Metaphysics of Ersatzism about Possible Worlds

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Abstract

According to actualism about possible worlds everything that exists is actual. Possible worlds and individuals are actually existing abstract parts of the actual world. Aristotelian actualism is a view that there are only actual individuals but no possible ones, nor their individual abstract representatives. Because of that, our actualist account of modality should differ depending on whether it concerns actual individuals or possible ones. The main goal of the dissertation is to develop a metaphysical framework for Aristotelian actualism.

Chapter 1 explains basic issues associated with the possible world approach to modality. I overview modal realist and actualist views on possible worlds and explain why I support the actualist approach. Subsequently, I introduce a distinction between Platonic and Aristotelian actualism, and discuss some semantic issues associated with actualism as such.

In Chapter 2 I argue that Aristotelian actualism, modeled on linguistic ersatzism, is preferable over its Platonic counterpart. Subsequently, I propose a metaphysical framework for Aristotelian ersatzism which is based on a claim that our modal concepts work differently for actual and possible individuals. In order to explain that claim I introduce three specific differences concerning modal features of actual and possible individuals: (a) Representational Difference, according to which actual and possible individuals are represented differently by possible worlds; (b) Metaphysical Difference, according to which actual and possible individuals are represented by possible worlds as having different metaphysical nature; (c) Modal Difference, which says while there are singular and contingent possibilities involving actual individuals, all possibilities

about possible individuals are general and necessary. I propose to interpret those differences in terms of the doctrines of haecceitism, antihaecceitism and existentialism. There is however no consensus on how those views should be characterized. Chapters 3, 4, and 5 focus on providing a precise characterization of those doctrines.

Chapter 3 focuses on the doctrines of modal haecceitism and antihaecceitism, which I view as opposite accounts of how possible worlds represent possibilities. According to modal haecceitism what possible worlds say about particular individuals does not supervene on what they say qualitatively. Modal antihaecceitism is a denial of such a claim.

Chapter 4 concerns metaphysical haecceitism and antihaecceitism, which I take to be alternative accounts of the fundamental structure of reality. For the metaphysical haecceitist reality contains irreducible singular facts, while for the metaphysical antihaecceitist reality is purely qualitative and general.

Chapter 5 focuses on an argument between existentialists and antiexistentialists. Existentialists claim that there are contingent singular propositions, while antiexistentialists deny that. I defend existentialism against antiexistentialist counterarguments, as well as criticize some of the antiexistentialist accounts of singular propositions modeled on the notion of individual essence.

In Chapter 6, by appealing to the results of investigations conducted in Chapters 3, 4 and 5, I reconsider Representational, Metaphysical and Modal Differences. According to a view that I propose: (a) Representational Difference entails (extreme) modal haecceitism for actual individuals but (extreme) modal antihaecceitism for possible individuals; (b) Metaphysical Difference entails metaphysical haecceitism (individualism) for actual individuals, but

metaphysical antihaecceitism (generalism) for possible individuals; finally (c) Modal Difference entails existentialism: while there are singular and contingent possibilities involving actual individuals, all possibilities about possible individuals are general and necessary. In Chapter 6, I also explain the implications of those views for the various issues, including transworld identity, essentialism, or the modal status of modal space.

Lastly, Chapter 7 overviews some semantic and metaphysical applications of Aristotelian ersatzism. I explain how it manages to accommodate Kripkean semantics and how it is able to account for the possibilities of indiscernibles, alien individuals and iterated modalities. I also address some possible objections to my proposal, including an issue of implicit representation and the Humphrey objection.

For my family

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Introduction

It is a widespread opinion that our world, i.e., the actual world, could be different in many ways. Each of these alternative ways for the actual world to be is a distinct possibility. Philosophers however disagree about what possibilities are. Some argue that possibilities should be explained in terms of dispositions, causal powers or fictions, others claim that they should be explained by essences, and yet others maintain that our concepts of possibility and necessity (and other modal concepts) are primitive and unanalyzable. In this dissertation I follow yet another, widely accepted approach to the nature of possibilities, according to which they should be understood in terms of possible worlds. According to the standard possible world approach to modal concepts, possibly p iff p is true at some possible world, and necessarily p iff p is true at all possible worlds. Many philosophers find such an approach appealing because it provides us with an extensional (nonmodal) analysis of modal concepts (assuming that our notion of a possible world itself is nonmodal, which is a matter of discussion). Possible worlds (and possible individuals) are also useful for many other theoretical purposes, e.g., an explanation of propositions, knowledge or counterfactuals. There are however many competing explanations of what possible worlds are. In general, we can divide those approaches into two camps: modal realist (or possibilist) and actualist. Roughly speaking, modal realists maintain that not everything that exists is actual. There are some entities—possible worlds and possible individuals (which taken together are often called 'possibilia')—which are not actual but nevertheless exist. For the majority of modal realists (a notable exception is Leibniz, for whom possible worlds, unlike the actual world, are ideas or concepts in God's mind), genuine possible worlds and possible individuals are the same kind of entities as the actual world and actual individuals are, that is, they are concrete, spatiotemporal entities. As a result, besides actual individuals such as Socrates, your favorite table, or an electron in your pocket, our ontology includes possible individuals such as particular talking donkeys, dragons or Kripke's twin brother. In contrast to that, actualists maintain that everything that exists is actual. Possible worlds and possible individuals are identified with actually existing abstract entities which are part of the actual world and which represent alternative ways for the actual world and actual individuals to be. There are different candidates for abstract replacements of possible worlds and possible individuals including propositions, states of affairs, properties or sentences of an idealized language. In this dissertation I take the actualist approach to possible worlds. Chapter 1 provides some reasons for which actualists (including me) find modal realism problematic.

Subsequently, I propose to distinguish Platonic and Aristotelian forms of actualism. Both views share a belief that possible worlds, including the actualized world, that is, a possible world which correctly describes what happens in the actual world (which is the concrete world in which we live), are actually existing abstract representatives. However, Platonic and Aristotelian actualists disagree on two important matters: (1) the nature of representatives and (2) the modal status of modal space (i.e., possibilities).

Roughly speaking, Platonic actualists (such as Bernard Linsky, Alvin Plantinga, Timothy Williamson or Edward Zalta) believe that both actual and possible individuals have actually existing unique replacements (proxies) such as individual essences (thisnesses) or contingently nonconcrete objects. In effect, both actual and possible individuals can be represented in modal

contexts singularly, by mentioning their unique proxies. Platonic actualists then provide a uniform treatment of possibilities for actual and possible individuals. Moreover, Platonic actualists believe all possibilities hold with necessity, that is, that there are no instances of contingent possibilities. A main motivation for such a view is a fact that, for the Platonic actualist singular propositions are not about contingently existing individuals (such as Socrates) but about their necessarily existing proxies (e.g., a property of *being identical with Socrates*, which exists necessarily). Thus, all singular propositions exist necessarily. Now, since it is standard to identify singular possibilities with true singular modal propositions (Aristotelian actualists agree on that), it follows that all singular possibilities are necessary. And since it is usually also assumed that general propositions exist necessarily and that general possibilities are modeled on them (Aristotelian actualists agree on that as well), it follows that all possibilities hold with necessity.

In contrast, Aristotelian actualists (such as Robert Adams, Gregory Fitch, Benjamin Mitchell-Yellin or Michael Nelson) argue that actual and possible individuals have different abstract representatives associated with them. Because actual individuals exist, they can be represented singularly by their unique representatives, e.g., by the sets of sentences including singular sentences directly referring to particular actual individuals. This however does not hold for possible individuals. Since they do not exist, all possibilities about them can be represented only generically, e.g., through sets of qualitative sentences that do not mention any particular possible (nonexisting) individual by a name. Due to this difference between how actual and possible individuals are represented, Aristotelian actualists claim that our account of modalities should differ depending on whether modal concepts are applied to actual or possible individuals. Moreover, Aristotelian actualists maintain that at least some parts of modal space are contingent,

that is, that some possibilities or necessities hold only contingently. A main rationale behind this view is that what singular propositions there are depends on what individuals exist. This is so either because singular propositions are directly about particular individuals or about their unique representatives. Either way, singular propositions ontologically depend on their constituents. Thus, if an actual individual, Socrates let's say, would cease to exist, there would be no singular propositions about him nor about his unique representative (because it would cease to as well). In effect, since singular possibilities are modeled on singular propositions, it follows that what singular possibilities there are depends on what individuals exist. Thus, some parts of modal space turn out contingent.

In Chapter 2 I provide a more detailed analysis of Platonic and Aristotelian forms of actualism. I start by discussing two dominant forms of Platonic actualism, that is, necessitism (Zalta and Linsky 1994, Williamson, 2002), and Plantingian actualism (Plantinga 1974, 1976, Van Inwagen 1985). I present basic claims of both views and overview some of their applications. I also indicate several issues that those views face and explain why Aristotelian actualism should be preferred. Subsequently, I present a variant of Aristotelian actualism (see Fitch 1996, Adams 1981) based on linguistic ersatzism, which I find the most promising variant of Aristotelian actualism. According to linguistic ersatzism, possible worlds are just maximal and consistent sets of sentences (see Roy 1995, Heller 1998a, 1998b, 2008, Melia 2001, 2003). I observe that a systematic analysis and exposition of the metaphysics underlying such a view has not been yet developed in full detail. A main goal of the dissertation is to provide such an account. According to my view, which I call Aristotelian ersatzism (due to the commitment to linguistic ersatzism), there three fundamental differences between actual and possible individuals that allow us to

explain two claims that are essential to Aristotelian actualism: (a) a view that our account of modalities should differ depending on whether actual or possible individuals are considered, and (b) a view that some parts of modal space are contingent:

Representational Difference: Actual individuals are differently represented by possible worlds than possible individuals.

Metaphysical Difference: Actual individuals and possible individuals are represented by possible worlds as having different metaphysical nature.

Modal Difference: While there are singular and contingent possibilities about actual individuals, all possibilities about possible individuals are general and necessary.

Subsequently, I propose to interpret those differences in terms of the doctrines of haecceitism, antihaecceitism and existentialism. There is however no consensus on how those views should be characterized. Chapters 3, 4, and 5 focus on providing a precise characterization of those doctrines and explaining their connections to other associated issues. In Chapter 6, by relying on the results of the analyses conducted in Chapters 3, 4 and 5, I provide a reinterpretation of Representational, Metaphysical and Modal Differences. Subsequently, in Chapter 7 I provide some semantic and metaphysical applications of the view that I developed in Chapter 6.

Let me explain my position in more detail.

In my view, Representational Difference amounts to an issue of how possible worlds represent possibilities involving actual and possible individuals. A notion of representation involved here is a technical one: A world w represents that some fact F is the case, if according to w it is the case that F. More specifically, under the assumption of linguistic ersatzism, a world w

represents that F is the case if w includes a set of sentences which explicitly or implicitly say that F is the case. As I argue in Chapter 3, there are two opposite views on the nature of representation: modal haecceitism and modal antihaecceitism. However, there is an argument over how those doctrines should be characterized. As I propose, we should discern the Kaplanian (Kaplan 1975) and the Lewisian approaches (Lewis 1986). I defend the latter one. According to it, both doctrines are viewed as implying some specific global supervenience theses. According to (Lewisian) modal haecceitism what possible worlds represent nonqualitatively (de re) concerning particular individuals does not supervene on what qualitative truths they represent. As a result, for any two possible worlds w_1 and w_2 , it is possible that w_1 and w_2 represent exactly the same qualitative truths or facts, but differ with respect to what nonqualitative truths or facts they represent with regard to particular individuals. For instance, modal haecceitism says that there is a possible world qualitatively indiscernible from the actual world but at which you swap your qualitative role with Joe Biden, and it is you who is the President of the United States, while Joe Biden is a philosopher. Such a world differs merely haecceistically from the actual world, that is, it differs purely nonqualitatively with respect to which individual plays which qualitative role. These kinds of differences do not supervene on qualitative differences between worlds (or possibilities). To generalize, modal haecceitism allows for haecceistically different possible worlds. In turn, (Lewisian) modal antihaecceitism entails that which nonqualitative truths are represented by some world w supervenes on which qualitative truths are represented by w. Thus, modal antihaecceitism precludes any case of haecceistically different possible worlds. If possible worlds agree on what they represent qualitatively, they have to agree on what they represent nonqualitatively with regard to some particular individuals.

On top of that, I propose to discern extreme and moderate variants of both doctrines. Let's consider modal haecceitism first. Both extreme and moderate modal haecceitism share a view that what nonqualitative (*de re*) truths are represented by possible worlds does not supervene on what those worlds represent qualitatively. However, extreme and moderate modal haecceitists disagree on the issue of essentialism. According to extreme modal haecceitism there are no qualitative constraints imposed on what is possible for individuals. As a result, any individual could have a qualitative character of any other individual. For instance, Socrates could be a poached egg, and you could be a talking donkey. Moderate modal haecceitism precludes such scenarios by introducing some qualitative constraints on what is possible for individuals. For instance, if humans are essentially rational, it follows that no human could be a poached egg.

Subsequently, I move towards modal antihaecceitism. As I argue, its moderate variant should be identified with a standard modal antihaecceitism described above, according to which possible worlds represent *de re* supervenes on what they represent qualitatively. In turn, extreme modal antihaecceitism denies that the notion of representation *de re* is legitimate at all. According to such a view, all truths that possible worlds represent are qualitative truths. There are no genuine truths about individuals to be represented.

Finally, I also explain how modal doctrines of haecceitism and antihaecceitism (in their extreme and moderate forms) relate to the issues of transworld identity, essentialism and principle of identity of indiscernibles.

Moving on to Chapter 4, which concerns the issues of metaphysical haecceitism and antihaecceitism. Inspired by Sider (2020), I propose to discern an individuation and a structural approach to both doctrines. Under the individuation approach metaphysical haecceitism and

metaphysical antihaecceitism are opposite accounts of what is the principle of individuation of individuals, that is, what is the ground for their individuality and identity. Roughly speaking, according to metaphysical haecceitism individuals are either individuated nonqualitatively, e.g., by bare particulars, thisnesses or Scotistic haecceities, or their identities are primitive and unanalyzable. In contrast to that, according to metaphysical antihaecceitism individuals are individuated qualitatively, e.g., through qualitative intrinsic properties, tropes, or qualitative relations. Moreover, as I observe, the individuation approach to metaphysical haecceitism and antihaecceitism relates both views to the principle of identity of indiscernibles (*PII*), a view according to which qualitatively indiscernible individuals are identical: While metaphysical haecceitism is claimed to entail falsity of *PII*, metaphysical antihaecceitism is usually conceived as entailing its truth.

However, I propose an alternative approach to both doctrines, which takes them to be alternative accounts of the fundamental structure of the world (see Sider 2020, Ch. 3). According to metaphysical haecceitism understood as a theory of structure, reality is such that besides qualitative, general facts (e.g., that fact that all humans are mortal) it contains irreducible individualistic facts (e.g., the fact that Socrates is mortal). Let's call such a view individualism (proponents of it include Adams 1979, Kment 2012, Turner 2016, Sider 2020). According to it, individualistic facts cannot be fully explained by qualitative facts. On the contrary, it is individualistic facts (such as the fact that Socrates is mortal) that explain some general facts (e.g., the general fact that someone is mortal). In turn, according to metaphysical antihaecceitism understood as a theory of structure of reality, either there are no individualistic facts at all but all facts are qualitative (as in a case of generalism, see Dasgupta 2009), or there are individualistic

facts, but they are somehow explained by or reduced to the qualitative facts (as in the case of grounding qualitativism, see Dasgupta 2014, Russell 2016).

I argue that for several reasons the structural approach is preferable over the individuation approach. A nice feature of the structural approach is that it makes metaphysical haecceitism and antihaecceitism neutral over the issue of *PII*. This is good news especially for the proponent of metaphysical antihaecceitism: Because *PII* is presumably false. by freeing metaphysical antihaecceitism from a commitment to *PII*, one is able to make it more compelling.

Finally, in Chapter 5 I focus on existentialism, a view according to which singular propositions, such as [Socrates is wise] (throughout the dissertation I use square brackets to refer to propositions) ontologically depend on their constituents (Adams 1981, Fine 1985, David 2009, Speaks 2012). Thus, if there are contingent individuals (and it seems obvious that there are such individuals, although Platonic actualists such as necessitists deny that), and singular propositions involve individuals as constituents (as in the ccase of Russellian view on propositions) or their truth values depend on how some particular individuals are (as in the case of some thin accounts of propositions such as one provided by Stalnaker 2012), then there are contingent singular propositions. For instance, if Socrates did not exist, there would be no singular propositions about him. Antiexistentialism is a denial of existentialism. According to it, all propositions, similarly to all abstract objects, exist necessarily. Antiexistentialists regard singular propositions as being not about contingent individuals but about their necessarily existing proxies, such as individual essences (see Plantinga 1983) or contingently nonconcrete objects (see Linsky and Zalta 1994). Moreover, all individuals, no matter if actual or possible, have their associated proxies. Thus, all singular propositions are necessary.

In the dissertation I defend the existentialist position. First, I show that any plausible account of individual essences that might suit antiexistentialism is problematic (at this point I leave necessitism aside, because I provide arguments against it in Chapter 2). Second, I defend existentialism against Plantinga's famous argument against it, according to which the existentialist cannot consistently account for the possibility of some individual ceasing to exist (Plantinga 1983). In doing so I appeal to a distinction between truth in/truth at. According to it, a proposition p can be true relatively to a possible world w in two senses: p can be true at and ina possible world. Truth in is existence entailing: If a proposition p is true in w then p has to exist in w in order to be true. But if a proposition p is true at w then it does not have to exist in w in order to be true. It is sufficient p that it actually exists (see Adams 1981, Turner 2005). We can then evaluate it at any possible world accessible to the actual world in which p exists. By appealing to this distinction it is possible to provide a strong answer to Plantinga's argument which shows that his argument equivocates between those two senses of being true and is, thus, inconclusive (see Fine 1985, Speaks 2012). However, for some philosophers (including Plantinga himself, see also: Davidson 2007) the truth in/truth at distinction is not genuine but involves picture thinking. There is only one notion of truth, truth simpliciter, which Plantinga identified with the notion of truth in. In response to that, I provide an actualist framework (inspired by Turner 2005, Einheuser 2012 and Mitchell-Yellin and Nelson 2016) which shows that the truth in/truth at distinction is not only genuine but indispensable, especially if one shares intuitions lying behind Aristotelian actualism.

In Chapter 6 I appeal to the results of the analyses conducted in Chapters 3, 4 and 5 and reconsider Representational, Metaphysical and Modal Differences. Let me overview my position.

Firstly, I take Representational Difference to entail extreme modal haecceitism for actual individuals, but extreme modal antihaecceitism for possible individuals. I argue that extreme modal haecceitism is a preferable account of how actual individuals are represented over its moderate counterpart. A main reason for which I believe extreme modal haecceitism should be prefered is that it avoids a commitment to essentialism, while moderate modal haecceitism entails it. I provide several reasons for which we should avoid commitment to essentialism in our account of modal features of actual individuals. In turn, with respect to possible individuals, I argue that extreme modal antihaecceitism is the only available account of representation. Moderate modal antihaecceitism is a nonstarter because it entails that what possible worlds represent de re supervenes on what they represent qualitatively. Thus, under such a view the notion of representation de re would still apply to possible individuals. But, as I argue, since there are no possible individuals, the notion of de re representation cannot apply to them at all. We cannot represent them singularly, even if our singular representation of them would supervene on their qualitative representation. We should look for a purely qualitative account of representation of possible individuals instead. Extreme modal antihaecceitism delivers just that.

Additionally, as I observe, endorsing Representational Difference so understood has consequences for some further issues such as (a) haecceitistic possibilities, (b) transworld identifications, and (c) essentialism. As I argue, we need to provide different accounts of those issues depending on whether they concern actual or possible individuals. In a nutshell, I shall show that actual individuals can be subjects of haecceitistic possibilities, but possible ones cannot, that transworld identifications are easy in the case of actual individuals (because we can use their names to represent them in different possible worlds), but all possible individuals are represented

as worldbound, and, finally, that while antiessentialism is true for actual individuals, some strong form of Leibnizian essentialism holds for worldbound possible individuals (that being said, I provide two ways in which we could avoid strong essentialism in the case of possible individuals; one of them is to introduce a plenitude of worldbound possible individuals, and another one is to to endorse property counterpart theory that will allow us to link worldbound possible individuals (to be more precise, their abstract representatives) by counterpart relations, which would enable us to account for the modal variability of possible individuals)

Secondly, I argue that Metaphysical Difference entails individualism for actual individuals, but generalism for possible one. In other words, according to Aristotelian ersatzism there are individualistic facts involving actual individuals. However, since there are no possible individuals, there are no individualistic facts about them, but all facts about them are general. To put it another way, under the assumption of linguistic ersatzism, because actual individuals exist, they can be represented directly, by their names. In effect, actual individuals can be subjects of nonqualitative (de re) descriptions. For instance, we can say directly of Socrates that he could be a tax collector or that he could have a twin brother. Those descriptions represent individualistic facts about Socrates that might obtain had a possible world representing those facts been actualized. That is not the case with regard to possible individuals. Since they do not exist, we lack names for them. In effect, we lack enough representational resources to provide a complete description of possible individuals. All we can do is to represent them generically, through qualitative descriptions by saying that 'Something could be a talking donkey', and so on. Such generic descriptions represent general facts that might obtain had possible worlds built out of the relevant generic descriptions been actualized. Had that been the case, the actual world would

exhibit a given general structure represented by a purely qualitative ersatz world representing possible individuals. In effect, as I argue, possible individuals, such as particular talking donkeys, dragons or Kripke's twin brother, are represented by ersatz worlds indirectly, through general descriptions that describe general facts. We are unable to represent possible individuals as individuals. I argue that such an approach to *possibilia* is supported both by our intuitions (e.g., we are unable to have singular thoughts about particular possible individuals) and by limited representational resources (e.g., we are unable to provide singular representatives of possible individuals). Aristotelian ersatzism is able to account for both phenomena.

Lastly, according to my view, Modal Difference entails existentialism. As a result, while there are singular and contingent possibilities about actual individuals, all possibilities about possible individuals are general and necessary. As I show, there are several consequences of endorsing existentialism and the truth in/truth at distinction that comes with it.

First and foremost, since only actual individuals exist, there are singular propositions only about actual individuals. All propositions about possible individuals are purely general. And since modalities *de re* are modeled on singular modal propositions, it follows that only actual individuals are subjects of *de re* possibilities. All possibilities about possible individuals are purely general. They concern not particular possible individuals, but rather their descriptions which represent reality purely qualitatively, that is, as general structures built out of properties.

Secondly, if there are contingent propositions, then some entities which are identified with sets of propositions will turn out contingent as well. For instance, if possible worlds are identified with sets of propositions, and some possible worlds include contingent singular

propositions (which is uncontroversial to assume under such a view on possible worlds), it will follow that some possible worlds exist contingently as well.

Thirdly, by assuming existentialism, we make the notion of truth at the default notion of the truth. A nice feature of it is that we will be able to evaluate actually existing propositions as being true at many possible worlds even if those propositions would not exist had relevant worlds been actualized. For instance, we can say that an actually existing proposition [Socrates does not exist] is true at a possible world in which Socrates does not exist (and never existed), despite the fact that had such a world been actualized, there would be no proposition as [Socrates does not exist].

Fourthly, since existentialism holds, depending on what individuals actually exist, different modal propositions exist. Thus, our modal evaluations ultimately depend on how the actual world is. Even more so, we are forced to take such a privileged perspective of the actual world when doing our modal analyses, because only the actual world can be fully described, both singularly and generically. We lack expressive resources to provide fully specific descriptions of possible worlds that are representing possibilities for possible individuals only. Thus, if we want to provide a fully specific explanation of modality, we should not take the perspective of such impoverished worlds, but instead evaluate modal space from the perspective of the actual world. This in turn requires us to treat the notion of truth at as the primary notion of truth.

Finally, in Chapter 7 I present some applications of Aristotelian ersatzism. First, I focus on metaphysical applications and explain how Aristotelian ersatzism is able to account for many possibilities which are *prima facie* problematic for the actualist, which include: (a) possibility of alien individuals, (b) possibility of indiscernibles and haecceititic possibilities, and (c) iterated

modalities. Next, I move towards semantic applications. As I show in Chapter 2, there are some issues affecting any actualist view, especially the Aristotelian one, with accommodating varying domain Kripkean semantics to her view. As indicated by Divers (2002, Ch. 13), there are three problems that arise for the actualist: the D-problem which is the problem of how to account for possible worlds with domains that are distinct from the domain of the actualized world; the Q-problem, which is the problem of how it is possible that one and the same individual is part of distinct domains, and the V-problem, that is a problem of whether a predicate can have as its extension at some world w an individual that is not included in the domain of w. Lastly, I explain how the Aristotelian ersatzist is able to address the problem of implicit representation, avoid Humphrey objection, and to provide an account of representation that avoids pictorial and magical representation.

Chapter 1

Possible worlds: Modal Realism and Actualism

Our world—the actual world—could be different in many ways than it actually is. For instance, you could be a tax collector instead of being a philosopher, or Socrates could have a twin brother. As it is not hard to guess, philosophers disagree about what is possible and what possibilities are. In what follows I am interested in the latter issue. I start by presenting some available accounts of the nature of possibilities. In the dissertation, I intend to focus on the approach that identifies possibilities with possible worlds. As I explain, in the literature, we can find modal realist and actualist approaches to possible worlds. I shall survey both approaches and provide some reasons for which actualists (including me) tend to criticize modal realism. Having clarified this issue, I am going to present the basic assumptions of actualism. Subsequently, I discern Platonic and Aristotelian variants of actualism and provide an initial characterization of them. Lastly, I explain some semantic background underlying the issue of actualism as such.

The structure of this chapter is as follows. Firstly (1.1), I introduce some basic notions associated with modality, briefly present available accounts of modal concepts, and indicate that I follow a possible world approach to modality. Subsequently, I overview two main accounts of possible worlds: modal realism and actualism. First (1.2.), I present the basic assumptions of modal realism. Next, I present (1.3.) some reasons for which actualists (including me) find modal realism problematic. Following that (1.4.) I present the basic claims of actualism, introduce a distinction

between Platonic and Aristotelian forms of actualism, and explain the differences between the two views. Lastly (1.5.), I overview some semantic issues associated with actualism which will be relevant for my further analyses of it.

1.1. Preliminaries

It is intuitive that some things could have been different than actually they are, while others could not change. Thus, statements such as the ones below are unproblematic from a common sense perspective:

- (1) It is possible that I will move to the USA.
- (2) It is necessary that 2+2=4.
- (3) Donald Trump could be a comedian.
- (4) Cats are necessarily mammals.

Of course, we often disagree about what is possible or necessary, but we all agree that there are matters which are possible and those which are necessary. In order to describe those kinds of matters we make use of modal concepts of possibility and necessity. These concepts can be applied directly to whole sentences, as in cases (1) and (2), or to the individuals themselves involved in these sentences, as in cases (3) and (4). This difference is philosophically grasped through a distinction between *de dicto* and *de re* modality. *De dicto* modalities apply to sentences.

¹ Of course, we are not limited to modal concepts of possibility and necessity. There are many others such as impossibility or contingency to which we appeal both in everyday thinking as our theoretical investigations. That

impossibility or contingency to which we appeal both in everyday thinking as our theoretical investigations. That said, in this dissertation I will focus solely on the concepts of possibility and necessity. Many (if not all) additional modal concepts can be easily obtained from the basic concepts of necessity and possibility once they are well defined.

Such modalities are not about any particular individual, but about propositions describing individuals. In that case we consider possible and necessary statements. In turn, *de re* modalities apply directly to individuals. In that case we consider what is possible or necessary for a given individual, independently of how it is described.

There is a deep and continuing philosophical debate regarding the nature of modal concepts of possibility and necessity (and other related ones), and their relationship to other important philosophical concepts. Modalists claim that we cannot analyze modal concepts, but they must be taken as primitive.² Others try to analyze modality in terms of more familiar concepts. Essentialism and dispositionalism are two recent examples of such a strategy.

Essentialists believe that modality reduces to essence, i.e., that all modal statements are true in virtue of some essentialist statements being true. In order to make this analysis a reductive one and noncircular (we do not want to analyze modal concepts in terms of concepts that are themselves modal, because it leads to circularity), it is required that the notion of essence is understood not modally, but definitionally, in the Neo-Aristotelian way. Roughly speaking, an essence of some individual x is a set of properties which explain what it takes to be x. There are many ways through which one could reduce modality to the definitionally understood essence.

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² Proponents of modalism include Prior and Fine (1977), Forbes (1989), deRosset (2009), Jubien (2009), Shalkowski (2020).

³ Proponents of the definitional view on essence are Fine (1994, 1995), Correia (2006, 2012), Oderberg (2007), Koslicki (2012), and Rosen (2015). In turn, proponents of a modal view on essences are: Plantinga (1976), Gorman (2005), Zalta (2006), Correia (2007), Rocca-Royes (2011), Cowling (2013), and Wildman (2013).

⁴ For a discussion of various approaches to reduction of necessity to essence see Michels (2019). Proponents of essentialist reduction of modality include Fine (1994), Oderberg (2007), Lowe (2008). Correia (2007, 2012), Rosen (2010), and Teitel (2019).

However, the most standard approach is to claim that a proposition p is necessary iff p holds in virtue of the nature of all entities (Fine 1994, pp. 9).

In turn, dispositionalists explain modality in terms of actually existing dispositions. A disposition is an ability of some object x, to bring about some state of affairs, if x has appropriate stimulus, whereas the relevant stimulus is usually understood as configurations of other objects that stay in a relationship to x. According to a basic characterization of this view (see Borghini and Williams 2008, pp. 26, Williams 2019, Giannini 2020, pp. 12):

- (1) Possibly p iff there is some actual disposition d, the manifestation of which is (or includes) p.
- (2) Necessarily p iff there is no actual disposition d, the manifestation of which is (or includes) p.

Finally, some philosophers claim that it is possible to explain modality (in contrast to modal primitivism) but without reducing it (in contrast to essentialism and dispositionalism). According to a possible world theory of modality, modal concepts of possibility and necessity are understood as quantifiers over possible worlds and possible individuals (Kripke 1963, 1980, Plantinga 1974, Lewis 1986, Melia 2003). Possible worlds and possible individuals taken together are usually called *possibilia* (entities which are possible).

⁵ A similar view, although a more general one, has been recently developed by Kment (2014). According to him, modality is reduced to explanation, whereas explanation has two main forms: causation and grounding. Generally speaking, if x explains y, then x is a reason for which y obtains.

⁶ This view is also supported by Vetter (2015). There is also a variant of dispositionalism that focuses on reductive analysis of counterfactuals (rather than concepts of possibility and necessity) supported e.g., by Martin (1994) and Bird (2007).

⁷ Well, at least some of these reductive strategies of modality might preserve possible world talk and modal logic coupled with its semantics, e.g., Kment (2014) preserves possible world talk (although he argues that popular systems

The majority of philosophers of modality find possible world analysis of modality nonreductive because it is implicitly modal.⁸ One reason for that is that in order to explain a concept of a possible world one needs to appeal to some other modal concepts such as consistency, implication, or possibility/impossibility. For example, when actualists claim that possible worlds are *consistent* sets of some world-making elements (e.g., sentences or propositions), they define possible worlds by using a modal concept of consistency: for any sentences s and s, a set of s, s is consistent iff s and s could both be true together. Thus, the concept of a possible world turns out to be implicitly modal. And this point is generalizable to many well-known accounts of possible worlds (especially actualist ones).

Yet for some philosophers, e.g., Lewis (1986), a claim that the possible world account of modality is nonreductive is problematic, for it entails that such analysis is circular. In order to avoid that, they propose a nonmodal characterization of possible worlds that allows for a reductive analysis of modality. Lewis is the well-known example of such a philosopher. According to Lewis, possible worlds are just maximal spatiotemporal sums of individuals.

However, there are some reasons to think that Lewis' approach to modality is circular as well. For example, Melia (2003, pp. 114-121), Divers (2002, pp. 117-121), and Divers and Melia (2001) provide a reductive argument according to which, if the possibility of alien individuals (i.e., individuals which cannot be given through recombination of the elements of the actualized

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of modal logic misrepresent modal facts, mainly because they cannot account for contingency of possibilities), nevertheless he claims that modality is derived from explanation. This shows that it is possible to provide a general reduction of modality to some other more fundamental concepts, but nevertheless accept (e.g., for heuristic reasons) the possible world framework.

⁸ Obviously, the notion of a possible world is explicitly modal as well. Yet the very use of the word 'possible' in one's account of modality does not entail that one's metaphysical analysis of modality through possible worlds is a nonreductive one. We should discern a purely heuristic use of the word 'possible' from its explanatory use.

world) is genuine, then modal realism is incomplete, i.e., it does not provide us with enough worlds to account for an infinite number of aliens. Their argumentation is that if aliens are possible, modal realism either leaves gaps in logical space, i.e., it is incomplete by missing some possibilities (contrary to Lewis' initial ambition), or it requires primitive modality, e.g., by endorsing a supplementing principle such that: 'Every way that a part of world could be is a way that a part of some world is.' (Divers and Melia 2001, pp. 34), which ensures completeness but at the cost of primitive modality. Either way, modal realism does not provide us with a purely extensional (reductive) analysis of modality. A similar point is made by Lycan (1991, pp. 224-225), who claims that in order to deny the existence of impossibilia (e.g., the existence of individuals having contradictory properties), Lewis has to assume that worlds are always possible worlds, that is, that there are no worlds at which there are individuals with contradictory properties. A similar point is made by Shalkowski (1994), who claims that possibilia can serve as a reductive base of modality only if (a) each individual is a possible individual (which is required to avoid commitment to the existence of *impossible* individuals), and (b) there is enough *possiblia* to account for all possibilities (in order not to leave gaps in the logical space). Shalkowski then argues (1994, pp. 669-670) that in order to meet these criteria, modal realism has to appeal to primitive modality.

However, even if a proponent of the Lewisian approach to possible worlds could somehow address all of these issues, I would respond that a nonreductive analysis of possible worlds is still preferable over a reductive one. In claiming that, I follow Armstrong (1989), Stalnaker (2012), and Plantinga (1976), who observe that the supposed circularity of their analyses of modality is not dangerous because our ambition is not reduction but regimentation

or systematization of our modal concepts. An analysis of modal concepts is meant to show how various modal concepts relate to each other rather than lead to the elimination of the analyzed modal concepts. I share a belief that actually we cannot achieve anything more than regimentation or systematization because modality is indispensable in our philosophical analyses, e.g., in the conceptual analysis. Thus, it cannot be explained away. For that reason, I find it unproblematic that a definition of some modal notion m requires reference to another modal notion m^* , as long as appealing to m^* helps us understand how the concept m works. Thus, even though the possible world approach is a nonreductive one, it helps us to understand our basic modal notions of possibility and necessity. Even more so, it might be argued, (see Stalnaker 2012, pp. 4) that if our explanation of modality did not involve any modal concepts at all, it would no longer be an explanation of *modality*, but rather an elimination of it. But we cannot eliminate modal notions for they are central to our conceptual analysis. This is a meta-metaphysical reason for which I find the reductive approach to modality unappealing. From this point I shall focus exclusively on the nonreductive possible world analysis of modality and leave primitivism as well as various forms of reductionism aside.

Once we accept that possible worlds are indispensable in our analysis of modal concepts, a natural question immediately arises: What are the possible worlds and their inhabitants?

Initially, it could be argued that while possible worlds are useful for our analysis of modality, their role is purely heuristic. Thus, despite their usefulness, literally speaking, there are no such things as possible worlds and their inhabitants. Thus, the question about the nature of

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⁹ That said, later in the dissertation, following Sider's approach (2011, 2020), I will argue that modality, like all other conceptual issues, is not substantial but it is grounded in first-order metaphysical issues regarding fundamentality, essence, or structure of the world. This however is consistent with modality being central and indispensable at least in *some* of our analyses.

such things is meaningless. A variant of this view is modal fictionalism, according to which, all modal statements should be interpreted as fictional, which are not literally true but still useful in making sense of our modal talk. ¹⁰ There are different variants of modal fictionalism, but they all take the possible world framework for granted, but interpret possible worlds and possible individuals as fictions. Rosen (1990, pp. 335), when developing his version of modal fictionalism, introduced a general schema of a fictionalist analysis of the concepts of possibility and necessity:

- (1) Possibly p iff according to the possible world fiction, p^* is true at some possible worlds.
- (2) Necessarily p iff according to the possible world fiction, p^* is true at all possible worlds.

where p^* is a specific possible world analysis of truth conditions of p provided by a given possible world fiction. For instance, under the assumption of linguistic ersatzism, a view according to which possible worlds are just sets of sentences, possibly Socrates is a farmer iff there is a possible world containing or entailing the sentence 'Socrates is a farmer'. In such a case (1) should be read as:

(1*) Possibly Socrates is a farmer, iff according to the linguistic ersatzism fiction, 'Socrates is a farmer' is a member of some world w or 'Socrates is a farmer' is entailed by some members of w.

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¹⁰ For differing versions of fictionalism see Armstrong (1989), Rosen (1990, 1995), Nolan (1997, 2001) and Sider (2002). For a general overview and discussion see Brock (1993), Hale (1995), and Nolan (2022).

A main benefit of such an analysis is that an operator 'according to a fiction F' is a kind of story prefix, which allows us to quantify over something within the scope of a given story, without making an existential commitment to what is said within the story. (Rosen 1990, pp. 331). Thus, it is possible to talk about *possibilia* within a particular story about possiblia, without being committed to the existence of *possibilia*. All that is required is that there are some stories about them. And we have plenty of them.¹¹

In this dissertation I put fictionalism aside. A reason for this is that I share a belief that *possibilia*, besides being useful in our explanations regarding ordinary modal statements, have some applications which cannot be provided if we take them as fictions.

Firstly, *possibilia* are required by the semantic models for modal languages including different systems of modal logic.¹² Secondly, *possibilia* allow us to analyze some basic philosophical concepts such as properties, propositions, counterfactuals, or self-knowledge. For example: A property might be understood as a function from possible worlds to extensions (possible individuals); a proposition might be understood as a set of possible worlds, counterfactuals defined through the use of closeness relation between possible worlds, and the contents of *de se* propositions (e.g., about our knowledge) might be identified with centered possible worlds.¹³ Last but not least, *possibilia* can provide truth conditions of our ordinary modal statements. Given that one introduces *possibilia* into her ontology, she can analyze modal

¹¹ In fact, one of the main issues of modal fictionalism is that it has difficulties in explaining why we should prefer one possible world fiction over another, i.e., why one should prefer Lewisian modal realist fiction (as Rosen does) over some actualist fiction.

¹² For a discussion of possible world semantics for modal logic see Carnap (1947), Hintikka (1961), Kripke (1963), Menzel (1991).

¹³ Since, as we will see in a moment, actualists define possible worlds as constructions out of a particular kind K of intensional entities, they will be able to provide an analysis of all relevant remaining kinds of intensional concepts minus the intensional concept of a kind K used in the construction of modal space. This point is more extensively discussed by Divers (2002, Ch. 3).

operators as quantifiers ranging over possible worlds and possible individuals. One then gets socalled Leibnizian biconditionals. For *de dicto* modalities those biconditionals take the following form (there are also their counterparts, formulated for modalities *de re*):

Possibly p iff p is true at some possible world w.

Necessarily p iff p is true at all possible worlds.

As we can see then, we need real (not fictional) *possibilia* for various reasons. All possible worlds theorists (excluding fictionalists) agree on that. However, disagreements start when one asks a question regarding the nature of possible worlds and possible individuals.

Initially, someone might claim that possible worlds and possible individuals are just artifacts of the semantic model for a particular system of modal logic. Thus, it is nonsensical to ask a question about their nature outside of a particular semantic model. I believe, however, that it makes sense to ask such a question. Even more so, I believe that the question regarding the nature of *possibilia* should be stated and answered *before* we choose a particular semantic framework for our modal talk. A reason for this is that semantic considerations for modal logics are neutral over their metaphysical interpretations. For instance, Kripkean (see Kripke 1963) models for quantified modal logic (QML) can have both actualist (Menzel 1990) and modal realist interpretations (Lewis 1968). And an interpretation we choose as a correct one is not determined by the semantics itself but rather by our metaphysical predilections. ¹⁴ Of course, it is true that our metaphysical speculations about the nature of *possibilia* can be influenced by some of our semantic principles, but, in general, metaphysical issues precede semantic ones.

¹⁴ A similar point is made by Bennett (2005) and Bianchi (2010).

Now, it is possible to discern two aspects of the question about the nature of *possibilia*: (1) How many possible worlds there are, i.e., what is possible? and (2) What is the nature of possible worlds and possible individuals themselves?

The first issue focuses on whether there are limits imposed on what is possible. Some philosophers claim that there are such limits, e.g., ones imposed by essences of things, laws of logic, laws of nature or by what is conceivable. The problem of how many possible worlds there are can also be explicated as a problem of plenitude. This issue refers to such problems as how plurality of possible worlds is constructed, what are the laws that govern such constructions, or what is the number of such constructions, i.e., is there enough *possibilia* to avoid leaving any gaps in logical space? According to David Armstrong (Armstrong 1989), David Lewis (Lewis 1986) and many philosophers that follow their approaches to modality, a principle recombination provides answers to many of these questions, if not all. Yet there is no consensus concerning the best way to formulate the principle of recombination.¹⁵

Many actualists, however, are not bothered by the combinatorial considerations (e.g., Plantinga, Adams or Stalnaker say nothing about how their actualist accounts of possible worlds relate to combinatorial principles and how their views are able to generate enough possibilities). This might indicate one of two possibilities. First, they might implicitly assume a kind of Platonist account of possibilities according to which all relevant possibilities are just out there, and there is no need to answer a question of how a plenitude of possibilities can be achieved or how it is constructed. Or, secondly, they are just interested in answering a question about the nature of

¹⁵ For a discussion of combinatorialism see Armstrong (1989), Sider (2005) and Broogaard (2006), Wang (2013). For a discussion of the principle of recombination see Nolan (1996), Divers and Melia (2002), Efird and Stoneham (2008), Wilson (2010, 2015), and Lenart (2021a).

possibilia rather than a question about the extent of possibilities, and they assume that the question of the nature of possible worlds can be investigated independently of the question of the potential number of possible worlds (i.e., what is possible). This view is sometimes called 'separatism' and has been recently endorsed and defended, for example, by Ross Cameron (Cameron 2012). In I support this position. My main focus in this dissertation will be on investigating the nature of possibilia. I put aside the question about how many possible worlds there are or what is the epistemology of modality. That said, there will be some places, e.g., when discussing the problem of nonactual (alien) individuals or the issue of essentialism, where discussing the issue of the range of possibilities will be necessary in order to provide satisfying answers to the issues in question.

Let's then focus our attention on the second issue associated with the question about the nature of *possibilia*: What possible worlds and possible individuals are?

To the first approximation possible worlds are ways things could have been. Among the plurality of possible worlds there is one which refers to the way the actual world is. Intuitively speaking, we could identify the actual world with the complete history of our universe. It is also intuitively obvious that the actual world could have been different than it actually is (for now, let's ignore a philosophical position which claims that everything is necessary. I will come back to this view in due course). Thus, possible worlds can be characterized as ways the actual world could have been. Every such possible state of the actual world is identified with a distinct possible world.

In the literature there are two dominant approaches to the nature of possible worlds (and possible individuals): modal realism and actualism. ¹⁶ In this dissertation I focus on actualism. However, in order to provide some context for my analyses, I shall briefly present the main claims of modal realism and show some reasons why actualists reject modal realism.

1.2. Modal Realism

According to modal realism, possible worlds are maximal spatiotemporal (or analogically spatiotemporal¹⁷) sums of individuals. Maximality here means full specificity. A world is fully specific if it determines all matters that are to be determined within it; that is, it is a *complete* way for the actual world to be. Possible worlds and their inhabitants are also spatiotemporal. They are thus the same kind of entities as the actual world and its inhabitants are (assuming that our world is a spatiotemporal world). They also exist in our ordinary unrestricted sense of 'existing', which we apply to the actual world. (Thus, modal realism should not be confused with modal meinongianism which, in general, distinguishes modes of being, e.g., existence and subsistence¹⁸). As a result, modal realism postulates that there are possible entities which are not actual. Thus, things such as talking donkeys or golden mountains are as real as you and your surroundings. The only difference between you and things like talking donkeys or dragons is that they do not inhabit

¹⁶ Sometimes, actualism is also often called ersatzism (Lewis 1986), moderate realism (Stalnaker 1976), or actualist realism (Divers 2002).

¹⁷ A possible critique of Lewis's default position defining possible worlds as spatiotemporal individuals is that there could be possible worlds with a structure different than spatiotemporal. Lewis anticipates such a critique (Lewis 1986, pp. 73-76), and says that such worlds would then have some kind of analogically spatiotemporal structure. A relation is analogically spatiotemporal if it is (a) natural, (b) pervasive, that is, if 'mostly, or perhaps without exception, when there is a chain of relations in the system running from one thing to another, then also there is a direct relation' (1986, pp. 76), (c) discriminating, that is, no two two things agree on their place in the structure of relations, and (d) external.

¹⁸ Proponents of modal meinongianism include Berto (2011, 2013), Berto and Priest (2014), Berto and Jago (2019).

your world, i.e., they are not your worldmates, where x and y are worldmates if x and y are spatiotemporally related.

Moreover, since all possible worlds (including the actual world) are equally real, whether a world is actual is a relative matter. Actuality is understood as indexed to a particular possible world (similarly, as 'here' or 'now' are always indexed to a particular location or a particular time). A statement 'Some world w is actual' means that inhabitants of w are spatiotemporally related. And the same holds for any other world. Thus, each world is actualized relative to itself. In other words, each individual in each world conceives its world as actual. However, according to modal realism we are unable to make sense of an idea of some world being absolutely or *truly* actual. There is nothing special about the actual world—the world in which you and I exist—besides the fact that we are spatiotemporally interrelated parts of it.

The most famous proponent of modal realism was David Lewis (Lewis 1986). According to his variant of it, possible worlds do not overlap. All of them are spatiotemporally isolated. Thus, all individuals are worldbound. If individuals are worldbound, it follows that one cannot explain modality in terms of transworld identity of individuals. Intuitively, one could reason that some individual a could possibly be F instead of being G iff there is a possible world w, distinct from the actual world w, in which a is F. This, however, requires a from w to be transworld identical to a in w,, that is, to be a literal component of w. However, if all possible worlds are spatiotemporally isolated, then all transworld identity statements must be false. That is, if possible worlds are disjoint maximal spatiotemporal sums of individuals, then there cannot be a spatiotemporal individual that would exist in two such disjoint spacetimes.

In addition to that, Lewis argues that even if we set aside his modal realism, transworld identity is problematic on its own. According to Lewis, if individuals were literally extended across possible worlds, it would follow that either individuals might have incompatible accidental intrinsic properties (e.g., shapes) or that all accidental intrinsic properties are relations. Both consequences are unacceptable. To see this, suppose that the shape of your hand (i.e., the number of fingers it has) is your accidental intrinsic property. Now, you actually have five fingers on your left hand (i.e., your hand looks five-fingered). But you could have had six fingers. Thus, you have six fingers at some world w. If we assume that you are identical across worlds, it follows that at w you have five and six fingers on your left hand. That's a contradiction. Lewis considers a possible solution to that issue which is to relativize properties to worlds: you have a relational property of having five fingers on your left hand at the actual world and another one of having six fingers on your left hand at w. Those properties are not contradictory and can be consistently possessed by a single individual. But the main problem with this solution to Lewis' argument is that it turns all accidental intrinsic properties (such as ones concerning shape of your hand) into relations. And even more so, these relations, as Lewis observes, are not internal (they do not supervene on the nature of their relata), but are external. Thus, accidental intrinsic properties turn out to be external relations. This is a very counterintuitive result. Due to both issues, Lewis concludes that we should abandon the genuine transworld identity view and take individuals to be worldbound.

However, if the transworld identity approach to analyzing modal properties of individuals does not work, a proponent of the worldbound view has to provide an alternative way of explaining modal variability of individuals across worlds.

One option is to simply deny modal variability of individuals. If individuals are worldbound, all properties that they have in a given world are essential to them. To claim this is to endorse Leibnizian extreme essentialism. (I shall say more about this view later, in Chapters 3 and 6).

However, Lewisian modal realists do not support such a view. Instead, they account for modal variability of worldbound individuals by introducing counterpart theory, which is radically antiessentialist. 19 According to counterpart theory, some actually existing individual a has modal property F in virtue of there being a possible world w inhabited by entity a^* which is a counterpart of a, and which has F in w, whereas entity a^* is a counterpart of a iff a^* is relevantly similar to a. What is the notion of relevant similarity? Well, a^* can be a counterpart of a when both individuals share all their natural intrinsic properties. In such cases they are just (qualitative) duplicates. However, there can be weaker relations of similarity, e.g., when a^* and are similar with respect to some intrinsic properties, or some extrinsic properties or relations that they bear to each other or to other individuals. However, as soon as similarity relations involve extrinsic properties and relations, they turn out to be context sensitive. In many cases we will decide which extrinsic properties and relations are relevant for similarity so understood. And it is the context sensitivity of counterpart relations that makes the counterpart theoretic analysis of modality a radically antiessentialist view. It turns out that no individual has its modal properties independently of a way it is described, that is, of a way in which we specify similarity relations that a given individual bears to other individuals. For instance, if what it takes to be a counterpart

¹⁹ It is worth noting, though, that the counterpart theory is not necessarily tied to (Lewisian) modal realism. It is possible to combine counterpart theory with some kind of actualism about possible worlds. For a discussion of various kinds of actualist counterpart theory see Stalnaker (1986), Heller (1998a), Sider (2002), Wang (2015), and Woodward (2017). In Chapters 3 and 6 I shall discuss such a view in more detail.

of Socrates is to be human, then we can safely say that Socrates is essentially human in virtue of all of his counterparts being human. But there will be equally legitimate contexts in which some individuals that are not human count as counterparts of Socrates. In such cases, it will not be true that Socrates is essentially human. Lewis calls such context sensitivity of our evaluations of modal statements 'inconstancy', and he claims that it is a good thing to have because it allows us to account for the fact that our modal intuitions vary from context to context (see Lewis 1986, Ch. 4.5). However, since the orthodox view on essentialism is that individuals have essential properties independently of the way they are described, counterpart theory entails radical antiessentialism.²⁰

Another option is to hold modal realism but allow for overlap. This position has been defended e.g., by McDaniel (2004, 2006) and Yagisawa (2010). According to modal realism with overlap individuals are extended in modal space similarly as they are extended in spacetime. For McDaniel (2004, pp. 143) modal realism with overlap is a modal analogue of enduratism, a view according to which an individual is wholly located at every moment of its existence. In turn, Yagisawa seems to endorse a modal analogue of perdurantism, a view according to which an individual persists in time in virtue of having temporal parts existing at different moments. Ignoring the details of both views, modal realism with overlap (in both variants) allows us to easily account for modal variability of individuals by allowing for a given individual to exist at many distinct possible worlds (although McDaniel and Yagisawa will differently explain how overlap occurs). Thus, some x could be F iff there is a possible world w at which x is F. Of course, modal

²⁰ For a more detailed analysis of a relationship between counterpart theory and essentialism see Heller (1998a), Mackie (2006), and Beebee and MacBride (2015). See also Chapter 6, section 6.2.3. below.

realism with overlap suffers from the issue indicated by the argument from accidental intrinsics. However, both McDaniel and Yagisawa have some responses to it. For instance, for McDaniel (2006, pp. 309), in order to address the issue of accidental intrinsics one can borrow an endurantist solution to the problem of temporary intrinsics, more specifically, a trope solution provided by Ehring (1997). (Note that the problem of temporary intrinsics is the very same problem as the problem of accidental intrinsics, but it affects persistence in time instead of existence in worlds). Yagisawa does not address the issue of accidental intrinsics in (Yagisawa 2010), however, arguably, he could appeal to a perdunatist solution to the problem of temporary intrinsics, which, roughly speaking, is that intrinsic change of an individual is accounted for by its temporal parts undergoing intrinsic change. He could then accommodate such a solution to the modal cases of transworld identity.

For Lewis, modal realism (including modal realism with overlap) has many benefits over actualism. An important one is that it provides a reductive analysis of modality: Our concepts of possibility and necessity can be analyzed as quantifiers over *possibilia* which are understood nonmodally. Additionally, modal realism provides us with an extensional and nonmodal analysis of other intensional concepts such as propositions (which can be conceived as sets of worlds) or properties (which can be understood as sets of individuals).

Lewis argues that actualism cannot match the explanatory power of modal realism. Firstly, it cannot provide us with a reductive analysis of modality for at least two reasons: (1) Actualism constructs possible worlds by employing a primitive modal notion of consistency, and (2) the notion of representation, that is, the notion of a relation that holds between an ersatz world and a possibility, involves primitive modality as well. This is especially true of the notion

of implicit representation, which is a kind of implication, and implication is a modal notion: An ersatz world w implicitly represents that some state of affairs S occurs if statements (some or all) included in w imply that S is the case.

Lewisian modal realism avoids primitive modality by constructing possible worlds without an appeal to any primitive modal concepts. 21 It also gets rid of the controversial notion of representation and 'true according to w' operator. Possible worlds do not *represent* qualitatively that S is the case at them, e.g., by sentences or propositions. Instead, possible worlds are just such that S occurs in them. For instance, there is no need to explain how some abstract representative (a sentence, a proposition or a property) represents a possible situation, i.e., a possible world, according to which Donald Trump loses the elections in 2016. For Lewis, this possibility is true iff there is a world similar to the actual world, in which an individual very similar to Donald Trump loses the elections in 2016.

1.3. Some actualist objections to modal realism

Actualists (and I am among them) disagree with modal realists in some fundamental respects.

A first and at the same time main actualist objection to modal realism is the incredulous stare objection.²² According to it, modal realism just runs against our common sense intuition about what there is (unrestrictedly). Intuitively it seems very unlikely that there are concrete (spatiotemporal) worlds distinct from the actual world, in which concrete (spatiotemporal) talking donkeys, dragons and million-carat diamonds exist. There is a consensus that there are no

 $^{^{21}}$ That being said, see section 1.1., where I mention some philosophers who argue that Lewis cannot avoid primitive modality as well.

²² See Kripke (1980), Armstrong (1989), Melia (2003).

such things. There *could be* such things, but actually there are none of them (unless you assume that possible existence is a mode of existence and endorse some kind of meinongianism, but meinongianism is even more controversial, at least from an intuitive standpoint, than modal realism). A modal realist could reply that she is able to mirror our intuitions by introducing restricted quantifiers that range over a restricted range of possible worlds. This would allow her to provide some reinterpretations of our intuitive statements. For instance, she would argue that when we say: 'there are no talking donkeys', we quantify over some restricted domain of possible worlds such that they do not contain talking donkeys. Thus, under a specific context, it is true that there are no talking donkeys. However, speaking unrestrictedly, there are worlds (provided by the principle of recombination), in which there are talking donkeys.

I think that this solution is unacceptable. It is like saying that if we ignore some possible worlds at which there are talking donkeys, then we can truly say that there are no talking donkeys. But the incredulous stare objection is that, speaking unrestrictedly, there are no nonactual individuals. Thus, modal realist solution does not work. In effect, the modal realist is forced to say that either there are nonexisting individuals (which opens up a route to modal meinongianism), or that besides actual entities there are nonactual entities, which expands our ontology in an unacceptable way. Actualism allows us to provide an account of modality that avoids both consequences and gives justice to an intuition that there are no possible individuals, but everything that exists is actual.

Secondly, and relatedly to the first point, modal realists, unlike actualists, argue that there are two kinds of existential quantifiers: narrow and inclusive ones. Sentences including narrow existential quantifiers say what exists within a particular world, while sentences including

inclusive existential quantifiers say what exists relative to the whole space of possible worlds. For modal realists both quantifiers have their uses. As a result, a modal realist will sometimes quantify, in the inclusive sense, over individuals that do not exist in the narrow sense in the actual world. Actualists however see a problem here: for them the existential quantifier is always the narrow quantifier, because, according to actualism, necessarily, everything that exists is actual. One cannot make sense of the modal realist inclusive quantifier because there are no things which do not actually exist. Thus, modal realists misrepresent our intuitive use of some portions of the natural language in modal contexts.²³

Thirdly, some actualists argue that actuality is not a relative matter, that is, which possible world is actualized is an absolute matter. ²⁴ Only one world is actual. And it is this world, the actual world, the world in which we live. Such a view could then be used as an argument against modal realism: it could be argued that only one world is real—the actual world—while all other possible worlds are just abstract parts of it. Among the plurality of possible worlds only one world is actualized, it is a possible world which correctly represents the actual world, that is, the actualized world. The actualized world should not, however, be confused with the actual world: while the latter is a concrete individual, the former is still an abstract entity.

Fourthly, one either endorses modal realism with overlap or without it. Suppose one endorses the former view. In such a case one has to somehow have to deal with the problem of accidental intrinsics. As I observed above, the modal realist could borrow some solutions provided by endurantists or perdurantists (depending on whether her modal realist view is a modal

²³ For a similar observation regarding a debate between actualists and modal realists see Lycan (1990, pp. 217) and Bennett (2006, pp. 281).

²⁴ Such a point is made e.g., by Adams (1974), Hazen (1979b), Salmon (1987), Armstrong (1989).

analogue of endurantism or perdurantism) to the problem of temporary intrinsics affecting individuals persisting in time. However, each solution to the problem of accidental intrinsics will introduce some additional ontological commitments to the already controversial theory, e.g., a commitment to tropes (as in case of McDaniel's view), or to the modal analogues of temporal parts, which Yagisawa calls modal indices, which are just modal slices or parts of individuals. An advantage of the actualist view on possible worlds over modal realism with overlap is that it is able to account for transworld identity of individuals very cheaply and without being affected by the problem of accidental intrinsics. If possible worlds are sets of some abstract representatives such as propositions or sentences of an idealized language, it is uncontroversial to say that two sets share some of their members. Similarly, if possible worlds are maximal properties or states of affairs it is uncontroversial to say that two distinct maximal properties or states of affairs could share some of their parts, that is, that a single nonmaximal property could be a part of two distinct maximal properties, or that a single nonmaximal state of affair could be included in two distinct maximal states of affairs. The problem of accidental intrinsics does not arise for the actualist, because transworld identity of individuals is accounted for by transworld identity of their abstract representaitives, not individuals themselves. For instance, assuming linguistic ersatzism, a name 'Socrates' could at one world be paired with a predicate 'is a philosopher', but at another world with a predicate 'is a farmer'. At each world 'Socrates' refers to the same individual, and each world represents that individual as having different qualitative character. No problem of accidental intrinsics appears. And this of course can be generalized to any of the mentioned actualist views.

Next, suppose that you endorse modal realism without overlap and you maintain that individuals are worldbound. As I explained it, the view of worldbound individuals naturally leads to extreme essentialism which states that all properties of individuals are essential to them. However, due to the fact that extreme essentialism seems highly implausible and counterintuitive, the modal realist recovers modal variability of individuals by endorsing counterpart theory. There are however some issues associated with counterpart theoretical explanation of modality. The most known objection to counterpart theory is the Humphrey objection (Kripke 1980, De 2018), which basically says that it is irrelevant what properties some individual y has for our explanation of modal properties of x, even if y is similar to y. There are also some further issues affecting counterpart theory. For the Lewisian modal realist, it is counterpart relations that ultimately represent possibilities, not possible worlds as such. However, as Kment observes (2012, pp. 601), it makes possible worlds redundant in our analysis of modality, because the whole explanatory work is done by counterpart relations. However, the very purpose of introducing possible worlds was to provide an analysis of the concepts of possibility and necessity (as Leibnizian biconditionals introduced at the beginning of this chapter show). If that job is done by counterpart relations, it seems that our view could do fine without possible worlds. However, it seems that counterpart relations cannot provide all applications which possible worlds are able to provide, e.g., (a) counterpart relations cannot be the relata of closeness relations which are part of the standard account of counterfactuals (see Lewis 1973), and (b) counterpart relations cannot be subjects of probability measures (Kment 2012). However, probability is important for explaining some parts of modal space (as indicated by Kment). Thus, counterpart theory leaves

²⁵ For further references and discussion of the Humphrey objection see Chapter 7, section 7.3.2. below.

some gaps in the space of possibilities. The Lewisian could then say that both possible worlds and counterpart relations are required to provide an adequate explanation of modal concepts. But it is unclear what explanation is done by possible worlds and what explanation is done by counterpart relations. It is possible to provide a much cheaper, actualist explanation of modality, which provides all required explanations of modal concepts by appealing solely to the possible world framework, assuming that we do not combine actualist view on possible worlds with counterpart theory. My point is that the actualist has a choice: She can either endorse a simple possible world account of modalities, or she can opt for a hybrid view which introduces both possible worlds and counterpart theory as a way of explaining modalities *de re.* Modal realist has no choice, but if she wants to avoid extreme essentialism and overlap she has to adopt counterpart theory. And if counterpart theory for some reason fails at providing an adequate explanation of modality, modal realism fails as well. Actualism, due to its neutrality over the issue of counterpart theory, fares better in that regard.

Fifthly, modal realism (with or without overlap) has troubles with accounting for some intuitive possibilities: e.g., empty worlds, worlds with disjoint spacetimes, worlds with extended spatiotemporal entities, impossible worlds or worlds containing only abstract entities such as numbers or necessary nonspatiotemporal individuals such as God.²⁶

Sixthly, according to the received view on the theoretical virtues, a theory is quantitatively parsimonious if it is modest in the number of entities of some kind K that it postulates. In turn, a theory is qualitatively parsimonious if it is modest in the number of kinds of entities that it

²⁶ Such an argument is made e.g., by Melia (2003, pp. 112-113). Lewis himself admits that his view is unable to account for some of the mentioned possibilities, see Lewis (1986, Ch. 2).

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postulates. Lewis agreed that his view is unparsimonious but only quantitatively: Modal realism introduces the plurality of possible worlds but those are the same kind of things as the actual world is. We already believe that the actual world exists. Lewis claims that there are just more things of that kind than we tend to think. However, as observed by Melia (2003, pp. 113), modal realism is also qualitatively unparsimonious. This is so because modal realists include in their ontology not only possible worlds but possible individuals as well. And those can come in radically different kinds than kinds of actual individuals, e.g., there are possible dragons, chimeras, talking donkeys, and so on. Thus, we have in our ontology many kinds of possible individuals that are different from the kinds of actual individuals. Such ontology is both quantitatively and qualitatively extravagant.

I am aware that these objections are not knockdown arguments against modal realism and each of them can be addressed, in one way or another. However, many find them (including me) sufficient to warrant looking for an alternative account of modality. Let me thus now move to actualism.

1.4. Actualism

According to actualism, and in contrast to modal realism, our quantifiers do not range over merely possible individuals or merely possible worlds. Instead, they always range over a domain of actually existing entities. Everything (in an unrestricted sense) that exists is actual; there are no individuals or worlds (nor could have been²⁷) which exist but are nonactual.

 $^{^{27}}$ Thus, I assume that *if* actualism is true then it is necessarily true. I am not interested in variants of actualism which are only contingently true.

That said, the actualist, of course, does believe that the actual world could be different in many ways. For instance, it could contain the same individuals or properties but rearranged in some way, it could contain an additional individual or a property, which cannot be identified with any actual individual or a property or any recombination of them, or it could contain fewer individuals or properties than it actually does.

Almost all actualists (except for those who believe that our world could not differ in any aspect, but believe that everything exists necessarily) agree that such possibilities are genuine. However, actualists must explain those possibilities without making a commitment to genuine *possibilia*. Since the actualist does not believe in genuine possible worlds and possible individuals, in order to preserve the possible world framework and its varied applications, she is forced to provide some replacements of *possibilia*, that would be less controversial than concrete possible worlds and concrete possible individuals introduced by the modal realist.

A default and familiar actualist story is that there is one concrete world—the actual world—filled with abstract²⁸ representatives which represent alternative ways for the actual world to be. Those representatives are abstract possible worlds. One of them is actualized. This is the actualized world. A possible world w is actualized if it correctly represents the way the actual world is. In turn, w correctly represents the way the actual world is iff it contains all true statements about the actual world. However, it is important to note that an actualized possible world is still an abstract and representational entity.²⁹ Similarly, for individuals, the actual world

²⁸ Actualists usually heavily depend on an intelligibility of a distinction between concrete and abstract entities. Throughout this dissertation I shall rely on the intuitive grasp of a difference between concrete and abstract entities according to which entities—such as numbers, propositions or properties—are abstract, while entities such as ordinary objects or artifacts are concrete.

²⁹ Throughout this dissertation I shall assume dualism about the actual world and possible worlds. According to this view, possible worlds are different kinds of entities than the actual world is. While the actual world is a concrete,

contains all concrete (and abstract) individuals there are. In addition to that, however, it contains a vast number of abstract representatives representing ways actual individuals could have been.

Some of them are actualized, others are not.

At this point one might ask: Why aim at providing replacements for genuinely possible entities, instead of abandoning them completely and becoming a *true* actualist? Such a position has been called 'hardcore actualism'. According to such a view, modality can be fully explained in terms of how the actual world is. There is no need to appeal to genuine *possibilia* or introduce their actualist replacements. Variants of hardcore actualism include combinatorialism, fictionalism and dispositionalism.

However, as I have already explained, *possibilia* have plenty of semantic and metaphysical applications. Thus, *if* one wants to develop an actualist view that will match explanatory power of modal realism, one has to opt for some kind of 'softcore actualism', which provides replacements of *possibilia*, which would play their theoretical roles. From this point by actualism I will always mean softcore actualism.

There are plenty of actualist positions and different ways of classifying actualist approaches to possible worlds and individuals.

According to Bennett (2005) we should distinguish two classes of actualist views: domain-inclusion and nondomain-inclusion actualism. According to the former view, all individuals that

spatiotemporal individual, possible worlds are some kind of abstract, representational entities which represent possible ways the actual world could have been. For more details on this view, see Einheuser (2012) and Longenecker (2019b). In turn, monism about possible worlds states that predicates 'actual' and 'possible' refer to the same kind of entities: For the actualist they will be abstract, for the modal realist they will be concrete. Thus, all worlds have the same metaphysical status. Proponents of monism about possible worlds include: Plantinga (1974), Stalnaker (1976), and Lewis (1986).

³⁰ See Kimpton-Nye (2018, 2021).

could exist actually exist. Thus, each domain of individuals of each possible world is included in the domain of the actual world. This view is a natural choice for proxy actualists such as Plantinga, Linsky or Zalta, for whom each individual, no matter if actual or possible, has associated a unique actually existing proxy. Some proxies are actualized, some are not. That being said, in principle, one could hold domain inclusion without introducing proxies for possible individuals. For instance, one could just deny that there could be individuals not identical to actual ones and say that every individual that could exist, actually exists. In such a case there would be no need to postulate proxies for possible individuals.

In turn, according to the nondomain-inclusion actualism, there could be individuals distinct from those that are actual. Domains of possible worlds representing possible individuals are not subdomains of the domain of the actual world. Such a view is a natural choice for a nonproxy actualist for which possible individuals do not have unique replacements but only actual individuals do. Instead, domains of worlds representing possible individuals should be constructed generically. Instead of singular representatives of possibilia, nonproxy actualists postulate generic representatives that do not represent possible individuals directly and singularly, but which do so purely qualitatively. For instance, for the nonproxy actualist, when we account for the possibility of a particular talking donkey, we are able to describe such a possibility purely qualitatively (de dicto), by saying 'Possibly, there is a talking donkey', but we are unable to provide any de re truth about a particular talking donkey, because there are no such individuals and we, thus, lack expressive resources to represent them singularly, e.g., by a name. In effect, a domain of a world representing the existence of a talking donkey can contain only its generic representatives which represent the possible existence of *some* talking donkey.

Lewis (1986) has provided yet another classification of actualist views. He proposed that we distinguish three kinds of actualist positions: linguistic, pictorial, and magical. Under his approach, actualist views differ with regard to their account of representation, that is, of the issue of how abstract representatives manage to represent possible states of affairs. Linguistic ersatzism is a view that representation works by naming, pictorial ersatzism is a view that representation works by isomorphism between the abstract representatives and represented entities, and magical ersatzism is a view that representation is a primitive, unexplained relation that holds between abstract representatives and represented entities.

In what follows I shall follow yet another classification of actualist views which discerns Platonic and Aristotelian forms of actualism.

Bennett (2005) observes that Platonic/Aristotelian distinction overlaps with her domain-inclusion and nondomain-inclusion distinction. In my view, however, the Platonic/Aristotelian distinction overlaps with Bennett's distinction only partially. It is broader than Bennett's distinction, and this is so for two reasons. Firstly, the Platonic/Aristotelian distinction takes Lewis's distinction into account as well. Secondly, it adds yet another layer of interpretation of actualist views which concerns modal status of modal space itself. Let me elaborate on that.

Obviously, both Platonic and Aristotelian forms of actualism share the actualist tenet that everything that exists is actual. However, both views differ with respect to three fundamental issues:

(1) How do abstract representatives (proxies, surrogates) manage to represent possibilities? Do they represent possibilities purely qualitatively or nonqualitatively? If

both, what is the nature of the relation between qualitative and nonqualitative representation. (This relates to Lewis's approach).

- (2) What is the nature of representatives? Are they purely qualitative, partially nonqualitative or purely nonqualitative? What is the metaphysical status of entities represented by those representatives? (This relates to Bennett's approach; although she is interested only in the nature of representatives, and leaves the issue of the nature of entities being represented aside).
- (3) What is the modal status of modal space itself? Are there some contingent possible truths, or do all possibilities hold (or not hold) with necessity?

In what follows I focus on the pure forms of Platonic and Aristotelian actualism which are Platonic and Aristotelian with respect to all of the three issues. Have in mind though that in principle one could provide hybrid views that are Platonic with respect to some of the listed issues and Aristotelian with respect to others.

Roughly speaking, Platonic actualism is a view that: (1) Abstract representatives manage to represent singular possibilities, no matter if possibilities regarding actual or possible individuals are concerned; (2) each individual, no matter if actual or possible, is replaced by a unique abstract representative (proxy) that represents each individual is *individual*; (3) modal space is necessary. There are no contingent possibilities.

In turn, according to Aristotelian actualism: (1) Abstract representatives are able to represent singular possibilities only of actual individuals. All possibilities regarding possible individuals are general; (2) while actual individuals are replaced by unique representatives that represent them as *individual*, possible individuals are replaced by the generic and qualitative

representatives which do not represent them as individuals, but which represent general structures (e.g., patters of properties); (3) some portions of modal space—possibilities involving contingent individuals—are contingent, i.e., they depend on what individuals there are.

In the next chapter I shall provide a more detailed analysis of Platonic and Aristotelian actualism based on three examples: necessitism and Plantingian actualism in the case of Platonism, and ersatzism in case of Aristotelianism. However, before I close this introductory chapter, let me describe some semantic background underlying Platonic and Aristotelian actualism that will be relevant for the further discussion of those views.

1.5. Some semantic aspects of actualism

Although, I indicated in section 1.2., that metaphysical accounts of *possibilia* are explanatorily prior to semantic considerations involving them, each metaphysical actualist account of *possibilia* has some associated semantics. And by looking at the presumed semantic frameworks of each actualist account we can learn something about their metaphysics of *possibilia*, e.g., how a given account interprets the actualist tenet 'everything that exist is actual', how it constructs domains of worlds, or how it relates to the issue of existentialism or transworld identity.

In general, by looking at semantic presuppositions of various actualist views we can discern two kinds of actualist accounts of *possibilia*: ones appealing to the fixed domain semantics and ones appealing to the varying domain semantics.

On the one hand, there is a fixed domain actualism (inspired by pre-Kripkean fixed domain semantics) according to which all possible worlds have exactly the same domain of individuals, namely, a domain of individuals existing at the actual world. Here, 'everything that

exists is actual' means that a domain of every possible world is a domain of the actual world. Our quantifier, 'everything', always ranges over one and the same domain of individuals.

On the other hand, there is a varying domain actualism (inspired by varying domain Kripkean semantics) according to which each possible world has associated its own domain of individuals which is not identical to a domain of the actualized world. It entails that varying domain actualism allows for things which exist but are not actual, contrary to its basic tenet that everything that exists is actual. Yet there are few ways in which actualists can accommodate Kripkean semantics to make it consistent with a claim that everything that exists is actual.

When considering semantic frameworks for quantified modal logic (QML), we find so called *canonical conception* based on Kripkean models which are sextuples: $\langle W, W@, R, D, Q, V \rangle$ (Hintikka 1961, Kripke 1963, Menzel 1991). Its intuitive application is: W is the set of all possible worlds, W@ is the actualized world, R is accessibility relation, D is the set of all possible individuals, Q is a function assigning to each world a domain of individuals (D(w)) which is a subset of D, and V is a function assigning elements of D to the extensions to predicates and truth values to sentences at each world.

What was new about Kripkean semantics in comparison to older semantic models was the addition of function Q, which allows for distinct possible worlds to have distinct domains of individuals. As a result, our quantifiers, when evaluated at a world, range only over the individuals existing in the domain of that world (Linksy and Zalta 1994, pp. 438). For this reason, Kripkean semantics is called varying domain semantics.

 $^{^{31}}$ It is worth mentioning that Kripkean models can be easily accommodated by the Lewisian modal realism coupled with counterpart theory. Kripken models—a counterpart relation C, which connects individuals across possible worlds—need to be added. See Lewis (1968).

This contrasts with a fixed domain semantics for simplest quantified modal logic (SQML) (see Barcan 1986, Linsky and Zalta 1994, 1996, Williamson 1998, 2000, 2002, 2013, and Hughes and Creswell 1996) according to which our quantifiers range over one fixed domain of individuals. A main virtue of SQML is that it is straightforwardly compatible both with modal realism and actualism. Below I will focus on its actualist applications only.

SQML is a result of connecting S5 system of modal logic with the standard quantified propositional logic (For more see Linsky and Zalta 1994, 1996, Melia 2003). In turn, the simplest semantic model for SQML is quintuple: $\langle W, W@, D, R, V \rangle$. Intuitive applications of the elements of the model are as follows: W is a set of possible worlds, W@ is the actualized world, D is a nonempty domain of individuals, R is accessibility relation and V is a function assigning each constant to a member of a domain D and assigning intensions (sets of n-tuples from D) to predicates (see Linsky and Zalta, 1993, pp. 434).

This model is very similar to the Kripkean model, but a difference is that here there is no function Q, assigning to each possible world in W a domain of objects D(w) which is a subdomain of D.

An intuitive rationale for fixed domain view: For any possible world w_1 and w_2 , w_2 is accessible to w_1 iff $D(w_2)=D(w_1)$ or $D(w_2)$ is a subset of $D(w_1)$. As a result, our quantifiers must always range over the same domain of individuals.³² Now, if our quantifiers always range over one and the same domain of objects it follows that principles:

³² A similar remark is made by Bennett, when she says: 'If every world can access every other (as required by S5), and if either it is the case that worlds can only access worlds whose domains are a subset of theirs (as entailed by the Barcan formula), or it is the case that worlds can only access worlds whose domains are a subset of theirs (as entailed by the

(BF):
$$\lozenge \exists x (Fx) \rightarrow \exists x \lozenge (Fx)$$
 (or, given interdefinability of \square and \lozenge , $\forall x \square (Fx) \rightarrow \square \forall x (Fx)$
(CBF): $\square \forall x (Fx) \rightarrow \forall x \square (Fx)$ (or $\exists x \lozenge (Fx) \rightarrow \lozenge \exists x (Fx)$)
(NE): $\forall x \square \rightarrow \exists y x = y$

are all true. However, for many actualists (and not only for them), these principles are controversial and unacceptable.³³ I shall summarize the reasons why this is so.

It is recognized that BF (for possibility operator) entails that from every $de\ dicto$ truth follows some $de\ re$ truth. That is, if it is possible that there is some x having F, it follows that there is x such that possibly it is F. As a result, one is committed to the (actual) existence of a possible entity which has a $de\ re$ modal property F. However, for the actualist not every $de\ dicto$ possibility entails $de\ re$ possibility. For example, the actualist wants to say that from a $de\ dicto$ truth such as 'It could be the case that Donald Trump has had a twin brother', it does not follow a $de\ re$ truth that there is (in the actual world) an individual x which is Donald Trump's twin brother. More generally, the actualist does not want to be forced to claim that every possibility statement has to be grounded in some statements about something actually existing (see. Linsky and Zalta 1994, pp. 437). BF forces us to claim that there could not be any modal $de\ re$ statement about some entity x without x existing at the actualized world.

³³ This is indicated by Divers (2002, po. 210-226), Bennett (2005, 2006), Linsky and Zalta (1994, pp. 436-439), Wang (2013).

³⁴ Well, one way of reconciling BF with actualism and to allow for there being an actual entity which is possibly my sister, is to deny essentialism (e.g., essentiality of origins) and allow actually existing entities to change any of their properties. Then it could be concluded that there is (in the actual world) an object that could be my sister (and this could be generalized to account for any possibility for the actual individual). However, it is problematic that actualists, in order to make their view consistent with BF, are forced to antiessentialism. I think that the actualist should be able to explain how modality works without commitment to antiessentialism. Such an antiessentialist solution to the problematic consequences of BF was delivered by Barcan (1986). See also Linsky and Zalta (1994, pp. 437).

In turn, BF (for necessity operator) is problematic, because it entails, for instance, that if everything that actually exists is necessarily mortal, it must follow that everything that could exist is mortal. Yet, it seems intuitively obvious that there could be immortal individuals. Thus, it is not necessary for everything that could exist to be mortal.

The majority of issues with CBF are just analogical to those mentioned in the case of BF, so I will skip them. What is peculiar about CBF is that if combined with a thesis of serious actualism³⁵, a view that something can have properties only in worlds in which it exists, it entails NE (or, equivalently, something can be in an extension of a predicate *P* at world *w* only if it exists at *w*).³⁶ Thus, CBF confronts us with a question of whether objects have properties in worlds in which they do not exist. Actualists typically deny that. If so, they endorse serious actualism. If they additionally endorse CBF, NE follows. However, NE is highly problematic (for actualists and supposedly for many other philosophers and nonphilosphers as well) because it entails everything existing necessarily, which means that a domain of actual world is fixed, and this is incompatible with a widely shared belief that, e.g., the possibility of aliens is genuine (as we will see in a moment, proponents of fixed domain actualism have some resources to address that issue). Most importantly, even if issues regarding BF and CBF can be somehow addressed by a proponent of fixed domain semantics, NE still remains as the biggest issue with this semantics.

³⁵ For many philosophers, serious actualism is a very intuitive principle. Proponents of it include: For a discussion of serious actualism see Plantinga (1983), Pollock (1985), Stephanou (2007), Stalnaker (2012), Williamson (2013). See also Chapter 5, section 5.5.4. below, where I discuss serious actualism with reference to the issue of existentialism.

Generally, serious actualism is believed to be true by most actualists. Many researchers think that serious actualism analytically follows from actualism, if actualism is understood as a thesis that there are no and could not have been individuals which do not exist. This entailment is defended by Plantinga (1979, 1983), Bergman (1996), Hudson (1997). For critical responses see Fine (1985), Pollock (1985) and Hinchliff (1989). I shall not dive into discussion of these specific arguments for or against serious actualism. I believe that the thesis of serious actualism is very intuitive, and throughout this dissertation I assume it to be true.

³⁶ I do not want to complicate my characterization of necessitism here. For a formal derivation of NE from CBF and serious actualism see Linsky and Zalta (1994, pp. 437).

Thankfully, by employing Kripkean semantics one can avoid a commitment to all of these problematic principles. A main feature of these semantics is that they allow for possible worlds to have distinct domains of objects from a domain of the actual world. Here is how the actualist can apply this feature to deny BF, CBF, and NE.

In the Kripkean semantics BF is not satisfied because according to Kripke models, even if $\forall x \Box (Fx)$ it does not follow that $\Box \forall x (Fx)$. For example, even if everything that actually exists is mortal (i.e., everything within a domain of the actual world), there are possible worlds containing nonactual individuals which are immortal. If so, it is not necessary for everything to be mortal. (Analogical remarks apply to BF for the possibility operator).

Now, onto the CBF. Its antecedent $\Box \forall x(Fx)$ entails that necessarily everything that exists (in all domains of possible worlds) has some feature F. Suppose that it is the property of existence. It follows from CBF that everything that is actual is necessarily existent $(\forall x \Box F(x))$. This, however, is obviously not true. (Analogical remarks apply to CBF for the possibility operator).

Lastly, since within Kripkean semantics distinct possible worlds have distinct domains of objects, NE is obviously false as well. Moreover, if it is the case that BF, CBF, and NE stand or fall together³⁷, if only one of them is not satisfied in Kripkean semantics it follows that all three are not satisfied.

That said, even though Kripkean semantics helps the actualist explain BF, CBF, and NE away, the actualist cannot accept it at face value, because Kripkean semantics, if taken at face value and combined with actualism, gives rise to several problems. In the literature we can find three

³⁷ For formal derivation of CBF and NE from BF see Linsky and Zalta (1994). See also Bennett (2005, endnote 6), for an explanation of a claim that BF, CBF, and NE stand or fall together. This is true only under the assumption that accessibility relation R is unrestricted).

such problems: the D-problem, the V-problem and the Q-problem.³⁸ Each successful actualist view based on Kripkean semantics has to somehow address these problems. This usually involves either modifying the semantics or modifying metaphysical assumptions underlying actualism. Let me briefly overview all three problems (I come back to those issues in Chapter 7, where I discuss semantic applications of the view that I present in Chapter 6).

Let's consider the D-problem first. According to an intuitive application of Kripkean semantics, there are possible worlds with domains of individuals distinct from that of the actual world. This would be unproblematic if such domains were just subdomains of the domain of the actualized world. However, if we believe that it is possible that there could be an alien individual not identical to any individual in the domain of the actualized world, (and almost everyone shares that belief), then Kripkean semantics explains this possibility by claiming that there is a possible world containing an individual which is not identical to any actual individual. Suppose that such a world is inhabited only by such alien individuals. As a result, we have a world whose domain is not a subdomain of the domain of the actualized world. Thus, Kripkean semantics commits actualists to the existence of nonactual individuals, which is inconsistent with the actualist tenet that everything that exists is actual.³⁹

Let's move towards the V-problem. An intuitive application of function V allows for some predicate P at a possible world w with a domain D(w), to have in its extension an individual which is not a member of domain D(w), i.e., which does not exist in w. For example, a predicate

³⁸ See Divers (2002, Ch. 13). Bennett (2005, 2006) also discussed an issue of how the actualist can endorse Kripkean semantics, but she covers only the D-problem. See also Plantinga (1976) and Linsky and Zalta (1994, 1996) for a

discussion of similar issues affecting actualist view.

³⁹ The view that Kripkean style semantics (without any modifications) is in spirit possibilistic is quite common. For such a view see McMichael (1983b), Hodes (1986), Menzel (1990) and Bennett (2006).

'being human' might have Nixon as an extension, even at possible worlds in which Nixon does not exist (Divers 2002, pp. 224). To put it differently, there are possible worlds according to which it is true that Nixon is human, yet, according to which it is not true that Nixon exists. This, however, seems to run against serious actualism, a view that something can exemplify a property at a possible world w only if it exists in w. By applying this principle to predicates it follows that an individual x can be an extension of a predicate p at w only if x is in the domain of w. Since the majority (if not all) of actualists adopt serious actualism, function v poses a difficulty for an actualist appealing to Kripkean semantics.

Lastly, let's consider the Q-problem: Intuitive application of function Q entails that one and the same individual can be a part of at least two distinct domains of individuals. Thus, it follows that Kripkean semantics comes with a view that individuals can be transworld identical. As a result, every actualist wanting to adapt Kripkean semantics to her view has to then explain how the transworld identity of individuals is possible within their metaphysical framework.

Each successful actualist theory of possible worlds based on Kripkean semantics has, in one way or another, addressed these issues. The actualist can either modify and accommodate Kripkean semantics to her needs, or modify underlying metaphysics to match consequences of intuitive application of Kripkean semantics.

Chapter 2

Platonic and Aristotelian actualism

In the previous chapter I distinguished Platonic and Aristotelian approaches to actualism. Both views replace genuine possibilia with some kind of actually existing abstract representatives, e.g., propositions, sentences or properties, that play similar (or identical) theoretical roles to those of genuine possibilia. However, as I indicated at the end of the previous chapter, there are fundamental differences between Platonic and Aristotelian approaches which concern the issues of how representatives represent possibilities for individuals, what is the metaphysical status of representatives and represented entities, and what is the modal status of modal space itself. A distinctive feature of Platonic actualism is that it provides a uniform treatment of actual and possible individuals: (a) Both are represented in the same way, that is, both kinds of individuals can be subjects of singular possibilities; (b) representatives of actual and possible individuals are nonqualitative (singular) and represent them as genuine individuals; (c) all possibilities, no matter if singular or general, hold with necessity. In contrast, a distinctive feature of Aristotelian actualism is that it treats actual and possible individuals differently: (a) While actual individuals can be subjects of singular possibilities, all possibilities about possible individuals are general; (b) while representatives of actual individuals are singular (nonqualitative) and represent them as genuine individuals, representatives of possible individuals are general (qualitative) and represent reality as having a purely general structure free of individuals or facts about them; (c) some parts

of modal space are contingent, more specifically, what singular (*de re*) possibilities there are depends on what individuals exists.

Below I discuss those differences between Platonic and Aristotelian forms of actualism in some examples. Subsequently, I provide some reasons for which I prefer the Aristotelian approach and start developing a variant of Aristotelian actualism modeled on linguistic ersatzism, which I call Aristotelian ersatzism. In this chapter I take a first step towards that goal by presenting basic assumptions of linguistic ersatzism and identifying three essential claims that must be added to it, in order to make it a kind of *Aristotelian* actualism. Those claims will be essential parts of the metaphysics underlying Aristotelian ersatzism that I develop in the remaining parts of the dissertation.

Overview of the chapter. I start my analyses by considering two variants of Platonic actualism: necessitism, an actualist view based on fixed domain semantics (Linsky and Zalta 1994, 1996, Williamson, 1998, 2000, 2002), and Plantingian actualism (Plantinga 1976), which is based on varying domain (Kripkean) semantics. I take both views to be variants of proxy actualism. Firstly (2.1.), I focus on necessitism. I present its basic claims and applications. Subsequently, I overview issues associated with that view. Following that (2.2.), I move towards Plantingian actualism. I argue against two of its assumptions, which are essential for Platonism as such: (a) a view that there are singular possibilities about possible individuals and (b) antiexistentialism, a view according to which there are no contingent singular propositions. Subsequently (2.3.), I discuss

⁴⁰ In claiming that both necessitism and Plantingian actualism are variants of a proxy approach I follow Bennett (2006). That said, there are some important differences between both views. See Nelson and Zalta (2009).

Aristotelian actualism modeled on linguistic ersatzism. First (2.3.1.), I explain basic assumptions of linguistic ersatzism. Following that (2.3.2) I argue that a systematic metaphysical account underlying the Aristotelian variant of linguistic ersatzism is yet to be provided. I introduce such an account, which I call Aristotelian ersatzism, and indicate three claims which are essential for it and which I analyze throughout the remaining parts of the dissertation.

2.1. Platonic actualism I: fixed domain actualism

In this section I provide an overview of the main postulates of a fixed domain actualism (necessitism). After that, I discuss some issues associated with it and explain why this view might be found problematic by actualist lights and why an Aristotelian alternative is more attractive.

2.1.1. Exposition

Fixed domain actualism⁴¹, similar to other variants of actualism, states that everything that exists is actual. In other words, that there are no (nor could have been) nonactual, merely possible individuals. If this claim is taken at face value it just means that the domain of all individuals is invariable from world to world and consists only of actually existing individuals. All possible worlds have the same domain of individuals. Thus, domain D, a set of all domains of all worlds just is a domain of the actualized world, $D_{(w \oplus)}$ Due to this, fixed domain actualism maintains that everything exists necessarily. This is a reason for which this view is often called 'necessitism'. Since nothing can cease to exist, all modalities involving all individuals are necessary as well. Thus, this

41 My explosion of fixed domain actualism rests heavily on Linsky and Zalta's variant of it developed in their (1994,

¹⁹⁹⁶⁾ papers as well as Divers' (2002) and Bennett's (2005, 2006) discussions of it. Another famous proponent of necessitism is Williamson (1998, 2000, 2002, 2013).

view is straightforwardly Platonic, for it requires the space of possibilities to be necessary. A main benefit of endorsing necessitism is that it preserves a most simple semantic interpretation of QML.

At first glance, necessitism seems implausible for it runs against a strong intuition that, besides necessary individuals (such as numbers, sets, properties), there are contingent individuals (such as people, animals, tables). Linsky and Zalta (1994, pp. 432) are aware of this issue. Their response is that we should not confuse a notion of contingent existence with a notion of contingent concreteness. If we keep them separate, then, even though necessitism entails that everything necessarily exists, it does not entail that everything is necessarily concrete. Thus, one is able to preserve the intuition regarding contingent existence by appealing to the notion of contingent concreteness. However, in order to be able to do that, Linsky and Zalta assume that concreteness and nonconcreteness are accidental properties of at least some individuals. Once such a claim is made it is possible to explain modal intuitions without appeal to *possibilia*. This, however, is done at the cost of expanding the ontology of the actual world.

Necessitists maintain that the actual world contains, besides contingently concrete individuals (e.g., ordinary individuals such as Barack Obama or tables) and archetypical necessary abstract objects (e.g., numbers), an infinite number of contingently nonconcrete individuals (e.g., Kripke's twin brother, talking donkeys, golden mountains). Thus, besides a claim that the space of possibilities is necessary, necessitists also claim that there are unique stand-ins (contingently nonconcrete individuals) for all merely possible individuals.

2.1.2. Some applications

I shall present some basic applications and explanations that this view provides. I focus first on some intuitive modal statements that need to be accounted for by any plausible actualist account of possible worlds. After that, I focus on some semantic applications of necessitism.

Providing truth conditions for problematic modal statements

Let's focus on how necessitists can provide truth conditions for various kinds of modal statements that are usually judged problematic for the actualist.

Firstly, consider a possibility that some actual individual could cease to exist:

Possibility of Nonexistence: An actual individual *x* could cease to exist.

It might initially be problematic for necessitism to account for such a possibility, because under necessitism everything necessarily exists. However, necessitism is able to provide a paraphrase for it. In general, a proposition expressing possible nonexistence of some individual x: [An individual x could cease to exist] should be read as: [An individual x could be nonconcrete]. Thus, the necessitist is able to account for the intuition lying behind the possibility of nonexistence of actual individuals.

Secondly, consider the possibility of aliens:

Possibility of Aliens: Possibly, there is an individual not identical to any actual individual.

According to necessitism it is not possible for there to be more entities than there actually are because everything exists necessarily, i.e., all possible worlds have one fixed domain. Thus, the

necessitist denies that the Possibility of Aliens, if taken at face value, is a genuine possibility. She claims that we treat it as a genuine possibility only because, on an intuitive level, we conflate existence with concreteness. Once we distinguish both features, our false belief that the possibility of aliens is genuine disappears. Linsky and Zalta in their (1994) paper argue that when we say that something exists, we really mean that something is concrete, and when we say that something ceases to exist, we really mean that it ceases to be concrete. Thus, when we consider the Possibility of Aliens), it should be read as:

Possibility of Aliens*: There is an actually existing individual which is nonconcrete but could be concrete.

Or, equivalently:

Possibility of Aliens**: There is a possible world w_1 in which some individual x exists and is nonconcrete and there is a possible world w_2 in which x exists and is concrete.

Thus, even though the Possibility of Aliens is, strictly speaking, false (for there cannot be additional individuals in the universal domain of all individuals), something similar to it is true.

Thirdly, necessitism can provide truth conditions for modal claims involving iterated modalities. The problem of iterated modalities appears once we accept that nonactual individuals are possible, and, thus, allow alien individuals themselves to exemplify some modal properties. A general idea is: there could be an alien individual x which was F but x could be G instead. It is recognized that iterated modalities are problematic for actualists, because they involve quantification over nonactual individuals. To see this, consider an example of iterated modality:

Iterated Modality: Saul Kripke could have a twin brother who is a farmer, however, he (Kripke's twin brother) could be a philosopher instead.

Now, following Alan McMichael's observations, Iterated Modality is true iff:

(1) There is a possible world w_1 which represents some x as not existing in the actual world (i.e., as being not identical to any actual individual) and as being Kripke's twin brother and being a farmer, and there is a possible world w_2 which represents x as existing and as being Kripke's twin brother and being a philosopher (McMichel 1983, pp. 54).

By supposing that being a farmer is F and being a philosopher is G, we can formalize this schema in a following way: $\lozenge\exists x(Fx \land \lozenge Gx)$ (see Fitch 1996, pp. 65). Now, the first part of (1) states that there could be an individual x which is not identical to any actually existing individual, and which is a farmer. Formally: $\lozenge\exists x(Gx)$. This is an example of the possibility of aliens. As indicated above, necessitists can easily account for that. Here, a possibility for x is purely de dicto, it does not ascribe to x any de re modal properties. However, she has more troubles with accounting for a second part of (1), $\lozenge Px$, which ascribes a de re modal property to x by claiming that x could be a philosopher. This follows from the fact that for the second part of (1) to be true there needs to be a particular nonactual individual which has transworld identity over w_1 and w_2 , and which exists at w_1 and is a philosopher. As a result, in order to provide truth conditions for iterated modalities, actualists are forced to accept the existence of nonactual individuals.

⁴² I changed the wording of McMichael's characterization slightly to be a more general one. Instead of worlds including states of affairs according to which such-and-such is the case, I say that worlds represent that such-and-such is the case. Thanks to that, such truth conditions can be accommodated to a range of actualist accounts of

Thankfully, necessitism offers an easy solution to the problem of iterated modalities.

According to necessitism Iterated Modality is true just in case:

(2) There is a possible world w_1 at which x (which is nonconcrete at the actual world) is concrete and is a farmer, and there is a possible world w_2 at which x (which is nonconcrete at the actual world) is concrete and is a philosopher.

There is no need to appeal to *possibilia* to provide truth conditions for Iterated Modality. It is sufficient to accept that there are (within the actual world) objects which are contingently concrete.

Semantic applications

The main virtue of necessitism is that it endorses the simplest semantic model for QML. In doing so it rehabilitates BF, CBF, and NE and treats them as unproblematic. Moreover, by avoiding Kripkean semantics, it avoids issues that follow from endorsing it together with actualism, that is, the D-problem, the V-problem, and the Q-problem. I shall briefly give an overview of how necessitists explain away problematic aspects of BF, CBF, and NE.

According to the necessitist interpretation of QML, BF (for possibility operator; analogical remarks hold for necessity operator) does not require us to accept that from the possibility of there being a million-carat diamond it follows that there is (in the actual world) a possible million-carat diamond. Instead, BF requires us to accept that there is something which has a property *possibly being a million-carat diamond*.⁴³ This, however, cannot be any of the

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⁴³ Such a reformulation of BF is presented by Barcan (1986) and Linsky and Zalta (1994). See also Bennett (2005, pp. 301).

actual concrete objects for it would violate our essentialist intuitions.⁴⁴ Necessitists agree that there is no concrete and actual object that could be a million-carat diamond. However, there is an actual but nonconcrete object that could be a million-carat diamond. More precisely, necessitists argue that a possibility of there being a million-carat diamond is explained by the fact that in the actual world there is a contingently nonconcrete million-carat diamond which could be concrete (i.e., which is concrete at some other possible world). As a result, BF requires only the existence of actual and contingently nonconcrete objects (Linsky and Zalta 1994, pp. 446).

CBF is unproblematic as well. CBF (for necessity operator; however, analogical remarks hold for possibility operator) was meant to be problematic, because it states that from the fact that necessarily, everything that exists has some property F, it follows that everything that exist is necessarily F. However, if we allow for the existence of nonconcrete objects, we can read CBF in the following way: Even if necessarily, everything that exists and is concrete is F (e.g., is material) it does not follow that everything that exists and is concrete is necessarily material, for there are objects which could be concrete and immaterial. CBF was also problematic for, if coupled with serious actualism (a view that something can have properties only if it exists), it entails NE. However, since NE is an acceptable principle, CBF is unproblematic in that regard as well.

Lastly, let's consider NE. Even though the domain of individuals is fixed and the same for all possible worlds, they differ from each other depending on which individuals are concrete and

⁴⁴ For more details on the antiessentialist solution to BF see fn. 35 above. Necessitists have their own ways of characterizing a notion of essential property. They argue that essential property (for contingently concrete objects) could be defined as a property that some object x has in every possible world in which it is concrete. In turn, an essential property for a necessarily abstract object is the one that some abstract object has necessarily. Such a twofold characterization of essential properties is more accurate than traditional modal characterization of essence, according to which F is an essential property of x iff necessarily, if x exists, x is F. The traditional notion of essentiality is unable to explain a difference in a way that contingent and necessary objects have essential properties. See Linsky and Zalta (1994, pp. 447).

which are abstract at them. Thus, despite NE being validated, our intuitions regarding contingent existence are preserved. For example, if there is a possible world w at which there is a talking donkey, it means that a talking donkey is concrete at w, whereas at the actual world it is nonconcrete. Thus, even though a talking donkey is a necessary being (it exists at all possible worlds), its contingency is explained by the fact that a talking donkey is concrete only at some possible worlds but not at all possible worlds. Thus, we can maintain NE and at the same time preserve intuitions lying behind possibilities of aliens, absence and change.

2.1.3. Issues with necessitism

John Divers observes (2002, pp. 213-219) that necessitism, despite being semantically consistent, is metaphysically implausible. I share this opinion. In what follows I shall present, partially following Divers, five reasons for which I think metaphysics of necessitism is implausible. Of course, at least some (if not all) of the issues indicated below could be addressed by necessitism. I do not aim to be exhaustive or decisive here. My aim here is to express dissatisfaction with vanilla necessitism and, thus, to motivate a search for an alternative account of possible worlds.

First, necessitism entails that the properties of being concrete and of being nonconcrete are accidental properties of objects. This, however, is controversial. Arguably, it is impossible for concrete objects to be concrete at some worlds and to be nonconcrete at some other possible worlds, and, similarly, for nonconcrete objects to be nonconcrete at some worlds and to be concrete at some other possible worlds. It is very intuitive to think that if, Socrates let's say, is not concrete at some possible world, he just does not exist at that world, and thus, given serious

actualism, he cannot exemplify at that world any property, including a property of being nonconcrete.

Moreover, I cannot find any persuasive arguments in Linsky and Zalta (1994, 1996) in favor of a claim that being concrete and being nonconcrete (or being abstract) should be treated as contingent properties of at least some objects. The only argument I can identify in their papers is an argument from theoretical usefulness. Namely, that treating being concrete and being nonconcrete as contingent properties allows us to provide the simplest semantic interpretation of QML. However, I do not think that the usefulness of an intuitively false claim makes it a true claim.

Secondly, there is a problem of how to individuate at least some of contingently nonconcrete objects. It is quite easy to conceive something concrete ceasing to be concrete. In such cases nonconcrete objects are individuated through their relation to concrete objects. However, if we consider nonconcrete objects that were never concrete (e.g., million-carat diamond), then there is a problem of how to individuate such objects, that is, how to discern (in a metaphysical sense, not an epistemic one) one nonconcrete object from another one.

Thirdly, Linsky and Zalta say that (1994, pp. 447), there is no difference in saying that Reagan exists but is not concrete and that Reagan does not exist. I think this is very problematic. First, such a claim runs against our intuition that Reagan is essentially concrete: if he were not concrete, Reagan would cease to exist. There is also a more technical issue associated with this view. When something exists and is nonconcrete, Reagan let's say, he exemplifies many properties characteristic of abstract objects: *being necessary*, *being outside spacetime*, and encodes (if we use Linsky and Zalta's term) many properties that he would exemplify if he were to be concrete such

as being human, being the president of the United States, etc. However, what we usually mean when we say that something does not exist, is that it does not exist and it does not exemplify (or encode) any properties at all. If this is what we usually mean by contingent existence, then necessitism is unable to account for our intuition, becasue it cannot allow for something ceasing to exist and at the same time exemplifying or encoding any properties.

Fourthly, necessitists claim that there is a one-to-one correspondence between merely possible individuals postulated by modal realists and nonconcrete individuals. Thus, it turns out there are more individuals in the actual world than we used to think. Besides ordinary diamonds and donkeys there is a vast number of nonconcrete million-carat diamonds, nonconcrete talking donkeys and other contingently nonconcrete individuals which exist in the actual world. This, however, is problematic because it turns out that necessitists' ontology is isomorphic to that of modal realists. ⁴⁵ Thus, I think the incredulous stare argument, which was originaly formulated against modal realism, applies to necessitism as well. Moreover, necessitism runs against one of the main motivations for developing an actualist alternative to modal realism, that is, to have a more safe and sane ontology than that of modal realism.

Fifthly, by identifying each possible individual with a unique proxy, necessitism runs against Aristotelian forms of actualism, which I think are preferable from an actualist standpoint. According to Aristotelian actualism, while we can account for singular possibilities involving actual individuals, possibilities about nonactual individuals are general. A main reason for that is that there are no possible individuals. Thus, we are unable to provide their unique representatives.

⁴⁵ A thought that necessitism is a kind of modal realism, see Bennett (2006). A similar issue affects Plantinga's proxy actualism. See section 2.2. below.

All we can do is to describe possible individuals indirectly, through some generic, purely qualitative descriptions. Such descriptions will represent possibilities of there being nonactual individuals. A nonactual individual could exist if a world representing its existence were actualized. But until that is the case, there is no such individual nor its unique proxy. In general, although I explore Aristotelian actualism in more detail below, for any form of Aristotelian actualism it will be essential that we provide different accounts of how actual and possible individuals are represented in modal contexts, and that we preserve the intuition that the actual world could be genuinely different, that is, it could contain some new individuals which actually do not exist.

Necessitism runs against both Aristotelian intuitions. It does not preserve an intuition that actual and possible individuals should be represented differently in modal contexts. According to necessitism, both actual and possible individuals can be represented singularly. It is just that while actual individuals are represented as concrete, possible individuals are represented as nonconcrete. They just differ with respect to some properties. But they are fundamentally the same kinds of entities. Necessitism runs also against the view that the actual world could contain some new individuals, which actually does not exist. Everything that could exist actually exists. The actual world contains more individuals than we think, but not all of them are concrete. Some of them are nonconcrete but could be concrete. When we consider x, a million-carat diamond as a possible individual, we should really think of a million-carat diamond as a nonconcrete individual that actually exists but which could be concrete. As a result, a million-carat diamond already exists in the actual world. It just lacks the property of being concrete. Thus, it is not true

that the actual world could contain some new individuals such as million carat diamonds. I find this result highly counterintuitive.

These are the reasons (although not exhaustive) for which I conclude that benefits which necessitism provides by delivering simplified semantics for QML with BF, CBF and NE on board are outweighed by the costs of the theory. Necessitists, of course, have some ways of answering at least some (if not all) of these issues. I cannot cover these answers here, for an exhaustive discussion of necessitism is not my aim. I just wanted to provide some reasons for which I do not follow their program and prefer an Aristotelian alternative. From this point I will focus only on variants of actualism based on varying domain semantics.

2.2. Platonic actualism II: Plantingian actualism

Let's now move towards a second variant of Platonic actualism, Plantingian actualism, which, in contrast to necessitism, is based on varying domain Kripkean semantics.

2.2.1. Exposition

Originally, this view was developed by Alvin Plantinga (1970, 1974, 1976, 1979), although he did not explicitly use the name 'proxy actualism' to describe his own position. Below I focus primarily on Plantinga's exposition of it. That said, Plantingian actualism has some other proponents as well. For instance, see works of Peter van Inwagen, who defended and further developed this view (1985, 1986).⁴⁶

⁴⁶ There are numerous discussions of many components of Plantingian actualism that I cannot cover here. For instance, individual essences are discussed by Adams (1981), Simon (1981), and Fine (1985). On the issue of serious actualism see Plantinga (1979), Hinchliff (1989), Hudson (1997), Bergmann (1998), Stephanou (2007), and Jacinto

I shall briefly overview Plantinga's basic metaphysical claims based on his (1976) and Divers' (2002, Ch. 10 and 13) discussion of Plantinga's view.

For Plantinga, a possible world is a maximal state of affairs. A state of affairs s is maximal iff for any state of affair s^* , s either includes s^* or precludes s^* . A possible world w includes s^* iff necessarily, were s actualized, s^* would obtain, whereas s precludes s^* iff necessarily, were s actualized, s^* would not obtain. Among many possible worlds, there is one which obtains. Such a state of affairs is the actualized state of affairs. An individual s exists iff necessarily, had a possible world s been actualized, s would exist. An individual s instantiates a property s iff necessarily, had s would exist and exemplify a property s. Note that all states of affairs, regardless of whether they obtain or not, are abstract entities. Therefore, all of them exist necessarily; every state of affairs (including every possible world) exists at every possible world. Even more so, all other intensional objects constructed out of states of affairs (possible worlds) such as propositions or properties will exist at all possible worlds as well. However, at each possible world only one possible world obtains (is actualized) and only some properties are exemplified, and only some propositions are true.

This is a very familiar actualist analysis. If one wants to, one can swap states of affairs for maximal properties (Forrest 1986) or maximal consistent sets of propositions (Van Inwagen 1986, Adams 1981), and preserve all indicated characterizations. What is specific to Plantinga's position, though, and what makes it a kind of *Platonic* actualism are two further claims: (a) Haecceitism, understood as a view that each individual—both actual and possible—has associated

(2019). Plantinga's arguments against existentialism (Plantinga 1983, Fine 1985, Stephanou 2020). Some semantic aspects of proxy actualism are discussed by Jager (1982) and Bennett (2006).

nonqualitative individual essence, also known as haecceity or thisness, which is its unique proxy; (b) Antiexistentialism, is a view that there are no contingent singular propositions but all of them are necessary. Accepting this view requires then—under the assumption that singular possibilities are modeled on singular propositions—there to be no contingent singular possibilities. Thus, the whole space of possibilities is necessary. I shall explain those two specific components of Plantinga's view in more detail.

Haecceitism

An essential part of Plantingian actualism is a view that each individual (either possible or actual) has an associated proxy which stays in a one-to-one relationship with each (possible or actual) individual. Plantinga takes such proxies to be thisnesses, properties of *being a*, e.g., *being Socrates*, which are unique and necessary for their bearers and are not reducible to any qualitative features of a given individual. Due to his commitment to thisnesses, Plantinga is usually described as a proponent of haecceitism both for actual and possible individuals, assuming (provisionally) that haecceitism equals accepting thisnesses.⁴⁷

Thisnesses are necessary in two senses. Thisness T is necessary because T exists in all possible worlds *simpliciter*. Thus, T is a necessary being in a strong (nonrelative) sense. T is necessary for x iff x has T in every possible world in which x exists. Thus, T is necessary for x in a weak (relative) sense. Lastly, thisness T is unique for x iff for some x and some y, if x has thisness

⁴⁷ Such characterization of haecceitism is preferred by Plantinga himself (1976) as well as by Kaplan (1975) and Adams (1979). However, as I show in Chapters 3 and 4, there are alternative characterizations of haecceitism, which allow one to be a haecceitist without endorsing thisnesses.

T, any individual y that has T is identical to x. Due to these characteristics, thisnesses can be called nonqualitative individual essences.

It is also important to note that thisness is not a property of self-identity, because every entity with determinate identity conditions has such a property. Thus, the property of self-identity is not unique but shareable by many individuals. Thisness should also be distinguished from Scotistic haecceities which are not properties nor essences of individuals, but some kind of primitive individuators of individuals.⁴⁸

Plantinga also assumes (as most philosophers who appeal to thisnesses do) that thisnesses are properties. Now, since properties are necessary beings (which is a commonly held belief), it follows that a domain of properties is invariable from world to world. Thus, if domains of worlds are built from thisnesses that go proxy for individuals, it follows that all possible worlds have the same domain. This might make Plantingian actualism collapse into fixed domain actualism (necessitism) discussed above. In order to avoid that (since Plantinga wants to endorse varying domain semantics), Plantinga postulates that each particular world has distinct essential domain (1976, pp. 117) which is constituted by exemplified individual essences at that world, that is, individual essences that would be exemplified if a world representing them as exemplified were actualized. Thus, even though possible worlds have the same domain of individual essences, they differ with respect to the individual essences that are exemplified at them. Most importantly, for Plantinga, essential domains are domains on which we quantify, e.g., when we use our everyday restricted quantifiers. Thus, one can appeal to varying domain Kripkean semantics instead of

⁴⁸ For a similar insight see Scarpati (2019). For more on thisnesses and haecceities see Chapter 4, section 4.3.1.

fixed domain semantics. At the same time, one can maintain that everything (unrestrictedly) that exists is actual because every individual essence exists at every world.

Antiexistentialism

In addition to haecceitism, Plantinga endorses an antiexistentialist account of singular propositions according to which, contrary to existentialism, there are no contingent singular propositions. This allows him to maintain a Platonist view that the space of possibilities is an unchanging realm. All possibilities are necessary, and all possible worlds necessarily exist.

For Plantinga, the main reason for endorsing antiexistentialism is that it can provide us with a solution to the puzzle of modal nonbeing, while existentialism cannot. A puzzle is as follows. It is uncontroversial to assume that there are contingent individuals which could cease to exist, e.g., it is true that Socrates might not have existed. If that were the case, a proposition [Not[Socrates exists]] would be true. However, since according to existentialism singular propositions ontologically depend on individuals they describe, if Socrates were not to exist, there would be no singular propositions true about Socrates either, including a proposition [Not[Socrates exists]]. Thus, it would not be true that Socrates does not exist, contrary to an initial assumption that Socrates might not have existed.⁴⁹ Thus, existentialism is false.

In order to solve the problem of modal nonbeing, Plantinga suggests that singular propositions should be viewed, not as being about or involving individuals, but instead as being about or involving thisnesses which go proxy for individuals. Given that thisnesses are necessary

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⁴⁹ Plantinga presents his argument in his (1983). For existentialist replies to Plantinga see Adams (1981) and Fine (1985). For a further discussion of existentialism see Stephanou (2007), David (2009), Speaks (2012), and Longenecker (2019a). See also Chapter 5 below in which I discuss existentialism and antiexistentialism in more detail.

entities, singular propositions about them turn out to be necessary as well. Most importantly, given that there are thisnesses of possible individuals and singular propositions are directly about or contain thisnesses, it follows that, similar to the case of actual individuals, there are singular propositions of possible individuals. Now, since singular *de re* possibilities are usually identified with true singular modal propositions, it follows that Plantingian actualism allows for *de re* possibilities for possible individuals.

Additionally, by endorsing antiexistentialism Plantinga is able to preserve a view that all possibilities are necessary: since there are no contingent singular propositions, all singular possibilities modeled on singular propositions are necessary as well. And since general possibilities hold with necessity as well (becasue all general propositions are necessary), it follows that there are no contingent possibilities. All possibilities are fixed, and what is possible does not depend on what the actual world is, or, equivalently, which possible world is actualized. In other words, possibilities belong to some kind of unchanging Platonic realm. Moreover, such necessitism can be extended to possible worlds themselves: If one were to choose to build possible worlds out of propositions, each possible world so constructed would be necessary as well. And since possible worlds are meant to represent possibilities, it would follow once again, that what possibilities there are is necessary. It is rarely stated explicitly, but such a view on the space of possible worlds is a default one in literature. A view that some possibilities are contingent is in the minority.

2.2.2. Some applications

I shall now briefly present some applications of Plantingian actualism. Similar to the case of necessitism, I show how the Plantingian view can provide truth conditions for some basic modal

statements, as well as its semantic applications. More specifically, I show how it can accommodate Kripkean semantics and address the D-problem, the V-problem, and the Q-problem.

Providing truth conditions for modal statements

Firstly, consider the possibility of some individual ceasing to exist:

Possibility of Nonexistence: An actual individual *x* could cease to exist.

Such proposition is true iff at there is a possible world w at which x's thisness T exists and is unexemplified.

Secondly, consider the possibility of aliens. It is intuitive that:

exemplified, while it is unexemplified at the actual world.

Possibility of Aliens: Possibly, there is an individual not identical to any actual individual.

Plantingian actualists can provide truth conditions for such a possibility without giving up a claim that there are no individuals other than those mentioned in a domain of the actual world. Suppose some x, a million-carat diamond, is an alien individual. It is true that x could be actual iff there is a possible world w according to which a thisness being a million-carat diamond is

Thirdly, Plantingian actualism has no issues with addressing the issue of iterated modalities which describe modal variability of possible individuals. Reconsider an example of an iterated modality given above:

Iterated Modality: Saul Kripke could have a twin brother who is a farmer, however, he (Kripke's twin brother) could be a philosopher instead.

Plantingian actualism provides us with truth conditions for Iterated Modality which do not commit us to the existence of *possibilia*. If we substitute merely possible individuals with unexemplified thisnesses, a problem of iterated modalities disappears. Truth condition for Iterated Modality could be formulated as follows:

(1) There is a possible world w_1 at which a property being Kripke's twin brother is co-exemplified with a property being a farmer, and there is a possible world w_2 at which property being Kripke's twin brother is co-exemplified with being a philosopher instead.

Semantic applications

Plantingian actualism also provides solutions to semantic issues that follow from combining Kripkean semantics with actualism, that is, the D-problem, the V-problem, and the Q-problem.

Let's consider the D-problem first. As stated in Chapter 2, the D-problem is a problem of how an actualist can allow for there being possible worlds with domains containing individuals not identical to any actual individual. Plantinga solves the D-problem by introducing thisnesses as proxies for possible individuals. According to this solution to the D-problem, a domain D is a set of all existing individual essences, either exemplified or unexemplified (the thisnesses that are represented as exemplified or unexemplified will differ from world to world). For this reason, Bennett (2005) rightly observes that Plantinga's actualism is a variant of domain-inclusion actualism, i.e., to a view that the set of all domains of all possible worlds *just is* a domain of the actualized world. That is, that D=D(w@). That said, each possible world has its own domain of individuals, D(w), which contains individual essences that would be exemplified had that world been actualized. As a result, by claiming that a set of all domains of all worlds equals a domain of

the actual world, Plantinga can preserve an actualist tenet that everything that exists is actual, whereas by claiming that each world has its own essential domain D(w) he is able to preserve varying domain semantics and preserve our intuitive use of restricted quantifiers and our intuitions about contingent existence.

Let's now consider the V-problem. The V-problem is a problem of whether a predicate P can have at some world w as its extension an individual which does not at w, e.g., whether bumanity has Socrates at its extension at worlds at which Socrates does not exist. Plantinga solves the V-problem by imposing a serious actualist restriction on it: A predicate P can have as its extension an individual x only at possible worlds at which x exists. However, since for Plantinga each individual (possible and actual) has associated thisness which necessarily exists and serves as a proxy of that individual at worlds at which that individual does not exist, an existence requirement is easily met: A given predicate P has an individual essence E as its extension at possible worlds at which E exists, that is, at all worlds. As a result, Plantinga can preserve both intuitive reading of function V and hold serious actualism (which is a widely held principle).

Lastly, let's consider the Q-problem. The Q-problem is how one and the same individual can be a member of two distinct domains of two worlds. For Plantinga, transworld identity of individuals is unproblematic. Once again, a notion of individual essence comes into play. Some individual x from possible world w_1 is transworld identical to some individual y at w_2 iff x and y have the same thisness T and T is exemplified both at w_1 and w_2 .

2.2.3. Issues with Plantingian actualism

There are many possible issues associated with Plantinga's account.⁵⁰ I am not interested in discussing all of them. Instead, I focus on issues associated with two essential claims of Plantingian actualism *qua* Platonic actualism: (a) that there are thisnesses of possible individuals and, thus, there are singular possibilities for possible individuals holding in virtue of their thisnesses, and (b) that all propositions are necessary and, thus, all possibilities are necessary. Below I provide reasons for which I think both views are false.

Troubles with thisnesses of possible individuals

There are some strong reasons for which it is impossible to maintain that there are thisnesses of possible individuals. I shall give an overview of them.⁵¹

The main argument against primitive thisnesses of possible individuals can be found in a paper of Robert Adams (1981, pp. 11). For Adams, a thisness, e.g., *being Socrates*, stays in a unique relation to an individual it describes, in this case, to Socrates. In other words, thisnesses are individuated by their relation to individuals they describe, thus, they ontologically depend on them. As a result, all thisnesses of contingent individuals are contingent as well. There would be no thisness *being Socrates* if Socrates never existed. Thus, if there are thisnesses of possible

⁵⁰ There is an issue concerning the nature of representation, see Lewis's arguments against magical ersatzist account of representation (Lewis 1986, pp. 174-191). Speaking very briefly, according to Lewis, magical ersatzst (such as Plantinga) does not deliver an account of how possible worlds represent possible states of affairs at all, but the relation of representation is primitive, magical. For some responses to Lewis see Denby (2009) and Nolan (2020). Others criticized Plantingian actualism for being crypto modal realism (see Bennett 2005, 2006, Nelson and Zalta 2009), or for providing an account of exemplification which treats all cases of individuals having properties as cases of coexemplification of properties (see Linsky and Zalta 1994, pp. 443 and fn. 33), or for not being ontologically parsimonious (see McMichael 1983a, 1983b).

⁵¹ A number of actualists have argued against thisnesses of possible individuals. See Fine (1977), Adams (1981), McMichael (1983a), and Linsky and Zalta (1994).

individuals, they are individuated by relation to possible individuals. However, since according to actualism there are no possible individuals, there cannot be thisnesses of possible individuals. Thus, contrary to what Plantinga claims, there are no unexemplified thisnesses.

A possible reply from the Plantingian actualist could be that we should get rid of nonqualitative content of thisnesses expressed by proper names they involve and make thisnesses purely qualitative. Given that, thisnesses could exist independently of how individuals are (as all qualitative properties do). An issue with this response is that thisnesses would turn out to be shareable (as all qualitative properties are), contrary to an initial assumption about their uniqueness. Perhaps one could insist that it is possible to provide unshareable purely qualitative individual essences (e.g., ones composed from qualitative tropes) which could play the role of thisnesses of possible individuals. However, as I show later in the dissertation (see Chapter 4, section 4.3.2.), there is a problem of individuation of tropes themselves. In a nutshell, a proponent of tropes either has to introduce some nonqualitative individuators of tropes, or take tropes to be primitively individual. The first option is unavailable for the trope theorist, for it means a return to haecceitism and nonqualitative individuators like thisnesses of tropes, or to other nonqualitative individuators which are ontologically dependent on some individuals. And tropes were meant to help us avoid such suspicious metaphysics. The second option is problematic as well because primitive qualitative proxies are no better than primitive nonqualitative ones. Similarly, as in the case of primitive thisnesses of possible individuals, we cannot give any example of a primitive qualitative individual essence built out of primitive tropes of some possible individual.

The Plantingian actualist could regroup and come back to the primitive nonqualitative thisnesses and say that thisnesses cannot be contingent because they are properties, and all properties necessarily exist. My reply is that this is perhaps true only for qualitative (general) properties. However, there is no reason for this to be true for nonqualitative ones. An analogy would help: Even though the majority of sets are necessary beings, not all sets necessarily exist. For example, a singleton {Socrates} does not exist at possible worlds at which Socrates does not exist. Similarly for properties, although all of them are abstract beings, only qualitative properties are necessary. Nonqualitative properties are ontologically dependent on individuals they describe, and this holds not only for thisnesses, but also for other, more common nonqualitative properties such as being distinct from Eiffel Tower or for the vast number of impure properties which are partly nonqualitative, e.g., being stronger than Kripke or being taller than Trump.⁵²

Lastly, in response to my counterargument, one could endorse primitivism towards thisnesses and say that they are nonqualitative, but are not individuated by relation to individuals they involve, thus, they do not ontologically depend on individuals. This could work. But then I would expect to see some examples of primitive thisnesses of possible individuals. Unfortunately, Plantingian actualists are unable to provide us with such an example.

However, even if we would ignore the fact that we do not have examples of thisnesses of possible individuals, a statement that we have primitive thisnesses for each possible individual makes our actualist ontology isomorphic to that of modal realists. Thus, as many actualists observed, Plantingian actualism turns out to be a kind of possibilism in disguise.⁵³ It says that

⁵² For a similar point see McMichael (1983a, pp. 60).

⁵³ Many philosophers indicated that Plantinga's view is a hidden kind of modal realism. For instance, see Adams (1981), Menzel (1990, pp. 366), and Bennett (2006, pp. 281-283). For a response see Woodward (2011).

even though there are no possible individuals in the domain of the actualized world, such domain contains an infinite number of unexemplified thisnesses including thisnesses of million-carat diamonds, talking donkeys, Donald Trump's twin brother and many others. It is like being a presentist who says that only present individuals exist but all past and future individuals have their proxies existing at the present. I would not call such a view presentist at all. Similarly, I would not call the Plantingian view actualist at all. Actualism promised us safe and sane ontology, if compared to that of modal realism. But, Plantingian actualism, by postulating an infinite number of thisnesses of possible individuals existing in the actual world, is susceptible to the incredulous stare objection, originally formulated against modal realism.

My last critical point about the postulate of thisnesses of possible individuals is that if possible individuals were to be replaced by thisnesses, it would follow that there are cases of haecceitistic possibilities involving possible individuals.⁵⁴ For instance, consider two possible individuals, e.g., Pegasus and Chimera. Both individuals have some associated qualitative roles R_1 and R_2 . Pegasus's qualitative role R_1 includes such properties as being a horse or having wings, while the qualitative role of Chimera includes properties of having three heads or being able to fire-breathe and so on. Now, if Pegasus and Chimera have primitive thisnesses T_1 and T_2 , then there are worlds w_1 and w_2 such that at w_1 , T_1 is co-exemplified with R_1 and T_2 is co-exemplified with R_2 and T_3 with T_4 . A difference between T_1 and T_2 is haecceitistic: T_1 and T_2 differ nonqualitatively without differing qualitatively.

⁵⁴ For more on haecceitism see Chapters 3 and 4 below.

But the problem with such scenarios is that while haecceitistic possibilities are easily acceptable in the case of actual individuals, they are highly counterintuitive in the case of possible ones. The main reason for this is that since actual individuals exist and are causally linked to us, we can refer to them nonqualitatively, by directly referring linguistic devices such as proper names, indexicals, or pronouns, which allow us to refer to actual individuals independently of any qualitative descriptions they satisfy. However, that's not the case for possible individuals which do not exist and do not influence us causally. Because of that they can be characterized only indirectly by qualitative descriptions built up of existing expressive resources of our languages. Thus, all there is to being a particular possible individual is to be characterized by a given qualitative description. Thus, when we reconsider worlds w_1 and w_2 , which represent the same qualitative truths, that is, at which there is some individual playing role R_1 and some individual playing role R_2 , as actualists we cannot make sense of swaps of qualitative roles of those individuals. Possible individuals are just those roles!55 We lack nonqualitative expressive resources to describe those two possible individuals directly. Thus, we cannot make sense of worlds w_1 and w_2 differing nonqualitatively without differing qualitatively. Thus, we can provisionally conclude that for worlds which represent possibilities for possible individuals, some kind of qualitative form of principle of identity of indiscernible holds: If two worlds say the same qualitative truths, they are identical⁵⁶⁵⁷

⁵⁵ For this reason, we should take the names 'Pegasus' and 'Chimera' not as proper names but as either empty names or shortcuts of descriptions.

⁵⁶ A similar argument against thisness of possible individuals is delivered by Lycan and Shapiro (1986) and Lycan (1994, Ch. 3).

⁵⁷ In Chapters 3 and 4 I explicate a complicated relationship that holds between the principle of identity of indiscernibles (*PII*) and variants of haecceitism and antihaecceitism. As I argue there, following the literature, there are forms of antihaecceitism which are compatible with the falsity of *PII*. That's why my current conclusion that from a denial of thisnesses of possible individuals, *PII* follows, holds only provisionally.

Troubles with antiexistentialism

As I indicated above, antiexistentialism is the second view associated with Plantingian actualism which makes it a kind of Platonic actualism. Here are two reasons why I think antiexistentialism is false (I say more about an argument between existentialists and antiexistentialists in Chapter 5).

A first reason. Antiexistentialism takes all singular propositions to be about thisnesses. Now, since thisnesses are properties, and all properties necessarily exist, it follows that all singular propositions necessarily exist. However, if existentialism so understood is combined with Plantingian haecceitism, that is, with a view that there are thisnesses of possible individuals, it follows that there are singular propositions about possible individuals. In other words, there are singular (de re) possibilities about such individuals. However, as I have established above, since there are no such individuals, there cannot be thisnesses of them. Thus, there are no singular propositions involving thisnesses of possible individuals. There could be such propositions, had relevant possible individuals. This, however, contradicts antiexistentialism, which says that all propositions necessarily exist. The antiexistentialist could respond by denying that there are possible singular propositions and claim that all propositions actually exist. However, such a view is absurd because it entails that a proposition [Possibly[Pegasus exists]] is impossible. And an antiexistentialist cannot maintain that a proposition [Possibly[Pegasus exists]] actually exists, because, as I have established, actually there is no thisness of Pegasus, thus, its thisness is not involved in any actually existing singular proposition.

However, even if we would get rid of Plantingian haecceitism towards possible individuals and stick with haecceitism for actual individuals only, antiexistentialism should still

be refuted for actual individuals. A main reason for that is that what possibilities *de re* there are, depend on what individuals exist. Therefore, if there were no Socrates, there would be no thisness of him. As a result, it would not be true, for instance, that *he* could be a farmer. Thus, some actually existing singular propositions about actual individuals could cease to exist were individuals involved in them to cease to exist. Thus, antiexistentialism is false for actual individuals.

A second reason. As I have indicated above, Plantinga argued (1983) that existentialism has difficulties explaining a possibility of nonexistence of contingent (actual) individuals. Following his remarks, suppose that existentialism is true. Then, the following reasoning proves that it is untrue:

- (1) Possibly, Socrates does not exist
- (2) Necessarily, if Socrates does not exist, then [Not[Socrates exists] is true
- (3) Necessarily, if [Not[Socrates exists]] is true, then [Not[Socrates exists]] exists.
- (4) Therefore, possibly Socrates does not exist and [Not[Socrates exists]] exists.

However, conclusion (4) runs against existentialism: if there were no Socrates, there would be no singular propositions about him, including negative ones.⁵⁸

In order to resist Plantinga's conclusion one could argue against premise (1) by claiming that there are no contingent individuals, but all individuals exist necessarily. This, however, presumes the necessitist approach to modality which I find problematic for reasons already given.

An alternative and less revisionary solution (which I prefer) focuses on premises (2) and (3) and

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⁵⁸ In presenting Plantinga's argument against existentialism I rely on Longenecker's simplification of it (Longenecker 2019a).

states that they are ambiguous. In order to establish such a claim, existentialists discern two ways in which a proposition p can be true relative to a possible world w. A proposition p can be true $in\ w$, which requires p to exist in w, and a proposition p can be true $at\ w$ which does not require p to exist in w. So a solution to Plantinga's argument is to reformulate premise (2) into: (2*) Necessarily, if Socrates does not exist, then [Not[Socrates exists]] is true at w (instead of being true $in\ w$). By using the same distinction, (3) should be reformulated into (3*): Necessarily, if [Not[Socrates exists]] is true at, then [Not[Socrates exists]] exists in w; (3*), however, is not true by existentialists' lights because [Not[Socrates exists]] can be true $at\ w$ without existing $in\ w$. Thus, a problematic conclusion (4) does not follow if premises (2) and (3) are read as involving the notion of truth at rather than truth in.

As a result, existentialism can consistently account for a possibility of nonexistence of contingent individuals. This is what we wanted, because we tried to avoid commitment to a view that all propositions exist necessarily. And we want to avoid that, because we want to preserve an intuition that what singular (*de re*) possibilities there are, depends on what individuals exist. The domain of the actualized world can change. Plantinga's antiexistentialism works on the assumption that the domain of the actualized world cannot change. He can maintain his view that all singular propositions are necessary, only because he overpopulates the domain of the actualized world. If we do not overpopulate it (and I think we should not if we want to call ourselves actualists) and also deny that there are thisnesses of possible individuals (and we should,

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⁵⁹ This solution to Plantinga's argument against existentialism is endorsed by many actualists including Fine (1977), Adams (1981), Fitch (1996), Turner (2005), Einheuser (2012) and Stalnaker (2012).

⁶⁰ Here I refer to Longenecker's reconstruction of the existentialist reply to Plantinga's argument. See Longenecker (2019a). In Chapter 5 below I discuss the dialectics between existentialism and antiexistentialism in more detail.

as I argued above), then naturally, we must provide an alternative, existentialist conception of singular modal propositions.

At this point I end my overview of the second form of Plantingian actualism. Although I have not once-and-for-all defeated necessitism or Plantingian actualism, I believe that I provided at least some motivations for which we should look for a view which: (1) Denies thisnesses of possible individuals and, thus, one which denies singular possibilities involving possible individuals, and which is able to (2) preserve a view that singular propositions about contingent individuals are contingent, and, therefore, that singular possibilities for contingent individuals are contingent as well. In the remainder of this chapter, I introduce a variant of the actualist view which meets both desiderata.

2.3. Aristotelian actualism: ersatzism

Ersatzism is, roughly speaking, a view that possible worlds are some kinds of very detailed stories (like books) which represent alternative ways the actual world and actual individuals could have been. There are different kinds of ersatzism available depending on the kinds of entities that are meant to constitute possible worlds, and on the way possible worlds represent possibilities. Below I shall focus solely on linguistic ersatzism, which takes possible worlds to be sets (or, equivalently, conjunctions) of sentences of some world-making language, while worlds represent by simply including or implying relevant sentences.

Linguistic ersatzism can take both Aristotelian and Platonic form.⁶¹ Since I have already explained why I do not follow Platonic actualism, below I shall assume the Aristotelian approach. Proponents of Aristotelian variants of ersatzism include Adams (1981), Fine (1985), Skyrms (1981), Fitch (1996), Lycan and Shapiro (1986), Kment (2014), Mitchell-Yellin and Nelson (2016).

Even though those authors provided extensive analyses of linguistic ersatzism, it is hard to find among their works any that would systematically explain metaphysical commitments of it. For instance, Fitch (1996) shows how an appeal to Aristotelian actualism can help the ersatzist avoid Lewis's counterarguments against linguistic ersatzism. Others, e.g., Adams (1981), Lycan and Shapiro (1996), Fine (1985), and Mitchell-Yellin and Nelson (2016) focus rather on some semantic and logical issues associated with Aristotelian actualism. Only some portions of Adams (1981), and Skyrms (1981) address some metaphysical aspects of Aristotelian actualism. Kment (2014) provides up to date the most systematic analysis of Aristotelian actualism. Yet, his metaphysics focuses mainly on the issue of contingent existence of possibilities. It does not say much about fundamental differences concerning: (a) how actual and possible individuals are represented by possible worlds and (b) what is the metaphysical nature ascribed to them by their abstract representatives.

⁶¹ Proponents of some kind of Platonic linguistic ersatzism are e.g., Carnap (1947), McMichael (1983a, 1983b), Roy (1995), Melia (2001), Nolan (2002) Sider (2002). I take those philosophers to be at least partially Platonic ersatzists because they seem to assume either that (a) there are singular representatives for each possible individual, or that (b) the whole modal space is necessary, or both (a) and (b).

It is worth mentioning that, independently of the Aristotelian/Platonic distinction, Sider (2002) and Nolan (2002) developed yet another approach to linguistic ersatzism, which does not focus on what particular possible worlds represent, but instead postulates a single modal pluriverse built out of sentences which—as a whole—describes all possible worlds and possible individuals, without quantifying over them. This view bears some similarities to fictionalism, as developed by Rosen (1990, 1995). In this dissertation I leave the pluriverse approach aside and view linguistic ersatzism as a variant of the standard possible world framework. For a discussion of ersatz pluriverse view see Brogaard (2006) and Wang (2015).

The purpose of this dissertation is to fill that gap and develop, in a more systematic way, a metaphysical framework for the Aristotelian variant of linguistic ersatzism. I call it Aristotelian ersatzism. A main feature of the framework that I develop is that it provides a different treatment of actual and possible individuals. An idea that actual and possible individuals should be treated differently is the core tenet of Aristotelian actualism as such. However, up to this date, it has not yet been fully explored and explained, especially within the context of linguistic ersatzism. I propose to interpret this tenet as entailing three fundamental differences between actual and possible individuals:

Representational Difference: Actual individuals are differently represented by possible worlds than possible individuals.

Metaphysical Difference: Actual individuals and possible individuals are represented by possible worlds as having different metaphysical nature.

Modal Difference: While there are singular and contingent possibilities about actual individuals, all possibilities about possible individuals are general and necessary.

At the end of this chapter, I will come back to these claims. But before I do that, I shall first present basic assumptions of linguistic ersatzism.

2.3.1. Exposition

World-making language

According to linguistic ersatzism, a possible world w is a construction built out of sentences of a worldmaking language L. There are several ways to characterize such a language. An approach that I follow takes L to be an ideal language (not a natural language, although I shall use natural language when presenting L) which is infinite, i.e., it contains an infinite vocabulary including names, n-adic predicates, variables, infinite connectives (conjunctions, negations) and quantifiers, all of which taken together allow us (by using rules of first- or higher-order predicate logic) to construe sentences that are infinite in length. (This is postulated to ensure that L has enough resources to express all genuine possibilities and to avoid cardinality issues regarding the expressive power of L^{63}). In addition to that, L has to be interpreted. That is, it is required that when characterizing L, one defines words of L, i.e., their truth conditions. The most straightforward way of doing it is to stipulate that L is a Lagadoninan language, a language such that every individual and property name itself. (By doing so the ersatzist makes sure that each individual and property is named, and that each individual and property has only one name. The latter feature ensures that no individual or property has a property F under a name 'a' but is not F under another name 'b'). Lastly, all ersazters assume that L is a nonmodal language, i.e., a language which does not contain any modal vocabulary. (This is postulated to provide an analysis of modal notions of possibility and necessity in terms of ersatz constructions built from sentences of L).

 $^{^{62}}$ Equivalently, one might construe ersatz possible worlds as conjunctions of sentences of L, or a single maxmail and consistent sentence (Wang 2015).

 $^{^{63}}$ Lewis argued against ersatzism saying that if sentences of L are taken to be finite in length, then there are not enough sentences constructable from L to cover all possibilities (see Lewis 1973, pp. 90). However, in Lewis (1986, pp. 143) he notes that the cardinality issue can be easily solved if the ersatzist assumes (as she should) that L can give us sentences infinite in length.

This is a general and abstract characterization of L. A schema of a language rather than a usual language full of content. What words L contains specifically is irrelevant as long as they are interpreted in a way allowing our ersatzist to represent worlds (possibilities) adequately. For instance, an ersatzist could say that words of L are just sets of their particular inscriptions, spatiotemporal regions wherein they are pronounced, points of spacetime, particles, numbers, or what you take to be components of safe and sane ontology. For instance, if you choose spacetime points as the basic elements of L then it is sufficient that you interpret statements about spacetime points by determining which statements about arrangements of spacetime points represent which possibilities, e.g., which statements about arrangements of spacetime points make statements about talking donkeys true. In the light of this ersatzism is the most modest actualist view (ontologically speaking) if compared to other ones, which construct possibilia out of propositions (Adams 1981), states of affairs (Plantinga 1976, Armstrong 1989) or properties (Forrest 1986, Stalnaker 2012).⁶⁴ An advantage of linguistic ersatzism over these alternative views is that it is not essentially tied to any particular category of entities besides an elementary vocabulary of L and set-theoretic constructions of them (however, you can get rid of sets as well if you decide to construe worlds as single maximal and consistent sentences or maximal and consistent conjunctions of sentences).

Lastly, it is worth mentioning that L contains only actually existing elements (whichever you have chosen) and all constructions out of these actual elements are actual as well. (This is assumed to ensure that ersatzism shares an actualist tenet that everything that exists is actual and,

⁶⁴ See also Wang (2015), who provides a view is a combination of linguistic ersatzism and a view which appeals to properties when explaining modality. Actually, the view that I present in Chapter 6 is similar to the view defended by Wang.

thus, that all possibilities are explained in terms of what is actual). As a result, L contains names only of actual individuals and predicates of actual properties. If the ersatzist wants to represent nonactual (alien) individuals (and properties), she has to provide, then, some kinds of indirect descriptions which do not name those individuals (or properties).

Ersatz worlds and ersatz individuals

For the ersatzist, an ersatz world is a maximal and consistent set of closed sentences of L (Lewis (1986, pp. 142-165, Melia 2001). For example, a world w can be identified with a maximal and consistent set of sentences such as:

 $\exists x(Fx \land Gx)$

 $\exists x \exists y (Rxy)$

... (here comes a list of sentences fully characterizing w).

A set of sentences S is maximal iff for any sentence p included in S, p or its negation is included in S. Additionally, a set S is consistent iff its members could be true together. In other words, S is consistent iff S does not contain any contradictory sentences. (This is postulated to make sure that ersatz possible worlds do not contain contradictions). That said, ersatzism has no issue with allowing for inconsistent ersatz worlds. Such worlds will just play a role of impossible worlds.

⁶⁵ A decent number of philosophers maintain that impossible worlds and impossible individuals are indispensable in our complete theory of modality due to the fact in our ordinary modal thought and talk we often refer to impossible scenarios (e.g., when we construct conditionals). Thus, we need *impossibilia* in our philosophical theories to account for such phenomena. For some representative accounts of *impossibilia* see Salmon (1984, 1989), Nolan (2013), Vacek (2013), Jago (2015), Berto and Jago (2020). Although I agree that *impossibilia* are indispensable and their account is

In order to mirror (at least partially, if not fully) the power of modal realists' explanations of the modal discourse, and also to satisfy some semantic desiderata imposed on all possible world frameworks (e.g., to account for a fact that every possible world has an associated domain of individuals and that those domains are used in theoretical identifications e.g., for propositions or properties, or used to provide truth conditions for modal statements), besides ersatz worlds, ersatzists need ersatz individuals as well.

Ersatz individuals are subsets of ersatz worlds. Similarly, as worlds, ersatz individuals are fully specific, that is, they are maximal and consistent sets of sentences of L. But unlike worlds, ersatz individuals contain sentences that are open with respect to one variable. Intuitively, an ersatz individual is a description that could be true of something. Now, since ersatz individuals are just subsets of ersatz worlds, we can recover them from ersatz worlds. To achieve that we can proceed as follows. First, we provide a set (or, equivalently, a conjunction) of all atomic sentences that fully characterize a world w: Fa, Gb, Rab..., and so on. Then we paraphrase them into quantified sentences: $\exists x(Fx)$, $\exists y(Gy)$, $\exists x\exists y(Rxy)$..., and so on. After that we make one variable unbound by deleting one existential quantifier from the description of w. Then we obtain a set (or conjunction) of sentences involving open sentences free with respect to one variable:

Fx

 $\exists y(Gy)$

 $\exists y \ Fx \land Gy \land \neg(x=y))$

•••

-

required in the complete theory of modality, throughout my analyses I focus exclusively on possible worlds and possible individuals.

As we can see, by providing a complete description of a given ersatz individual one simultaneously provides a complete description of an ersatz world which represents a given ersatz individual as existing. As Lewis says, ersatz individuals mirror ersatz worlds (Lewis 1986, pp. 149). Thus, in order to fully characterize a given ersatz individual we must not only mention all of its intrinsic characteristics but describe fully what happens according to a world representing a given ersatz individual as existing. 6667

Representation

Now, let's focus on an issue of how possible worlds describe possible states of affairs. Generally, an ersatz possible world w represents that some x is F if it just says that 'x is F' that is, if it includes a sentence which, if interpreted, means that x is F (this refers to the notion of explicit representation), or if other sentences constituting w, if interpreted, jointly entail a sentence that 'x is F (this refers to the notion of implicit representation). Find that x is x in the sentence of implicitly or implicitly that such-and-such goings-on take place according to it. For instance, an ersatz world represents that a donkey talks if it contains a sentence meaning that some donkey talks or if some sentences (perhaps even all of them) contained in such a world jointly entail a sentence 'Sme donkey talks'. A main virtue of such a notion of representation is that it is based on a well-established notion of set-membership (in the case of

 $^{^{66}}$ This idea is very similar to an old Leibnizian idea of a complete concept according to which each individual object has an associated individual concept that contains all of its characteristics, including past, present and future properties and relations to all other individuals (see Mondadori 1973, 1975, Cover and O'Leary-Hawthorne 1999). 67 Similarly, ersatz worlds mirror ersatz individuals: by describing fully a given ersatz world w one fully describes all ersatz individuals that exist within that world.

⁶⁸ This is the standard way of explaining notions of explicit and implicit representation. See Adams (1981), Lewis (1986, pp. 142), Heller (1998b, 2008), Divers (2002, Ch. 17). For a more detailed analysis of the issue of implicit representation see Chapter 7, section 7.3.1. below.

explicit representation) or logical entailment (in the case of implicit representation). Thus, as Lewis observes (1986, pp. 165), linguistic ersatzism has the least problematic (although still not unproblematic, at least for Lewis) account of representation from all ersatz programs.⁶⁹

Actuality and actualization

All ersatz worlds (and ersatz individuals) are actual, that is, they are constructed out of actually existing elements of L. However, even though all ersatz possible worlds are actual, not all of them are actualized. An ersatz world w is actualized iff it contains and entails all and only true sentences. More intuitively, a world w is actualized iff it correctly represents how the actual world (concrete thing) is. Had the actual world been different, another ersatz world would be actualized. That being said, every possible world is actualized from its own perspective. That is, it says of itself that it correctly represents how the actual world is. However, there is only one which really (in the absolute, nonrelative way) correctly represents how the actual world is. Thus, Aristotelian ersatzism, unlike modal realism which has a place only for relative actuality, has a place both for a notion of relative actuality as well as for a notion of absolute actuality.

⁶⁹ One of the alternatives is to endorse pictorial ersatzism, a view that worlds represent by isomorphism (e.g., by similarity, as a map represents by being structurally similar to a terrain it depicts) between abstract structures (e.g., propositions, states of affairs or properties) and concrete individuals. A complication here over the linguistic ersatzist account of representation is that it is unclear (at least *prima facie*) how concrete individuals can be similar to their abstract representations or how abstract representations can be isomorphic to individuals which are merely possible ones, but which actually do not exist.

Another option is to endorse magical ersatzism and claim that worlds represent by magic, i.e., that a relation between representatives (propositions, states of affairs or properties) and what is represented is primitive and unanalyzable. For instance, a magical ersatzist could say that a proposition [John is a donkey and talks] is possible if at some world [John is a donkey and talks] is true, but do not explain what makes such a proposition true at a given world (and the same account can be given in terms of states of affairs or properties). For a further discussion of magical and pictorial variants of ersatzism and their comparison to linguistic ersatzism see Lewis (1986, Ch. 3), Melia (2008, pp. 137-142). See also Chapter 7, section 7.3.3. below.

⁷⁰ For a similar point see Adams (1974, 1981).

Ways worlds and individuals could have been

Given that ersatz words and individuals are characterized by sentences of Lagadonian language L such that every individual and every property names itself, it follows that, besides ersatz constructions, there are individuals and properties represented by those constructions. Thus, besides ersatz representatives, the ersatzist is committed to properties and individuals represented by the representatives. To be more specific, it is possible to extract from characterizations of ersatz worlds and ersatz individuals, ways for worlds and individuals to be. I shall call those ways attributive roles. By an attributive role I take a maximal and consistent set (or conjunction) of properties⁷¹ (qualitative and/or nonqualitative) represented by predicates involved in sentences included in a given ersatz world or an ersatz individual. Such roles could then be played by some actual individuals in the actual world had ersatz representatives representing those roles been actualized.

Thus, in general we should discern three kinds of entities to which ersatzists are committed to: (a) ersatz representatives of individuals and worlds (which are linguistic constructions); (b) attributive roles represented by those representatives (which are complexes of properties), (c) genuine (concrete) worlds and individuals which could satisfy a given attributive role had relevant ersatz representatives representing those genuine worlds and individuals as existing and as having those roles were actualized. 72

⁷¹ I appeal to the notion of a property just for mere convenience. However, at this point, I do not have any particular account of properties in mind. The ersatz view on possible worlds is consistent with any view on properties, be it realist, nominalist or trope theory.

 $^{^{72}}$ Such a distinction is not always made explicitly by ersatzists. Known exceptions to me are Heller (1998a), Sider (2002), and Wang (2015), and Woodward (2017).

Now, ersatzism is committed to (a) and (b), but it does not accept (c), that is, besides the actual world and actual individuals there are no other concrete entities. Of course, there could be new individuals, and the actual world could be different, but one can account for such possibilities without a postulate of genuine *possibilia*. It is sufficient to introduce ersatz representatives of *possibilia* which represent ways *possibilia* could have been. Had such ersatz representatives been actualized, *possibilia* would exist and would play represented attributive roles.

(An important note: some ersatz accounts might identify the ways worlds and individuals could have been with ersatz worlds and ersatz individuals themselves. and do not introduce attributive roles at all. Another option could be to stick with attributive roles (properties and their constructions) and identify possible worlds and possible individuals with those. I think however that we need both ersatz representatives and attributive roles because they have distinctive theoretical functions. For instance, as I shall argue later, at some point we might be interested in introducing counterpart relations into our ersatz theory of worlds. In such a case, as I argue, it is attrituvie roles rather than ersatz representatives that should be related by counterpart relations. By combining ersatz representativies and attributive roles my view is similar to that of McMichael (1983b) and Wang (2015), although there are important differences between our accounts, which I shall indicate in the next section and discuss in more detail in Chapter 6).

Aplications

At this point I do not provide applications of Aristotelian ersatzism because they will depend on the details of the metaphysics that I will present in Chapter 6. Because of that, applications of my view are provided in Chapter 7.

2.3.3. How to make linguistic ersatzism Aristotelian

The story told about linguistic ersatzism so far is a standard way of characterizing it (ignoring the addition of attributive roles, which are not introduced by all linguistic ersatzists). However, I am not interested in discussing linguistic ersatzism as such (this has been already done extensively in the literature), but in developing a metaphysical framework for its Aristotelian variant, which I called Aristotelian ersatzism. What claims must then be added to linguistic ersatzism in order to make it a kind of Aristotelian actualism about possible worlds? That is, what claims make Aristotelian ersatzism *Aristotelian*? In my view an essential component of Aristotelian actualism as such is that it treats actual and possible individuals differently. In order to explain that claim I propose to introduce three fundamental differences between actual and possible individuals:

Representational Difference: Actual individuals are differently represented by possible worlds than possible individuals.

Metaphysical Difference: Actual individuals and possible individuals are represented by possible worlds as having different metaphysical nature.

Modal Difference: While there are singular and contingent possibilities about actual individuals, all possibilities about possible individuals are general and necessary.

In the remainder of the dissertation I will explain what those differences mean and what consequences follow from accepting them. In order to explain Representational and Metaphysical difference I will appeal to the doctrines of haecceitism and antihaecceitism, while in order to explain Modal Difference, I will appeal to the doctrine of existentialism. Following Fine (2005), I plan to discern modal and metaphysical doctrines of haecceitism and antihaecceitism. While modal variants of those views concern the issue of how possible worlds represent possibilities, metaphysical ones concern the nature of individuals, or nature of reality in general. In turn, existentialism is a doctrine concerning the nature of singular propositions according to which singular propositions ontologically depend on individuals they are about.

In light of this distinctions, I propose to reinterpret Representational, Metaphysical and Modal Differences in a following way:

Representational Difference: Modal haecceitism is true for actual individuals, but modal antihaecceitism is true for possible individuals.

Metaphysical Difference: Metaphysical haecceitism is true for actual individuals, but metaphysical haecceitism is true for possible individuals.

Modal Difference: Existentialism is true. Thus, while there are singular and contingent possibilities about actual individuals, all possibilities about possible individuals are general and necessary.

In the remainder of this dissertation, I have two goals.

My first goal is to provide, throughout Chapters 3, 4, and 5, precise characterizations of the doctrines involved in Representational, Metaphysical and Modal Differences. Chapter 3

focuses on the issues of modal haecceitism and modal antihaecceitism, while Chapter 4 considers the issues of metaphysical haecceitism and metaphysical antihaecceitism. The purpose of both chapters is to provide an adequate and satisfying characterizations of the doctrines of haecceitism and antihaecceitism and to explain how those views relate to some issues usually associated with them, such as essentialism, transworld identity, individuation, or principle of identity of indiscernibles. Subsequently, Chapter 5 concerns existentialist and antiexistentialist explanations of the nature of singular propositions. I provide a detailed presentation of an argument between existentialists and antiexistentialists. I claim that existentialism is a preferable view.

My second goal is to provide, in Chapter 6, a systematic characterization of the metaphysics underlying Aristotelian ersatzism based on the results of the investigations conducted in Chapters 3, 4 and 5. This will involve further clarification of the Representational, Metaphysical and Modal Differences in light of the obtained results concerning doctrines of haecceitism, antihaecceitism and existentialism. I also explain what consequences follow from endorsing all three differences. Subsequently, in Chapter 7 I present some semantic and metaphysical applications of the developed view and address some of the possible objections that might arise towards my view.

Chapter 3

On Modal Haecceitism and Antihaecceitism

As I indicated in the previous chapter, Representational Difference amounts to an idea that while actual individuals can be represented by possible worlds singularly, all possible individuals are represented generically. I proposed to explain that idea by an appeal to the doctrines of modal haecceitism and antihaecceitism. According to my view, Representational Difference should take a following form:

Representational Difference: Modal haecceitism is true for actual individuals, but modal antihaecceitism is true for possible individuals.

It is however unclear how both modal doctrines should be characterized and what are consequences of endorsing them. Let me start by providing some intuitive characterizations of both views.

Some philosophers think that it is possible that Socrates could have been a poached egg, that Barack Obama could have swapped all of his qualitative properties with Donald Trump and still be Barack Obama (i.e., that Barack Obama could have had Donald Trump's life), that there might be a symmetrical universe that would contain qualitatively indiscernible individuals or that the history of our universe could repeat itself, meaning that after each epoch of our universe another comes which is qualitatively indiscernible from a previous one, yet numerically distinct.

These possibilities are paradigmatic examples of haecceitistic possibilities. Generally speaking, such possibilities amount to an idea that it is not possible to determine which individual belongs to which possibility based only on a purely qualitative characterization of individuals and possibilities. In order to do that, one has to introduce nonqualitative and primitive (irreducible to the qualitative ones) descriptions of individuals and possibilities. Philosophers who accept that there are haecceitistic possibilities are called (modal) haecceitists. Their opponents are called (modal) antihaecceitists; they deny that there are haecceitistic possibilities and claim that it is possible to determine which individual belongs to which possibility based on purely qualitative grounds.

The most popular characterizations of (modal) haecceitism and (modal) antihaecceitism were delivered by Kaplan (1975). Yet, as it has been recognized in the literature on the topic (see Lewis 1986, Fine 2005, Stalnaker 2012), Kaplanian characterization blurs a difference between modal and metaphysical variants of haecceitism and antihaecceitism. As we will see in a moment, it is problematic for some additional reasons as well. I propose that we replace the Kaplanian approach to both doctrines with a Lewisian approach. Subsequently, I explain how modal doctrines of haecceitism and antihaecceitism (understood in the Lewisian way) relate to other such issues like transworld identity, essentialism or principle of identity of indiscernibles. I will appeal to the results of the analyses conducted in this chapter in Chapter 6, where where I reconsider Representational Difference and explain in more detail which specific variants of modal haecceitism and antihaecceitism it entails, and what consequences follow for the Aristotelian ersatzist from endorsing those particular variants of the doctrines in questions.

Overview of the chapter. First (3.1.) I present Kaplan's characterization of haecceitism and antihaecceitism. Next (3.2.) I argue that Kaplanian characterizations conflate modal and metaphysical aspects of these doctrines and explain why this is problematic. Subsequently (3.3. and 3.4.), I introduce and further develop an alternative, Lewisian characterization of modal haecceitism and modal antihaecceitism. Lastly (3.5.), I discuss cheap haecceitism, a view which, at its bottom level, is Lewisian modal antihaecceitism based on counterpart theory, but which is able to account for intuitions staying behind modal haecceitism by allowing for haecceitistic possibilities without allowing for haecceitist differences between possible worlds. I argue that cheap haecceitism is problematic and explain why noncheap variants of modal haecceitism should be preferred.

3.1. Kaplanian characterization

The notion of *haecceitas* was introduced to a contemporary analytic metaphysics by David Kaplan (Kaplan 1975) who proposed to translate a Latin term 'haecceitas' by 'thisness'. As I have already indicated in Chapter 2, thisness is a property of *being a*, which is necessary and unique for individual *a*, e.g., *being Socrates*.⁷³ Kaplan discusses the notion of thisness within a scope of modal metaphysics and uses it to characterize a doctrine of haecceitism. He proposes to view an argument between haecceitists and antihaecceitists as an argument over the intelligibility of transworld identity claims. More specifically, a tension between both views concerns an issue:

⁷³ I discuss several understandings of the notion of thisness and its relationship to the notion of scotistic haecceities in Chapter 4 below.

whether we can meaningfully ask whether a possible individual that exists in one possible world also exists in another without taking into account the attributes and behaviour of the individuals that exist in the one world and making a comparison with the attributes and behaviour of the individuals that exist in the other world. (Kaplan 1975, pp. 722-723).

For Kaplan, haecceitism is a view which gives positive answers to these questions and, thus, allows us to make sense of transworld identity claims. More specifically, according to such a view:

it does make sense to ask – without reference to common attributes and behaviour – whether *this* is the same individual in another possible world, that individuals can be extended in logical space (i.e., through possible worlds) in much the way we commonly regard them as being extended in physical space and time, and that a common 'thisness' may underlie extreme dissimilarity or distinct thisness may underlie great resemblance (Kaplan 1975, pp. 722-723).

Under such a view we are allowed to take transworld identity claims at face value, i.e., as being directly about one and the same individual across distinct worlds. Supposedly, an individual x is extended across the space of possible worlds in virtue of its thisness T being exemplified at relevant worlds, whereas thisnesses are meant to be primitive nonqualitative features of individuals that can be possessed by them independently of how individuals in question are specified qualitatively. As a result, we can pick out and track individuals across possible worlds by identifying their thisnesses.

On the two following pages Kaplan (1975, pp. 724-725) supplements his characterization of haecceitism by stating that endorsing haecceitism equals accepting singular propositions, for at least two reasons.

On the one hand, suppose that propositions are sets of possible worlds and that propositions are structured. Next, consider a singular proposition about some particular individual, e.g., [Socrates is wise]. Call it p, which is then identified with a set of worlds at which Socrates is wise. Now, since many distinct possible worlds represent Socrates as being wise, it follows that Socrates has trans-world being. Thus, haecceitism follows.

On the other hand, let's reverse the order of explanation and define possible worlds in terms of propositions and treat possible worlds as sets of propositions. If singular propositions such as p can constitute possible worlds (which is an uncontroversial assumption), then if we consider two distinct possible worlds that have p as a member, it follows that Socrates, an immediate constituent of p, has a transworld being. To generalize, by tracking singular propositions that constitute possible worlds we can track individuals involved in those propositions as well. Thus, haecceitism follows.

Both presented cases show that if you accept singular propositions, then you are committed to haecceitism (as characterized by Kaplan).

Let's now move towards antihaecceitism. According to Kaplan, antihaecceitism:

holds that for entities of distinct possible worlds there is no notion of transworld being.

They may, of course, be linked by common concept and distinguished by another concept

(...) – but there are, in general, many concepts linking any such pair and many distinguishing them. Each, in this own setting, may be clothed in attributes which cause them to resemble

one another closely. But there is no metaphysical reality of sameness or difference which underlies the clothes. Our interests may cause us to *identify* individuals of distinct worlds, but we are then creating something – a trans-world continuant – of a kind different from anything given by the metaphysics. (Kaplan 1975, pp. 723).

According to Kaplan, the antihaecceitist denies that we can make sense of transworld identity claims. Thus, if she wants to say something about the modal properties of some individual, that is, if she wants to preserve an idea that two worlds can represent possibilities for the same individual, she has to provide an indirect analysis of an individual having different properties at different worlds, which will be based on purely qualitative characterization of worlds and individuals in question. Kaplan's remarks suggest that it is natural for the antihaecceitist to endorse counterpart theory⁷⁴ and take transworld identity claims to be elliptical descriptions of two individuals from two distinct possible worlds being linked by a common qualitative description.⁷⁵ According to the counterpart theory, all individuals are worldbound. However, this does not mean that individuals could not have been different in any respect. Individuals have their modal properties in virtue of their counterparts having properties in question in other possible worlds. Standard counterpart theory (see Lewis 1968) states that an individual x has only one counterpart at a world at which x exists: itself. Thus, all other counterparts of x are otherwordly. An individual y counts as a counterpart x if y is relevantly similar to x, and no z is more

⁷⁴ The original characterization of counterpart theory has been provided by Lewis (1968, 1973, 1986). For a further discussion and developments of it see Hazen (1979a), Heller (1998a), Forbes (1982), Fara and Williamson (2005), and Kment (2012).

⁷⁵ That said, counterpart theory is not essentially tight to antihaecceitism and purely qualitative description of possibilities. As Cowling (2012) showed, it is possible to make sense of a nonqualitative counterpart relation and combine counterpart theory with (modal) haecceitism.

similar to x than y is. In light of this, counterpart theorists interpret propositions involving a possibility operator such as [Possibly[an actual individual x is F]] as true iff there is a possible world w, according to which a counterpart of x, x^* , which is relevantly similar to x, exists and is F. In the case of necessity operators, a proposition such as [Necessarily[an actual individual x is F]] is true iff all counterparts of x at all worlds are F. It is worth mentioning that relations of similarity are context sensitive. They are stipulated rather than discovered. For this reason, there are many alternative ways of characterizing similarity relations between counterparts. There is no objective notion of similarity for, as Kaplan says, 'there is no metaphysical reality of sameness or difference which underlies the clothes'. Individuals from distinct possible worlds can be similar to each other with respect to some choice of clothes but be completely different with respect to another choice of clothes. There is, however, no sense of having 'one true clothes' that would explain what a given individual really is, independently of the ways in which it is described.

Additionally, since for Kaplan, as haecceitism entails that there are singular propositions, we can identify antihaecceitism with a view that there are no singular propositions but only general ones. As a result, all possibilities have to be characterized purely qualitatively.

Lastly, it is important to note that, for Kaplan, both haecceitism and antihaecceitism should always be applied to a given kind K of entities rather than to all entities unrestrictedly. Thus, one can be a haecceitist with respect to concrete individuals or living organisms but be an antihaecceitist with respect to abstract entities such as numbers or properties or fictional characters.

Below I explain what is problematic about Kaplanian characterizations of haecceitism and antihaecceitism. Following that I introduce and further develop an alternative, Lewisian approach to both doctrines.

3.2. Modal and metaphysical variants of haecceitism and antihaecceitism

As observed by Fine⁷⁶ (2005, pp. 35-36), an issue with the Kaplanian approach is that it blurs a difference between modal and metaphysical variants of haecceitism and antihaecceitism.⁷⁷

Let's focus on the issue of haecceitism first. It seems that the Kaplanian characterization of haecceitism combines both its modal and metaphysical aspects: To describe haecceitism as a thesis, according to which individuals are extended in the space of possible worlds, and that it is meaningful to ask whether an individual x has transworld being, is to say something about how modal concepts apply to individuals and how distinct possible worlds are able to represent possible states of affairs regarding one and the same individual. A view which concerns such issues is a variant of modal haecceitism, which should, however, be distinguished from a more first order issue concerning metaphysical structure of individuals or reality in general. When Kaplan says that, according to haecceitism 'common thisness may underlie extreme dissimilarity', he is no

⁷⁶ Similar observations are made by Stalnaker (2012, pp. 54-56) and Lewis (1986, pp. 221-225).

⁷⁷ A distinction between modal and metaphysical variants of haecceitism and antihaecceitism was first introduced by Fine (2005, ch. 1). Recently, Scarpati (2019) made a very similar point. See also Lenart and Szachniewicz (2020). Beside these examples, a distinction between modal and metaphysical variants of haecceitism is rarely stated explicitly. That said, it seems to be implicitly assumed by other theorists of haecceitism and antihaecceitism. For example, the distinction is assumed by Lewis (1986) who claimed that it is possible to be a (modal) haecceitist without postulating thisnesses (which, as I argue, is a part of metaphysical doctrine of haecceitism), or by Adams (1979) who explicitly claimed that he is not interested in semantic (modal) issues associated with haecceitism, but rather in a metaphysical component of it according to which individuals have thisnesses, which are irreducible to qualitative properties, and by Skow (2008), who indicated that contemporary discussion of haecceitism involving possible worlds framework is much less first-order than an old discussion of haecceitism made by scholastics (which concerned the individuation issue), and by Leibniz (which concerned a debate between relationism and substantialism about space).

longer describing modal issues, but a substantial metaphysical issue concerning the nature of identities of individuals. According to metaphysical haecceitism so understood, every individual has a thisness, a property of being that individual, which is irreducible to qualitative features of the individual in question. Thisnesses can then be taken as individuators of individuals, that is, components of individuals that make them individual.

Similarly, Kaplan's formulation of antihaecceitism blurs a difference between its modal and metaphysical variants. A view that 'for entities of distinct possible worlds there is no notion of transworld being', and that 'they may, of course, be linked by common concept and distinguished by another concept (...) – but there are, in general many concepts linking any such pair and many distinguishing them' refers to modal antihaecceitism, a skeptic thesis about modalities de re according to which individuals have no transworld being, and thus one cannot take modalities de re at face value, without any reference to their qualitative character. Thus, modal antihaecceitism, instead of endorsing the transworld identity view, works naturally with a thesis of worldbound individuals coupled with the counterpart theory as a way of analyzing modal properties of individuals. In turn, a view that 'each [entity - K.L] (...) may be clothed in attributes which cause them to resemble one another closely. But there is no metaphysical reality of sameness or difference which underlies the clothes' is a variant of metaphysical antihaecceitism, a view according to which identities of individuals can be fully explained in terms of their qualitative roles. Individuals have no irreducible thisnesses which might underlie qualitative clothes but are individuated by the qualitative clothes.

Considering even these rough formulations of modal and metaphysical variants of haecceitism and antihaecceitism which can be extracted from Kaplan's remarks, is sufficient to

establish my point that modal and metaphysical variants of haecceitism and antihaecceitism are distinct views which should be kept apart. A position that fails to keep them apart is problematic on the conceptual and metaphysical level. Let's consider conceptual issues first.⁷⁸

(1) Kaplan states that haecceitism and antihaecceitism might apply differently to distinct kinds of individuals. This is obviously correct in case of the metaphysical variants of these doctrines, but that is not the case with reagard to the modal ones. After the work done by and Fine (2001) within the field of metaphysical realism and anti-realism, it is common to conceive the majority of metaphysical disputes as disputes whether realism or anti-realism is true with respect to a restricted domain D of entities. In light of this, the haecceitism/antihaecceitism debate can be viewed (as Kaplan suggests) as a debate whether realism or anti-realism towards thisnesses with respect to some kind K of entities is correct or not. As a result, one could be, for instance, a realist about thisnesses with respect to living organisms, but be antirealist about them with respect to artifacts or fictional characters. However, as Fine (2005, pp. 35) observes, if Kaplan's formulations aim at defining modal haecceitism and *modal* antihaecceitism, such a domain restriction is rather problematic. According to Fine, a main reason for that is if modal operators apply to some domains of individuals (in case of de re modality) or sentences (in case of de dicto modality), they must apply to all of them unrestrictedly. That is, modal notions used in semantics such as modal operators must apply to individuals (or sentences) systematically. It cannot be the case that one and the same formula involving modal operators has different truth values under various circumstances.

⁷⁸ In what follows I rely on Fine's observations (Fine 2005, pp. 35-36) but also add some further points.

- (2) By looking from a historical perspective, it is obvious that not everyone was discussing haecceitism and antihaecceitism within the scope of modality. Many discussed both views with respect to such issues as the principle of identity of indiscernibles (Adams 1979, Legenhauusen 1989, Stalnaker 2012), substantialism or relationism about spacetime (Pooley 2006), individuation (Park 1988, 1990, 2016, Rosenkrantz 1993), identity of fundamental constituents of matter (French and Redhead 1989, Ladyman and Bigaj 2010, Dorato and Morganti 2013), probability (Kment 2012), fundamental structure of reality (Dasgupta 2009, 2016, Russell 2016, Bacon 2019), or coincidence (Lenart and Szachniewicz 2020). However, such applications of haecceitism and antihaecceitism cannot be called *modal* applications. They are more substantial theses and deserve their own name. Under Kaplan's construal, we are unable to call such debates haecceitistic or antihaecceitistic at all.
- (3) By not distinguishing modal and metaphysical variants of discussed doctrines, a problem of how modal and metaphysical variants of these views interconnect cannot emerge. Does modal haecceitism entail metaphysical haecceitism or is it possible to be a modal haecceitist but endorse antihaecceitistic metaphysics? Or, conversely, is it possible to be a metaphysical haecceitist yet be a modal antihaecceitist? Such issues are unintelligible if we do not distinguish explicitly modal and metaphysical variants of the discussed doctrines. Yet, as indicated by Fine in his (2005, ch. 1), these questions are genuine and worth investigating on their own. One could provide some independent reasons for a claim that modal variants presuppose metaphysical ones (in fact, this is the position that I defend in

Chapter 6), however, without such independent reasons, modal and metaphysical views are conceptually independent and all combinations of views are logically consistent.

(4) Lastly, providing distinct modal and metaphysical characterizations of haecceitism and antihaecceitism allows us to shed new light on relationships that these doctrines have to other usually associated views such as essentialism, *PII* or transworld identity views. Obviously, modal variants of haecceitism and antihaecceitism will differently relate to these views more than their metaphysical counterparts.

Secondly, by confusing modal and metaphysical variants of haecceitism and antihaecceitism together, one also faces some more substantial, metaphysical difficulties. Kaplanian formulations seem to entail the following metaphysical views::

- (1) Modal haecceitism entails a doctrine of genuine transworld identity of individuals, while modal antihaecceitism entails a worldbound view coupled with counterpart theoretic analysis of modalities *de re*.
- (2) Modal haecceitism entails that there are singular propositions, while modal antihaecceitism entails that there are no singular propositions.
- (3) Metaphysical haecceitism entails a view that individuals have irreducible thisnesses that ground their identity or distinctness, while metaphysical antihaecceitism entails that individuals do not have thisnesses, but their identity or distinctness is grounded in their qualitative roles.

I maintain that all three claims are too strong. There are no such entailments. These combinations of views are allowed, and some of them are very natural, but other options are available as well. Thus, we need more general formulations of the doctrines in question.

There is no entailment suggested by (1), because one can be a modal haecceitist but deny that there is genuine overlap of worlds and, thus, deny the genuine transworld identity of individuals, which are parts of worlds. Instead, a modal haecceitist could (a) claim that transworld identifications of individuals can be given by stipulation, (b) accept Lewisian modal realism and claim that possible worlds are causally isolated regions of spacetime, but introduce a nonqualitative counterpart relations and allow for *de re* representation of worlds to be primitive, independent from qualitative truths holding at relevant worlds (such a view is defended e.g., by Cowling 2012), or (c) accept isolated worlds and qualitative counterpart theory, but endorse cheap haecceitism (Lewis 1986, pp. 228-235), and account for haecceitistic possibilities by allowing individuals to have more than one (itself) counterpart within a single world. Cheap haecceitism is *cheap* because it accounts for haecceitistic possibilities without commitment to a genuine transworld identity view nor to primitive (nonqualitative) stipulation.

Claim (1) is not true about modal antihaecceitism either. One could endorse modal antihaecceitism, but believe that: (a) Possible worlds genuinely overlap, or (b) believe that individuals are worldbound, but deny counterpart theory and, instead, endorse the Leibnizian view on modality which states that all qualitative and intrinsic properties of individuals are essential to them.

Claim (2) is inadequate as well. Firstly, (a) both modal haecceitists and modal antihaecceitists could hold a view that possible worlds represent not through propositions being

true at them but through sentences (linguistic ersatzism), by abstract constructions such as maximal properties, by exhibiting a qualitative or nonqualitative character, or by a choice of qualitative or nonqualitative counterpart relations. In all of those cases we do not need to appeal to propositions at all in order to do our modal metaphysics. Secondly, (b) the modal antihaecceitist could accept that there are singular propositions or sentences, but say that their content supervenes on a content of qualitative propositions or sentences. Thus, the modal antihaecceitist could accept that there are singular propositions (or sentences) but believe that their nonqualitative content is reducible to the qualitative content. Thirdly, (c) not every possible world theory constructs possible worlds out of propositions. Within those theories which get rid of propositions, accepting (denying) singular propositions cannot be equivalent to endorsing modal haecceitism (antihaecceitism). Fourthly, (d) Kaplaninan formulations presume a structured view on propositions. It is, however, expected that if modal haecceitism/modal antihaecceitism (as understood by Kaplan) make sense, they should be compatible with an alternative, e.g., Fregean view on propositions, according to which contents of propositions are their truth values, or views on which propositions are sets of possible worlds.

Lastly, claim (3) is too strong as well. (a) It is possible to hold metaphysical haecceitism or metaphysical antihaecceitism but put aside the issue of what grounds the identities of individuals. For instance, as I show in Chapter 4, one could view both theories as alternative explanations of the fundamental structure of reality. One then focuses on the natures of individualistic and general facts and relationships between them, rather than on the issue of identities of individuals. Moreover, (b) an argument over the nature of thisnesses, i.e., whether they are reducible to qualitative properties or not, usually is associated with an argument over the principle of identity

of indiscernibles (*PII*) (see Black 1952, Adams 1979). It is often argued that while (metaphysical) antihaecceitism entails *PII*, haecceitism denies it. By moving towards structural approaches to metaphysical haecceitism and antihaecceitism, one can make both views neutral over the issue of *PII*. Finally, (c) a debate between metaphysical haecceitists and antihaecceitists should make sense even for someone who denies that there are properties. For such a philosopher it will make no sense to ask a question whether some properties (thisnesses) are reducible to other properties (qualitative properties). Yet, such a philosopher should still be able to hold some form of metaphysical haecceitism or antihaecceitism.

I believe I have shown sufficient reasons for keeping modal and metaphysical variants of haecceitism and antihaecceitism apart. In the remainder of this chapter I will focus on modal doctrines, while their metaphysical counterparts will be discussed in the following chapter.

3.3 Lewisian modal haecceitism

According to the Lewisian approach⁷⁹, a debate between modal haecceitists and modal antihaecceitists does not primarily concern an issue of whether transworld identity claims are intelligible. Instead, it concerns a more general issue of how possible worlds represent possible states of affairs.

Independently of whether one is a modal realist or an actualist about possible worlds, both parties agree that possible worlds are representational entities, that is, that they are kinds of entities which represent possible states of affairs, and that they can do so either qualitatively or nonqualitatively. We can then identify what a given possible world w represents qualitatively

⁷⁹ For a discussion of a Lewisian approach to haecceitism and antihaecceitism see Lewis (1986), Fara (2009), Kment (2012), and Russell (2015).

with qualitative sentences which are true at w. By using a linguistic approach to the qualitative/nonqualitative distinction, we can assume that a qualitative sentence is one which can be expressed in a language free from any linguistic devices referring to particular individuals such as names, indexicals or pronouns, e.g., 'Someone is wise', 'the wisest philosopher who ever lived'. In turn, what w represents nonqualitatively can be identified with nonqualitative sentences which are true at w, while a nonqualitative sentence is a sentence expressed in a language involving linguistic devices referring to particular individuals, e.g., 'Socrates is wise', 'He is the fastest man on Earth'.80

Now, although actualist and modal realist approaches to possible worlds will differently explain what it takes for a given qualitative or nonqualitative sentence to be true at a given world, both parties agree with Kripke's observation (Kripke 1980, pp. 16-19 that what happens according to possible worlds can be described both qualitatively and nonqualitatively. This is uncontroversial. However, controversies and disagreements start with a question about a relationship between what possible worlds represent qualitatively and nonqualitatively. Are nonqualitative truths dependent on qualitative ones? Modal haecceitists answer 'no', while modal antihaecceitists answer 'yes'. To be more precise, according to modal haecceitism:

Modal haecceitism: what a possible world w represents nonqualitatively ($de \ re$) concerning particular individuals does not supervene on what w represents qualitatively.⁸¹

⁸⁰ For more on a linguistic approach to the qualitative/nonqualitative distinction see Adams (1979), Lewis (1986, pp. 221), Stalnaker (2012, pp. 62-67).

⁸¹ It is worth mentioning, though, that supervenience is an instance of a modal relationship, which are generally concerned as being nonexplanatory. Supervenience indicates merely a covariance (or lack of it) between distinct phenomena, but it does not provide a metaphysical (substantial) explanation of one phenomenon in terms of another one. Such explanations could be provided by essences (understood nonmodally) or by grounding relations. This nonexplanatory character of supervenience is a crucial feature that makes modal doctrines of haecceitism and

In other words, providing a complete list of qualitative truths held according to w is not sufficient to determine truths about the individuals that exist according to w and the qualitative roles they occupy. Nonqualitative truths about individuals are just some further truths, which cannot be derived from qualitative ones. As a result, modal haecceitism allows for haecceitistic differences between possible worlds: There are distinct worlds which represent the same qualitative truths, but which differ with respect to the nonqualitative truths they represent. Now, since possible worlds represent possibilities, haecceitistic differences between possible worlds give rise to cases of haecceitistic possibilities. A haecceitistic possibility is one which differs from other possibilities solely in terms of which individual belongs to which possibility or which individual occupies which qualitative role according to a given possibility, without there being any qualitative differences between possibilities in question. Modal haecceitists claim that there are cases of haecceitistic possibilities, while modal antihaecceitists deny that there are any.

3.3.1. Haecceitistic possibilities

A popular example of a haecceitistic possibility can be found in Adams (1979). Consider a possible world w_I containing two indiscernible spheres, Castor and Pollux, which both play the

antihaecceitism distinct from their metaphysical counterparts. That said, lack of supervenience (in the case of modal haecceitism) or its presence (in the case of modal antihaecceitism) between what possible worlds represent nonqualitatively and quantitatively can follow (as I will argue in Chapter 6, it must follow, because I believe that modal issues are grounded in metaphysical ones) from some more substantial truths about relationships between nonqualitative and qualitative matters. But for now, I shall conceptually separate modal and metaphysical (substantial) issues.

⁸² It is worth noting that haecceitistic differences can occur between entities other than possible worlds. As I will show in Chapter 4, they can occur between concrete individuals within a single world. Thus, it will turn out that not all cases of haecceitistic differences give rise to haecceitistic possibilities.

same qualitative role *R* which consists of having the same qualitative (intrinsic and relational) features (Adams 1979, Stalnaker 2012, Cowling 2017):

$$w_i$$
: $\exists x \exists y (Rx \land Ry \land Castor = x \land Pollux = y \land Castor \neq Pollux)$

So, w_1 is just Max Black's world (Black 1952). Next, suppose that Castor and Pollux are inhabited by two individuals, you and your twin brother, and you are qualitatively indiscernible from each other because you both play the same qualitative role R. Now, it is possible that either of the spheres is destroyed. Thus, two possibilities are genuine:

P1: You survive on Castor but your twin brother and Pollux are destroyed.

P2: Castor and you are destroyed but your twin survives on Pollux.

Assuming that P1 and P2 are maximal possibilities, that is, that they are complete descriptions of what could happen, P1 and P2 can be represented by two possible worlds:

$$w_{P1}$$
: $\exists x \exists y (Rx \land Py \land Castor = x \land you = y)$

$$w_{P2}$$
: $\exists x \exists y (Rx \land Py \land Pollux=x \land your twin=y)$

As you can see, both w_{P1} and w_{P2} tell the same qualitative story: There is some sphere playing R and some individual playing P. But w_{P1} and w_{P2} differ with respect to what they represent nonqualitatively regarding which individual belongs to which possibility. In w_{P1} it is you and Castor who survive, while in w_{P2} it is your twin brother and Pollux who survive. As Adams argues, such a haecceitistic difference cannot be easily neglected by antihaecceitists because, supposedly,

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 $^{^{83}}$ Of course, you can swap indiscernible spheres and twins with any indiscernible individuals you like.

there is a fundamental difference in our attitudes towards our own death and the death of someone else.

One can also construe a haecceitistic possibility without a presupposition of intra-world indiscernibles such as Black's spheres and their inhabitants. Suppose that there is a possible world w_1 at which there is a sphere, Castor, playing qualitative role R, and that there is a possible world w_2 at which there is a sphere, Pollux, playing qualitative role R. Both spheres are qualitatively indiscernible, and thus, w_1 and w_2 represent the same qualitative truths. Yet they represent different $de\ re$ truths: It is Castor which exists at w_1 and it is Pollux that exists at w_2 .

There are also other examples of haecceitistic possibilities.

Some claim that it is possible that the history of the universe could repeat itself (Lewis 1986, Russell 2015). Suppose that's actually the case and that each epoch of our universe starts with the Big Bang and ends with the Big Reset, but after each occurrence of the Big Reset everything is replayed after the new Big Bang, exactly as it actually played out. Thus, supposing that you live in the fifth epoch, there are epochs qualitatively indiscernible from it at which you do not exist but your qualitative duplicate does. If we then treat each epoch as a distinct possible world, there turns out to be distinct but qualitatively indiscernible possible worlds that differ solely in what they represent *de re* about particular individuals.

A similar haecceitistic scenario is that there are possible worlds qualitatively indiscernible from the actual world, but at which you do not exist. For instance, there is a world at which your body exists but you do not; your body is inhabited by another person, or by no one or by a zombie. Such worlds differ from the actual world haecceitistically as well (Cowling 2017).

Yet others claim that there are possible worlds qualitatively indiscernible from the actual world at which you and some other individual swap your respective qualitative roles. ²⁴ Swaps can be gradual or done in one step. Chisholm (1967) provided a well-known example of a gradual swap. He observes that it is uncontroversial to assume that the essences of individuals allow for a slight change of properties of individuals in question. Consider Adam and Noah existing in the actual world. Now, consider a possible world w_1 at which Adam slightly changes, e.g., with respect to one property, and becomes more like Noah, and Noah slightly changes and becomes more like Adam. At w_1 it is still true that the essences of Adam and Noah allow for a little revision of their properties. So, there is another possible world w_2 at which Adam becomes even more like Noah, and Noah becomes even more like Adam. Finally, after enough steps, we end up with the possible world w_n at which Adam plays the qualitative role of Noah, and Noah plays the qualitative role of Adam. As a result, there is no qualitative difference between the actual world and w_n world. There is, however, a nonqualitative, haecceitistic difference between both worlds concerning which individual plays which qualitative role at which world.

3.3.2. Principle of identity of indiscernibles

Obviously, some of the mentioned cases of haecceitistic possibilities rely on the possibility of indiscernibles such as Black's spheres, thus, on the falsity of the principle of identity of indiscernibles (*PII*), a view, roughly speaking, according to which if two individuals are qualitatively indiscernible, then they are identical (I explain more about this principle in the following chapter). However, it should be noted that denying *PII* is not sufficient for modal

⁸⁴ For a further discussion of a possibility of qualitative swaps see Chisholm (1967), Lewis (1986), Salmon (1996), and Mackie (2006).

haecceitism as characterized above. Modal haecceitism concerns differences between the way in which distinct possible worlds represent possible states of affairs. The very issue of *PII*, however, is neutral over the way possible worlds represent or even whether there are possible worlds at all, e.g., you could ground all modalities in actuality, like dispositionalists do, or deny modal concepts altogether, but still accept or deny *PII* for individuals existing in the actual world. Obviously, denying *PII can* support modal haecceitism, yet since both views can come apart, denying *PII* is neither sufficient nor necessary for modal haecceitism.

For instance, as noted by Cowling (2011), one could deny that two indiscernible spheres could coexist at one possible world, but at the same time deny modal haecceitism, and say that although distinct possible worlds can contain indiscernibles, all of them must represent the same *de re* truths. This is basically Lewis's position (Lewis 1986, pp. 224), according to which, modal antihaecceitism is consistent with *PII* being false, that is, with there being duplicates of purely qualitative worlds. In turn, one could accept *PII* but hold modal haecceitism. For instance, one could say that there are no cases of intra-world indiscernibles, but maintain instead that there are distinct possible worlds such that each represents a single sphere. Such worlds represent the same qualitative truths but differ with respect to what they represent *de re* concerning particular spheres, e.g., which sphere occupies which qualitative role. This possibility is just the simplified scenario of Castor and Pollux described above. *PII* is consistent with there being such worlds.

Of course, it is possible to modify *PII* and apply it to possible worlds themselves. Such a variant of *PII* could look like:

 PII_{worlds} : for any two possible worlds w_1 and w_2 , if they share qualitative characteristics, then w_1 and w_2 are identical

Then, denial of PIIworlds will be necessary and sufficient for modal haecceitism. This, however, is not the usual way of characterizing PII. A first issue with PII_{worlds} is that under many conceptions of possible worlds, worlds are not individuals but abstract, intensional entities. And since PII is meant to apply to individuals (Leibniz himself took PII to be a principle of individuation of individuals or, more precisely, monads; see Rodriguez-Pereyra 2014), PII cannot be applied to worlds understood as abstract entities. A main rationale behind such a restriction is that abstract entities are individuated (if at all) differently than individuals. If, however, we cannot apply PII to possible worlds under some understandings of what possible worlds are, and at the same time, we want to maintain that modal haecceitism entails falsity of PII_{worlds} and antihaecceitism entails truth of PIIworlds, then under some views on what possible worlds are, the doctrines of haecceitism and antihaecceitism cannot be even stated. This, however, is unwelcomed, because it is expected that if modal haecceitism and antihaecceitism make sense at all, they should make sense under all currently available theories of possible worlds. Secondly, viewing modal antihaecceitism as entailing PIIworlds is too strong requirement because modal antihaecceitism, as Lewis suggested (Lewis 1986, pp. 224-225) is consistent with there being duplicates of qualitatively indiscernible possible worlds, and thus with the falsity of PII. In the light of these remarks, I prefer to stick with the orthodox readings of PII, and take it to apply solely to individuals within a single possible world rather than to possible worlds themselves.

In conclusion, for the jsut presented reasons, when discussing modal doctrines of haecceitism and antihaecceitism I put *PII* aside. I shall come back to the issue of *PII* when discussing metaphysical variants of these doctrines.

3.3.3. Transworld identity and stipulation

From the Lewisian characterization of modal haecceitism it follows that modal haecceitism allows for haecceitistic possibilities. That being said, modal haecceitism is something more than a mere acknowledgement of haecceitistic possibilities. Following Kaplan, one could suppose that modal haecceitism entails a doctrine, according to which, individuals are extended in the space of possible worlds and that possible worlds overlap. However, modal haecceitism (under the Lewisian characterization) does not entail genuine transworld identity. For the (Lewisian) modal haecceitist a world w might represent that Socrates exists at it not by having Socrates as a literal constituent, but by including a name of Socrates coupled with a predicate 'exists', or by including another singular representative of him, e.g., his thisness, which is represented by w as exemplified. Another option could be to opt for a nonqualitative counterpart theory, and say that a world w represents that Socrates exists at it, if w contains a nonqualitative counterpart of Socrates. 85

In order to better understand these remarks, we should carefully distinguish the genuine transworld identity view, according to which individual from one world can be a literal constituent of another world (which is a controversial view), from the problem of *de re* representation, that is, an issue of how possible worlds manage to represent individuals as existing at them and as having a certain qualitative character. The latter issue is uncontroversial and every possible world theorist has to explain how her worlds manage to represent *de re* possibilities. For some philosophers, such as modal realists with overlap, *de re* representation will work through genuine transworld world identity, for others it will work through counterpart relations (either qualitative or nonqualitative), or by overlap of abstract representatives of individuals. Modal haecceitism does not entail any particualar view on the nature of representation *de re*. Yet, it

⁸⁵ For a defense of (haecceitistic) nonqualitative counterpart theory see Cowling (2012).

imposes a constraint on how we should explan that issue. For the modal haecceitist, how possible worlds represent *de re* is at least partially determined by the nonqualitative matters. Thus, purely qualitative accounts of representation *de re* are, such as (qualitative) counterpart theory or purely qualitative transworld identity view, are incompatible with modal haecceitism.

On top of that, there is a third issue usually associated with the issue of transworld identity, that is, the issue of transworld identification. Following Divers (2002, Ch. 16), I take it to be an epistemic problem of in virtue of what we are able to say whether one and the same individual exists at distinct possible worlds. Contrary to what has been suggested by Kaplan (1979), modal haecceitism says that there is no problem associated with the issue of transworld identification, because transworld identifications can be simply given by stipulation.

Suppose that there is a possible world w at which someone is a tax collector. A philosopher who views the transworld identification issue as a genuine issue asks: In virtue of what you identify this individual with Socrates? That is, among different individuals that exist at w, which one is Socrates? Perhaps, at w there are many tax collectors. Which of them is Socrates? She then claims that to answer these questions you need to provide a criterion of transworld identity of Socrates that would guarantee that any individual satisfying this condition at any world is identical to Socrates. Such a criterion would be a set of purely qualitative, necessary and sufficient properties for being a Socrates. But as Plantinga (1973) and Kripke (1980) (see also Van Inwagen 1985, Salmon 1996) rightly observed this is an incorrect way of looking at the issue of transworld identification. It is difficult (if not impossible) to deliver a purely qualitative necessary and sufficient condition for an individual to be identical with another one. And even if we would be able to provide such a criterion, we do not need it to be able to determine at which worlds Socrates

exists. A thought that transworld identifications are difficult and pose a genuine problem follows from a misconception about possible worlds according to which they are given purely qualitatively. Kripke's crucial insight, accepted by the majority (if not all) philosophers working on possible worlds, is that worlds are not given purely qualitatively, in terms of properties that some individuals could have, but can also be given nonqualitatively, in terms of individuals (see Kripke 1980, pp. 49-50). Thus, in order to determine in which possible worlds Socrates exists we can simply stipulate that we consider a world at which Socrates is a tax collector by simply describing a world w in terms of individualistic truths (i.e., truths involving reference to individuals) as being such that Socrates is a tax collector at it. And we can stipulate that no matter what it takes to be a Socrates. It is also perfectly legitimate for us to stipulate worlds at which Socrates is a poached egg or a talking donkey. That being said, whether such worlds are possible or not is another story, which is not settled by the stipulation itself. Modal haecceitism at its bottom is a thesis about legitimacy of our use of stipulation (see Salmon 1996). An issue of which of the stipulated worlds are possible will depend on a relationship that modal haecceitism bears to the issue of essentialism. (I will tackle that issue in a moment).

It might be replied that stipulation is available to the modal antihaecceitist as well (see Lewis 1986, pp. 222-223). And I agree. As I show below, modal antihaecceitism, at least in its moderate form, shares a view that possible worlds can be given both qualitatively and nonqualitatively, and that we can appeal to stipulation when determining which individual exists at which world. However, what is peculiar about the haecceitistic stipulation is that: (a) It cannot be replaced or reduced to qualitative stipulation, and (b) it doesallow us to make sense of haecceitistic possibilities, that is, to discern qualitatively indiscernible possible worlds. Let's

explain this idea in an example. Following Kripke (1980, pp. 16), suppose that we toss two sixsided dice, let's call them a and b. Suppose that on one occasion a lands 5 and b lands 6, while on another occasion a lands 6 and b lands 5. Treat these two simple alternatives, as two distinct possible worlds (maximal possibilities). At $w_1 a$ is 5 and b is 6 while at $w_2 a$ is 6 and b is 5. These possible worlds are qualitatively indiscernible. Yet, we can stipulate that they differ de re with respect to which dice lands on which side. And we can do so simply by introducing names 'a' and 'b' and by combining them differently with qualitative descriptions at w_1 and w_2 . In doing so we presume that haecceitistic stipulations are irreducible to qualitative ones. So, when we stipulate that there are two possible worlds w_1 and w_2 differing only in permutations of individuals over their qualitative roles, we presume, that our nonqualitative direct descriptions of dice a and dice b cannot be replaced by qualitative descriptions which would indicate some ignored qualitative differences between a and b, including their individual origins, histories, trajectories, shapes etc., which would allow us to qualitatively discern possibility w_1 from w_2 .

Lastly, it is worth mentioning that haecceitistic stipulation is available both to actualists and modal realists. For instance, if you are linguistic ersatzist you are free to stipulate that Socrates' name is paired with whatever predicates, or, if you are Plantingian actualist, you can stipulate that Socrates' thisness is co-exemplified with whatever property. Similarly, modal realists without overlap can freely stipulate the distributions of nonqualitative counterpart relations linking individuals from distinct worlds, while modal realists with overlap can freely stipulate which individual is included in which world.⁸⁶

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⁸⁶ There is an interesting discussion on whether we can provide a nontendentious characterization of (modal) haecceitism and (modal) antihaecceitism that would be compatible with *all* possible accounts of possible worlds (see Skow 2008, 2011, and Torza 2011). I do not want to address this issue here. What I can say, however, is that certainly

3.3.4. Modal haecceitism and essentialism

As I observed above, modal haecceitism does not entail any particular view on the nature of representation *de re*, and it makes transworld identifications easy and unproblematic. That being said, as Salmon observes (Salmon 1996, see also Koslicki 2020), there is a further problem of transworld identity that reappears for modal haecceitists. Following Salmon (1996, pp. 220), I call it the essentialist transworld identity problem. Suppose that we can freely stipulate whatever we want. Thus, we are free to stipulate that there is a world *w* at which there are only poached eggs, and one of these poached eggs is identical with Socrates. A natural question arises: Could Socrates be identical to a poached egg? That is, is a world representing Socrates as being a poached egg a *possible* world? To generalize, a problem is whether every haecceitistic stipulation refers to a genuine possibility. The haecceitist could answer 'yes' and deny any nontrivial form of essentialism and avoid the essentialist transworld identity problem as well. However, she could also answer 'no', adopt some form of essentialism and agree that the essentialist transworld identity problem is genuine. Both answers are legitimate. This indicates a divide among modal haecceitists.

(Methodological note: whenever I refer to the issue of essentialism, I always have in mind a view ascribing nontrivial essential properties to individuals. Roughly, I take a property to be nontrivial if it is qualitative or impure (a property is impure if it is partially qualitative and partially nonqualitative, e.g., *being as wise as Socrates*) and its possession is independent of the

the Lewisian formulations are compatible with a wider variety of views on the nature of possible worlds than the Kaplanian ones. Thus, the Lewisian characterizations are preferable. And there are no better ones available yet.

way we describe such individuals. I assume that purely nonqualitative essential properties such as being identical to x are trivial).

In my view, depending on whether one believes in essentialism and imposes restrictions on our haecceitistic stipulations, or does not believe in essentialism and leaves our stipulations unconstrained, we can discern moderate and extreme variants of modal haecceitism.

According to moderate modal haecceitism, there are some qualitative restrictions imposed on our stipulations. That is, what possible world w represents de re concerning particular individuals in some sense depends on what w represents qualitatively. This characterization of modal haecceitism looks similar to that of modal antihaecceitism (which I discuss below) according to which representation de re supervenes on qualitative representation. However, there is an important difference between both views. For the moderate modal haecceitist representation de re only partially depends on qualitative representation. Thus, in many cases it will be still legitimate to determine what possible worlds represent *de re* through the haecceitistic stipulation, independently from what they represent qualitatively. This view then allows for nonqualitative differences between worlds without qualitative differences, thus, for haecceitistic possibilities. However, it is a *moderate* modal haecceitism because there are some limitations (which take the form of nontrivial essentialist truths) imposed on how far our stipulations can go. Thus, only some haecceitistic possibilities will be genuine. In contrast, modal antihaecceitism claims that what possible worlds represent de re can be determined (if at all) only by what they represent qualitatively. That is, if there is any determinate de re truth holding at w, then this truth has to be dependent on qualitative truths holding at w. Thus, there cannot be nonqualitatively different but qualitatively indiscernible possible worlds. Thus, there cannot be *any* haecceitistic possibilities.⁸⁷

A natural candidate for limiting principles to which a moderate modal haecceitist could appeal are essentialist truths. For example, if origin essentialism⁸⁸ is true, then Socrates is essentially born from human gametes g_1 and g_2 ; that is, at every possible world at which Socrates exists, he is born from g_1 and g_2 . It is not possible for Socrates to be human at one world but to be a poached egg at another world. As a result, if we assume origin essentialism, a stipulated world according to which Socrates is a poached egg will turn out to be an impossible world.

In turn, according to extreme modal haecceitism there are no qualitative constraints imposed on what is possible. Thus, the way possible worlds represent *de re* is logically independent from the way they represent things qualitatively. We can freely stipulate that any individual could play any qualitative role and that each such stipulation will refer to a genuine possibility. Thus, when the extreme modal haecceitist stipulates that Socrates is a poached egg at some possible world w, then she is referring to some genuinely possible world. In effect, the extreme modal haecceitist, by stipulating, e.g., that Socrates is a poached egg at some possible world w, has to deny any plausible form of essentialism. Thanks to that, she is able to avoid the essentialist problem of transworld identity mentioned above.

At this point I shall not decide whether extreme modal haecceitism is preferable over its moderate counterpart. I shall come back to this issue later in Chapter 6 (section 6.2.3.), where I claim that extreme modal haecceitism is preferable over its moderate counterpart.

⁸⁷ For a similar point on antihaecceitism see Lewis (1986, pp. 222-223)

⁸⁸ For a discussion of origin essentialism see Kripke (1980), Robertson (1998) and Mackie (2006).

Here I end my exposition of modal haecceitism and its connections to other doctrines. I shall now move towards modal antihaecceitism.

3.4. Lewisian modal antihaecceitism

As in the case of modal haecceitism, I take modal antihaecceitism to be an account of how possible worlds represent possible states of affairs. More specifically, modal antihaecceitism is a skeptical view about primitiveness of modalities *de re*:

Modal antihaecceitism: What a possible world w represents nonqualitatively ($de \ re$) concerning particular individuals does supervene on what w represents qualitatively.

In other words, providing a complete list of qualitative truths that hold at w is sufficient to determine which individuals exist at w and which individuals play which qualitative roles. As a result of this connection between qualitative and nonqualitative truths, and in contrast to modal haecceitism, there are no possible worlds which tell the same qualitative story, but which differ with respect to what they say de re about particular individuals. For the modal antihaecceitist, either any difference in what possible worlds represent de re entails a difference in what they represent qualitatively (as in the case of a moderate variant), or there is no distinctive notion of representation de re, but worlds represent all truths qualitatively (as in the case of an extreme variant). Either way, for the modal antihaecceitist there are no cases of haecceitistic possibilities, i.e., possibilities which differ nonqualitatively concerning which individual belongs to which possibility without differing qualitatively. According to the modal antihaecceitist the issue regarding which individual belongs to which possibility can be addressed (if at all) only based on

purely qualitative grounds. Thus, there are no possible worlds which are qualitatively indiscernible from the actual world but at which you do not exist, or at which you and Trump swap qualitative roles, at which history repeats itself, or which differ with regard to which of the two indiscernible spheres is annihilated. That being said, although modal antihaecceitism denies that there are nonqualitatively different but qualitatively indiscernible possible worlds, it is consistent with there being duplicates of qualitatively indiscernible possible worlds (e.g., Lewis holds such a view, see Lewis 1986, pp. 224-225), but such worlds cannot differ in what they represent *de re*. Thus, modal antihaecceitism is consistent with the falsity of *PII*. This shows that, analogically as it was in case of modal haecceitism, although the endorsement of *PII* is a natural step for the modal antihaecceist, the truth of *PII* is neither sufficient nor necessary for modal antihaecceitism. Thus, *PII* and modal theses of haecceitism and antihaecceitism should be investigated separately.

3.4.1. Transworld identity or worldbound individuals?

Since Lewis, it became an orthodoxy to identify modal antihaecceitism with the counterpart theoretic analysis of modalities *de re*. The main rationale behind such association is that according to modal antihaecceitism the only available means of determining *de re* representation of worlds are purely qualitative. In effect, modal antihaecceitists are unable to take transworld identity claims at face value (given that we are persuaded by Lewis' arguments against modal realism with overlap). Instead, modal antihaecceitist can provide us only with an elliptical and purely qualitative explanation of the fact that distinct possible worlds can represent *de re* possibilities

for the same individual. Counterpart theory is a well-known example of such an explanation. However, modal antihaecceitism does not entail it.

Counterpart theory, as characterized by Lewis (1968) entails that all individuals are worldbound, thus, that possible worlds never overlap. However, the claim that representation *de re* supervenes on qualitative representation is neutral over the issue of whether possible worlds overlap or not. For instance, one could believe that worlds overlap and, thus, claim that individuals are genuinely transworld identical across worlds, but endorse modal antihaecceitism and maintain that representation *de re* about such individuals does supervene on qualitative truths holding at worlds containing those individuals, e.g., under the assumption of McDaniel's modal realism with overlap, according to which individuals are just transworld collections of tropes, singular truths about individuals might supervene on qualitative truths about tropes. Of course, in order to hold modal realism with overlap one has to deal with Lewis' arguments against (as well as some other issues). Nevertheless, modal antihaecceitism on its own is consistent with a view that purely qualitative possible worlds overlap.

One could also hold modal antihaecceitism but be an actualist. One option is to opt for actualism with overlap, a view according to which ersatz worlds have overlapping abstract parts (sentences, propositions, properties, etc.). If one would like to square this view with modal antihaecceitism, one would then need to specify purely qualitative conditions of transworld identity of abstract representatives. Another option is to endorse actualism with worldbound representatives (some variants of linguistic ersatzism are like that: if an ersatz individual mirrors the whole world that represents it, no ersatz individual could be a part of more than one world; see Chapter 6 below for more details on such a view) and introduce (qualitative) counterpart

theory linking those representatives (or properties represented by them, as argued by McMichael 1983b and Wang 2015; I discuss their position in more detail in Chapter 6). Both cases show that it is possible to combine the actualist theory of possible worlds with a purely qualitative analysis of representation *de re* characteristic of modal antihaecceitism.

Finally, one could agree that individuals are worldbound but do not introduce counterpart theory but instead endorse Leibnizian essentialism as a way of analyzing the notion of representation *de* re, and say that all individuals have all of their properties essentially. Such a view is available both to the actualist and modal realist.

As we can see then, there are plenty of ways the modal antihaecceitist could maintain the supervenience claim without making a commitment to the counterpart theory or to modal realism. There might be independent reasons for which counterpart-theoretic analysis of modalities *de re* is preferable over the alternatives, but these reasons are independent from the thesis of modal antihaecceitism itself.

3.4.2. Stipulation

It is also interesting to investigate whether the stipulation solution to the issue of transworld identification is available to the modal antihaecceitist. As noted above, when one stipulates in modal contexts, one arbitrarily chooses which possible worlds and which possible individuals are the subjects of one's modal reasoning. *Prima facie* it seems that the antihaecceitist cannot appeal to stipulation so understood, because it allows us to make transworld identifications independently of what qualitative truths hold at possible worlds. Thus, stipulation seems to be incompatible with a supervenience thesis inherent to modal antihaecceitism. However, Lewis

observes that the antihaecceitist (independently of whether she believes in counterpart theory or not) could appeal to stipulation on the condition that it is rightly understood:

Certainly, we are free to stipulate that the world under consideration shall be one where Nixon invariably loses. Anyone can agree on that, whatever his views on cross-identification (unless his views provide no way at all to cross-identify Nixon with an otherworldly loser). Even a counterpart theorist like myself can be happy with such a stipulation, rightly understood. It comes to this: let us consider a world such that the qualitative character of that world and its inhabitants, plus the qualitative character of our world and its Nixon together make some election-loser in that world be a counterpart by description of our Nixon. In brief: let us consider a world that bears certain relations of qualitative likeness and difference to ours. (Lewis 1983, pp. 18)

Thus, to generalize, the moderate antihaecceitist can appeal to stipulation on the condition that, in principle, each instance of the haecceitist (nonqualitative) stipulation can be replaced by the purely qualitative one. Thus, unlike the haecceitist, the antihaecceitst does not believe in a truly primitive stipulation and that we can—merely by stipulation—discern qualitatively indiscernible possible worlds. At best we can discern qualitatively indiscernible possibilities within a single world (such a maneuver is done by the cheap haecceitist in order to account for haecceitistic possibilities within a single world; I say more about such a view in a moment). That being said, in practice, haecceitistic stipulation might be still indispensable for the antihaecceitist because, as Lewis observes (1986, pp. 222-223), (a) we are unable to provide a finite description of the supervenience base of de re representation, (b) we lack complete knowledge of qualitative

character of the world, and (c) we are free to stipulate that two possibilities differ nonqualitatively while ignoring underlying qualitative differences, e.g., by moving back to the Kripke's dice example, we might stipulate that w_1 at which dice a lands 5 and dice b lands 6 differs haecceistically from a world w_2 at which a lands 6 and b lands 5, ignoring qualitative differences between w_1 and w_2 which underlie nonqualitative differences, such as differences in origins, causal relations, locations, size of the dices and so on. Analogically, even if mental properties supervene on physical properties, we can talk solely about people's mental states ignoring the issue of a qualitative supervenience base underlying and determining their mental states. (see Lewis 1986, pp. 226).

3.4.3. Modal antihaecceitism and essentialism

Standard modal antihaecceitism entails that representation *de re* supervenes on qualitative representation. But depending on how strong the determination relation between qualitative representation and *de re* representation is, it is possible to discern moderate and extreme variants of modal antihaecceitism.

I take moderate modal antihaecceitism to be a view that the issue of whether a particular individual exists at a world w is settled (if at all) by what qualitative truths w represents (on an assumption that the qualitative description of w is sufficiently rich). For example, in order to determine whether it is true de re that 'Socrates exists at world w' it is sufficient to provide a very detailed qualitative description of w of the form, 'There is an individual x such that x is human, x is wise, and x is snub-nosed, and...' (here, one should include complete qualitative specification of a relevant part of w, on which Socrates' existence will supervene). Moderate modal

antihaecceitists claim that each determinate *de re* truth about a particular individual has such a purely qualitative supervenience base. If a sentence *s* expressing a *de re* truth about some individual does not have such a qualitative base, then it is indeterminate whether *s* holds at *w* or not. This variant of modal antihaecceitism is preferred, e.g., by the Lewisian style counterpart theorist.

In contrast, according to extreme modal antihaecceitism there is no place for a distinctive notion of *de re* representation at all. All representation done by worlds is done by qualitative sentences. There is no need to provide a singular and direct descriptions of individuals at possible worlds. This is because all statements, whether about individuals or worlds, are purely qualitative. The consideration of purely qualitative statements is sufficient for analyzing modality. This view could seem to be very counterintuitive, becasue we tend to think that at least *some* statements about individuals, e.g., fundamental ones, seem indispensable in our complete characterization of the actual world and possibilities for the actual world. However, once extreme modal antihaecceitism is supplemented by a further metaphysical view, according to which there are no individuals at all, but the actual world have purely qualitative metaphysical structure (patterns of relations or properties), then extreme modal antihaecceitism becomes a very natural account of how modal concepts apply to such purely generic constituents of worlds.

There are interesting questions regarding how these views relate to the issue of essentialism. In principle, modal antihaecceitists can be antiessentialists, moderate essentialists or extreme essentialists.

Suppose you endorse counterpart theory, and say that representation *de re* is governed by qualitative representation. Now, although counterpart theory mirrors essentialist truths by

claiming that an individual x is essentially F iff all x's counterparts are F, endorsing counterpart theory does not commit you to essentialism because, as Lewis indicates, which individuals count as counterparts of x is context sensitive. Thus, under some choice of counterparts Socrates will be essentially human (if we assume that to be Socrates's counterpart is to be human), but under some other choices of counterparts Socrates will not be essentially human (if to be Socrates's counterpart is to be a living organism). Now, since according to the orthodox view, genuine essentialism ascribes essential properties to individuals independently from how individuals are described or conceived (Forbes 1986, Paul 2006, Oderberg 2007, and Beebee and McBride 2015), moderate modal antihaecceitism based on counterpart theory entails a strong version of antiessentialism of an Quinean fashion (Quine 1963, pp. 155. See also Beebee and McBride 2015, pp. 2), according to which individuals have properties essentially and others contingently only relative to the ways in which individuals in question are specified. 89

Another way to be a moderate antihaecceitist could be to endorse modal realism with an overlap of McDaniel's style, according to which individuals are just modally extended bundles of qualitative tropes and claim that individuals so understood could not undergo haecceitistic possibilities, because there are some qualitative essentialist constraints imposed on the kind of tropes that can be co-located and that constitute a given (modally extended) individual. The

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⁸⁹ There is a variant of counterpart theory discussed by Buras (2006), according to which some counterpart relations are not context-sensitive, namely those which are grounded in perfectly natural properties. Under a choice of such counterpart relations, it is fully determined that individuals have particular essential properties.

In my view this does not help, because as long as there are also other legitimate choices of counterpart relations grounded in less-than-perfectly-natural properties (and there are such contexts), then we have plurality of contexts and, a fortiori, plurality of essences; some essences will be more natural than others, nevertheless, individuals will have variable essences according to their context. It could be replied that essences grounded in perfectly natural properties are always possessed by individuals and never context sensitive. My reply: It is true. But if we allow other contexts, it turns out that in some contexts, individuals have additional essences than those perfectly natural ones. Thus, essences expand dramatically. Perhaps we should reserve a term 'essence' to only essences grounded in perfectly natural properties. But Buras does not provide support for such a claim.

essentialism assumed here can be moderate (some tropes of individuals are essential to them) but can be extreme as well (all tropes are essential to a given bundle of tropes). (Analogical remarks hold for an actualist view coupled with a thesis that abstract representatives of individuals overlap).

It is also possible to be a moderate antihaecceitist but endorse extreme essentialism, a view saying that all relevant properties of individuals are essential to them. This is the Leibnizian position. Similarly to the counterpart theory, it says that we cannot make sense of transworld identity claims (no matter if we are actualist or modal realist, although arguments against overlap provided by Lewis are more dangerous for the modal realist variant of the overlap view). However, instead of providing an analysis of modal properties of worldbound individuals in terms of counterpart relations, the Leibnizian antihaecceitist prefers a view that individuals have all their qualitative intrinsic properties and relations (since, according to Leibniz, relations reduce to intrinsic properties) essentially. Thus, it turns out that all intrinsic properties of individuals are essential to them. This view is just another way of explaining a claim that qualitative descriptions of worlds are sufficient for establishing what they represent *de re.*90

Lastly, in the case of extreme modal antihaecceitism there is no need to determine what worlds represent *de re*, because all representation is done by qualitative descriptions. Thus, we do not have to determine essential properties of individuals in order to determine how they are represented at possible worlds. It is possible, however, to take qualitative descriptions themselves and investigate whether the entities they represent (qualitative properties or relations) have

⁹⁰ I say more about the Leibnizian view in Chapter 4, section 4.3.2. below, where I discuss Leibniz's complete concept view and associated with it essentialist view. See also Chapter 6, section 6.2.3., where I evaluate different interpretations of Leibnizian essentialism.

essential features on their own or not. At this point, however, extreme modal antihaecceitism seems to be compatible with antiessentialism or any variant of essentialism for properties and relations. (I come back to this issue in Chapter 6).

3.5. Cheap haecceitism

Both moderate and extreme variants of antihaecceitism deny that there are any cases of haecceitistic possibilities. Many, however, think that some haecceitistic possibilities are genuine. Cheap haecceitism is a view which tries to make compatible modal antihaecceitism modeled on counterpart theory with a view that some of the haecceitistic possibilities are genuine.

Originally, cheap haecceitism was proposed by David Lewis (Lewis 1986).⁹¹ For Lewis, standard modal haecceitism should be given up, not for some substantial reasons which make it false, but because a cheaper substitute is available. That is, he claims it is possible to have haecceitistic possibilities without haecceistically different possible worlds (understood as maximal possibilities).

For Lewis, cheap haecceitism is tightly connected to counterpart theory. An important feature of counterpart theory—which makes cheap haecceitism possible at all—is that possible worlds do not represent *de re* directly (e.g., by overlap of individuals), but they do so under a particular choice of counterpart relations linking worldbound inhabitants of the relevant worlds.

cheap haecceitism delivered by Lewis.

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⁹¹ Jeffrey Russell (2015) developed a variant of cheap haecceitism which fares well without counterpart theory. I leave this variant of cheap haecceitism aside for it seems to me to combine both modal and metaphysical doctrines of antihaecceitism. For Russell, haecceitistic possibilities are nonfactual, thin possibilities which means, in his theory, that there are no genuine nonqualitative facts concerning identities of individuals, which, in my view, indicates commitment to metaphysical antihaecceitism about individuals. Here I focus on a purely modal characterization of

In other words, *de re* truths are represented by worlds coupled with specified counterpart relations rather than by worlds alone.

Standard counterpart theory states that a single individual cannot have more counterparts in a single possible world other than itself (Lewis 1968). Thus, in order to make sense of modalities de re, counterpart theorists must provide a plurality of possible worlds linked by counterpart relations between individuals inhabiting both worlds. Thus, for any individual x, any change of its modal role, that is, in a complete characteristic of modal properties of a given individual, entails a change of a distribution of qualitative counterpart relations linking x to individuals from a world (or worlds) distinct from a world in which x exists. A nice feature of this view is that it preserves modal correspondence, a view that every maximal possibility is a distinct possible world (more about this principle in a moment). Under the assumption of modal correspondence, it follows that haecceitistic differences between possible worlds are just haecceitistic differences between maximal possibilities. A maximal possibility is a complete way for a world to be, that is, a way which determines for any fact F, whether F or not-F, holds at a possible world in question. This, however, is consistent with some maximal possibilities being very thin, e.g., with some maximal possibility stating only that one fact obtains while all the rest fail to obtain at a given possible world. Thanks to that we can stick to—whether we are modal realists or actualists—a very natural principle about the plenitude of possible worlds according to which any way things could have been is a way that some possible world is. 92 Given such a

⁹² For modal realists, possible worlds literally are the ways things could have been. For actualists, however, this should be read as: any way things could have been is a way that some possible world represents being the case and which could obtain (in the absolute, nonrelative sense), had a possible world in question been actualized.

plenitude of possible worlds, we can treat every nonmaximal possibility as a special kind of a maximal possibility.

However, one of the costs of endorsing standard counterpart theory is a denial of all cases of haecceitistic possibilities: If representation *de re* of worlds is governed by distributions of counterpart relations across possible worlds, and counterpart relations are purely qualitative, then representation *de re*, if determined at all, is determined by the qualitative character of worlds.

However, Lewis (1986, pp. 228-235) recognizes that at least *some* haecceitistic possibilities are hard to deny, and that accounting for these possibilities is a desideratum that has to be met by any adequate theory of possible worlds. For instance, it is hard to deny that you could be one of a pair of twins, or that there could be a symmetrical world containing indiscernible individuals, or that there could be a world undergoing eternal recurrence of epochs.

In order to account for such possibilities Lewis (1986, pp. 230-232) proposes sticking with his (moderate) modal antihaecceitism, but slightly modifying counterpart theory by allowing individuals to have many counterparts other than themselves, at least at some possible worlds. (Note that this, however, is consistent with a claim that for the majority of the remaining worlds, individuals have no other counterparts within a world in which they exist besides themselves). As a result, since possibilities are represented by worlds coupled with a particular choice of counterpart relations, by multiplying counterpart relations at a single possible world, one can multiply possibilities that a given world represents without multiplying possible worlds themselves. The aim is to generate enough possibilities, so that one can account for haecceitistic

possibilities without commitment to haecceistically different possible worlds. Lewis describes this position as follows:

It is usual to think that the unit of possibility is the possible world. I divide this thesis, retain part and reject part. It is true, and important, that possibilities are invariably provided by whole possible worlds. There are no free-floating *possibilia*. Every possibility is part of a world - exactly one world - and thus comes surrounded by worldmates, and fully equipped with extrinsic properties in virtue of its relations to them. What is not true is that we should count distinct possibilities by counting the worlds that provide them. A single world may provide many possibilities, since many possible individuals inhabit it.

To illustrate, consider these two possibilities for me. I might have been one of a pair of twins. I might have been the first-born one, or the second-born one. These two possibilities involve no qualitative difference in the way the world is. Imagine them specified more fully: there is the possibility of being the first-born twin in a world of such-and-such maximally specific qualitative character. And there is the possibility of being the second-born twin in exactly such a world. (...) I say: two possibilities, sure enough. And they do indeed differ in representation *de re*: according to one I am the first-born twin, according to the other I am the second-born. But they are not two worlds. They are two possibilities within a single world. The world in question contains twin counterparts of me, under a counterpart relation determined by intrinsic and extrinsic qualitative similarities (especially, match of origins). Each twin is a possible way for a person to be, and in fact is a possible way for me to be. I might have been one, or I might have been the other. There are two distinct

possibilities for me. But they involve only one possibility for the world: it might have been the world inhabited by two such twins. (Lewis 1986, pp. 231).

As we can see, given that we allow individuals to have many counterparts at a single possible world and multiply counterpart relations within such a world, we have enough resources to mirror haecceitistic possibilities within the antihaecceitistic framework. Let me provide another example. Suppose that there is a world of one-way eternal recurrence of epochs with the first epoch but no last one, and that we live in one of the epochs. Suppose that you live in the 5th epoch. However, it is equally possible that you live in the 50th epoch. Based purely on the qualitative characterization it is impossible to determine in which epoch you live. The modal haecceitist who accepts modal correspondence between possible worlds and maximal possibilities will claim that here we have two distinct possible worlds which represent the same qualitative truths about us, but which represent differing *de re* truths. One world represents *de re* that you live in the 5th epoch and the second one represents *de re* that you live in the 50th epoch. Such a difference in representation is a haecceitistic difference between possible worlds.

In contrast, the cheap haecceitist says that we do not have two distinct possible worlds here, but only two possible ways for us to be, which can be represented by a single possible world. If we stipulate that individuals can have multiple counterparts within a single possible world, then a person living in the 50th epoch could be your counterpart (if it is relevantly similar to you). If so, a single possible world can represent both that you could live in the 5th epoch, and that you could live in the 50th epoch.

Depending on whether a cheap haecceitist wants to mirror moderate or extreme variants of modal haecceitism, she might introduce some qualitative restrictions on how we stipulate

counterpart relations or not. Suppose that she aims at accounting for intuitions lying behind moderate modal haecceitism. Then our cheap haecceitist should introduce some qualitative restrictions on how our stipulations of counterpart relations work with regard to some kind K of individuals. In such a case she limits what counts as a counterpart of an individual of kind K. For instance, in order to block some extreme possibilities (as moderate haecceitists do), e.g., that Socrates could have been an alligator, one has to introduce some essentialist principles precluding that alligators will count as counterparts of Socrates. For instance, if Socrates is essentially human, then alligators cannot be his counterparts. Such a procedure has to be then reiterated for every other kind of individual. If the cheap haecceitist, however, decides to account for extreme modal haecceitism, she does not have to impose any essentialist restrictions on how we stipulate counterpart relations. Anything goes. Thus, if the cheap haecceitist constraints what counts as counterparts of individuals, she can account for fewer haecceitistic possibilities. If she, however, does not impose any qualitative constraints then she can mirror any haecceitistic possibility she wants.

Lewis himself indicates no *a priori* qualitative restrictions on how we stipulate counterpart relations. Thus, for him, extreme cheap haecceitism is more plausible than a moderate variant of it. If we choose to introduce essentialist restrictions, we need to explain what these restrictions are, and this seems to be a very hard task on its own. Moreover, even if we would somehow be successful at that, still a problem remains. Namely, that we need to explain what essentialist restrictions are imposed on how individuals could have been *before* we provide our characterization of counterpart theory and nature of modal representation. This problem is especially serious if one endorses a modal notion of essence which presupposes that individuals

are extended across worlds. However, even if one sticks with a definitional (nonmodal) approach to essence, the problem remains, for it turns out that in order to explain the issue of how possible worlds represent individuals in the domain D, you must explain the identity conditions of each individual in D.

Here I end my exposition of cheap haecceitism. I shall now explain why I think cheap haecceitism is an incorrect approach to haecceitism.

Issues with cheap haecceitism

Without doubt it is a strength of cheap haecceitism that it accounts for haecceitistic possibilities without appeal to haecceitistic differences between possible worlds. However, by allowing individuals to have many counterparts at a single world, cheap haecceitists pay a high price by disconnecting possibilities from possible worlds, that is, by affirming that *possibilities are not always possible worlds*; some possibilities are less than possible worlds. This cost of cheap haecceitism is indicated by Lewis himself:

Is 'cheap' an understatement? Is there any cost at all? I think there is - simply the cost of making a break with established theory, on which all differences between possibilities are supposed to be differences between possible worlds (Lewis 1986, pp. 235).

In order to better understand the issue in question, I shall discern two kinds of possibilities: (1) possibilities which are maximal, i.e., always identified with the entire possible world, and (2) possibilities which are nonmaximal, i.e., only partial descriptions of a possible world.

The orthodoxy (which I shall follow below) denies that there are possibilities of kind (2) but all possibilities are of kind (1). That is, *all differences between possibilities are always differences between possible worlds*. Such a presumption underlies the possible world framework as such and its promise of extensional analysis of modal concepts that is highlighted by Leibnizian biconditionals:

Possibly p iff p is true at some possible world w.

Necessarily p iff p is true at all possible worlds.

For instance, if it is possible that you are a philosopher, then there is a possible world w_1 at which you (or your counterpart) are (is) a philosopher. When you consider another possibility, e.g., that you could be a farmer instead, then there is a possible world w_2 , distinct from w_1 , at which you (or your counterpart) are (is) a farmer. It is very natural to think that if we have distinct possibilities $de \ re$ for a single individual, we have two distinct possible worlds representing distinct modal roles that you could play. Each possible world can describe only one modal role of a given individual because a world which represents me as being a philosopher cannot, at the same time, represent me as being a farmer (assuming that being a philosopher and being a farmer are incompossible properties). To generalize, the orthodox view presumes a modal correspondence principle according to which:

Modal Correspondence: If it is true according to some possible world w that an individual x has property F, then it cannot be true that x has not-F instead according to w.

Standard counterpart theory preserves Modal Correspondence. If we analyze *de re* possibilities in terms of a distribution of counterpart relations across distinct possible worlds, then in order to describe alternative *de re* possibilities for a given individual x, we must provide an alternative distribution of counterpart relations holding between x existing at some world w_1 and counterparts of x existing at a world w_2 , which is a world relevantly similar to w_1 . We can do that by: (a) replacing w_2 with some qualitatively different world w_3 , which will naturally give rise to alternative distribution of counterpart relations between w_1 and w_3 or by (b) stipulating a new distribution of counterpart relations holding inhabitants of w_1 and w_2 . No matter which option we chose, we preserve a thought that differences in possibilities *de re* for a given individual entail differences in possible worlds.

This is not the case according to cheap haecceitism. Lewis keeps possibilities of the second kind to be independent from possibilities of the first kind, for the only way the cheap haecceitist can account for haecceitistic possibilities is to claim that a single possible world can represent many less-than-world possibilities for a given individual. And since he finds at least some cases of haecceitistic possibilities undeniable, he is forced to do so. This however runs against orthodoxy just described. Cheap haecceitism, by allowing for individuals to have many counterparts at a single world, denies that each difference in possibilities entails difference in possible worlds

I argue that we should preserve correspondence between possibilities and possible worlds and either opt for noncheap variants of haecceitism or deny haecceitistic possibilities and endorse standard modal antihaecceitism. Let me provide five reasons for that. In what follows I draw heavily on Cowling's comments on Modal Correspondence (Cowling 2012, pp. 404-406).

Firstly, as already indicated, maintaining correspondence between possibilities and possible worlds allows us to preserve Leibnizian biconditionals, and, a fortiori, a promise of extensional analysis of modality provided by possible worlds. However, as Cowling observes (2012, pp. 404), if Modal Correspondence is denied, there will be more possibilities than there are possible worlds. According to cheap haecceitism, there are haecceitistic possibilities but there are no qualitatively indiscernible possible worlds. Thus, there will be no one-to-one correspondence between possible worlds and possibilities. Moreover, even if there are qualitatively indiscernible worlds, if we deny Modal Correspondence, the identification of a given possibility with a possible world w will be arbitrary and not systematic because any other qualitatively indiscernible from w possible world w^* will be an equally good candidate for the identification (Cowling 2012, pp. 404-405).

Secondly, a main motivation for introducing possible worlds is to explain the nature of possibilities and associated issues such as counterfactuals (Stalnaker 1968, Lewis 1973) or probability distributions (Kment 2012, 2014). If, however, possibilities are not represented by possible worlds but rather by distributions of counterpart relations across worlds, then it seems that one could replace possible worlds by counterpart relations.

On this account, worlds do not play the theoretical role commonly associated with worlds. This is highlighted by Kment:

That role is taken over by the world-descriptions [in our currently discussed case, counterpart relations – K. L.]. But surely what the term "world" refers to is determined in large part by the theoretical role commonly associated with the word "world". If the entities that best fit this theoretical role are the world-descriptions [counterpart relations – K. L.],

then, other things being equal, these entities are better candidates for being the referents of "world" than what the world description theorist calls "worlds". So, should we not conclude that the world description theorist [counterpart theorist – K. L.] is simply misdescribing her own account? If her view is correct, then the world-descriptions [counterpart relations – K. L.] are really the possible worlds (Kment 2012, pp. 601).

This might be already problematic. However, a further issue emerges. If one replaces possible worlds with counterpart relations, it is impossible to mirror all applications provided by possible worlds. Since I have already mentioned extensional analysis of modality, I shall briefly touch upon counterfactuals and probability.

For Kment (see also Russell 2015, pp. 394), possible worlds are used, besides standard applications such as an explanation of modal concepts, to explain probability measures and counterfactuals. If, however, worlds are replaced by counterpart relations, these relations would need to serve as a domain of probability measures. However, it is unclear how this could be done. Additionally, standard conceptions of counterfactuals appeal to the notion of closeness between possible worlds (Lewis 1973). Now, if possible worlds are replaced by counterpart relations, then counterpart relations themselves would have to bear a closeness relation to each other. This, however, is problematic as well.

Thirdly, giving up the correspondence makes us unable to provide an adequate and unified extensional analysis of propositions and properties in terms of *possibilia* (or, in terms of their ersatz surrogates if you are an ersatzist).

Standard extensional analysis of propositions states that propositions are sets of possible worlds and that properties are functions from possible worlds to individuals. Thus, assuming that

possible worlds are just some kinds of individuals (genuine or ersatz), we can have a unified account of propositions and properties treating them as sets of individuals. Now, if we separate possibilities from possible worlds, we can no longer maintain such a unified account of properties and propositions, unless we provide further explanations. Propositions and properties can no longer be identified with sets of possible worlds/individuals because there is a third component, possibilities, that has to somehow fit into this picture. Are there propositions built from sets of possible worlds *and* possibilities? Are there propositions corresponding to sets of possibilities only? These questions must be addressed by cheap haecceitists, and they are not the easy ones.

Moreover, as Cowling (2012, pp. 404) observes, by accepting Lewisian modal realism we deny that possible worlds can differ nonqualitatively without differing qualitatively. Thus, in order to account for distinctness of some *de se* (centered) propositions (which normally, under the assumption of the correspondence between possibilities and possible worlds, would amount to nonqualitative differences between worlds) we must treat them as ordered pairs of individuals and worlds. Thus, we cannot provide a uniform account of all propositions. Moreover, we confuse contents of belief with contents of believed propositions. As Stalnaker observes (quote after Cowling 2012, pp. 405):

Even though belief states are represented by sets of centered possible worlds, the contents of belief can be taken to be ordinary propositions - sets of uncentered possible worlds (...) By taking the contents of belief to be (uncentered) propositions, we can straightforwardly compare the beliefs of different subjects, and we can model the way assertions change the context in a straightforward way (Stalnaker 2007, pp. 69-71).

Fourthly, Fara (2009) observed that there is an issue associated with cheap haecceitism concerning its relationship to the actuality operator. Fara's argument can be reconstructed as follows:⁹³

Let's consider the revised counterpart theory which allows for individuals to have many counterparts at a single world with the actuality operator. Next, suppose that actually you live in the 5th epoch but you could live in the 50th epoch, which is an uncontroversial example of a haecceitistic possibility. The cheap haecceitist says that you could live in the 50th epoch in virtue of there being a counterpart of you in the actual world who actually lives in the 50th epoch. Thus:

- (1) Actually, you live in the 5th epoch and possibly actually you live in the 50th epoch.

 From the logic of actuality it follows that if possibility actually p, then actually p. By applying this principle we get:
- (2) Actually, you live in the 5th epoch and actually you live in the 50th epoch.

 If so, by a principle that if two propositions are true, their conjunction is true as well, so we can infer:
 - (3) Actually (you live in the 5th epoch and you live in the 50th epoch).

This, however, is a contradiction. Thus, cheap haecceitism has to be rejected.

The cheap haecceitist could reply that 'you' in the first conjunct of (2) have a different counterpart (itself) than 'you' in the second conjunct of (2) (your qualitative duplicate living in the 50th epoch). Thus, both sentences are true in virtue of differing counterpart relations. Thus, we cannot make a step from (2) to (3). Fara observes, however, that such a solution does not work

⁹³ See also Stalnaker (2012) for a discussion of Fara's position.

because 'you' in both cases does occur under the same sortal (human). Thus, 'you' in both cases satisfy the same counterpart relations (In fact, a person who lives in the 50th epoch is your counterpart, and you are a counterpart of a person living in the 50th epoch). Moreover, even if for some reason we would be unable to make a step from (2) to (3), (2) itself is already problematic for the cheap haecceitist.

A related concern is that cheap haecceitism forces us to treat some intuitive cases of counterfactual scenarios, i.e., scenarios that could obtain had the actual world been different, as cases of actual scenarios. The cheap haecceitist states that a possibility that you could live in the 50th epoch is not a genuine counterfactual possibility but just an alternative perspective on the actual world, e.g., a point of view on another person which is your qualitative duplicate. As a result, cheap haecceitism, by allowing individuals to have many counterparts at a single world, undermines our intuitive understanding of what it takes for some situations to be counterfactual.

Fifthly, cheap haecceitism does not allow us to account for the Aristotelian intuition that actualia and possibilia should be treated differently in modal context. According to cheap haecceitism all possible worlds have to be characterized purely qualitatively. Thus, a cheap haecceitist's account of possible worlds holds for all possible worlds. There is no reason why we should hold cheap haecceitism for some purely qualitative worlds but not for others. Thus, even if we ignore all of the previous issues associated with cheap haecceitism, such a view is incompatible with my enterprise, which is to defend a view that actualia and possibilia are reprensted differently in modal contexts.

In conclusion, taking into account all my criticism of cheap haecceitism, In what follows

I shall stick with the orthodoxy and identify possibilities with possible worlds and focus on the
standard modal haecceitsitic and antihaecceitistic accounts of representation.

Here I end my discussion of modal doctrines of haecceitism and antihaecceitism. The results of these analyses will be relevant in Chapter 6 where I shall reinterpret Representational Difference, a view according to which while actual individuals can be represented singularly in modal contexts, that's not the case with respect to possible individuals. I shall argue that this view is best understood as a one entailing extreme modal haecceitism for actual individuals but extreme modal antihaecceitism for possible ones.

Chapter 4

On Metaphysical Haecceitism and Antihaecceitism

As I argued in Chapter 2 (section 2.3.3.), a second essential component of Aristotelian ersatzism is Metaphysical Difference, a view according to which actual individuals and possible individuals are represented by possible worlds as having different metaphysical nature. In Chapter 2 I proposed to interpret Metaphysical Difference in terms of the doctrines of metaphysical haecceitism and metaphysical antihaecceitism. It then takes a following form:

Metaphysical Difference: While metaphysical haecceitism is true with respect to actual individuals, metaphysical antihaecceitism is true about possible individuals.

There is however no agreement about how doctrines of metaphysical haecceitism and antihaecceitism should be characterized in the first place, and how they relate to such issues as the issue of individuation or principle of identity of indiscernibles. The goal of this chapter is to provide an adequate and precise characterization of both doctrines and explain their connections to other related views. The results of the analyses conducted in this chapter will be used in Chapter 6, where I explain in more detail Metaphysical Difference and consequences that follow from accepting it.

To the first approximation, metaphysical haecceitism and metaphysical antihaecceitism are opposite views on the nature of identities of individuals, that is, on what it takes to be

individual as such (from now on I will use the phrases 'identities of individuals' and 'individuality of individuals' interchangeably). Roughly speaking, according to metaphysical haecceitism, identities of individuals cannot be explained qualitatively but are nonqualitative and primitive (irreducible), while for antihaecceitism, identities of individuals are purely qualitative. In this chapter I investigate possible ways of characterizing these doctrines more precisely and the ways that are preferable.

In the literature it is popular to view a difference between metaphysical haecceitism and antihaecceitism as one concerning the status of *PII*. I shall explain this approach below. In order to do that I will first analyze and define *PII* in specific terms. I will then differentiate an individuation approach and a structural approach to both metaphysical haecceitism and antihaecceitism.

According to the individuation approach, haecceitism and antihaecceitism are alternative explanations of what individuates individuals. In general, according to metaphysical haecceitism principle of individuation of individuals is nonqualitative (among such individuators we can find bare particulars, thisnesses or Scotistic haecceities) or impure (partially nonqualitative and partially qualitative properties, e.g., origin properties), while according to metaphysical antihaecceitism principle of individuation is qualitative (examples of such individuators include intrinsic qualitative properties, tropes or qualitative relations like spatiotemporal ones).

In contrast, according to the structural approach, haecceitism and antihaecceitism are opposite views on the fundamental structure of reality. According to metaphysical haecceitism reality is such that besides qualitative facts it includes individualistic facts about particular

individuals, while according to metaphysical antihaecceitism reality is either purely qualitative or all individualistic facts are reducible to qualitative facts.

I claim that while the individuation approach is tightly connected to the thesis of *PII*, it is not the case with respect to the structural approach, which is neutral over the issue of *PII*. Subsequently, I provide reasons for which I think the structural approach is preferable over the individuation approach. The main reason is that I do not think that the issue of individuation is a genuine metaphysical issue at all. Moreover, *PII* is a contentious view, thus, both metaphysical haecceitism and antihaecceitism should be characterized independently of it.

Overview of the chapter. The structure of this chapter is as follows. First (4.1.) I give a brief overview of *PII* and the arguments for and against it. Next (4.2.), I explain how *PII* relates to the doctrines of metaphysical haecceitism and antihaecceitism. Subsequently, (4.3.) I discuss individuation approaches to metaphysical haecceitism and antihaecceitism. After that (4.4.), I explain reasons for which the individuation approach is problematic and why we should look for an alternative one. Finally (4.5.) I present an overview of a structural approach to metaphysical haecceitism and antihaecceitism respectively.

4.1. Principle of identity of indiscernibles (PII)

PII is a metaphysical (nonmodal) principle governing individuation of individuals. As I indicated in Chapter 3, PII can be true or false with respect to intra-world individuals, independently of whether the individuals in question are the subjects of haecceitistic possibilities or not (or, more generally, whether they have modal properties at all). As I argued, one can ground haecceitistic

possibilities in intra-world cases of indiscernibles, which is a very natural move, but one can obtain haecceitistic possibilities even if intra-world cases of indiscernibles are precluded.

Analogically, one can allow for intra-world cases of indiscernibles independently of whether there are cases of haecceitistic differences between distinct possible worlds or not.

This indicates, once again, a more general point that metaphysical issues such as *PII* can be investigated independently—at least in principle and if no further argument is provided—from the modal issues concerning how possible worlds represent possible states of affairs, how possible individuals are linked together across distinct possible worlds, or even whether there are possible worlds at all.

That said, even though the issue of *PII* is neutral over the modal issues, *PII* itself has a modal status. ⁹⁴ In fact, a dominant view on *PII* holds that if *PII* is true for a given kind *K* of individuals, then it is necessarily true for *K*-individuals, that is, it holds at every possible world at which *K*-individuals exist. Some authors investigate also an issue of whether *PII* is contingently true about the actual world, e.g., whether fundamental particles obey *PII* or not (French and Redhead 1988, Saunders 2006, Morganti 2008 and Ladyman and Bigaj 2010). In such cases, arguments for or against *PII* usually come from the field of philosophy of physics (specifically, quantum mechanics) and concern features of fundamental constituents of matter, empirical detectability, or features of theory choice such as parsimony or Ockham's Razor. Below I focus

⁹⁴ Another two examples of metaphysical concepts which can bear some modal consequences even though are nonmodal in nature are essences characterized definitionally and metaphysical grounding (see Sider 2020). Both concepts are explanatory rather than modal. In other words, although both concepts have modal status and modal consequences, necessity is insufficient neither for defitnional essence (see Fine 1994) nor for grounding (see Rosen 2010, Fine 2012).

on the issue of whether PII is necessary or not. I put aside the issue whether PII is contingently true about the actual world.

The orthodox view on PII (shared by Leibniz himself) is that it applies to individuals (substances, monads), that is, particular objects, rather than propositions, universals, or other abstract entities. One can extend PII to such abstract entities (see Swinburne 1995), but it is not an usual way of characterizing PII. Since my focus in this dissertation is primarily on individuals, I stick with PII applied to individuals. Additionally, PII is usually meant to range over properties of individuals. That said, characterizing PII does not require a belief in universals and is nominalist friendly. PII can be thus formulated in terms of tropes or predicates that individuals satisfy. That said, I will stick with property-talk for simplicity reasons, however, without presupposing any particular view on the nature of properties. Lastly, PII is meant to involve a metaphysical rather than an epistemic notion of indiscernibility. Any two individuals are epistemically indiscernible if we—cognitive subjects—cannot detect any difference between those individuals. In turn, according to a metaphysical notion of indiscernibility, any two individuals are indiscernible if there is no objective difference between them. Under metaphysical reading, it is possible that even though two individuals are epistemically indiscernible for us, they are discernible in the absolute, metaphysical sense (e.g., for an ideal cognitive subject such as philosophers' God).

PII comes in a variety of formulations. Standard accounts (Black 1952, Adams 1979, Cleve 2002, Rodriguez-Pereyra 2017, Forrest 2020) discern three variants of PII that differ in strength. The weakest variant of *PII* quantifies over *all* properties of compared individuals:

PII1: If any x and y, if x and y share all their properties, then x is identical to y.

This presumes that both qualitative (intrinsic and extrinsic) as well as all nonqualitative properties are being compared. This, however, makes *PII* trivial. If all properties of individuals are being compared, then self-identity properties of relevant individuals must be compared as well. As a result, *PIII* says that if x and y do not differ with respect to being distinct, then x=y. This, however, makes *PII* trivial. In addition, it cannot help us explain a difference between metaphysical haecceitism and antihaecceitism (if one follows the approach of distinguishing both views through their relation to *PII*) because proponents of both views can easily accept *PIII*. A stronger variant of *PII* is needed, one which would somehow restrict the properties over which it quantifies. In order to obtain a nontrivial variant of *PII*, it is usually restricted to range only over qualitative properties, which do not involve reference to individuals, given that it is possible to a priori exclude any cases of trivialization of *PII*. Under this approach *PII* should be read as follows:

PII2: For any x and y, if x and y share all their qualitative (intrinsic and extrinsic properties, then x is identical to y.

Under such characterization of *PII*, one compares both intrinsic (internal, monadic) and extrinsic (external) properties of any individual in order to determine whether they are identical or not.

However, it is possible to provide an even more extreme variant of *PII* and take it to quantify over relations as well:

PII3: For any x and y, if x and y share all their intrinsic qualitative properties, then x is identical to y.

PII3 denies that two distinct individuals could differ in extrinsic qualitative character without differing intrinsically. If they differ extrinsically, they must differ intrinsically. For Leibniz, PII3

naturally follows from *PII2* because he believed that relations are reducible to intrinsic qualitative properties of individuals. However, for my current purposes there is no need to make such a radical assumption. Thus, from now on, whenever I refer to *PII*, I will have *PII2* in mind.

A standard rationale for thinking that *PII* is false is that there are intra-world cases of qualitatively indiscernible yet numerically distinct individuals. And since *PII* is taken to be a necessary truth, a single case of indiscernibles is sufficient to establish falsity of *PII*. If we ignore a possible counterexample to *PII* which could come from the field of quantum mechanics, according to which there are indiscernible fundamental particles (e.g., bosons, see Saunders 2006, Muller-Seevinck 2009), we are left with the conceivability arguments which provide us with possible cases of indiscernibles. A classic example of possible indiscernibles are Black's spheres. However, you could swap spheres with any other kind of individuals you prefer that could be duplicated. A general idea is that it is conceivable that there could be two qualitatively indiscernible individuals, playing the same qualitative role but differing numerically.

Some, however, are dissatisfied with such arguments. For Ian Hacking (Hacking 1975, pp. 249), depending on whether one describes Black's world as having Euclidean or non-Euclidean (curved) spacetime, one can either obtain two distinct indiscernible spheres (in the case of Euclidean, relational spacetime. On the absolute conception of spacetime, spheres could be discerned *via* their absolute locations), or one sphere distant from itself (in a highly curved, non-Euclidean spacetime). Thus, one gets two descriptions of the Black's world, but these descriptions are not distinct possibilities. They are just two perspectives on the same possibility. However, as

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⁹⁵ For Saunders though, this does not indicate that *PII* is false for some domain of individuals. Instead, he claims (2006, pp. 60), that if *PII* does not hold for some domain of entities, then those entities cannot be called individuals at all.

Adams suggests (1979, pp. 16-17), unless one accepts conventionalism about spacetime, differences in geometries of spacetime indicate differences between possible worlds. Thus, Black's world with Euclidean spacetime is a different world than Black's world with curved spacetime. Thus, if the Euclidean Black's world is consistent (and Hacking does not deny that), then numerically indiscernibles are possible.

If someone is not convinced or has some further issues with Black-like scenarios, in establishing falsity of PII one could appeal to a possibility of almost indiscernibles (Adams 1979, pp. 17-18). Such an approach avoids Hacking's criticism, as Hacking's remarks apply only to cases of indiscernible individuals. According to the argument from almost indiscernibles, in order to ground the possibility of indiscernible individuals, one could imagine a possible world at which there are two individuals, a and b, and they differ only with respect of b having a scratch and not having one. If this is possible, it is also possible that b could have no such scratch. If so, it is possible that a and b could be indiscernible, yet distinct. b

Generally, it is widely accepted that either Black's scenarios or scenarios of almost indiscernibles, or both, are good reasons to believe in the falsity of *PII*. However, as Hawley (2009) indicated in her neat analysis of a discussion over the status of *PII*, there are three classes of replies that a proponent of *PII* could make in order to defend it against those arguments.

One could opt for an *identity solution*, according to which, indiscernible individuals are just identical. This strategy is endorsed, e.g., by O'Leary-Hawthorne (1995). A thought is to assume that individuals are just bundles of immanent universals. If universals can be localized at many times and places, so can the bundles of them. Thus, a single individual can be located at

⁹⁶ For a critical assessment of the argument from almost indiscernibles see Rodriguez-Pereyra (2017).

many times and places. No distinct but qualitatively indiscernible objects are required. The main issue with this view, as highlighted by Hawley (2009, pp. 107-108) and Forrest (2020), is that multiply-located bundles will have incompatible properties. Suppose a bundle called 'Sphere' contains a property of *having mass equal to 1kg*. Suppose it has two locations. At each location there will be an instance of 'Sphere', that is, at each location there will be a sphere with a mass equal to 1kg. As a result, those two spheres will together weigh 2kg. However, a bundle is meant to exemplify *having mass equal to 1kg*. It turns out that both spheres include two properties: *having mass equal to 1kg* and *having mass equal to 2kg*. As a result, both spheres exemplify incompatible properties, or each instance of the Sphere is not a sphere itself, which seems controversial. Perhaps one could also respond that there are not two spheres, but there is one Sphere (abstract entity) multiply-localized. But if instances of such a bundle are not particular spheres, how can we understand a thought that a single bundle is at two places at the same time?⁹⁷

A second problem for this view is its inability to account for relations. For more details see Hawthorne and Sider (2002) and Sider (2020, pp. 65-72).

Another way of defending *PII* is to endorse a *discernibility solution*, which states that there are some overlooked respects in which given indiscernible individuals differ. A popular example of this strategy is a position that individuals are always weakly discernible by relations which are irreflexive but symmetric, e.g., each sphere in Black's world is 5m apart from another sphere but not 5m apart from itself.⁹⁸ The main issue with this solution is that indiscernibles cannot always be discerned by irreflexive but symmetrical relations, e.g., in cases when

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⁹⁷ For a further discussion of this view see Hawley (2009, pp. 107-108).

⁹⁸ A proponent of this approach is Saunders (2006). Other proponents of relational individuation of fundamental constituents of matter include: Esfeld and Lam (2008), Muller and Seevinck (2009), Esfeld and Deckert (2017). For a discussion of the view see Hawley (2006), Morganti (2008). For an overview see Ladyman and Bigaj (2010).

indiscernibles are co-located. Another issue is that irreflexive relations seem to presuppose distinctness of individuals linked by it (French 2006, pp. 5, Hawley 2009, pp. 109).

A third option is to go for a summing solution, in which instead of indiscernibles there are simple individuals which are extended. Kris McDaniel (2007) calls such individuals extended simples. As a result, Black's scenario should be reformulated: Instead of two indiscernible spheres there is only one extended two-sphere-shaped individual. The main drawback of this view, as Hawley observes, (2009, pp. 113), is that it runs against an intuitive view that existence conditions of individuals are intrinsic to them, not extrinsic. Intuitively, it takes for an individual x to exist is to be a maximally connected portion of matter. The summing solution states that there is a twosphere-shaped extended individual, that is, that there are two connected arrangements of matter arranged sphere-wise. It thus denies the intuitive existence conditions, because it denies that distinct individuals exist at each arrangement of matter. And it denies this solely on the grounds that there are two connected arrangements of matter, plus PII is true. Thus, existence conditions are radically extrinsic. They depend on the nature of some whole (connected arrangements of matter). As Hawley and Forrest observe, this opens up a road to monism, which is a rather controversial view. Moreover, arguably, if PII is true at all, it should be stateable outside the monistic metaphysics.

Since all of the presented ways of saving *PII* are problematic, I conclude that *PII* is probably a false principle. At best, it is a controversial one.

I shall now investigate how *PII* has been traditionally related to the issues of metaphysical haecceitism and antihaecceitism. I shall argue that we should provide characterizations of these doctrines which are neutral over the issue of *PII*.

4.2. PII and individuation and structural approaches to metaphysical haecceitism and antihaecceitism

As I indicated in the introduction, in the literature it is standard to explain differences between metaphysical haecceitism and antihaecceitism by appealing to *PII*.⁹⁹ As Adams argued (1979, pp. 11), the denial of primitive individuals 'stands or falls with a certain doctrine of the Identity of Indiscernibles'. Thus, roughly speaking, the view that identities of individuals are primitive entails falsity of *PII*, while the view that identities of individuals are not primitive but have purely qualitative grounds, entails truth of *PII* (see Adams 1979, Legenhausen 1989, pp. 626).

It is important to note, as observed by Legenhausen (1989, pp. 634), that *PII* is not about identity conditions of individuals because, obviously, two individuals are identical if they share all their properties. The question of *PII* concerns rather the issue of individuation, that is, a question of what makes individuals individual in the first place. ¹⁰⁰ In other words, *PII* concerns the way identity claims should be judged, e.g. whether, when evaluating identity claims we should take into account only qualitative intrinsic and/or extrinsic properties of individuals, or whether some nonqualitative features of individuals determine their identities as well. If *PII* is false, then some nonqualitative matters will be essential when evaluating identity questions, while if *PII* is true, mere qualitative matters will be sufficient to settle all identity questions. So, the truth or falsity of *PII* reveals the general feature of individuality of individuals, that is, whether it has

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⁹⁹ See Adams (1979), Legenhausen (1989), Cover and O'Leary-Hawthorne (1997, 1999), and Stalnaker (2012). Have in mind though that those researchers did not discern modal and metaphysical variants of haecceitism and antihaecceitism.

¹⁰⁰ In fact, Leibniz himself took *PII* to be a principle of individuation. See Rodriguez-Pereyra (2014, pp. 24). I discuss individuation further below in section 4.3.

purely qualitative grounds or some nonqualitative ones. In the light of this, metaphysical haecceitism and antihaecceitism are opposite classes of accounts of individuation which entail *PII* or preclude it. I shall call this approach to both doctrines an *individuation approach*. Under this approach, metaphysical haecceitism will entail that individuals are individuated by some nonqualitative matters, while metaphysical antihaecceitism will entail that individuality of individuals has purely qualitative grounds.

There is, however, an alternative approach to both doctrines, hinted by Adams himself (despite the fact that he tied a discussion between metaphysical haecceitism and antihaecceitism with the issue of *PII*), which is neutral over the issue of *PII*. I call it a *structural approach* because it considers a question about the fundamental nature of reality:

Is the world—and are all possible worlds—constituted by purely qualitative facts or does thisness hold a place beside suchness as a fundamental feature of reality? (Adams 1979, pp. 5). 101

Roughly speaking, under this construal, metaphysical haecceitism entails that reality at its fundamental level contains nonqualitative matters, which cannot be reduced to qualitative matters, while metaphysical antihaecceitism is a view that reality at its fundamental level is purely qualitative. As a result, all nonqualitative matters must either be grounded in qualitative matters or there are nonqualitative matters at all. As I shall show below, an interesting feature of

individuate x only if x already exists and is differentiated from other individuals.

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 $^{^{101}}$ Adams believed that the issue of haecceitism/antihaecceitism is neutral over the issue of individuation. The main reason is that he believed that thisnesses are not individuators because they, according to him, ontologically depend on their bearers, and the individuator of an x cannot ontologically depend on x in order to be an individuator of x, because if it depends on its bearer, the explanation of individuality is circular, because an individuator of x can

haecceitism and antihaecceitism so understood is that they are independent from the issue of individuation and, henceforth, are neutral over the issue of *PII*.

In the following sections I shall present in more detail variants of individuation and structural approaches to metaphysical haecceitism and antihaecceitism. I shall argue that the structural approach is preferable over the individuation approach.

4.3. Individuation approaches

Before I start, I shall make three methodological remarks.

Firstly, it is important to note that there are two notions of individuation: metaphysical and epistemic. The former concerns metaphysical grounds for individuality, that is, it focuses on the issue of what makes an individual the very individual it is, distinct from other individuals. The latter one concerns how we—cognitive subjects—single out objects through our experiences, thoughts or linguistic activity (Lowe 2005, pp. 75. See also Lowe 2012). For the current discussion only the metaphysical notion of individuation will be relevant.

Secondly, the issue of individuation is separate from the issue of identity, be it synchronic, diachronic or transworld. More precisely, the issue of identity is posterior to the issue of individuation, that is, identity conditions of an individual x presuppose that x is already individuated, e.g., distinct from other individuals. For instance, if you look for a criterion of a transworld identity of Socrates, you might investigate which individual at which world is identical with Socrates, but this presupposes that Socrates, as well as other possible individuals, are already individuated.

Thirdly, sometimes in the literature (as in case of the quote from Adams), identities of individuals, i.e., their individuality, are referred to by the notion of thisness. I prefer to remain with the notions of identities of individuals or individuality of individuals when I refer to the problem of individuation as such, and refer to thisness when I explain a particular account of identities of individuals that explains individuality of individuals in terms of thisnesses. I prefer this approach because it is possible that one believes in the primitive individuality of individuals but does not believe that primitive individuality is to be explained in terms of thisnesses, e.g., one could appeal to bare particulars or Scotistic haecceities instead. One could also reduce primitive individuality to qualitative roles without trying to reduce thisnesses (properties) to other kinds of properties. One could also deny that there are properties at all, but still think that the problem of primitive individuality and the quest of finding its purely qualitative grounds are genuine metaphysical issues. For similar reasons, I prefer to use the notion of a qualitative role instead of a notion of suchness which for Adams is connected to qualitative properties. Suchness is a special case of qualitative role. A notion of qualitative role is, however, a more general notion, for it is compatible with nominalistic or tropistic views on qualities.

4.3.1. Metaphysical haecceitism qua theory of individuation

Under the individuation approach, metaphysical haecceitism is a view that individuality of individuals cannot be explained in terms of their qualitative roles, that is, satisfying a particular qualitative role, although necessary (because any individual has to satisfy *some* qualitative role), is not sufficient for being a particular individual (because an individual could change its qualitative role but preserve identity, or two individuals could play indiscernible qualitative roles, but be

distinct). This indicates that what individuates individuals have to be a further, nonqualitative matter. There are separate candidates for nonqualitative individuators of individuals. Below I give a brief overview of three popular candidates: Scotistic haecceities, thisnesses and bare particulars. Metaphysical haecceitism committed to such individuators obviously entails falsity of *PII* because it allows for any two individuals to be qualitatively indiscernible but to differ with respect to the haecceities, thisnesses or bare particulars they possess. Subsequently, falsity of *PII* entails that purely qualitative and relational approaches to individuation are inadequate. Individuals must be individuated nonqualitatively.

However, there are also independent reasons besides *PII* being false for which metaphysical haecceitists disbelieve qualitative individuation. For such philosophers qualitative individuation is problematic, because it lies in the very nature of qualitative characteristics that they are shareable by distinct individuals. Perhaps the antihaecceitist could postulate qualitative features which are unique and unshareable by individuals, e.g., tropes. But the metaphysical haecceitist replies that there is a problem with individuation of tropes as well. In a nutshell (I explain this point below in section 4.3.2.), tropes are either individuated by the relation to the individual to which they belong (which is circular, because it presupposes individuality of the individual in question), or they are individuated by spatiotemporal localization (which opens up regress, because one has to individuate points of spacetime), or they are just primitively individual (which leaves us with unanalyzed individuality, and this was meant to be avoided by metaphysical antihaecceitism).

For metaphysical haecceitist, relational individuation is not good either. There are two *a priori* arguments for that. First, it is possible for a single individual *x* to exist alone, without any

other individuals or perhaps even entities. Thus, *x* cannot be individuated through relations to other individuals or entities. Secondly, relations are either internal or external. If relations are internal, then they supervene on their relata. If so, they presuppose individuality of the relata, thus relations cannot individuate relata. If relations are external, then they are neutral over which particular individuals are their relata. Thus, they are not unique for the individuals they link. Thus, they cannot individuate individuals either.

As a result, the metaphysical haecceitist claims that if individuals cannot be individuated qualitatively or relationally, then they must be individuated by some of their intrinsic and nonqualitative constituents. If so, falsity of PII follows for a kind K of individuals in question.

In contemporary metaphysics one can find three candidates for nonqualitative individuators: Scotistic haecceities, thisnesses, and bare particular. I shall briefly explain how they are meant to individuate individuals.

Scotistic haecceities and thisnesses

First option of individuating individuals nonqualitatively is to argue that individuals are individuated by Scotistic haecceities or thisnesses. Many philosophers identified haecceities with thisnesses. However, there is an important difference between both concepts: While thisnesses are properties (*being x* or *being identical with x*), haecceities, as conceived by Scotus, are not properties, but further constituents of individuals (see Park 1990, 2016, King 2005, Cross 2014). Scotus's argumentation is very complicated, involving references to many scholastic concepts, and I do not want to go into details here. In general, a reason for postulation of haecceities is that

¹⁰² For instance, Bergman (1964), Plantinga (1979), Losonsky (1987), or Rosenkrantz (1993).

properties can be essential or accidental. Traditionally, essential properties were identified with a substantial form of a given individual, and the substantial form for Scotus cannot individuate individuals, because form includes the general characteristics of individuals—common natures (in contemporary jargon: generic essences)—which are sharable by distinct individuals. Yet, what individuates individuals must be unique for them. Thus, haecceities cannot be generic essential properties. However, haecceities cannot be identified with specific natures (in contemporary jargon: individual essences) either. As Wosuk Park (1990, pp. 388-390) observes, this is so for at least three reasons. Firstly, it is possible that two distinct individuals have the same specific nature. Secondly, specific natures can have something in common. Thus, they are not fundamentally specific as haecceities are. Thirdly, specific natures are determinables which can be determined, whereas haecceities cannot be determined by anything else. Haecceities cannot also be accidental properties, because accidental properties are not necessary for their bearers and are sharable as well; however, what individuates individuals must be necessary and unshareable (unique) for individuals.

Scotus introduces haecceities as individuators due to his dissatisfaction with alternative accounts of individuation which propose to individuate individuals though form, matter, combination of both or relations. All of these principles appeal, for Scotus, to entities which are in principle repeatable, i.e., they can be shared by distinct individuals. Thus, they cannot be the ultimate individuators. Scotus also does not believe that one could individuate individuals though existence, because existence is the same in all instances. And the principle of individuation should

be unique for each individual. Negation cannot be a principle of individuation as well because individuality is a positive phenomenon which requires a positive explanation.¹⁰³

As King observes (2005, pp. 9) haecceity is not discovered, but postulated. It is a theoretical entity postulated to solve the issue of individuation. Haecceity can be understood only through its theoretical functions. King identifies five features of haecceities (as he calls them, individual differences): (a) Haecceities individuate in a sense that they contract common natures to become specific natures for a given individual. (b) Haecceities are not repeatable, because they do not belong to a kind which could have many instances. They are not individuated by anything else. This is postulated to ensure that no infinite regress of explanation of individuality emerges. (c) Haecceities are simple. They neither have natures nor individual differences which would individualize their natures. (d) Haecceities are ultimate differences between individuals. Since they do not have any constituents, they cannot be explained in some more fundamental terms. Haecceities are irreducibly distinct from each other and nothing else explains this. (e) Haecceities differentiate rather than diversify individuals. That is, haecceities ground numerical differences between individuals but do not account for a difference in any qualitative aspect of individuals.

Now, let's move towards thisnesses, which are properties of being x or being identical with x, e.g., being Socrates or being identical to Socrates. They are nonqualitative, unique, and necessary for their bearers. Thus, they can be called nonqualitative individual essences. However, as I argued in Chapter 2 (section 2.2.3.), we should distinguish Adams's thisnesses from Plantingian thisnesses. For Adams, thisnesses ontologically depend on their bearers. Thus, if there were no

¹⁰³ For a more detailed discussion of Scotus' arguments against rival theories of individuation see King (1992) and Noone (1993, 2003). For a further discussion of Scotus's position see Park (1988, 1990) and Cross (2014).

Socrates, there would be no property of being identical with him. Thus, Adams's thisnesses cannot individuate individuals because a relation between individuator and an individual must be antisymmetric. In turn, under the Plantingian approach to thisnesses, they, like all other properties (which are abstract entities), exist necessarily, i.e., at all possible worlds. At worlds at which Socrates does not exist, his thisness exists, but is unexemplified. Only Plantingian thisnesses can be used as individuators (although Plantinga himself was not bothered about the individuation issue). Thisnesses so understood can then be used to explain the individuality of individuals, as suggested by Rosenkrantz (1993).

Bare particulars

Bare particular theory is an opposition to the bundle theory (which I discuss below in section 4.3.2.). While the bundle theory is a view that individuals are not nothing over and above collections of universals (or tropes), bare particular theory, by contrast, is a view that individuals, besides having properties (universals or tropes), have further constituents which are bearers of their properties. These constituents are bare particulars¹⁰⁴; they are not discovered (we do not have direct epistemic access to them, as to the majority of qualitative properties had by individuals) but, similar to haecceities, they are postulated to solve some theoretical issues. Standard motivations for postulating bare particulars are to explain three issues: (a) unity of properties, i.e., why such-and-such properties are tied together, (b) exemplification of properties, i.e., what grounds a fact that properties are *bad* by individuals, and (c) numerical difference of

 $^{^{104}}$ They are also sometimes called 'thin particulars', as opposed to 'thick particulars', which are understood as individuals composed from a collection of properties. See Armstrong (1978).

individuals. For the bare particular theorist, bundle theory fails to provide satisfactory explanations of these issues (more on bundle theory below).

The standard account of bare particulars (Allaire 1963, Bergmann 1964, and Moreland 1998) states that they are simple (do not have any properties), unshareable (unique for their bearers) and primitively particular (they are not individuated by anything else). If bare particulars were not simple, two issues would reappear with respect to them.

Firstly, one could ask: Which properties of bare particulars are sufficient for their identity? If these properties are qualitative, then metaphysical antihaecceitism follows, which contradicts the entire purpose of introducing bare particulars as nonqualitative individuators. If, in turn, they are nonqualitative, then there is a problem of individuating these properties themselves. Thus, a danger of infinite regress appears.

Secondly, if bare particulars had properties, it would be required to explain in virtue of what bare particulars can exemplify properties. Since bare particulars are postulated to explain the issue of exemplification, in order to solve the current issue, it would be required to postulate bare particular b^* of a bare particular b that would explain b having its properties. However, since bare particulars have properties, b^* would also have properties, and the issue of individuation would re-emerge for b^* as well. Thus, infinite regress follows. To avoid both issues, bare particulars are conceived as simple. b^*

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¹⁰⁵ One might argue that obviously bare particulars do have properties of *being* simple, *being unshareable* and *being primitively particular*. However, a proponent of bare particulars could respond by endorsing a sparse view on properties according to which not every meaningful predicate names a genuine property. Only predicates present in our fundamental description of reality and descriptions grounded in it name properties. As a result, while bare particular can be described by many meaningful predicates, they lack properties.

In addition to these characteristics, proponents of bare particulars (Moreland 1998, Wildman 2015) usually distinguish two notions of exemplification: an ordinary notion of having properties characteristic for individuals, and a second one, one which grounds the former relation of exemplification, which is characteristic for bare particulars. Now, although bare particulars are bare in a first sense of exemplification—they do not have properties of their host individuals—they nevertheless bear all properties of their host individuals. However, their linkage with properties is not essential: Bare particulars can, in principle, be paired with any kind of qualitative role.

Thanks to these two notions of exemplification, bare particular theory can explain issues (a) and (b). In the case of (a), properties of individuals are unified by their respective bare particulars bearing those properties. For example, properties of F, G, H... had by Socrates are tied together in virtue of bare particular bearing F, G, H... In the case of (b), properties are had by individuals in virtue of bare particulars of individuals bearing those properties. For instance, Socrates exemplifies a property of being human in virtue of his bare particular b bearing a property of being human.

Additionally, from the fact that bare particulars are primitively particular and unshareable it follows that they are primitive (irreducible) and unique individuators. Thus, they can explain numerical differences between individuals in the ultimate way. Most importantly, the metaphysics of bare particulars provide a justification for the falsity of *PII*, because they allow for cases of qualitatively indiscernible individuals which differ numerically in virtue of having distinct bare particulars.

An obvious issue associated with this view is that bare particulars (and this applies to haecceities and thisnesses as well) are empirically undetectable. They make no casual difference in the world. However, proponents of bare particulars seem to agree with that and say, instead, that bare particulars are postulated for theoretical reasons. The antihaecceitist can, however, reply that these theoretical reasons are not good, because all required explanatory work can be done by qualitative constituents of individuals. Then we come to the discussion of whether qualitative individuation can do all work associated with individuation. Proponents of bare particulars think that it cannot.

Second, a more sophisticated issue is that if individuals are individuated primitively, then an indeterminate number of individuals can overlap at the same spacetime localization (see Della-Rocca 2005). But the haecceitist could reply that she is interested in qualitatively significant duplication, as in the case of Black's scenario (and similar ones), where one-sphere-world and two-sphere-world are observationally different. In other words, the haecceitist could appeal to quantitative parsimony: Although she accepts that identities are primitive, she could just deny unnecessary cases of duplication (see Hawley 2009, pp. 104-105).

4.3.2. Metaphysical antihaecceitism qua theory of individuation

Let's now move towards metaphysical antihaecceitism. Under the individuation approach, metaphysical antihaecceitism is a view that individuality of individuals is to be explained by their qualitative roles, that is, satisfying a particular qualitative role is necessary and sufficient for being a particular individual. I discuss two most popular variants of antihaecceitistic accounts of individuation: bundle theory and Leibnizian complete concept view. Naturally, metaphysical

antihaecceitism based on qualitative individuation entails the truth of *PII* because it requires that for any two individuals, if they are constituted by the same bundles of properties or have the same complete concept associated with them, then they are one and the same individual.

There are two main motivations behind metaphysical antihaecceitism *qua* theory of individuation. ¹⁰⁶

The first motivation is the truth of *PII*. There are no possible cases of indiscernibles because individuals are always qualitatively discernible. They are discernible either by their qualitative intrinsic or extrinsic characteristics or both. Antihaecceitists of this kind explain away Black's and Adams's scenarios either by showing, as Hacking did, that such scenarios do not refer to genuine possibilities, or by endorsing one of the three presented responses to their arguments, that is, identity strategy, discerning strategy, or summing strategy.

The second (and related) motivation is based on a principle of sufficient reason. This is the original Leibniz's motivation for accepting PII and qualitative theory of individuation of individuals. Suppose identities of individuals are primitive, that is, individuals are individuated nonqualitatively. If so, there can be qualitatively indiscernible individuals which differ merely numerically. However, if indiscernibles are possible, when creating the actual world, God would have no sufficient reason to create an individual a rather than an individual a^* , which is qualitatively indiscernible from a. Since all truths about a hold for a^* as well. Thus, God would have no sufficient reason to treat them differently. But since the principle of sufficient reason is indispensable (as argued by Leibniz), identities of individuals cannot be primitive. Thus, metaphysical haecceitism is false and metaphysical antihaecceitism true.

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¹⁰⁶ Similar points can be found in Scarpati (2019).

A more contemporary variant of this motivation is that if identities of individuals are primitive, then such identities do not make any qualitative difference in a world. Individuals can swap their roles or overlap, but such scenarios will be empirically undetectable. If Socrates' identity is primitive, then Socrates could be replaced by a qualitatively indiscernible individual: Socrates*. Similarly, if identities of tables are primitive, it follows that at the same location L there is a table T with properties F, G, and H, and on top of that there a table T* at L, that is qualitatively indiscernible from T, which overlaps with T. Both scenarios (and many similar ones) are allowed if identities of individuals are primitive. A main problem with such scenarios is that they give rise to differences in identities which are empirically undetectable because they are not accompanied by any qualitative difference. Many would think however, that if there is no qualitative difference detectable between individuals, then there should be no differences between identities of individuals involved. In effect, identities of individuals must have purely qualitative grounds.

Now, I shall present two popular variants of metaphysical antihaecceitism that meet these antihaecceitistic desiderata: bundle theory and Leibnizian complete concept view.

Bundle theory

According to the bundle theory, individuals are just collections of properties. Depending on the view on properties one endorses, it will result in variants of the bundle view. A popular one is that individuals are just co-instantiated universals (O'Leary Hawthorne 1995, Zhang 2018. See also Hawthorne and Sider 2002 for a discussion of this view). Another, more popular variant, is

a view that individuals are just compresent tropes (Campbell 1990, Simons 1994, McDaniel 2001, Paul 2012, 2017).¹⁰⁷

Independently of a chosen variant, bundle theory, similar to bare particular theory, is able to explain (a) unity of properties: properties F, G, H... are unified if they are coinstantiated/compresent, (b) exemplification: some individual a has F iff a bundle composed of F, G, H... includes F, (c) numerical distinctness: two individuals A and A are numerically distinct if bundles of properties with which they are identified differ with respect to at least one constituent property.

Bundle theory has been traditionally judged to entail *PII* and deny that indiscernibles are possible. Thus, since for many philosophers *PII* is arguably false, bundle theory has to be false as well. However, if constituents of bundles are immanent universals, then, as (O'Leary-) Hawthorne indicated (1995), it is possible to interpret Black's scenario (and similar ones) in a way that the same bundle of universals is present at many places. Thus, there is only one object—a bundle of universals—which is located at many places. Black's scenario is then genuine, but *PII* is still true. But *PII* is applied to bundles of universals, not to their instances. ¹⁰⁸

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¹⁰⁷ For further discussions of bundle theory see Cleve (1985), Hawthorne and Sider (2002), Benovsky (2008), Sider (2020, pp. 65-72).

 $^{^{108}}$ For a critical discussion of Hawthorn's position see Hawthorne and Sider (2002) and Sider (2020). For those researchers the main issue associated with bundle theory is its inability to provide a satisfactory account of relations. As Sider (2020, pp. 67) points out, initially the bundle theorist could decide to include relations into bundles themselves. But then, suppose that there are two individuals, x and y such that x bears R to something or other and y bears R to something or other. The bundle theorist describes this situation as x being a bundle including R and y being a bundle including R. However, no more information can be added. So, the bundle theorist cannot provide enough information to determine whether x and y bear R to each other or whether each of them bears R to something else. Another option would be not to include relations into bundles but to claim that bundles instantiate relations. But it is unclear what it would mean for a bundle of properties to instantiate relations, e.g., what it would mean for some bundle of properties to be in a relation of love to other bundle of properties. Moreover, such a view would deem identical intrinsically indiscernible individuals staying in distinct relations. For instance, an electron in your pocket will be identical to an electron on the chair nearby. For more details on the bundle theorist accounts of relations see Campbell (1990, Ch. 5-6), McDaniel (2001), and Paul (2012, 2017).

Another option is to endorse trope bundle theory. There are many views on tropes, but a standard account is that tropes are abstract particulars, unrepeatable instances of features, like particular redness or particular sphericity. Tropes are simple (do not have any further constituents), purely qualitative, and stay in relations of resemblance. Most importantly, two tropes can stay in a relation of exact resemblance, e.g., two tropes of redness can be so similar to each other that they will be qualitatively indiscernible. Thus, tropes can differ numerically without differing qualitatively. As a result, bundle theory modeled on tropes entails falsity of *PII*. Indiscernibles turns out to be possible after all. At the same time, tropes are meant to be much less problematic than bare particular or haecceities, because tropes, as it is argued, are given in perception, whereas bare particulars and haecceities are postulated, not discovered. Additionally, by appealing to tropes one does not need to postulate universals which are, for some philosophers, another suspicious category of entities.

However, as I have already indicated above, there are issues regarding trope individuation.

We can discern three accounts of individuation of tropes (see Schaffer 2001, Maurin 2018).

The first option is to individuate them by their relation to individuals they characterize (Williams 1953). For instance, to be a particular instance of redness is to be had by a particular individual a. This however makes the tropistic explanation of individuality of individuals circular, for it presupposes that individuals are already individuated.

The second option is to individuate tropes through their spatiotemporal localization: To be a particular instance of redness is to be in such-and-such spatiotemporal localization (see Lowe 1998, Schaffer 2001). But this is problematic as well for the antihaecceitist. Firstly, tropes belonging to individuals existing outside spatiotemporal structure (e.g., tropes associated with

our mental states) cannot be then individuated at all. Secondly, there is an issue of individuation of points of spacetime themselves. The trope theorist has to either endorse a view that points of spacetime are just fundamentally individual (which is a controversial assumption), or say that they are individuated by something else. If the latter, the trope theorist owes us an account of individuation of spacetime points. This does not undermine trope theory, but it makes it much less appealing.

The third option for the antihaecceitist is to say that tropes are primitively individual (see Ehring 2011, Keinänen and Hakkarainen 2014). But this runs against the very spirit of antihaecceitism, which is to avoid primitive identities but explain them purely qualitatively. If tropes are primitively individual, then they can be subjects of swaps of tropes or pilling of tropes (Maurin 2018). Both scenarios are problematic because they lead to haecceitistic differences between individuals, which are empirically undetectable and which should be excluded by the metaphysical antihaecceitist. In the swap case, two individuals a and b swap their tropes F and G respectively. If so, we have two scenarios which are qualitatively indiscernible but which differ with respect to which individual has which tropes. It is a similar story for the pilling case. If tropes are individuated primitively, then it is possible that an individual a has 1 trope of redness R_I at a given spacetime localization, but it is equally plausible that it has 10 tropes of redness R_I at a given spacetime localization, which are qualitatively indistinguishable, but merely numerically distinct.

For these reasons I think bundle theory modeled on immanent universals suits better antihaecceitistic desiderata, which are to save *PII*, exclude intra-world haecceitistic differences between distinct individuals, and do not appeal to any primitively individuated entities. Trope bundle theory does not meet any of these desiderata and seems to be too close to haecceitistic

metaphysics. From here on, when I will refer to bundle theory, I will refer to the one modeled on immanent universals as an orthodox model of the antihaecceitistic metaphysics.

Leibnizian complete concept view

A similar view to the bundle theory is a Leibnizian complete concept view (Mates 1968, Mondadori 1973, 1975, Adams 1994, pp. 57-63, Cover and O'Leary-Hawthorne 1999, Ch. 3 and 4). According to it, each individual has an associated complete concept, which contains all of its qualitative intrinsic properties (and, at least for Leibniz, all other features of the individual in question supervene on those). A general, antihaecceitistic idea here is that each singular proposition about a particular individual can be paraphrased into a general proposition. Thus, each individual can be fully described by a very long list (perhaps infinite) of general propositions.

This view is tightly related to another Leibnizian idea, namely to the predicate-in-subject view on truth, according to which a proposition ascribing some property F to some individual x is true iff a predicate expressing property F is contained in the complete concept of x. As a result, if you know the predicate expressing F, you will know that property F belongs to the complete concept of x, and *vice versa*, if you know the complete concept of x, you will know that x has F (Adams 1994, pp. 57-63, 65-67).

Such a view has a consequence that all truths about individuals are analytic. In other words, all truths of the form 'x is F' should be paraphrased into truths: 'A complete concept of x including F, G, H... includes F. However, for Leibniz, such statements are analytic only for an individual like God, which knows all features of all individuals, i.e., which can conceive the whole complete concept of any individual. However, in our case, due to our lack of complete knowledge

of qualitative character of the world, we are unable to explain away all primitive (nonqualitative) descriptions of individuals. For instance, we cannot explain away the name 'Socrates', because we do not know (fully) the complete concept associated with Socrates and his whole qualitative nature. Thus, we are unable to provide necessary and sufficient purely qualitative conditions for being Socrates. However, in principle, such a knowledge is achievable (e.g., for God). Thus, at its bottom, the Leibnizian complete concept view is a case of metaphysical antihaecceitism.¹⁰⁹

Additionally, complete concepts are so specific that no two individuals can be characterized by the same complete concept. Obviously, this entails the truth of PII. For any individuals x and y, if x and y have the same complete concept, then x=y. Individual concepts thus can be identified with qualitative individual essences discussed contemporarily, which are understood as sets of essential properties, which are qualitative, unshareable, and necessary for their bearers. However, there is one important difference between two notions. Usually, in the contemporary metaphysics, qualitative individual essences are thought to be some subsets of all properties of individuals. However, what is peculiar about Leibniz's position is that the individual concept of an individual, e.g., Socrates, contains unrestrictedly all of its intrinsic features. Thus, under the standard approach to Leibniz's view, all intrinsic features of a given individual turn out to be essential for it. And since relations are reducible to intrinsic features of individuals, all relational properties of individuals are essential to them as well. For the majority of researchers such an extreme essentialist view is unacceptable, becasue it clashes without are

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¹⁰⁹ This antihaecceitistic reading of Leibniz metaphysics is quite common in the literature. It is shared e.g., by Adams (1979), Cover and O'Leary-Hawthorne (1992, 1999). However, for a defense of haecceitistic reading of Leibniz's metaphysics see Møller-Nielsen (2015).

Such characterization of qualitative individual essences is standard in the literature. See Plantinga (1979), Losonsky (1987), Mackie (2006), Rocca-Royes (2011) and Ujvári (2013).

strong intuitions that individuals could be different with respect to at least some of their intrinsic properties or relational properties.¹¹¹

4.4. Issues with the individuation approach

Now, my aim here is not to determine which of the just mentioned views on individuation is the correct one. Instead, I argue that the individuation approach to metaphysical haecceitism and antihaecceitism as such is for several reasons problematic and that we should look for an alternative approach to both doctrines.

Firstly, it presumes that individuals have constituents such as bare particulars, haecceities, thisnesses (if you endorse metaphysical haecceitism), or universals (if you endorse metaphysical antihaecceitism). However, as I will show in a moment, one could endorse haecceitistic or antihaecceitistic metaphysics of individuals (or more generally, of reality) without presupposing that individuals have constituents at all. It seems plausible that metaphysical haecceitism or antihaecceitism should make sense even if individuals were to turn out to be simple. Thus, I believe that the issues of metaphysical haecceitism and antihaecceitism can be separated from the issues regarding individuation of individuals *via* their constituents.

Secondly, the individuation approach characterizes metaphysical haecceitism as entailing the falsity of *PII* and metaphysical antihaecceitism as entailing the truth of it. However, as I shall show below, one could hold haecceitistic intuitions about reality without committing oneself to the falsity of *PII* and analogically hold antihaecceitistic intuitions without commitment to *PII*.

understood as a tool of analyzing modality de re, rather than the issue of individuation.

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On super-essentialist reading of Leibniz see Mates (1972), Mondadori (1973, 1975), Brody (1980). For a response see Huner (1981). See also Cover and O'Leary-Hawthorne (1992) for a discussion of Leibnizian essentialism. See also in Chapter 6, section 6.2.3., where I discuss different possible variants of Leibnizian essentialism, however

This is especially true for the antihaecceitists. As I have indicated above, *PII* is generally considered to be rather problematic. Arguments against *PII* come from the field philosophy of physics, where the received view is that fundamental quantum particles do not obey *PII* (French and Redhead 1988, French 1989, French and Krause 2006, Ladyman and Bigaj 2010), as well as from the field of modal metaphysics, where many researchers (Black 1952, Adams 1979, Lewis 1986, Mackie 2006, Cowling 2017) agree that there could be qualitatively indiscernible individuals or possibilities. It turns out that under the individuation approach metaphysical antihaecceitsm entails falsehood (*PII*). However, once we abandon the individuation approach it will be possible to provide a characterization of metaphysical antihaecceitism which is neutral over the issue of *PII*.

Thirdly, under the individuation approach, metaphysical antihaecceitism entails that identities of individuals are purely qualitative. However, there are some solid structuralist arguments against individuals, whether their identities are purely qualitative or not. Among those arguments, we can find: (a) an argument from pessimistic meta-induction (see Ladyman 1998) according to which individual-free structure is the only invariant structure represented by mathematical apparatus of our constantly changing scientific theories about fundamental reality; (b) an argument from metaphysical underdetermination (Ladyman 1998, French and Ladyman 2003), which says that some of our best theories describing the fundamental structure of reality allow for metaphysical underdetermination regarding entities that those theories concern. For instance, fundamental particles and points of spacetime can be interpreted either as individuals or as nonindividuals. Structural realism explains away such an underdetermination by eliminating individuals and introducing general structure as the only fundamental constituent of

the world; (c) an argument against individuals proposed by Shamik Dasgupta (2009), according to which individuals should be eliminated from our ontology because they are unobservable and physically redundant. If one accepts some or all of such arguments, metaphysical antihaecceitism *qua* theory of individuation turns out incorrect because, even though it says that individuals are purely qualitative beings and, thus, it gives justice to some antihaecceitist intuitions, it still introduces individuals into our ontology. Thus, if we want to provide an antihaecceitist view that gives justice to those anti-individualist arguments, we should abandon the individuation approach, and define metaphysical antihaecceitism as a view about the fundamental structure of reality. It will be then possible to characterize metaphysical antihaecceitism as a view that reality is purely general and qualitative.

Fourthly, following Sider (2020, pp. 74-75), one might have reasonable doubts whether the individuation issue is genuine at all. His argument starts by an observation that the issue of individuation seems to entail a view that reality—before our conceptualization—comes as undifferentiated. For instance, according to Jubien (1993), before we provide conditions by which we partition reality, reality is just an unspecified arrangement of spacetime points or portions of matter. If you want to talk about particular individuals and their properties, you must then individuate them by specifying relevant conditions of their existence, that is, conditions which explain how particular chunks of matter constitute individuals or how occupation of suchand-such spacetime points gives rise to individuals. You can replace Jubien's view with any alternative view of unspecified reality. Such a view is very popular among contemporary metaphysicians who do scientifically informed metaphysics. But as Sider rightly observes, this view is misleading because even Jubien's unspecified reality comes already equipped with

individuals. That is, if you talk about spacetime points or portions of matter, these are already individuals with their identities being determined. In general, it is impossible to provide an individual-free description of reality if one takes the predicate logic as a proper language of fundamental reality. A nice feature of the language of predicate logic is that descriptions formulated by its use are already individual-oriented; that is, such descriptions presume that the values of the variables and referents of the names are individuals with determinate identity and existence conditions (see Hawthorne 2003, Sider 2020). In other words, our quantifiers and names used in our best descriptions of the structure of the world (mathematical, physical, metaphysical) already require individuals existing in the world, no matter how they are individuated. If that view is correct (and I think it is), it is possible to describe the fundamental structure of reality without being committed to any particular view on the nature of individuation of individuals (such as predicate logic). Thus, the issue of individuation is posterior to the issue of describing reality in individual-oriented language.

One might, however, respond that individuation does not concern existence conditions but rather serves as a foundation of identity and distinctness of individuals. However, as Sider rightly observes, providing existence conditions is sufficient for determining these latter issues as well. Thus, there is no need to provide a principle of individuation of individuals. As Sider puts it, 'a domain of entities, intuitively, comes equipped with facts of identity and distinctness' (Sider 2020, pp. 75). As a result, there is no need to provide an account of individuation in order to state all facts about individuals. Such a view is shared by those philosophers who take identity (a=b),

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¹¹² Many researchers agree that the language of predicate logic is the proper language of fundamentality. Although, see Dasgupta's position discussed below, which aims at developing an alternative, individual-free language of fundamental reality.

and distinctness facts (a≠b) as fundamental (Dasgupta 2009, Sider 2011). For Sider, once we agree that the vocabulary of predicate logic is fundamental, i.e., carves reality at its joints', statements of identity and distinctness such as: $\exists x \exists y (x=y)$ or $\exists x \exists y (x\neq y)$, turn out fundamental. And if they are fundamental, they need no further explanation. Thus, there is no need to postulate principles of individuation that would explain facts about identity and distinctness (the same reasoning could also be applied to existence facts as well). We could even exclude the identity predicate from descriptions of fundamental reality and we would still be able to provide a sufficiently rich description of fundamental reality, grounding everything else on such a description. Talk of identity and grounds of identity is just not required for a complete story of the world. 113 However, even if facts about identity and distinctness would turn out not fundamental and they would require further explanation, they would need not be explained by facts about individuation of individuals but rather in facts about parthood (Smid 2017) or in facts about constitution (Shumener 2020). It is also possible to claim that identity and distinctness facts are zero-grounded (Fine 2012). All of those alternative explanations of identity facts are much cheaper than ones based on the issue of individuation.

4.5. Structural approaches

I close this chapter by overviewing structural approaches to metaphysical haecceitism and antihaecceitism. I call them structural because they take both doctrines to be accounts of the fundamental structure of reality. As I observed above, such an approach to both doctrines seems to be hinted by Adams, for whom both doctrines concern the following question:

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¹¹³ For a further discussion of this view, including Dasgupta's variant, see Shumener (2017).

Is the world – and are all possible worlds – constituted by purely qualitative facts or does thisness hold a place beside suchness as a fundamental feature of reality? (Adams 1979, pp. 5)

Adams conceived thisnesses and suchnesses as properties. Thus, for him metaphysical haecceitism should be viewed as an account that thisnesses, that is, properties of being a particular individual, are part of fundamental reality and are not reducible to suchnesses, that is, qualitative roles of individuals built from qualitative properties. Metaphysical antihaecceitism is then defined as a denial of this claim: At the fundamental level of reality there are only qualitative properties and combinations of them.

It seems, however, that a claim that some properties are reducible or irreducible to other ones is a little bit obscure. In contemporary metaphysics, focused on such explanatory notions such as ground or essence, it is much more common to investigate explanatory relationships holding between facts rather than properties. I am going to follow this approach below. For the purpose of the analysis, it will be sufficient to assume that facts are expressed by true propositions. In this dissertation I have already discussed singular and general propositions. We can then simply discern singular (nonqualitative) facts of the form 'a is F, 'aRb' (e.g., Socrates is human, Socrates loves Xantippe) expressed by singular (nonqualitative) propositions and general (qualitative) facts of the forms such as ' $\exists x(Fx)$ ', ' $\forall x(Gx)$ ' (e.g., something is wise; all humans are mortal) expressed by general (qualitative) propositions. This leaves us with a very thin account of facts, that that's everything we need here. Under such an approach, metaphysical haecceitism and antihaecceitism are alternative explanations of what kinds of facts are in the world and how they are related.

A very desirable feature of the structural approach to both doctrines is that it does not force link both views with the controversial issue of individuation. Metaphysical haecceitism and antihaecceitism understood structurally do not presuppose a pre-individual level of reality from which we should somehow recover individuals by providing their principles of individuation. According to the structural approach it is also not required to presuppose that individuals have constituents (individuals can be taken to be simple and unstructured) nor to relate metaphysical haecceitism and antihaecceitism to the doctrine of PII (as we shall see, both doctrines are neutral with respect to PII). Overall, the structural approach is much more modest if compared to the individuation one. It only requires that there are two types of facts—individualistic and general—and some kind of a modal or explanatory relationship between them, e.g., one based on grounding, essence, structure or supervenience. I will start the presentation of both theories with an analysis of metaphysical antihaecceitism due to the fact some motivations behind metaphysical haecceitism result from dissatisfaction with claims of metaphysical antihaecceitism.

4.5.1. Metaphysical antihaecceitism qua theory of structure

Metaphysical antihaecceitism *qua* theory of the structure of reality (from now on I will use the name 'qualitativism' to refer to metaphysical antihaecceitism so understood) states that either (a) facts about reality are purely qualitative or depend on qualitative facts, or that (b) all facts are purely qualitative. Now, (a) and (b) variants of qualitativism refer to its moderate and extreme form. Moderate qualitativism is consistent with the existence of individualistic facts. It claims, however, that if there are such facts they have to be somehow explained by the qualitative facts. One could then model a link between qualitative and individualistic facts by appealing to some

purely explanatory notions such as grounding (Fine 2001, Rosen 2010), structure and metaphysical semantics (Sider 2011), or definitional essence (Fine 1994), or to some modal notions such as (Humean) supervenience (Lewis 1986, 1994) or modal essence (Plantinga 1974).

In principle, moderate qualitativism could take two forms: it could either allow only for nonfundamental individualistic facts, and say that fundamental reality is purely qualitative, or accept both fundamental and nonfundamental individualistic facts but claim that all individualistic facts (including fundamental individualistic facts) have to be explained by qualitative facts. A recent example of moderate qualitativism is grounding qualitativism (Dasgupta 2014, Russell 2016). According to this view, all individualistic facts are grounded in qualitative facts. Supposedly, this variant of moderate qualitativism allows only for nonfundamental individualistic facts. A reason for this is that if one defines fundamental facts as those which are ungrounded (which is a standard assumption among grounding theorists), and all individualistic facts are grounded, then no individualistic fact can be fundamental. Another example of moderate qualitativism could be priority monism (Schaffer 2010), a view according to which (roughly speaking) facts about particular individuals are grounded in facts about the world taken as a whole. For instance, facts about you are grounded in facts about the cosmos (taken as a whole).

In turn, extreme qualitativism is a view that there are no individualistic facts nor individuals which those facts concern. Reality is just purely general and everything that happens to it can be represented by qualitative facts. An example of such a view is generalism (Dasgupta 2009, 2016, Bacon 2019, Dewar 2019). Very similar views to generalism are (eliminative) ontic structural realism (Ladyman 1998, French and Krause 2006, French and Ladyman 2010)

according to which reality consists in patterns of relations, ontological nihilism (see O'Leary-Hawthorne and Cortens 1995, Turner 2011, Turner Forthcoming), a view according to which there are no things, that is, no objects of quantification, and existence monism (Horgan and Potrč 2000, Schaffer 2007), a view according to which everything that exist is the world taken as a whole. All of these views share a belief that our most perspicuous characterization of reality should be free from descriptions involving reference to particular individuals, no matter if fundamental or not. As a result, we should abandon languages modeled on predicate logic, which comes together with domains of quantifications which are sets of individuals, as a correct tool of describing fundamental reality. Extreme qualitativists aim at developing a new, purely general language, that would be capable of providing a complete purely qualitative description of reality. For instance, structural realists such as French and Krause (2006) develop a nonclassical logic, according to which non-individuals (e.g., properties or relations) can be subjects of quantification and for which neither law of identity nor its negation does apply (see Ladyman 2014). In turn, nihilists such as O'Leary-Hawthorne and Cortens (1995) and Turner (Forthcoming) develop a feature-placing language which allows them to paraphrase all sentences involving reference to individuals to sentences like 'It is snowing', and 'It is warm here'. Thus, they can get rid of individuals in their ontology completely. 114

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¹¹⁴ Existence monism could be an exception: as argued by Horgan and Potrć (2000), even though there is only one thing—the world taken as a whole—it can play a role of a truthmaker of our ordinary and scientific statements about particular individuals. Thus existence monists might preserve predicate logic as a correct tool of characterizing fundamental reality, on the condition that truth conditions of our statems about particular individuals are rightly understood.

Below I shall focus solely on grounding qualitativism and generalism as they seem to be currently the most (metaphysically) refined variants of moderate and extreme qualitativism respectively. Let me first overview some arguments supporting both views.

Arguments for grounding qualitativism and generalism

As presented by Dasgupta (2009, pp. 40, 2014, pp. 6), both grounding qualitativism and generalism are supported by two skeptic arguments against individuals (of course these arguments can support other variants of qualitativism as well). It is argued that individuals and facts about them are either eliminable or derivable from qualitative grounds (depending on whether one endorses generalism or grounding qualitativism) because individuals are undetectable and physically redundant. Let me explain both claims.

Firstly, Dasgupta argues that individuals are undetectable because if we consider two physical situations, where two individuals play exactly the same qualitative roles but according to which individuals are permuted over these roles, it is impossible to empirically detect any difference between these two situations. Only qualitative facts (or facts grounded in qualitative facts) are empirically detectable. Thus, if facts about individuals are meant to be some further facts, not grounded in qualitative ones, then they are undetectable. Individualistic facts have to be either explained by qualitative facts or eliminated.

Secondly, Dasgupta argues individuals are also physically redundant. Physical laws are general, that is, they are never about particular individuals like Socrates and Plato, but hold for *any* individuals of a certain kind. For instance, Newton's law of gravity says that *any* particle attracts every other particle with a force directly proportional to the product of their masses and

inversely proportional to the square of the distance between their centers. On the level of the physicalistic description it is sufficient to say that there is an individual *x* attracting individual *y*, but whether *x* is Socrates and *y* Plato or other way around does not matter for the correctness of a physical description. Thus, individuals are physically redundant: The behavior of physical systems is not influenced by which individuals have which properties, or even whether there are individuals at all. Or consider another example: Newtonian gravitational theory postulates absolute velocities. However, for newer theories of gravity (such as Einstein's) absolute velocities are redundant because they do not influence how physical systems evolve. All work can be done by relative velocities. Moreover, because they do not make a difference to the way physical systems behave, absolute velocities are empirically undetectable. Thus, absolute velocities can be eliminated from our best theories of gravity. The same applies to individualistic facts: we either ground them in qualitative facts (which means that the whole explanatory work is done by qualitative facts), or they become explanatory irrelevant which means that we can eliminate them from our ontology.

Obviously grounding qualitativism and generalism could also be supported by some other arguments against individuals coming from the philosophy of science which support eliminative structural realism, e.g., an argument from pessimistic meta-induction (Ladyman 1998), or an argument from a metaphysical undetermination of the nature of fundamental constituents of matter (Ladyman 1998, French and Ladyman 2003). Another source of anti-individualistic arguments are arguments supporting ontological nihilism (Hawthorne and Cortens 1995, Turner 2011), and existence monism (Horgan and Potrč 2000, Schaffer 2007), which basically

amount to an idea that all there is to the world can be explained exhaustively without reference of any individuals (nihilism) all individuals except one: world (existence monism).

I will now present what grounding qualitativism and generalism amounts to.

Grounding qualitativism

According to grounding qualitativism, every individualistic fact is grounded in qualitative facts. Thus, each individualistic fact taken separately, e.g., a fact that Socrates exists is grounded in some plurality of qualitative facts that explain why a fact that Socrates exists obtains.

However, there is a problem with this characterization of grounding qualitativism. If you look for qualitative grounds for a fact *Socrates exists*, then you need to provide purely qualitative sufficient and necessary conditions for it to obtain. A natural position is to take some facts about intrinsic features of Socrates to ground the fact that Socrates exists. For instance, those facts could include facts about his origin, material parts, and so on. It could then be argued that if some *x* has such-and-such origin and such-and-such material parts, then x=Socrates. But the problem with that approach is that it presumes a strong qualitative essentialism which assigns to each individual a unique qualitative individual essence, i.e., a set of unique qualitative properties that jointly explain the identity of a given individual and, thus, determines conditions under which a given individual could exist. For instance, if you say that Socrates has individual essence *E*, wherever *E*

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¹¹⁵ Metaphysical grounding is a relation of ultimate metaphysical explanation holding between facts (equivalently, it can be defined as a senteital operator holding between propositions or sentences, see Correia (2006): if A grounds B, then B holds in virtue of A, or because A holds. A is the metaphysical reason for B. An orthodox view is that grounding, besides being an explanatory relation, is also a necessitation relation: if A grounds B, A necessitates B (Rosen 2010, Fine 2001, 2012). A feature of grounding that is most important for my current analyses is that, as Fine (2001) observed, grounding is a tool allowing us to explain the notion of factuality and reduction. Roughly speaking, some nonfundamental statement p is factual if p grounded in some factual statements. In turn, nonfundamental individualistic fact F is reducible to some qualitative facts if it is grounded in qualitative facts.

is exemplified, Socrates exists there. However, it seems difficult (if not impossible) to provide such essences for every individual. As I showed when I was discussing the issue of transworld identity, after the work done by Chisholm (1967), Plantinga (1974), Kripke (1980) and Salmon (1996) on this topic, it seems that no one anymore believes that we are able to provide necessary and sufficient purely qualitative conditions for being a particular individual.

A proponent of grounding qualitativism could try to avoid the commitment to qualitative individual essences by broadening the grounding base of the fact *Socrates exists*, to include some external facts as well. But it is unclear which external facts should be included in it. Which facts about Socrates' surroundings necessitate his existence? It seems that there is no nonarbitrary way to decide the facts that are explanatorily relevant to the fact Socrates exists.

Perhaps the best way of avoiding arbitrariness is to take the grounding base to include a complete qualitative description of the Universe and ground the fact that Socrates exists in such a big plurality of qualitative facts (a similar move is made by priority monists). However, as Dasgupta observes (2014, pp. 8-10), a problem with such a move is that the grounding base would include facts explanatorily irrelevant to the fact that Socrates exists, e.g., facts about distant galaxies and so on. It is, however, part of the standard conception of grounding (which seems to be a very intuitive view, perhaps even pre-theoretically) that if a, b, c grounds d, then all three a, b, c must be relevant in explaining d (see Fine 2012, Dasgupta 2014)

However, grounding qualitativism can be modified so that it avoids the issue of explanatory irrelevance just indicated. As Dasgupta suggested one could modify grounding relation to the form that it is plural on both sides (the orthodox view is that grounding base is plural but what is grounded in singular). As a result, we should not look for qualitative grounds

for particular individualistic facts but search for qualitative grounds for all individualistic facts taken together. In effect, grounding qualitativism should be reformulated to the form:

Grounding Qualitativism: All individualistic facts are collectively grounded in qualitative facts.

Intuitively, this view amounts to an idea that once qualitative facts are distributed over the world, all individualistic facts follow. However, to settle this, we do not have to link particular individualistic facts with particular qualitative facts included in the grounding base. Dasgupta explains this idea by claiming that facts in grounding base are explanatorily relevant nondistributively (Dasgupta 2014, pp. 4). Thanks to that we avoid a commitment to strong qualitative essentialism, for the same reason we avoid irrelevant facts in the grounding base. Obviously, if the grounding base includes all qualitative facts about a given world, and derivative facts are all individualistic facts about a given world, then all facts in the grounding base (taken as a whole) are explanatorily relevant for explaining all individualistic facts (taken as a whole).

A desirable feature of this view is that it is neutral whether PII holds or not. Grounding qualitativist (unlike the proponent of the bundle theory or the Leibnizian complete concept view) is able to make a room for Black's world even within a purely qualitative description of reality. If she assumes that resources of predicate logic allow us to express fundamental qualitative facts, then she can easily describe Black's world as one at which it is true that $\exists x\exists y(Rx \land Ry \land x\neq y)$) (where 'R' designates a qualitative role played by both spheres). This is a fundamental and purely qualitative description of a world which states the existence of two qualitatively indiscernible individuals.

If, however, quantificational facts turn out to be nonfundamental (many researchers argue that quantificational facts are grounded in their instances, see Dasgupta 2009, pp. 50, Rosen 2010, Fine 2012, Turner 2016, Sider 2020), then the grounding qualitativist can just take a quantificational description of a Black's world to be a nonfundamental description involving individualistic facts (it would then take a form: $\exists x\exists y(x=a \land y=a \land Ra \land Rb \land a\neq b)$), and ground it collectively in all qualitative facts obtaining at Black's world (see Dasgupta 2014, pp. 25-26). Once again, grounding qualitativism makes room for indiscernibles. Thus, it is consistent with the falsity of *PII*.

Generalism

A more extreme variant of metaphysical antihaecceitism understood structurally is generalism, according to which there are no individualistic facts at all but all facts about the world are purely qualitative. On the ontological level, according to generalism (see Dasgupta 2009) there are only properties (understood as universals) with determined adicity (relations are identified with properties which have an adicity higher than 1) which instantiate algebraic structure. Thus, unlike bundle theory, generalism does not provide a way of building individuals out of properties but sticks to the view that there are only patterns of properties. The main aim of generalism is to mirror the descriptions of reality given to us through first-order predicate logic, but without making a commitment to the existence of individuals through quantification. In order to provide relevant paraphrases of statements of predicate logic, the generalist has to provide a sufficiently

¹¹⁶ Dasgupta's program is inspired by the work of Quine (1976).

rich purely qualitative description of the world. To achieve that she has to provide a systematic way of constructing more complex properties out of simple ones.

I shall briefly explain how, according to Dasgupta, algebraic structures are supposed to be described. Each property has an associated term, P^n , where P is a name of a property and n is its adicity (the generalist refers to properties through terms instead of predicates to avoid explaining an issue of how predicates apply to individuals). For example, W^{I} is a term naming 1-place property of being wise and L^2 is a generalist paraphrase of an ordinary 2-place property of x loving y. Next, Dasgupta introduces some additional functors that can be applied to terms to form more complex expressions. For instance, he introduces conjunction and negation. The complex term $(W^1 \wedge T^2)$ names a 1-place property of being wise and a 1-place property of being tall. In turn, $\neg F^1$ names a 1-place property of *not being wise*. He also introduces term functor σ which rotates the argument places of the relation, e.g., σL^2 is converse of L^2 ; there is also a term functor p which adds adicity to a term, thus pW^{I} is a paraphrase of a relation of being wiser than someone else. (For more details see Dasgupta 2009, appendix; I shall ignore some technical details of his view for the ease of exposition). Most importantly, Dasgupta introduces c, a cropping functor. Intuitively, if it is applied to F^n , it cancels one adicity from F^n . When you have a term naming property such as F^{I} , then c just cancels an individual that instantiates that property. Thus, cF^{I} has canceled adicity, and names 0-place property, and 0-properties are, for Dasgupta, states of affairs. Intuitively, cF¹ is an occurrence of wiseness. In turn, when you have some two-place property, e.g., L^2 which intuitively means x loves y, cL^2 stays for a property of x being loved by someone, and ccL^2 for an occurrence of loving, which intuitively might be understood as an occurrence of a fact that someone loves someone.

In general, by using the cropping operator we are able to paraphrase each n-adic property into a 0-adic one. In order to obtain a final generalist description of reality, Dasgupta introduces the last primitive expression, x obtains, which applies to 0-adic terms naming properties to states of affairs, e.g., ccL^2 obtains is just a state of affairs such that loving obtains. In general, for Dasgupta, reality at its rock bottom is built out of occurrences of such general states of affairs and nothing more.

In addition, the generalist takes a fundamental description of reality to be holistic. On the individualistic conception there can be fundamental facts described by such sentences like 'a is F', 'aRb' and so on. For the individualist, decomposing complex facts into simple ones is straightforward, as is determining which individual has what properties or which individual is associated with which. This, however, is not the case for generalists. Consider a general fact:

(1)
$$\exists x \exists y (Fx \land Gy \land Rxy)$$

$$cc(F^1 \land G^1 \land R^2) obtains$$

If you try to decompose it, you get three separate general facts:

(2) $\exists x(Fx)$ (its generalist paraphrase: cF^{1} obtains); $\exists x(G)$ (cG^{1} obtains); $\exists x\exists y(Rxy)$ (ccR^{2} obtains).

But (2) stated as it is, leaves it indeterminate whether something that is F is also G or something that is F bears R to something that is G or other way around. In other words, facts mentioned in (2) do not unequivocally mirror fact (1). In order to avoid such an indeterminacy, the generalist

has to assume that the fundamental description of reality is holistic; it contains a single very complex fact which cannot be broken down into simpler ones.¹¹⁷

Lastly, unlike bundle theory and Leibnizian complete concept view, as Dasgupta indicates, generalism is not committed to *PII*. Generalism does not impose any a priori limits on what general structures there might be. Similar to grounding qualitativism, generalism can describe Black's world by:

(3)
$$\exists x \exists y (Fx \land Fy \land \neg Ixy)$$

Which is then mirrored by the generalist description:

(4)
$$cc(F^1 \land pF^1 \land \neg I^2)$$
 obtains

Intuitively, the generalist description of Black's world is such that two exactly-the-same qualitative roles and nonidentity relation obtain. Thus, we are able to account for an intuition that there could be indiscernible individuals and that *PII* fails without making a commitment to individuals at all.

Let me now move towards the structural approach to metaphysical haecceitism.

4.5.2. Metaphysical haecceitism qua theory of structure

Metaphysical haecceitism, structurally understood, is a view that there are individualistic facts and that individualistic facts are not grounded in qualitative facts but are some further, irreducible facts. From here on I shall thus refer to this view as individualism.

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¹¹⁷ For a more detailed defense of generalism and its holism see Dasgupta (2009, pp. 56-62, 2014, 2016), Bacon (2019), Dewar (2019). For a further criticism of generalism see Turner (2016) and Sider (2020).

Arguments for individualism

Below I provide two positive arguments for individualism, as well as some arguments in favor of it that follow from dissatisfaction with grounding qualitativism and generalism.

Firstly, the most obvious reason for believing in individuals and facts about them is that individuals are paradigmatic examples of concrete entities that are building blocks of the actual world. Contemporary metaphysicians tend to take individuals to be either: (a) portions of matter localized in spacetime, (b) some primitive entities localized in spacetime, which might be simple or complex entities built out of matter, or (c) points of spacetime themselves. Thus, individuals are either in spacetime or are parts of spacetime (if they are points). Such a view on individuals seems to be a default one among contemporary metaphysicians. For instance, it is presumed by endurantists (Van Inwagen 1990) and perdurantists (Sider 2001), supersubstantivialists (Sider 2001, Morganti 2011), mereological universalists (Lewis 1986, Rea 1998, Sider 2001), material constitution theorists (Fine 2003), proponents of Neo-Russellian views on singular propositions (King, Soames and Speaks 2014), or philosophers working on modalities *de re* (Kripke 1980, Adams 1981, Lewis 1986). It is safe to say that individualism is a default view in contemporary metaphysics.

Secondly, individuals and individualistic facts also seem to be indispensable in our scientific practice. They seem indispensable on the epistemic level: it is the individuals that are observed in the experiments. There are also strong arguments showing that individuals are indispensable elements of fundamental descriptions of reality delivered by science (contrary to what Dasgupta suggests). For instance, the received view within the philosophy of physics is that

PII does not hold for some kinds of fundamental particles (le. g., bosons). ¹¹⁸ It is then very often argued that, if PII does not hold for a given kind K of individuals, individuals of that kind are primitive individuals, which means that individualistic facts involving them cannot be explained away and reduced to qualitative facts. Qualitative facts are just unable to state all there is to primitive individuals.

The indispensability of individuals in our fundamental scientific descriptions of reality can also be supported by a view that generalizations are grounded in their instances, e.g., a general fact such as *all humans are mortal* is grounded in facts about particular people. Now, it can be argued that at least some statements about fundamental reality take the form of generalizations. If so, those generalizations have to be grounded in facts about particular fundamental individuals. Thus, individuals are indispensable in at least some of our fundamentals descriptions of reality.

Finally, as Sider convincingly argued (Sider 2011, see also Sider 2020, Ch. 3), the best language to describe fundamental reality is a language modeled on predicate logic. Such a language however comes together with domains of quantification, which are nothing else then sets of individuals. Thus, theories describing fundamental reality that are formulated using such a language will provide ontologies full of fundamental individuals over which we quantify when we describe fundamental individualistic facts.

Thirdly, there is also a purely metaphysical argument in favor of primitive individualistic facts, according to which purely qualitative description of reality is incomplete: it misses information regarding individuals, e.g., it does not explain which individual plays which

of that, fundamental particles are non-ndividuals.

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¹¹⁸ Proponents of such a view include: French and Redhead (1988), Esfled (2004), Morganti (2004), Esfeld and Lam (2008), Morganti and Dorato (2013). For a more general overview of the view see Ladyman and Bigaj (2010). See also French and Krause (2006), who agree that fundamental particles do not obey *PII*, but make a conclusion that because

qualitative role, or which individual is identical to which. Consider a very simple fundamental description of reality given in qualitative terms, such as 'Something is F and something is G'. Under such a description it is indeterminate whether it is the same thing that is both F and G or not. No matter how complicated a qualitative description is, it will never be sufficient to give adequate paraphrases of individualistic descriptions, because qualitative roles can always be duplicated or permuted over individuals, and under such circumstances purely qualitative description of reality will not determine which role is associated with which individual. In order to determine such matters purely qualitatively. one would need to appeal to the notion of qualitative individual essence. Such essences would then link each individual with its unique qualitative role. However, as I indicated above, there is a consensus that it is unlikely that we will ever be able to identify qualitative individual essences of individuals. Moreover, from an individualist standpoint, a problem with such essences is that they would preclude all cases of haecceitistic differences between individuals or possibilities involving them. They would also entail a contentious thesis of PII.

Fourthly, individualism is supported by a dissatisfaction with the generalist and grounding qualitativist programs. As we saw, both qualitativist positions entail some radical form of holism. The grounding qualitativist claims that all individualistic facts must be collectively grounded in all qualitative facts. But this is problematic because it means that if you take any particular individualistic fact, you will be unable to determine its qualitative foundation. All you can do is explain all individualistic facts at once and take them as holding in virtue of the fundamental qualitative character of the world. This seems to be very counterintuitive. A big advantage of individualism is that it allows us to take particular individualistic facts at face value,

one by one. It is possible to explain each individualistic fact taken separately. We also do not have to assume that grounding is plural on both sides (which is unorthodox) and we do not have to appeal to a nondistributive notion of explanation (which is also unorthodox).

Individualism is also supported by a failure of the generalist program. Similar to grounding qualitativism, the generalist account of the world entails radical holism: Reality must be explained by one very complex fact and to give such a fact, the generalist needs to provide enough expressive resources to provide a sufficiently rich description of the world. As Sider observes (2020, pp. 99), this requires the introduction of infinitary syntactic functors such as infinitary quantification (or the algebraic counterpart of it, that is, cropping operator), conjunction and so on (of course this is required if the world in question is infinitary). In contrast, individualists, given an infinite world, instead of providing one single infinite fact will provide an infinite number of individualistic facts, but this is much less problematic because such facts will be linked to one another 'via recurrence of the individuals in them' (Sider 2020, pp. 99). Thus, no infinitary logical connectives are required. Sider observes that generalist vocabulary is at best only countably infinite, while for the individualist, if each individual can name itself, individualist fundamental language can contain more than a countably infinite number of elements. Thus, she can provide an infinitary description of the world, which is uncountably infinite but without appeal to infinitary connectives. For the generalist this route is blocked. She then overcomplicates language describing fundamental reality. And since qualitative parsimony (number of kinds of entities) is more important than quantitative parsimony (number of entities within a single kind of entities), it is better to have an uncountably infinite number of entities of one kind (individuals), than having a countably infinite number of entities of several kinds

(various kinds of connectives and operators) (although this might be debatable). Moreover, introducing new kinds of entities overcomplicates our fundamental descriptions, e.g., laws of nature. However, these descriptions should be as simple as possible.

Fithly, the individualist could argue that an argument from empirical undetectability does not work if you hold realism, which might be roughly understood as a view that reality is just out there, independently of whether we can discover it or not. Under such a view there is nothing wrong with unobservable entities as such. If some theory posits unobservables, that does not make it instantly false. As Sider observes (2020, pp. 107-108) unobservables are problematic only if they are explanatorily redundant. Thus, a claim that individuals are unobservable is not a decisive reason to eliminate individuals from our ontology. It should be supplemented by a further claim that individuals are explanatorily redundant. But that argument does not work, because individuals are important in our theories. Such concepts as quantifiers, variables or predicates are all individual-based and all of these concepts have vast applications both in philosophical and scientific theories. Dasgupta, thus, would have to eliminate all of these individual-based concepts. But he does not do that. Instead, he provides generalist paraphrases. But by doing so he just introduces an alternative language that is equivalent to the first-order language with quantifiers, variables, and predicates. Generalist paraphrases can do the same job as first-order descriptions but without individuals. This is not an elimination of concepts of firstorder logic. Further arguments are needed to show why generalist descriptions are preferable. As we have seen, arguments against individuals from empirical undetectability and physical redundancy are debatable. Thus, generalists would need further arguments that would show why generalist descriptions of fundamental reality are superior to the ones formulated by use of firstorder logic.

Individualism

It is difficult to find any explicit contemporary characterization of individualism. The majority of researchers focus their attention on the discussion of various forms of qualitativism such as generalism, ontological nihilism or structural realism. That being said, as I have indicated above, individualism seems to be a default view of many contemporary metaphysicians. In order to provide a general characterization of it, let's come back to the initial Adams' question:

Is the world – and are all possible worlds – constituted by purely qualitative facts or does thisness hold a place beside suchness as a fundamental feature of reality? (Adams 1979, pp. 5)

Individualist answer to it looks as follows:

Individualism: Besides general facts, reality contains irreducible individualistic facts.

I think that the best way of making sense of individualism is to, similarly as qualitativists do, appeal to the multi-layered view of reality which discerns fundamental and nonfundamental layers which are explanatorily or modally related. Individualism could then entail that individualistic facts exist: (a) only at the nonfundamental level, (b) only at the fundamental level, or (c) on both levels. Following that, we could then discern moderate and extreme variants of individualism. Moderate individualists would be happy with irreducible individualistic facts at least at *some* level of reality, whereas extreme individualists would say that individualistic facts are

not only irreducible to qualitative facts, but it is the individualistic facts that explain at least some of the qualitative facts.

Let's consider moderate individualism first. In order to model an explanatory link between fundamental and nonfundamental facts one could appeal, similarly as qualitativists do, to such notions like grounding, structure, essence or supervenience. In what follows I will be neutral on that matter and will stick with a primitive notion of explanation and talk about some facts explaining other facts. Let me briefly overview three possible variants of moderate individualism.

A first variant (a): moderate individualism is a view that reality contains primitive individualistic facts on the nonfundamental level. Those facts cannot be explained by qualitative facts, no matter if those are fundamental or nonfundamental. But nonfundamental individualistic facts can be explained by other nonfundamental individualistic facts, e.g., some facts about you are explained by some facts about your parents, while both kinds of individualistic facts are nonfundamental. There are however no fundamental individualistic facts. Fundamental reality can be explained in purely qualitative terms. A nice feature of this view is that it is consistent with the arguments against (fundamental) individuals provided by Dasgupta, structural realists or ontological nihilists.

A second variant (b): moderate individualism is a view that individualistic facts are present only at the fundamental level of reality. To support her position, an individualist could appeal to some data coming from the philosophy of science which I indicated above, and argue that some fundamental constituents of matter do not obey *PII*, which indicates, in turn, that there are fundamental individuals whose identities cannot be explained in qualitative terms, but

are primitive. Therefore, individualistic facts about such primitive individuals will be irreducible to qualitative facts, both fundamental and nonfundamental ones. That being said, such a view would hold that all nonfundamental individualistic facts can be explained by qualitative facts. For instance, all facts about nonfundamental individuals such as you, your favorite cat or your table can be fully explained by purely qualitative facts, fundamental, nonfundamental or both.

Finally, according to a third variant (c): individualism is a position according to which primitive individualistic facts can be found both on fundamental and nonfundamental levels of reality. There are fundamental individualistic facts about fundamental individuals such as particles, as well as individualistic facts about nonfundamental individuals such as you and your cat, and both kinds of facts cannot be explained by qualitative facts. However, there might be explanatory links between fundamental and nonfundamental individualistic facts, e.g., fundamental ones could explain nonfundamental ones. For instance, an individualist could argue that facts about you or your cat are explained by the individualistic facts about particles composing you or your cat.

One could also be an extreme individualist and maintain that all facts are individualistic. Some individualistic facts might explain other individualist facts (as in case of (c) variant of individualism), however, reality does not contain qualitative facts at all. Although such a view is logically consistent, it seems to be in tension with intuitive examples of qualitative facts such as generalizations. Perhaps an individualist could treat statements describing generalizations (as well as other supposed examples of statements describing qualitative facts) as nonfactual. But this seems to entail some kind of error theory regarding our scientific practice (or any other relevant discourse postulating qualitative facts). Perhaps, an extreme individualist, similarly as a generalist,

could try to paraphrase all statements describing generalizations (and any other remaining general statements) into singular statements describing individualistic facts. Yet, such a view is yet to be developed.

No matter which variant of individualism turns out to be correct, individualism as such has some advantages over classical accounts of metaphysical haecceitism based on the issue of individuation. Let me mention two of them.

A first nice feature of individualism is that individualistic facts are just any facts about individuals, they are not necessarily about thisnesses of individuals. Even more, one can believe in individualistic facts even if one disbelieves that there are thisnesses, understood either as individuators (as argued by Rosenkrantz 1993), or as primitive properties of being a given individual (as argued by Adams 1979), and that thisnesses are constituents of individuals. One could, for example, endorse a view that individuals are simples, that is, that they do not have parts or constituents, and define individualistic facts as being about simples. Perhaps one could even say that all thisnesses are equivalent to some qualitative properties but, nevertheless, hold that there are individualistic facts about individuals, which cannot be fully explained by purely qualitative features of reality. Thus, individualism understood as a theory about the nature of individuals facts is a very flexible view which is neutral to many metaphysical issues related to individuals

A second welcomed feature of individualism is that it is neutral on the issue of *PII*. You can be an individualist but at the same time hold that there cannot be qualitatively indiscernible individuals. For instance, you could say that 'Socrates exists' describes a nonqualitative fact irreducible to qualitative facts, but, nevertheless, deny that there could be a duplicate of Socrates,

Socrates*. That is, you could accept that there are irreducible facts about individuals, and that individuals cannot be explained away, but at the same time accept that individuals so understood obey *PII*. Of course, you could also accept that there are duplicates of individuals and deny *PII*. However, individualism itself is neutral on this. We no longer have to describe metaphysical haecceitism as committed to the falsity of *PII*.

At this point I end my overview of individualism and qualitativism. I will appeal to the results of these analyses in Chapter 6, where I show how doctrines of individualism and qualitativism allow us to explain Metaphysical Difference, a view that actual and possible individuals are represented as having distinctive metaphysical nature. I will argue that while individualism holds for the actual world and its inhabitants, all worlds representing alien individuals represent reality as being purely qualitative, and that generalism is a theory that allows us to explain that claim in more detail. Before I do that however, let me focus on the doctrines of existentialism and antiexistentialism that underlie Modal Difference.

Chapter 5

Existentialism and Contingent Possibilities

As I indicated in Chapter 2, the third essential component of Aristotelian ersatzism is the Modal Difference:

Modal Difference: Existentialism is true. Thus, while there are singular and contingent possibilities about actual individuals, all possibilities about possible individuals are general and necessary.

According to Aristotelian ersatzism, while there are plenty of *de re* possibilities involving *actualia* such as: (1) Socrates could be a tax collector, or (2) Possibly, you have a twin brother, there are no *de re* possibilities involving possible individuals such as particular talking donkeys or your twin brother. All possibilities about such entities are general. For example: 'Possibly, there is something that is a talking donkey', or 'Possibly, there is something that is your twin brother'.

In my view, a main reason to believe in Modal Difference so characterized is existentialism, a view that what singular propositions there are is a contingent matter. If we endorse existentialism, and we agree that there are no possible individuals (which is the main tenet of actualism as such), it follows that there are no singular propositions involving possible individuals. Thus, since singular possibilities are modeled on singular propositions, it follows that

there are no singular possibilities about possible individuals, but all possibilities about them are general.

In this chapter I will focus on explaining the dialectics between existentialists and antiexistentialists. Antiexistentialism is a denial of existentialism. According to it all propositions exist necessarily, including singular propositions. Those however do not involve contingent individuals, but their necessarily existing proxies such as individual essences. I intend to provide some existentialist arguments against antiexistentialism. Majority of these arguments target the notion of individual essence and show that any currently available conception of individual essences that is compatible with antiexistentialism is problematic.

Subsequently, I shall defend existentialism against Plantinga's famous argument against it, which takes the form of a puzzle that the existentialist faces, namely, that she is unable to account for the possibility of nonexistence of particular individuals. Roughly speaking, a puzzle runs as follows. If, let's say, Socrates would not exist, there would be no singular propositions about Socrates (as follows from existentialism). Thus, there would be no singular truths about him, including a truth stating his nonexistence. Therefore, existentialism cannot be true. This is the most serious challenge to existentialism that can be found in the literature. If one wants to hold existentialism, one has to somehow address it. Following the relevant literature, I observe that the puzzle stems from the four assumptions that the existentialist makes: (a) some individuals exist contingently, (b) Leibnizian analysis of modality is correct, (c) serious actualism is true, (d) singular propositions ontology depend on contingent individuals. In order to block the puzzle, the existentialist should modify her view by dropping one of the assumptions (excluding the fourth one, which is essential to existentialism as such). I argue that none of those solutions work.

In response, I claim that a proper solution is to add a fifth assumption according to which there are two distinct senses in which a proposition can be true relatively to a world: a proposition can be true *in* and truth *at* or *according to* a possible world (Adams 1981; Fine 1985; Turner 2005; Einheuser 2012). Now, in order to resist Plantinga's argument, the existentialist can apply truth in/truth at distinction to it and say that Plantinga's argument equivocates between those two senses of truth. In effect, the argument is inconclusive.

However, according to some researchers (see Plantinga 1983, Davidson 2007), the truth in/truth at distinction is not genuine, but involves picture-thinking. Moreover, it is argued that we should have one, uniform notion of truth rather than two. Another possible issue is that the truth in/truth at distinction seems to be in conflict with serious actualism, or that the notion of truth at is incompatible with S5, S4 and B systems of modal logic, but requires a weaker logic. However, by working out in more detail a truth in/truth at distinction, I show that the existentialist can address all of these issues.

Overview of the chapter. First (5.1.), I explain basic assumptions of existentialism and present the antiexistentialist counterargument to it provided by Plantinga. Then (5.2.), I analyze some possible ways an existentialist could answer Plantinga's. I argue (5.3.) that a preferable solution is to introduce truth in/truth at distinction. Some philosophers think however that such a distinction is unmotivated. In response to that (5.4.), I argue that the truth in/truth at distinction is genuine, and provide some motivations staying behind it. Following that (5.5.), I show how a supporter of such distinction can avoid some semantic inconveniences that are claimed to follow from her view.

5.1. Existentialism

Existentialism is an analytical analogue of continental existentialism according to which existence precedes essence defended, e.g., by Sarte (1943/1990). In its analytical form it states that singular propositions about particular individuals ontologically depend on those individuals. The reasoning behind such a view runs as follows. First, it is intuitive to assume that at least some individuals exist contingently. Second, it seems uncontroversial that there are singular propositions about contingent individuals. Now, existentialists argue that if a contingent individual x that is described by a singular proposition p had not existed, there would be no p nor any other singular proposition about x. Thus, it follows that there are no no truths about individuals which do not exist. For instance, if Socrates never existed, a singular proposition [Socrates is wise] would not exist, as well as all other singular propositions about Socrates. That being said, existentialism is consistent with the existence of necessary singular propositions, on the condition that they are about necessarily existing individuals such as God or numbers (or any other kind of individuals that you take to be necessary).

Obviously, existentialism is true under the Russellian conception of propositions according to which propositions are structured entities which are constituted by entities they describe. For instance, a singular proposition [Socrates is wise] has as its constituents Socrates, an instance of a property of *being wise* and an instance of a relation of exemplification. Qualitative properties and relations exist necessarily, but since Socrates exists contingently, any singular (Russellian) proposition about him will be contingent as well.

¹¹⁹ Contemporary proponents of the Russellian view on propositions include: Soames (1985, 1987), Salmon (1986, 1989), King (2007, 2009).

That being said, existentialism does not entail the structured view of propositions. ¹²⁰ It is compatible with a thinner conception of propositions such as one proposed by Stalnaker (2012, pp. 23-27), according to which propositions are individuated by their truth conditions. Under this view singular propositions are such that their truth conditions depend on how some individuals are. Existentialism can then be viewed as a claim that truth conditions of singular propositions ontologically depend on what individuals there are. For instance, if there would be no Socrates, there would be no truth conditions involving him. Thus, there would be no singular propositions about Socrates.

5.2. Plantinga's argument against existentialism

The strongest (at least to this day) argument against existentialism has been provided by Alvin Plantinga (1983). A problem highlighted by his argument is the modal analogue of a classical problem of nonbeing according to which one cannot consistently ascribe a property of nonexistence to an individual which does not exist. For instance, if you say that Socrates does not exist, you then ascribe a property of nonexistence to Socrates. But if there is no Socrates, how can he exemplify any property, including a property of nonexisting (assuming that there is such a property)? A similar issue appears in modal contexts and affects existentialist accounts of singular propositions. A problem runs as follows. It is intuitive that Socrates could cease to exist. If that would be the case, then it would be true that Socrates does not exist. But if singular propositions ontologically depend on individuals (as existentialists claim), a singular proposition [Not[Socrates exists]] would not exist had Socrates not exist. Thus, if Socrates would not exist, it

¹²⁰ For a similar view see Stephanou (2020).

would be not true that Socrates does not exist. Thus, an existentialist cannot consistently hold

her assumptions and explain a possibility of nonexistence of contingent individuals.

Originally, this argument has been delivered by Plantinga (1983, pp. 9-10). It takes a form

of a reductio of existentialism:

(1) Possibly, Socrates does not exist.

(2) If (1), then [Not[Socrates exists]] is possible.

(3) If [Not[Socrates exists]] is possible then it is possibly true.

(4) Necessarily, if [Not[Socrates exists]] had been true, then [Not[Socrates exists]]

would have existed.

(5) Necessarily, if [Not[Socrates exists]] had been true, then Socrates would not have

existed.

(6) [Not[Socrates exists]] is possibly true (from 1, 2 and 3).

(7) Necessarily, if [Not[Socrates exists]] had been true, then [Not[Socrates exists]]

would have existed and Socrates would not have existed (from 4 and 5).

(8) Conclusion: It is possible that both Socrates does not exist and [Not[Socrates

exists]] exists (from 7 and 8).

Thus, existentialism entails a contradiction. Therefore, it cannot be true.

The problematic conclusion follows from the four assumptions that the existentialist

makes:

Contingent Existence: There are contingently existing individuals.

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Leibnizian Analysis of Modality: Some proposition p is true iff there is a possible world w according to which p is true.

Serious Actualism for Propositions: A proposition p is true according to w if and only if p exists according to w.

Ontological Dependence: A singular proposition p about an individual a exists according to a possible world w iff a exists relative to w.¹²¹

Contingent Existence is assumed in the first premise of Plantinga's argument. Leibnizian Analysis of Modality is presumed in a step from (2) to (3): if a proposition is possible, it means it is possibly true, which means, given Leibnizian Analysis of Modality, that a proposition is true at some possible world. In turn, Serious Actualism for Propositions is presumed in premise (4): if $[Not[Socrates\ exists]]$ had been true at some world w, then it would have a property of being true at w. But something can have a property only if it exists. Thus $[Not[Socrates\ exists]]$ has to exist at worlds at which it is true. Lastly, Ontological Dependence is just inherent to the thesis of existentialism.

From Plantinga's argument it follows that if the existentialist combines her view with all four assumptions, then she cannot explain the possibility of nonexistence of individuals. Thus, existentialism has to be abandoned.

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¹²¹ A similar idea can be found in Einheuser (2012, pp. 2). I add the Contingent Existence assumption to the list of assumptions indicated by Einheuser.

5.3. Antiexistentialism and individual essences

If we accept Plantinga's argument, we should endorse an antiexistentialist explanation of the possibility of nonexistence of individuals. In contrast to existentialism, the antiexistentialist view has Fregean roots, for it either entails that propositions lack structure and constituents, or that propositions do have structure and constituents but their constituents are Fregean senses, concepts or other kinds of abstract entities. But, since it is widely held that abstract entities are necessary, then propositions involving or describing such abstract entities have to be necessary as well.

According to the Plantinga's variant of antiexistentialism, singular propositions have constituents but those never are contingent individuals, but their proxies. that is, nonqualitative individual essences (thisnesses). For Plantinga, thisnesses, like all other properties, are abstract and, thus, necessary, i.e., they exist in all possible worlds. As a result, since singular propositions are about thisnesses, singular propositions necessarily exist as well. Thanks to that, Plantinga can easily explain the possibility of nonbeing: at worlds at which you do not exist, your thisnesses exists, but is just unexemplified. Thus, there is no problem with referring to you and stating your nonexistence at worlds at which you do not exist because you got an unexemplified necessarily existing proxy that is a subject of singular propositions about you. As a result, Plantinga is able to avoid the modal problem of nonbeing by denying Ontological Dependence of singular propositions on individuals. At the same time, his view preserves Contingent Existence, Leibnizian Analysis of Modality and Serious Actualism for Propositions.

However, existentialists have some strong arguments against thisnesses as well as against any of the other plausible views on individual essences that are available to the antiexistentialist,

e.g., ones which construe individual essences purely qualitatively. Under such an approach, one reduces every bit of the nonqualitative content of singular propositions that involves direct reference to contingent individuals to purely qualitative content. As a result, all singular propositions are paraphrased into general ones, which exist necessarily. In what follows I will present some reasons for which the existentialist finds (Plantingian) thisnesses and qualitative individual essences problematic. I shall consider three types of qualitative approaches to essences:

(a) one based on the notion of qualitative individual essence, (b) another one based on the notion of the world-indexed essence, and (c) and another one based on the notion of relational essence.

5.3.1. Against thisnesses

As I have already indicated in Chapter 2 (sections 2.2. and 2.3.) where I provided an initial overview of Aristotelian ersatzism and proxy actualism, existentialists provide some strong arguments against (Plantingian) thisnesses. For them, an analogue of existentialism for propositions holds for thisnesses as well (and for other purely nonqualitative properties such as being identical to x, or impure properties such as being as tall as Kripke). As Adams (1981, pp. 11) and others (McMichael 1983a, Menzel 1990) argued, thisnesses (similarly as any other purely nonqualitative or impure property) ontologically depend on individuals they are about. More specifically, for any thisness T of any individual x, it is essential to T that it is exemplified by x. Thus, in every possible world in which T exists, T is exemplified by x. It is thus impossible for T to exist but be unexemplified by x. Thus, contrary to Plantinga's position, there are no unexemplified thisnesses. But why is it essential to T that it is exemplified by x? As Adams writes (1981, pp. 11), 'to be the property of being identical with a particular individual is to stand,

primitively, in a unique relation with that individual'. Thus, had x cease to exist, T would not stay in an unique relation to x. Therefore, T would no longer exist because staying in the unique relation to x is constitutive to being T. Now, since according to actualism there are no possible individuals but only actual ones, no possible individual can stay in a unique relation to any thisness. As a result, there are no thisnesses of possible individuals which are currently unexemplified. All thisnesses are exemplified. In consequence, it is impossible to appeal to unexemplified thisnesses as a solution to the modal puzzle of nonbeing and treat them as proxies of nonexistent individuals.

5.3.2. Against qualitative individual essences

When faced with this criticism the antiexistentialist could instead conceive individual essences as purely qualitative individual essences, that is, sets of qualitative essential properties. Qualitative individual essences are unique for their bearers: no two distinct individuals could share the same qualitative individual essence. Thus, they obey *PII*. They are also necessary. This is so because qualitative properties in general, such as *being red*, *having spherical shape*, *having electromagnetic charge*, do not ontologically depend on individuals or on how individuals are. Thus, sets of qualitative necessary features that constitute qualitative individual essences are necessary as well. As a result, similarly as in the case of Plantingian essences, qualitative individual essences can help us explain the puzzle of nonbeing. One can just say that at worlds at which I do not exist, my qualitative individual essence exists but is not exemplified.

However, there are some strong reasons against qualitative individual essences.

Firstly, since such essences are qualitative, they are shareable. Thus, contrary to an initial thought, they are not unique to individuals. As a result, they cannot serve the role of proxies of individuals at worlds at which relevant individuals do not exist. A reason for which qualitative essences are shareable is modal: If you take any individual x and any qualitative feature F and say of x that it essentially has F, it is possible that there is a qualitatively indiscernible duplicate of x which would essentially be F as well. And since this reasoning applies to any qualitative feature, it applies also to qualitative individual essences. As a result, there are no qualitative individual essences. All purely qualitative essences have to be general (shareable) essences. This is bad news for the antiexistentialist because if all qualitative individual essences turn out to be generic essences, it follows that all singular propositions about individuals (or more precisely, about their supposed unique proxies, that is, qualitative individual essences) should be paraphrased into general propositions which are about generic essences. Thus, the antiexistentialist can avoid the problem of nonbeing on the cost of giving up singular propositions altogether. But this means to give up the whole topic of describing singular possibilities for particular individuals.

The antiexistentialist could insist that there are unique qualitative characteristics, such as tropes, which cannot be shared by qualitative duplicates and that we could build qualitative individual essences from them. But, as I indicated in Chapter 4, section 4.3.2., where I was discussing trope bundle theory, tropes are a rather problematic category of entities. A main reason for that is that there is no satisfactory account of individuation of tropes. Trope theory also has some serious difficulties with accounting for relations between individuals understood as bundles of tropes (see Hawthorne and Sider 2002). Additionally, tropes allow for primitive (haecceitistic) differences between possibilities (worlds), without implying any qualitative differences between

them. If so, qualitative individual essences built out of tropes would entail some kind of modal haecceitism. But this would run against the role that qualitative individual essences are usually meant to play in modal metaphysics, which is to provide a purely qualitative account of representation *de re*, which does fine without any brute (haecceitistic) differences between worlds. Thus, if the antiexistentialist wants to preserve an antihaecceitistic account of *de re* representation based on qualitative individual essences, she should not understand them as sets of tropes.

Secondly, a related worry is that identifying thisnesses with qualitative individual essences presumes the controversial thesis of *PII*. If each individual has associated a unique qualitative individual essence, then there are no qualitatively indiscernible individuals which are numerically distinct. However, as I showed in Chapter 4, many researchers think that there are either actual or possible cases of some cases of qualitatively indiscernible individuals that violate *PII*. If so, a view precluding all cases of indiscernibles is revisionary with respect to our knowledge about the actual world, or about our modal intuitions, or both. Perhaps one could argue that a possibility of indiscernibles should be exchanged for the postulate of qualitative individual essences because the later notion is fruitful in many other ways. But I do not see how this could be maintained. Many researchers do not believe in essential properties in general. And *individual* essences which are understood as collections of essential properties unique for each individual are even more controversial than usual essences because they provide even stronger modal constraints on what is possible. The more essential properties you accept the more restrictions on what could have

¹²² Such purely account of modalities *de re* has been defended e.g., by Leibniz (see Mondadori 1973, 1975, Cover and O'Leary-Hawthorne (1999), Forbes (1985, 2002), Legenhausen (1989). Such an account of modalities *de re* is also an essential part of the counterpart theory of modality defended, e.g., by Lewis (1973, 1989). Hazen (1979a), Forbes (1982), Cresswell (2004)

been are imposed. However, the fewer the restrictions the better, especially if those restrictions cannot be explained in terms of naturalistic explanations, and definitely, some essentialistic explanations cannot be explained in such a way. Thus, assuming that each individual has associated qualitative individual essence is a very controversial claim.

Thirdly, if you agree that qualitative individual essences individuate individuals, it follows that all essentialistic truths turn out analytic, and thus, trivial. For instance, if you say that x is essentially F, and at the same time you identify being x or being identical to x with having a particular qualitative individual essence composed of qualitative essential features F, G, H, then saying that x is essentially F is just saying that an individual essence built out of F, G, H contains F.

Fourthly, such conception of essence, in order to provide a systematic and necessary explanation of the issue of nonbeing requires that all individuals have qualitative individual essences. However, even if we assume, for the sake of the argument, that such essences are genuine, supposedly not all individuals have qualitative individual essences. An example could come from the field of fundamental physics according to which some entities such as bosons (e.g., photons) could share their qualitative roles and be only weakly discernible through antisymmetric relations that they bear to each other (see Saunders 2006, Muller and Seevinck 2009). Bosons however lack qualitative individual essences. If so, the possibility of nonexistence involving such individuals cannot be accounted for by the antiexistentialist. But why possibilities of some actual individuals (such as bosons) should be treated differently than possibilities involving other actual individuals such as tables or humans? It turns out then, that antiexistentialist explanation of modality based on qualitative individual essences would leave gaps in modal space.

5.3.3. Against world-indexed and relational essences

Finally, the antiexistentialist could conceive individual essences as being indexed to whole worlds, or as related to some individuals within a given world.

Let's consider the first option. According to it (see Plantinga 1979), for any individual x, its individual essence is a set of all its properties (nonqualitative and qualitative) relativized to a possible world in which x exists. For instance, Socrates has the property of being wise at w_{\oplus} , being a teacher of Plato at w_{\oplus} and so on. If all of his properties are so relativized, they together constitute his individual essence. This is so because Socrates has each of his world-indexed properties in every world in which he exists. Moreover, no other individual could share a collection of all of his world-indexed properties. Thus, PII follows once again.

Now, the problem with such an account (ignoring the issue of PII) is that all properties of a given individual, if indexed, turn out to be essential for it. Thus, we end up with extreme essentialism which is highly implausible. A proponent of such a view could try to avoid such a consequence and account for modal variability of Socrates by saying, e.g., that although Socrates has a property of being wise at w_{\oplus} at every possible world at which he exists, having such property is compatible with having a property of being not-wise at w_x . But this solution does not work because being wise at w_{\oplus} and being not-wise at w_x are compossible. Thus, we did not ascribe to Socrates some property X that he has at w_{\oplus} and its negation not-X that he has at w_x , but we ascribed to him two distinct properties X and Y, which are both essential to Socrates As a result, we end up once again with extreme essentialism. Someone might try to avoid extreme essentialism by saying that Socrates has a property of being wise at w_{\oplus} at some world w_1 but he has a property

of being unwise at $w_{@}$ at some other world w_{2} . But this cannot work for it would follow that Socrates is represented as being both wise and unwise at $w_{@}$, which is impossible.

Now, let's consider the relational account of essences, according to which individual essence is a qualitative relation that links an individual in a given world w to other individuals that exist at w. For instance it could be a relation *originating from certain gametes* that could link Socrates with particular male and female gametes, let's call them *John* and *Jill* (Kripke 1980, Robertson 1998).

A first issue with the notion of relational individual essence is that it makes essence extrinsic. However, there is a strong intuition that essences should be intrinsic to their bearers. If essences explain what it takes to be a given individual, they should explain it independently of how some other individuals are. It seems intuitive that an individual x should preserve its essence, that is, that it should be explainable what it takes to be x, even if x would be the only individual existing in a given possible world. If essences are extrinsic, no individual could exist alone in any possible world and possess its essence. Even if not all essential properties are intrinsic to its bearer, some essential properties definitely are. Paradigmatic examples of essential properties are intrinsic properties such as: being made out of matter, being rational, being human, and so on.

Secondly and relatedly, relational essences are unable to explain a nonexistence of an individual x at a possible world w if at w individuals involved in x's relational individual essence do not exist. For instance, consider Socrates and his relational essence: being born from gametes John and Jill. Suppose that Socrates does not exist at w. In such a case the antiexistentialist would like to say that Socrates' essence exists at w but is unexemplified. However, suppose that one of the two gametes (e.g., John) involved in Socrates' essence cease to exist at w as well. Since being

born from gametes John and Jill involves direct reference to particular individuals, similarly as Plantingian thisnesses, they ontologically depend on individuals they describe. As a result, at worlds at which John does not exist, being born from gameetes John and Jill does not exist either. Thus, such an essence cannot at such worlds account for Socrates' nonexistence. In effect, an account of de re modalities based on relational essences leaves many possibilities unexplained.

Perhaps one could try to reduce nonqualitative components of relational essences so that they become purely qualitative and, thus, necessary ones. This would require reducing *being Jill* and *being John* to qualitative properties. And similarly for all other individuals involved in all other relational essences. As a result, antiexistentialism would be committed to some kind of metaphysical antihaecceitism according to which identities of individuals are reducible to qualitative features. A first issue with such a position is that such reductions seem to be very hard to come by. A second issue is that we would expect that antiexistentialism will be neutral on the metaphysical issues concerning nature of identities of individuals.

In summary, I provided some reasons for which I think all currently available accounts of proxies of individuals are problematic. In light of this, I conclude that the antiexistentialist is unable to establish a view that singular propositions involve necessary existing proxies, and, thus, that all singular propositions exist necessarily. Of course, I did not provide a knockdown argument against antiexistentialism as such, because, presumably, the antiexistenstialist could try to develop an account of singular propositions that does fine without commitment to proxies. Thus, I will be content with a modest conclusion that Plantingian antiexistentialism and its related forms face some serious issues.

5.4. Fixing existentialism: solutions that do not work

I have shown that antiexistentialist accounts of singular propositions based on the notion of individual essence are unattractive. In this section, I will provide a positive argument in favor of existentialism showing how such a view can resist Plantinga's argument and solve the modal puzzle of nonbeing.

Initially, since Plantinga's argument is conclusive, it might be thought that in order to defend her position, the existentialist should attack some of its premises. Let's overview possible solutions of that kind.

5.4.1. Deny Contingent Existence

First option could be to deny Contingent Existence presumed in premise (1) of Plantinga's argument. This way of avoiding the problem of nonbeing is preferred by necessitists such as Linsky and Zalta (1994, 1996) and Williamson (1998, 2000, 2002). However, for reasons already indicated in Chapter 2, I do not not think that appealing to necessitism is promising.

5.4.2. Deny Leibnizian Analysis of Modality

Another option is to deny the Leibnizian Analysis of Modality. This requires denying a step from (2) to (3): If you say that a proposition p is possible it does not follow that p is possibly true, that is, that p is true in some possible world. However, there are at least two reasons for which it is difficult to abandon the Leibnizian Analysis of Modality.

Firstly, it provides us with an extensional analysis of modal concepts. If you abandon Leibnizian Analysis of Modality assumption, then you abandon the main reason for which

possible worlds are postulated. You should then rather opt for some alternative, nonextensional accounts of modal concepts such as modalism, fictionalism or dispositionalism.

Secondly, Leibnizian Analysis of Modality supports a very natural way of thinking about a relationship between possible worlds and possibilities. According to the Leibnizian Analysis of Modality, each possibility refers to a distinct possible world. In other words, the Leibnizian analysis entails Modal Correspondence, the principle according to which each possibility refers to a unique possible world. As Adams (1974, pp. 225) puts it: '(...) possibility is holistic rather than atomistic, in the sense that what is possible is possible only as part of a possible completely determinate world'. Thus, if one abandons Leibnizian Analysis of Modality, then one has to abandon Modal Correspondence as well. However, as I argued in Chapter 3, section 3.6., this is very costly because by abandoning Modal Correspondence we disjoint possibilities from possible worlds. But the very purpose of introducing possible worlds was to explain possibilities. By denying Modal Correspondence, we allow possibilities to play the role of possible worlds, or at least a part of it. We thus either make possible worlds redundant, or we complicate our explanation of modality by saying that some explanation is done by possibilities and some by possible worlds (a similar point is made by Kment 2012). But this makes our account of modality much less parsimonious than the orthodox one, which preserves the Modal Correspondence principle. In what follows, I shall look for a solution to the Plantinga's puzzle which preserves it as well.

5.4.3. Deny Serious Actualism for Propositions

Finally, someone may deny Serious Actualism for Propositions. Let me discuss two arguments against serious actualism to which one could appeal: one proposed by Nathan Salmon, and another one based on meinongianism. Both arguments were meant to target serious actualism for individuals, but they could also be used to criticize serious actualism for propositions. Both arguments amount to an idea that individuals (or propositions) can have properties even if they do not exist. How is this possible?

Let's consider Salmon's argument first, as presented in Salmon (1987). ¹²³ Consider two gametes, 'Egg' and 'Sperm'. Suppose that they never united and will never unite, even though they could have united. If they would unite, they would give rise to a new individual, call him 'Noman'. As Salmon suggests (1987, pp. 49-50, see also Jacinto 2019, pp. 475), 'Noman' refers to an individual that would exist had 'Egg' and 'Sperm' united. But, since 'Egg' and 'Sperm' actually are not united, actually there is no such individual as Noman. Despite that, Noman exemplifies some properties, although not usual ones. For instance, Noman, since he does not exist, is not human, thus, it has no properties characteristic for humans. In general, he lacks properties that entail his existence. Nevertheless, he has *some* properties that are independent on whether he exists or not, e.g., a semantic property of *being named 'Noman'*, or a disjunctive property of *being possibly existing or necessarily not existing* (Salmon 1987, pp. 98). Had Noman existed, he would have many other properties, but until that is the case, he has only a highly restricted number of

¹²³ Other arguments against serious actualism can be found in Fine (1985), Pollock (1985). For responses to Fine see Stalnaker (2012, pp. 102-113), Williamson (2013, pp. 154-155) and for responses to Pollock see Plantinga (1985), Stephanou (2007). For a further discussion of serious actualism and further references see Jacinto (2019).

properties. This however is sufficient to establish a conclusion that even nonexisting individuals can have properties. Thus, serious actualism is untrue.

For many philosophers, Salmon's argument is unacceptable. For instance, for necessitists, for whom all individuals necessarily exist. Thus, it is impossible to say that Noman could exist. If Noman could exist, he necessarily exists although, actually, he is nonconcrete. But, as I have already pointed out in Chapter 2, necessitism is problematic on its own. Moreover, as Jacinto points out (2019, pp. 476), Williamsons' argument (2002) from necessitism against Salmon's position presupposes serious actualism. Thus, it is not a good strategy to resist Salmon's argument by appealing to necessitism.

I think a much better way of answering Salmon is to observe that only existing individuals can be referents of our names. If 'Noman' refers to Noman, then Noman exists. However, it is impossible that 'Noman' refers to a nonexisting individual. There are just no names referring to nonexisting individuals. Of course, we can introduce artificial names into our language, such as 'Noman', but those names do not refer to possible individuals because there are no such individuals. They are just shortcuts for the qualitative descriptions that could be true of something. For example, a description such as: 'the person who originates from 'Egg' and 'Sperm'. However, actually, there is no such person. At best there is an unexemplified relational essence (in this case, origin essence) associated with that description, which actually exists (ignoring issues associated with relational essences indicated above in section 5.2.). But then, 'Noman' refers to a relational essence which actually exists and which, thus, can exemplify properties, e.g., being possibly exemplified. Thus, it does not refer to a nonexistent entity. Thus, serious actualism is not threatened.

Another way of resisting Salmon's argument is to assume that names do not refer to individuals but ascribe properties to them. ¹²⁴ Each name can then be conceived as ascribing a thisness to an individual. Thus, 'Noman' ascribes to something a property of *being Noman*. But assuming that there are no thisnesses of nonactual individuals, 'Noman' is not a name at all. A result is the same as before: contrary to what Salmon claims, we lack names of nonactual individuals

A second way of resisting Serious Actualism for Propositions could be to appeal to some form of meinongianism, a view which makes a distinction between different modes of being. An opponent of serious actualism could then claim that whenever an individual does not exist, it subsists (or is nonconcrete), and it can exemplify some properties (including a property of nonexistence) as a subsisting individual. Thus, serious actualism fails. In addition to that, some proponents of meinongianism distinguish two ways in which individuals might have properties, depending on whether they exist or not. In short, while existing individuals exemplify properties in the usual sense of having of properties, nonexisting individuals encode (Parsons 1980, Zalta 1983, 1988), immanently contain (Ingarden 1931/2013) or are ascribed to have (Van Inwagen 1977) properties. One could then apply meinongianism to propositions. and say that it is possible for a proposition to not exist but to subsist and to encode/contain/have ascribed to it a property of being true.

An obvious issue with such a view is that one has to discern different modes of being and to accept in her ontology subsisting (or contingently nonconcrete) entities which are usually

¹²⁴ The former view is referentialism, while the latter is predicativism. For references see Jacinto (2019, section 4). Salmon's argument assumes referentialism about names.

taken to be nonexistent. Moreover, if one chooses to discern a special way in which subsisting entities possess properties (e.g., that they encode properties), then one complicates the ideology of a theory in a bad way, because a relation of encoding (or any other alternative kind of a relation of possession of properties indicated above) seems to not have any ground in our pre-theoretic intuitions. Thus, reasons for endorsing it are purely theoretical. However, I think we have a much cheaper way of defending existentialism which preserves serious actualism and avoids meinongianism.

As we can see, both Salmon's and meinongian ways of denying serious actualism are problematic. Surely, a lot more should be said about both positions. However, let me make a conditional conclusion: *if* you want to preserve a view there are no genuine names of nonexisting individuals (and you should do it, if you share intuitions lying behind Aristotelian ersatzism) and you want to avoid meinongianism, you should look for an existentialist solution to the Plantinga's argument which preserves serious actualism.

5.5. Fixing existentialism: a solution that works

In my opinion, a preferable existentialist way of answering the puzzle of nonbeing is to discern two senses in which a proposition can be true relative to a possible world. According to this idea, a proposition can be true *in* a possible world and true *at* a possible world. Such a distinction is made by many Aristotelian actualists, e.g., Adams (1981), Fine (1985), Fitch (1996), Turner (2005) and Einheuser (2012). Firstly (5.5.1.), I present a distinction, then (5.5.2.) show how it allows the existentialist to answer Plantinga's argument. However, some philosophers (including Plantinga himself) do not believe that truth in/truth at distinction is genuine. I answer them

(5.5.3. and 5.5.4) by developing truth in/truth at distinction in more detail. After doing that (5.5.5), I explain away some further issues that are usually taken to follow from the truth in/truth at distinction.

5.5.1. Inner and outer truth

Let me start by considering Fine's characterisation of the distinction between two senses in which propositions can be true relative to possible worlds. Fine suggests that:

One should distinguish between two notions of truth for propositions, the inner and the outer. According to the outer notion, a proposition is true in a possible world regardless of whether it exists in that world; according to the inner notion, a proposition is true in a possible world only if it exists in that world. We may put the distinction in terms of perspective. According to the outer notion, we can stand outside a world and compare the proposition with what goes on in the world in order to ascertain whether it is true. But according to the inner notion, we must first enter with the proposition into the world before ascertaining its truth (Fine 1985, pp. 163).

Some of the mentioned authors (Adams 1981, Stalnaker 2012) identify inner truth with truth in and outer truth with truth at. I follow their approach. These are just different ways of expressing the same idea. In what follows I shall use these labels interchangeably.

As highlighted by Fine, a difference between both notions of truth lies in the fact that when p is true in some possible world w, we evaluate it from the perspective of w itself. Thus, in order for p to be true in w, p needs to exist in w. In turn, when p is true at w we evaluate p from

the outside, that is, since we are actualists, from a perspective of the actual world. This is so, because as actualists we treat all possible worlds to be possible ways for the actual world to be. Thus, the actual world has the privileged status. It is the center of modal space. Of course, each possible world represents itself as being actual. Yet, they are not actualized in the absolute sense. We can thus take a proposition existing at the actual world and evaluate it at some world w, however this does not require p to exist in w in order for it to be true at w. It is sufficient that it exists in the actual world.

Let me explain how this distinction works with an example. Let's come back to the proposition [Not[Socrates exists]]. Call it p. Given the Leibnizian Analysis of Modality, we can say that p is true at some possible world, that is, that there is a possible world at which Socrates does not exist (e.g., a world at which there are no humans at all). Call such a world $w_{-Socrates}$. Now, although p is true at $w_{-Socrates}$, p is not true in $w_{-Socrates}$. This is so because if $w_{-Socrates}$ were actual, there would be no Socrates. Now, if we assume existentialism, if there would be no Socrates, there would be no singular propositions being directly about him (for the fine-grained conception of propositions) nor singular propositions (including p) whose truth conditions would essentially depend on Socrates (for the coarse-grained conception of propositions). As a result, since a proposition can be true (in any sense of being true) only if it exists (which follows from serious actualism), since p would not exist in $w_{-Socrates}$ were $w_{-Socrates}$ actualized, p would not be true in $w_{-Socrates}$ Socrates as well. However, p actually exists and is about Socrates. In the actual world we can easily imagine that Socrates could never have existed and express this idea by constructing a negative existential singular proposition, namely the proposition p. Proposition p is both false at and in the actual world. However, it is true at many worlds which represent Socrates as nonexisting.

At this point someone might be curious how possible worlds can represent Socrates' nonexistence. Since I work within the framework of linguistic ersatzism, possible worlds are assumed to be sets of sentences. But if so, one might wonder how a possible world built out of sentences can represent that Socrates does not exist other than by including a sentence 'Socrates does not exist' which describes a proposition [Not[Socrates exists]]? But a possible world cannot include such a sentence, because *ex hypothesis*, Socrates does not exist at a world in question, thus, he cannot name himself at it. So, it seems that the existentialist, by endorsing the ersatz conception of worlds, has difficulties with representing Socrates' possible nonexistence. Thus, a puzzle of nonbeing reapers for the ersatzist who wants to endorse existentialism.

To solve this issue, recall that possible worlds can represent possibilities either explicitly or implicitly. It is true that the ersatzist cannot allow for explicit representation of Socrates' nonexistence in worlds in which there is no Socrates because in such worlds there are no sentences naming Socrates. However, such worlds can represent Socrates' nonexistence implicitly, by not containing nor implying any truth directly mentioning Socrates (see Adams 1981, pp. 21). In other words, ersatz worlds can represent Socrates' nonexistence by simply not telling or implying anything about him. Such worlds can include general sentences such as 'The father of western philosophy' etc., but since purely qualitative descriptions never uniquely pick out individuals, ersatz worlds containing such descriptions cannot either explicitly or implicitly represent Socrates' nonexistence (nor existence).

5.5.2. Plantinga's argument revisited

Now, if a proposition can be true relative to a possible world in two senses, then the existentialist can provide a strong response to Plantinga's argument. A thought is that different premises will turn out true under different readings of the notion of truth. However, there will be no reading under which all premises of the argument will turn out true. To be more specific, recall two premises of Plantinga's argument:

Premise (3): If [Not[Socrates exists]] is possible then it is possibly true.

Premise (4): Necessarily, if [Not[Socrates exists]] had been true, then [Not[Socrates exists]] would have existed.

Now, if the distinction between truth in and truth at is genuine, then the notions of truth involved in premises (3) and (4) are distinct and the argument equivocates between these different understandings of truth. To be more precise, premise (3) can be true only under the truth at reading: since possible truth means being true at a possible world, [Not[Socrates exists]] is taken to be true at w-Socrates. But it cannot be true in w-Socrates, because in order for it to be true in w-Socrates, it would have to exist in w-Socrates. However, if it existed in w-Socrates would have to exist in w-Socrates as well. But then, it would be false that [Not[Socrates exist]] is true in w-Socrates. Thus, we would get a contradiction. In turn, premise (4) can be true only under truth in reading: if [Not[Socrates exist]] is true in w-Socrates. But if

[Not[Socrates exist]] would be true at $w_{-Socrates}$, then it would not follow that [Not[Socrates exist]] exists in $w_{-Socrates}$, because a preposition can be true at $w_{-Socrates}$ without existing at $w_{-Socrates}$.

There is thus no single notion of truth that might underlie the whole argument, as Plantinga desires. Thus, the argument turns out to be inconclusive.

Plantinga himself however does not consider this response to his argument as a serious one because he does not believe that a distinction between truth in and truth at is genuine. For Plantinga the distinction is just picture thinking. Standard truth in a possible world is sufficient for our modal theorizing and we do not need any other notion of truth. In order to address that issue, existentialists need to show that there are strong intuitive and theoretical reasons to postulate the notion of outer truth as distinct from the well-established notion of inner truth.

Thankfully, there are such reasons. As I shall argue, a main rationale behind outer truth is that some facts about modality can be explained only by the use of the notion of outer truth. Thus, it is not a virtue but a vice of Plantinga's view that it has a uniform notion of truth. By not including the notion of outer truth in our actualist theory of modality, we misrepresented facts about modality.

5.5.3. Motivating the truth in/truth at distinction

Let's first focus on the notion of inner truth which is a default notion of truth used by possible world theorists. This notion is presumed in the Leibnizian Analysis of Modality as well: It is possible that p iff p is true in some possible world w, that is, had w been actualized, p would exist

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¹²⁵ See Fine (1985, pp. 194). Although he discusses a slightly different variant of Plantinga's argument. See also Turner (2005, pp. 193) and Einheuser (2012, pp. 3) for similar solutions to Plantinga's argument.

¹²⁶ Plantinga (1983, pp. 15-20). Similar position towards this distinction is held by Crisp (2003) and Davidson (2007).

in w and would be true in w (equivalently, it would be the case that p). Plantinga assumes this notion of truth in his theory of modality as well as in his argument against existentialism. According the this standard view, a proposition p is true in w iff p is an element of w:

Inner Truth: A proposition p is true in w iff $p \in w$

Of course, since I work on the assumption of Aristotelian ersatzism, which identifies possible worlds with sets of sentences rather than propositions, we should slightly modify Inner Truth to the following form:

Inner Truth*: A proposition p is true in w iff a sentence s that describes proposition $p \in w$. Of course, since possible worlds can represent explicitly as well as implicitly (by entailing some truths which follow from explicit truths), we should allow for propositions true in w which are true implicitly. Thus, we should introduce two kinds of inner truths:

Explicit Inner Truth*: A proposition p is true in w explicitly iff a sentence s that describes p $\in w$.

Implicit inner Truth*: A proposition p is true in w implicitly iff a sentence s that describes p is entailed by other sentences e w.

This is how we can characterize a complete internal story of w. It includes explicit truths that hold in that world and implicit truths which follow from explicit ones. For instance, a complete story

issue of implicit representation with regard to Aristotelian ersatzism.

¹²⁷ However, there is of course a problem of implicit representation that I marked in Chapter 2. There is no easy route from explicit truths to implicit truths. Standard logical entailment is not sufficient to obtain implicit truths from explicit ones. On top of logical entailment we need some metaphysical conventions (axioms, laws) determining which explicit truths entail which implicit truths. See Chapter 7, section 7.3.1. below for a further discussion of the

of w given in terms of inner truths includes explicit fundamental description of w (e.g., arrangements of fundamental particles) plus implicit truths regarding macro individuals, which supervene or are grounded on the fundamental description of w. Both descriptions are internal characterisations of w, thus, are inner truths.

Now, the existentialist says that the world story associated with w given in terms of inner truths is not a complete story of w. There are some missing truths holding at w, which are not internal to it, but which hold at w from the perspective of the actual world.

Representational and ontological completeness

As I just said, for the Aristotelian ersatzist who holds existentialism, inner truths do not say everything that is true relative to a possible world. In order to explain this position I would like to refer to a distinction made by Iris Einheuser (2012, pp. 6-8) between two senses in which possible worlds can be complete. Each sense of completeness will be associated with each of the discussed notions of truth.

On the one hand, worlds can be ontologically complete. A world w is ontologically complete if we say of it all truths statable in the representational resources available relative to that world, that is, the representational resources that would be available to us, had w been actualized. In other words, complete ontological characterisation of a world w fully characterizes its intrinsic character, without any reference to the actual world. Here the world w is considered in itself. As Einheuser observes, an ontologically complete representation of a world w is:

fashioned so as to be adequate to capture all the intrinsic ontological and structural features of what is characterised. The intrinsic features of that which is characterised are those that

it doesn't have in virtue of its relation to other things and in particular in relation to the actual world (Einheuser 2012, pp. 7).

We can thus infer that the notion of ontological completeness amounts to the notion of inner truth. When we give a complete ontological characterisation of a world, we provide a list of all inner truths holding in it, that is, all truths that would hold had that world been actualized.

On the other hand, worlds can be complete representationally. A world w is representationally complete if we say of it all truths statable in representational resources that are available in the actual world. That way we provide a complete list of truths that are true at w, that is, which are evaluated at w from the perspective of the actual world.

Now, since the Aristotelian ersatzist does not believe that there are singular truths about nonactual individuals, her worlds cannot be ontologically complete. For the Aristotelian ersatzist, an ersatz world w_{zombie} represents that there are zombies (which I take to be alien individuals) by including a sentence 'There are zombies' which describes a relevant singular proposition. Such a world however cannot include (nor entail) singular instances of this general sentence, that would mention particular zombies by name. Thus, for the Aristotelian ersatzists, as long as w_{zombie} is not actualized, there are not enough expressive resources to represent particular (alien) zombies, and thus, to provide ontologically complete characterisation of w_{zombie} . This leads to a more general conclusion that ersatz worlds whose domains are not subsets of the domain of the actualized world have to be ontologically incomplete. Of course, had w_{zombie} been actualized, particular zombies would exist and there would be singular truths about them, and w_{zombie} would be ontologically complete. But actually, w_{zombie} is not actualized. Thus, it is ontologically underspecific.

Interestingly however, as Einheuser observes, representational completeness allows for ontological overspecificity. This is so because given the notion of representational completeness, we can tell truths about possible worlds which are not internal to them. Let me explain. Consider possible worlds which differ from the actual world only with respect to some actual individuals $a_1...a_n$ not existing in them. If we now provide representationally complete characterisation of these worlds, we will have to say of those worlds many truths about actual individuals $a_1...a_n$, which are stateable in expressive resources available in the actual world, and which will be true or false of these worlds independently of whether those truths themselves would exist had worlds in question been actualized. For instance, all negative existential singular propositions about actual individuals $a_1...a_n$ will be true at worlds accessible to the actual world in which those individuals do not exist, despite the fact that had those worlds been actualized, there would be no such individuals and singular propositions about them. We can extend this list to all other singular propositions following from negative existential propositions. For instance, if [Not[a exists] is true at w, if w is evaluated from the perspective of $w_{@}$, then at w it is also true that [Not[a]] is human]] (this naturally follows from the assumption of serious actualism: an individual can exemplify properties only if it exists). To give a more concrete example. Consider a Socrates-free world, $w_{-Socrates}$ which is accessible to $w_{@}$. If there is no Socrates in w_{-Socrates} there are no inner truths about him in $w_{-Socrates}$. Yet, it is intuitively correct to think that [Not[Socrates exists]] as well as other propositions like [Not[Socrates is wise]] are true at *w*-Socrates as well.

To sum up, possible worlds are complete in two senses, which refer to two senses of truth.

They can be complete ontologically, and this kind of completeness is driven by truth in, and they can be complete representationally, and this kind of completeness is driven by truth at. As I

explained, if we provide an ontologically complete description, we miss many truths that hold at w. In turn, if we provide a representationally complete description, we provide many truths that hold at w, which are not true in w, but w is then represented as ontologically overspecific, that is, as telling truths not internal to it.

As a result, possible worlds have two kinds of stories associated with them: internal and external ones. This indicates that they can be maximal in two senses: ontologically and representationally. Aliens worlds, that is, worlds representing only alien (possible) individuals, are ontologically nonmaximal because they do not determine truth values of singular propositions that would exist had those worlds been actualized. They are maximal only representationally, that is, relative to the currently available expressive resources. Alien worlds are thus rather types of worlds, rather than fully specific (ontologically) worlds, as the actualized world is or its recombinations.

As I observed earlier, both accounts of how possible worlds represent are legitimate and in principle available to the Aristotelian ersatzist. However, as I explain in a moment, it is the notion of representational completeness that is a default way of approaching alien possible worlds. Ontological completeness is relevant only for the actualized world and worlds whose domains are subsets of the domain of the actualized world. Only with respect to such worlds will we have enough expressive resources required to provide a complete list of singular propositions about individuals in those worlds, which are required in order to obtain an ontologically complete world. In the case of possible worlds which contain only alien individuals (or alien properties), such worlds can be described only as representationally complete.

In order to explain the central role that the notion of outer truth plays for the Aristotelian ersatzist, I will appeal to another distinction proposed by Einheuser, which highlights two possible ways in which the actualist could approach possible worlds.

Counterfactual possibility and alternative actuality

It is a tenet of the possible world analysis of modal discourse that possible worlds are possible ways the actual world could have been. One of those ways is actualized. It is a true story associated with the actual world which I called 'the actualized world' Nevertheless, for an actualist this tenet can be understood in two different senses, depending on a character of a relation holding between possible worlds and the actual world. 128

On the one hand, possible worlds can be considered from the perspective of the actual world and thought to be counterfactual to it and its inhabitants. Under this approach possible worlds represent alternative ways for the actual world and its inhabitants to be. They are constructed out of representational resources available in the actual world. Such worlds can represent as many truths as actual expressive resources allow to. Under this approach to possible worlds the actual world is the center of modal space, that is, possible worlds represent possibilities from the perspective of the actual world.

Moreover, modal space should be evaluated not from the perspective of a single possible world, but all worlds taken together. First comes the actual world with its expressive resources and then comes the plurality of worlds constructed (*via* the principle of recombination) from the elements of the actual world (or more precisely, from the elements of the actualized world). Only

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¹²⁸ In what follows I draw heavily on Einheuser (2012, pp. 11-13). A similar observation has also been made by Mitchell-Yellin and Nelson (2016).

after we deliver analysis of the actualized world and worlds constructed out of its elements, we are able to evaluate modal space and assign truth conditions to all modal statements.

On the other hand, possible worlds can be considered as possibly actual. Under this approach, when we evaluate modal space, we take a perspective of a particular possible world w itself, and investigate how modal space would look like had w been actualized. Thus, w is in the center of modal space and modal space is evaluated from the perspective of it. Thus, all possible worlds are considered as characterizable by expressive resources that would be available to us had w been actualized.

In principle, both approaches to possible worlds are available to the Aristotelian ersatzist. However, most of the time she will take possible worlds to be counterfactual possibilities rather than alternative actualities. This is so because she can provide both representationally and ontologically complete characterisations only of the actualized world and worlds given by recombination of it. Every possible world representing aliens or just omitting some actual individuals $a_1...a_n$, will be ontologically incomplete: had one of such worlds been actualized there would be either new truths which we actually cannot describe (because aliens would exist and singular propositions about them which currently are unavailable to us), or there would be no truths which we actually can describe (because some actual individuals $a_1...a_n$ and singular propositions involving them would not exist), or both.

By treating all possible worlds as counterfactual possibilities we ensure that only the actualized world and worlds given by recombination of it whose domains are subsets of the domain of the actualized has will be fully specific, that is, maximal both representationally and ontologically. Alien worlds and worlds omitting some actual individuals will be represented (as

desired by the Aristotelian ersatzist) as impoverished, that is, as being completely (in case of alien worlds) or partially (in case of worlds omitting only *some* actual individuals) generic worlds. The Aristotelian ersatizst can treat possible worlds as alternative actualities and appeal to the notion of inner truth only as far as she wants to evaluate purely qualitative possibilities. All general propositions exist in all worlds. Yet, different worlds can differ with respect to which general propositions are true in them. Thus, if we narrow our investigations to qualitative possibilities, we are able to treat possible worlds as alternative actualities and investigate what is true in them. In that case we are then able to describe them completely both representationally and ontologically. But this approach has limited applications because most of the time we are interested in determining singular (*de re*) possibilities. In that case we no longer can rely on the inner truth and treat possible worlds as alternative actualities, because such a method will lead to misrepresentation of *de re* possibilities: it will provide us only with purely qualitative means of explaining modalities involving *possibilia*.

Now, endorsing the outer notion of truth as a default one when analyzing modalities *de re* and treating possible worlds as counterfactual possibilities has some interesting consequences for our understanding of serious actualism.

5.5.4. Truth at and serious actualism

Suppose that we have a good grasp of the notion of outer truth. As I argued, for the Aristotelian ersatzist it is a default notion of truth. However, for some, this does not help the actualist at all, because the notion of outer truth is in tension with the doctrine of serious actualism. A thought is that the notion of outer truth allows for a proposition p to be true at w without existing in it

(in what follows, for the ease of exposition, I will ignore a complication that it is Lagadonian sentences that describe propositions; just to remind you: a proposition p exists in w iff a sentence s describing p is included in w or entailed by other sentences included in w). And since I assumed that any satisfactory actualist answer to the puzzle of nonbeing should preserve serious actualism, the notion of outer truth does not allow the Aristotelian ersatzist to defend existentialism from Plantinga's counterargument.

However, in my view, if serious actualism is rightly understood, the notion of outer truth does not entail its falsity. Originally, I characterized serious actualism (for propositions) as follows:

Serious Actualism for Propositions: A proposition p is true according to w if and only if p exists according to w.

However, it holds only for the notion of inner truth: a proposition p has to exist in w only in order for p to be true in w. However, in order for p to be true at w, it is not necessary for p to exist in w. It is sufficient that p exists in the actual world from the perspective of which we evaluate a proposition p at worlds which are counterfactual to the actual world. Given that, the existentialist can preserve an intuition of serious actualism, that a proposition has to exist in order for it to be true at some world w. Yet, she can deny that it has to exist in w. By taking this into account, the principle of serious actualism for propositions has to be extended to take a following form:

Weak Serious Actualism for Propositions: A proposition p is true at w iff either: (a) p exists in w or (b) p exists in the actual world w_{\varnothing} and w counterfactually possible relative to w_{\varnothing} .

Serious Actualism for Propositions holds only if worlds are taken as alternative actualities (possibly actual). However, it does not work if worlds are conceived as counterfactual states of the actual world and its inhabitants. In that case, possible worlds are evaluated from the perspective of the actual world. Thus, we are allowed to say of some world w some truths which would not exist had w been actual, but which actually are true at w in virtue of existing in the actual world. Thus, even though p has to exist in order for it to be true, it does not have to exist in w in order for it to be true at w. Thus, the Aristotelian ersatzist can make the notion of outer truth consistent with the intuition lying behind serious actualism.

5.5.5. Principles governing truth at

There is one additional issue that I would like to discuss. The issue is related to the principles governing outer truth which were introduced by Adams (1981). The issue is that, as Adams himself observed, these principles lead to some semantic inconveniences. Namely, that Aristotelian ersatzism based on the outer notion of truth is incompatible with B, S4 and S5 systems of modal logic. Let me explain.

Originally, Adams, in his seminal paper (1981), proposed seven principles governing outer truth. First, we have three principles governing outer truth of nonmodal and nonquantificational propositions:

(1) If p is true in w, then p true at w.

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¹²⁹ I present them in a simplified form. See Mitchel-Yellin and Nelson (2016, pp. 1545) and also Einheuser (2012, pp. 9-10).

- (2) If p is an atomic singular proposition involving an individual a, and a does not exist in w, then p is false at w and negation of p is true at w.
- (3) Every proposition following truth-functionally from propositions true at w, is true at w.

Next, Adams proposes two principles governing outer truth of quantificational propositions:

- All existential propositions describing a relation between an individual a which does not exist in w with some other individuals existing in w are false at w and their negations are true at w: $[\exists x_1...\exists x_n \Psi(a, x_1...x_n)]$ is false at w and its negation is true at w. For example, if a=Socrates, then [Socrates is smaller than Plato] is false at w-Socrates.
- (5) All propositions following in free quantificational logic from propositions true at w, are true at w.

Lastly, Adams delivers two additional principles governing truth-at of modal propositions:

- (6) All modal propositions about an individual a which does not exist in w, are false at w and their negations are true at w. If $[\lozenge[p]]$ and $[\square[p]]$ and p is a singular proposition about a, then $[\lozenge[p]]$ and $[\square[p]]$ are false at w_{-a} and their negations are true at w_{-a} . For example, if a=Socrates, $[\lozenge[Socrates is a farmer]]$ and $[\square[Socrates is human]]$ are false at $w_{-socrates}$ and their negations are true at $w_{-socrates}$.
- (7) All existential modal propositions describing a relation between an individual a which does not exist in w with some other individuals in w are false at w and their negations are true at w. Thus, propositions $[\exists x_1...\exists x_n \Diamond [\Psi[a, x_1...x_n]]]$ and $[\exists x_1...\exists x_n \Box [\Psi[a, x_1...x_n]]]$ are

false at w_{-a} and their negations are true at w_{-a} . For example, if a=Socrates, then [\Diamond [Socrates is smaller than Plato]] and [□[Socrates is born from gametes John and Mary]] are false at w-Socrates and their negations are true at w-Socrates.

Below I would like to focus on principles (6) and (7) which govern truth values of modal propositions. I decide to do so, because, as we will see in a moment, those principles have the most problematic consequences of the existentialist account of propositions. 130

For Adams, a main motivation for principles (6) and (7) is that according to him, 'there are no possibilities de re about nonactual individual' (1981, pp. 29). Thus, if an individual a does not exist in w, call such a world w_a , then w_a cannot represent any de re modal truths about a. In effect, all modal propositions involving a which do not exist in w_a , that is, which would not exist had w_{-a} been actualized, are false at w_{-a} and their negations true at w_{-a} .

This treatment of modal propositions, as Adams himself observes, is metaphysically satisfying (given that you hold Aristotelian actualist intuitions about modal space), however semantically problematic. It is semantically problematic because it entails that the following theorems characteristic of systems B, S4 and S5 of modal logic are all false:

B characteristic axiom: $\Psi \rightarrow \Box \Diamond \Psi$

S4 characteristic axiom: $\Box \Psi \rightarrow \Box \Box \Psi$

S5 characteristic axiom: $\Diamond \Psi \rightarrow \Box \Diamond \Psi$

As Mitchel-Yellin and Nelson have shown (2016, pp. 1545-6), all of these three axioms are incompatible with Adams' principle (6). Following their explanations, to see that B axiom is

130 It is worth to note however that some philosophers contested other principles presented above as well. For example, Mitchel-Yellin and Nelson (2016) contested principle (1). See also Turner (2005) for an alternative, although similar characterisation of principles governing truth at.

inconsistent with (6) consider the Socrates-free world w-Socrates. Next, consider a conditional: If [Socrates exists]→[Necessarily[Possibly[Socrates exists]]] which is an instance of B axiom: $\Psi \to \Box \Diamond \Psi$. Proposition [Socrates exists] is true at $w_{@}$. By (6), [Possibly[Socrates exists]] is false at $w_{-Socrates}$. Now, since $w_{-Socrates}$ is accessible to $w_{@}$ (since the ontology of $w_{-Socrates}$ is that of $w_{@}$ minus Socrates), it is not true at $w_{@}$ that [Necessarily[Possibly[Socrates exists]]. Thus, antecendent of the conditional is true at w_{ω} , but its consequent is not, thus, B has a false instance at w_{ω} . Thus, B is not correct logic of our modal language. For similar reasons S5 is not compatible with (6). According to S5 axiom: $\Diamond \Psi \rightarrow \Box \Diamond \Psi$, which follows from a view that possible world at which Ψ , is accessible to itself, that is, that accessibility relation is reflexive. Then, analogical reasoning as in case of B holds for S5. S4 is also not true if 6) is true. Consider a necessary truth: [If Necessarily [if some x is such that x=Socrates] then [Socrates=Socrates]] then [Necessarily[Necessarily[if[some x is such that x=Socrates] then [Socrates=Socrates]]]]]. All it p. Proposition p is an instance of S4 characteristic axiom. In short, $\Box p \rightarrow \Box \Box p$. Proposition p It is obviously true at $w_{@}$, because Socrates exists in $w_{@}$ and he is self-identical. p is also true at all Socrates-free worlds accessible to $w_{\scriptscriptstyle @}$ because its consequent, [Socrates=Socrates] is false at Socrates-free world (because for Adams identity properties ontologically depend on individuals they consider), and its antecedent [some x is such that x=Socrates] is false at Socrates-free world. Thus, S4 axiom is fine and $\Box p$ is true at w_{\varnothing} . However, by (6), $\Box p$ is not true at Socrates-free world. Thus, $\Box p \rightarrow \Box \Box p$ is not true at Socrates-free world. Thus, S4 is incompatible with (6).

In addition to these issues, as noted by Einheuser (2012, pp. 10), Adams' account of truth at of modal propositions seems to allow for contradictions to hold at possible worlds. Consider world $w_{-Socrates}$ once again. Given (6), a proposition [Not[Possibly[Socrates exists]]] is true at $w_{-Socrates}$

Socrates. However, at w-Socrates it is also true that [Not[Necessary[Not[Socrates exist]]]]. However, since modal operators of necessity and possibility are interdefinable, it turns out that the contradiction is true at w: it is both not possible that Socrates exist and that it is not necessary that Socrates does not exist.

In response to both issues Adams proposes to replace standard modal operators of possibility and necessity, with weak possibility and weak necessity operators. Something is weakly possible if it is not false at all worlds and something is weakly necessary if it is not false at any possible world. These operators are suited to work with actualist metaphysics and to provide (although semantically more complicated) analogues of systems of B, S4, S5 defined in terms of these weak operators (see Adams 1981, pp. 30). Moreover, those weak operators are not interdefinable. So one can avoid Einheuser's challenge as well. However, as Einheuser notes (2012, pp. 10), it is widely recognized that logics based on weak modal operators are problematic. For instance, such a logic will entail that at worlds in which Socrates does not exist it is both weakly possible that he is wise and that he is not wise.

Adams could still maintain that even though there are some semantic inconveniences associated with these logics, his view is just correct metaphysically, and due to this we should ignore semantic issues that come with it. However, I think that his view is not metaphysically satisfying from the Aristotelian standpoint either. That said, I think we can easily tweak Adams' metaphysics of outer truth and singular propositions if we combine it with the notion of outer truth that I presented above. As a result we will obtain a metaphysical view which will not require developing alternative and semantically inconvenient systems of modal logic nor require an endorsement of weak modal operators, but which will be consistent with standard and strong S5

logic and will allow us to stick with standard modal operators.¹³¹ And since S5 is our strongest modal logic, if Aristotelian actualism will turn out compatible with S5, it will be *a fortiori* compatible with S4 and B systems as well.

Convenient semantics: principles (6) and (7) fixed

As I already indicated, for Adams there are no possibilities $de\ re$ about nonactual individuals. Thus, under his view Socrates-free world $w_{-Socrates}$ cannot represent any possibilities or necessities about Socrates, including his essential properties. Thus, at worlds in which Socrates does not exist, it is not possible that Socrates exists, it is not necessary that Socrates is identical to Socrates, nor that Socrates is essentially human. Moreover, if one of the Socrates-free worlds had been actualized, there would be no singular propositions about him, including singular modal propositions ascribing modal properties to Socrates. This, for Adams, is the spirit of Aristotelian actualism.

However, in my view this is not a proper Aristotelian actualist view. At some point in his (1981), Adams explains Aristotelian methodology in the following way:

[the] actualist should hold that whether there are possibilities about an individual depends on whether there actually are propositions about the individual, rather than on whether there would have been such propositions if the possibilities in question had been realized" (Adams 1981, pp. 20).

¹³¹ Perhaps there are independent reasons to abandon S5 as a proper logic of metaphysical modality, see Salmon (1989). However, I will not consider those reasons here.

Adams here seems to suggest that when we investigate whether there are possibilities involving a particular individual we should not take possible worlds as alternative actualities. In other words, when evaluating modal singular propositions we should not appeal to the notion of inner truth and investigate what would be possible for some individual x had worlds representing x as existing been actualized. The Aristotelian actualist should stick with the notion of outer truth when evaluating modal singular propositions. She can use inner truth for evaluation of modal propositions only if she considers general propositions. Such propositions exist in all possible worlds and distinct worlds differ just with respect to which general propositions are true at them. But, as Adams rightly observes, the Aristotelian actualist cannot appeal to the inner truth when evaluating truth values of modal singular propositions. The reason for this is simple. Since there are no nonactual individuals, there are no singular propositions about them. All we can do when describing nonactual worlds involving nonactual individuals is to appeal to general propositions, which exist necessarily. Aristotelians allow for de re truths only for actual individuals. In order to determine such truths we should start from the actual world, take singular propositions about actually existing individuals and evaluate those propositions at distinct possible worlds. We then take possible worlds not as alternative actualities but as possibilities for the actual world and its inhabitants. Thus, we then appeal to the notion of outer truth: we say of possible worlds truths from the perspective of the actual world. 132

Surprisingly, however, Adams supports this approach to evaluating singular propositions only insofar as negative existential singular propositions are concerned (principle 2), but rejects it

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¹³² Such an approach to possible worlds is endorsed also by Turner (2005), Einheuser (2012) and Mitchell-Yellin and Nelson (2016).

in the case of modal singular propositions, as principles (6) and (7) suggest. In support of his position Adams observes that:

What we can insist is that what is true about me at a world in which I do not exist must be determined, in accordance with some logical criterion, by the proposition that I do not exist, together with other propositions true at that world, which are not about me. For in a world in which I do not exist I have no properties; so what else about me could determine anything there? (Adams 1981, pp. 23)

Thus, for Adams, besides negative existential propositions about Socrates and propositions which follow from them at $w_{-Socrates}$, there are no other singular propositions about Socrates true at $w_{-Socrates}$. This is so because there is nothing else in $w_{-Socrates}$ that would determine modal truths about Socrates. Thus, there are no modal singular truths about $w_{-Socrates}$.

This however is problematic. I think that here Adams shifts from considering w-Socrates as a possibility for the actual world to viewing it as an alternative actuality. In other words, he seems to consider w-Socrates from its own perspective and to investigate what singular propositions would exist and be true had w-Socrates been actualized.

I agree that at *w*_{-Socrates} there is nothing about Socrates which could determine *de re* modal truths about Socrates. Thus, if *w*_{-Socrates} had been actual, there would be no *de re* truths about Socrates. But, as I argued above, treating possible worlds as alternative actualities should not be a default Aristotelian approach to possible worlds because it does not take the actual world central to our modal theorizing.

(As I highlighted above in section 5.5.3., this is so for singular propositions. However, in the case of general propositions the Aristotelian actualist can appeal to inner truth, because all general propositions are necessary. Thus, in such a case relativization of modal space to the actual world is neither needed nor special, because the actual world does not provide a unique perspective on which general propositions exist).

In my view, once we come back to treating $w_{-Socrates}$ as counterfactual to the actual world and its inhabitant (Socrates) and once we describe w.Socrates in terms of actually existing representational resources, the problem of modal propositions about Socrates holding at w.Socrates disappears: such propositions should be treated by the Aristotelian actualist analogically as all negative existential propositions (and this of course generalizes to any possible world accessible to the actual world, that is, whose domain is a sub-domain of that of w_{ω}). Since Socrates actually exists, there are many propositions about him, including modal ones. Thus, if $w_{-Socrates}$ is characterized from the perspective of the actual world, w-Socrates can represent many modal truths about Socrates, despite the fact that Socrates does not exist in w-Socrates. Pace Adams, these modal truths holding at w-Socrates are not grounded in any goings-on about Socrates internal to w-Socrates but, and here I disagree with Adams, they are grounded in goings-on occurring in the actual world. Thus, since $w_{-Socrates}$ is accessible from the actual world, it follows that at $w_{-Socrates}$ it is true that Socrates is essentially human (because he is essentially human in the actual world) or that Socrates could exist (because he actually exists). 133

Moreover, by claiming that modal truths about Socrates at $w_{-Socrates}$ have to be grounded in Socrates' nonexistence in w-Socrates coupled with remaining truths holding in w-Socrates, Adams tries

¹³³ Similar point is made by Mitchel-Yellin and Nelson, (2016, pp. 1543-4)

to ground modal propositions about Socrates in goings-on occurring in a particular possible world $w_{-Socrates}$. This however is incorrect. Modal propositions are not grounded in goings-on occurring in a particular possible world, but are grounded in the whole space of possible worlds. Particular world stories never include modal propositions because world-stories contain only nonmodal propositions. Thus, modal propositions should be evaluated only from the perspective of the whole modal space (see Mitchell-Yellin and Nelson 2016, pp. 1551-2). On top of that, for the Aristotelian actualist, modal space is constituted from representational resources given in the actual world, not from the representational resources that would exist had some particular possible world w been actualized. Actually we have all general propositions that there can be (ignoring alien properties which might constitute alien general propositions), but we lack singular representational resources which would exist had alien individuals been actual. That is, we can provide generic descriptions of aliens, but no singular ones. Thus, when we want to investigate what possibilities there are for particular individuals, we always have to start from the actual world, construct modal space from actually available representational resources, and finally evaluate modal properties with respect to modal space so constructed. 134

Adams' position seems to follow from a mischaracterization of the serious actualism doctrine. As I indicated above, a standard approach to possible worlds which treats them as alternative actualities relies on Serious Actualism for Propositions, according to which:

Serious Actualism for Propositions: A proposition p is true according to w if and only if p exists according to w.

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¹³⁴ When I write that we are constructing modal space, I use an epistemic metaphor. What I truly mean by such a claim is a metaphysical idea that modal space is given by a recombination of the elements of the actualized world.

Adams seems to work on the assumption of this principle. It forced him to deny that there are any other outer truths about some *x* besides negative existential truths holding at the *x*-free world.

However, as I indicated above, once we switch our stance towards possible worlds to a proper Aristotelian one and treat them as possibilities for the actual world and its inhabitants we should modify serious actualism for propositions principle to the aristotelian-friendly form:

Serious Actualism for Propositions*: A proposition p is true at w iff either (a) p exists in w or (b) p exists at the actual world $w_{@}$ and w is a counterfactual possibility for $w_{@}$.

This principle allows many propositions, besides negative existential ones, to be true at w without being true in w. Most importantly, all modal singular propositions actually true will be true at any world accessible to w_{\oplus} . Essential truths are good examples. Suppose that Socrates is essentially human. Call this proposition q. If q is true, it is necessarily true (because all essential truths are necessary). Thus, it is true at all possible worlds, including Socrates-free worlds (given that modal operators are governed by truth at but not truth in). Another example: Socrates could be taller than he actually is. This proposition is true at worlds accessible to w_{\oplus} , including Socrates-free worlds which are consistent with the existence of Socrates.

One could object to this and impose an existential requirement on attribution of modal properties to individuals: propositions such as [x] is essentially F, [x] is necessarily F or [x] is possibly F are true only at those worlds at which x exists. Without such an existential condition one would predicate a property of an nonexisting individual and this would contradict serious actualism, which is inherent to Aristotelian actualism. 135

¹³⁵ I extend here Adams' argument which imposes existential restriction on attribution of essential properties, which are just specific kinds of modal properties. See Adams (1981).

However, Adams here conflates $de\ dicto$ modalities with $de\ re$ modalities. ¹³⁶ Principles (6) and (7) do not ascribe modal properties to individuals, but to propositions. Thus, they concern only modalities $de\ dicto$. Therefore, the worry that allowing modal truths about x to hold at worlds in which x does not exist entails ascribing properties to nonexistent individuals does not hold. Aristotelian actualists do not ascribe modal properties to nonactual individuals but instead, as I argued above, they ascribe modal properties to propositions about x, and since x actually exists, many propositions about it actually exist as well. Some of those propositions are essentialist truths, others are necessary or possible. But all of them hold at worlds accessible to the actual world.

In light of these remarks, I suggest that the principles (6) and (7) should be replaced with new ones, which are more in line with the existentialist approach to propositions possibilities that I developed in the previous sections. Once that is done, our account of outer truth will no longer lead to the inconvenient semantics and will be consistent with all popular systems of modal logic. Firstly, recall (6) (in a simplified form):

(6) All singular modal propositions about an individual a which does not exist in w_{-a} are false at w_{-a} and their negations are true at w_{-a} .

From what I argued above it follows that (6) is not true. In my view, and in contrast to what Adams suggests, modal propositions should be treated in an analogical way as negative existential propositions. Obviously, there are types of singular modal propositions like essential truths which can be true of an individual x even at worlds in which a does not exist. Additionally, as I argued

 $^{^{\}rm 136}\, See$ Turner (2005, pp. 204-205), who makes a similar point

above, I think this generalizes to all modal propositions true of actual individuals. All modal propositions which are actually true, are true at worlds accessible to the actual world, that is, worlds which are counterfactual states of the actual world and its inhabitants. Thus, we should revise (6) to the following form:

(6*) All actually true singular modal propositions about an actual individual a which exist in $w_{@}$ are true at worlds accessible to $w_{@}$ in which a does not exist, and their negations are false.

For instance, since [Possibly[Socrates exist]], [Necessarily[Socrates is identical to Socrates]] and [Socrates is essentially human] are all true in and at the actual world, they are true at all possible worlds accessible to the actual world (even though, they will be not true *in* some of such worlds, e.g., in Socrates-free worlds).

An important feature of (6*) is that it does not hold for nonactual individuals. Thus, if we consider $w_{Socrates}$ as an alternative actuality, then had $w_{Socrates}$ been actual Socrates would be an alien individual relative to $w_{Socrates}$. Thus, from the perspective of $w_{Socrates}$ there would be no singular truths about Socrates saying that he could exist, that he is necessarily self-identical or that he is essentially human. There would be no singular propositions about Socrates at all. As we can see then, (6*) applies to worlds taken as counterfactual possibilities, evaluated from the perspective of the actual world and whose world-stories are constructed out of the actual representational resources. That's why I think a default Aristotelian approach to possible worlds is to take them as possibilities for the actual world rather than possible actualities.

Adams recognizes such an alternative to his (6), but objects that such a move requires primitive modal stipulation (Adams 1981, pp. 31-32). But I think this is incorrect. I do not stipulate which modal propositions are true. I just say: whatever modal propositions are actually true, they are true at all worlds accessible to the actual world. And since all worlds are given by the recombination of the elements of the actual world and all of them are taken as counterfactual possibilities for it, all worlds are accessible to the actual world. Thus, the existentialist view of propositions based on truth in/truth at distinction is consistent with axioms characteristic for B, S4 and S5 logics. There are no false instances of B axiom, because if some proposition p is true in the actual world, then it is necessarily possible that p, that is, it is true at every possible world (considered as a possibility for the actual world) that p is possible. Similarly for the S4 axiom. If p is evaluated as necessary in the actual world, then it is true at every possible world that p is a necessary truth. Lastly, S5 also has no false instances: if p is possible in the actual world, then it is true at every possible world that p is a possible truth.

We should also reformulate (7) in a similar manner. Originally, it runs as follows (in a simplified form):

(7) All existential singular modal propositions describing a possible or necessary relation between an individual a which does not exist in w_{-a} with some other individuals $x_1...x_n$ which exist in w_{-a} are false at w_{-a} and their negations are true at w_{-a} .

I argue that if a is an actual individual then we can formulate existential modal propositions about a which describe a relation between it and other individuals $x_1...x_n$ existing at a-free world, and those modal propositions will be true at such worlds in virtue of a actually existing and being

possibly or necessarily related to individuals $x_1...x_n$ existing in a-free world. Thus, I claim that (7) should be reformulated:

(7*) All actually true existential singular modal propositions describing a possible or necessary relation between an actual individual which does not exist in w_{-a} accessible to w_{\oplus} with some individuals $x_1...x_n$ which exist in w_{-a} are true at w_{-a} and their negations are false at w_{-a} .

Thus, intuitively, if it is actually true that a is possibly or necessarily related to $x_1...x_n$ at w_{-a} , then it is true at w_{-a} that a is possibly or necessarily related to $x_1...x_n$ at w_{-a} . For instance, suppose that [Socrates could be taller than Plato] is actually true. Then, this proposition is true in a Socrates-free world accessible to w_{\oplus} in which only Plato exists. Once again, since for the Aristotelian ersatzist, all worlds are given by recombination of the elements of the actual world, every world is accessible to the actual world. Thus, once again, our existentialist account of singular propositions can be made consistent with characteric axioms of B, S4 and S5.

Adams recognized (1981, pp. 31-32) such an alternative to (7) as well. But he objects to it by claiming that if $x_1...x_n$ are nonactual individuals, then there cannot be actually true existential modal singular propositions involving those individuals because there are no such individuals. Thus, there are no actual true modal singular propositions describing a relation between some actual individual a and nonactual individuals $x_1...x_n$ which would be true at w_{-a} .

I think that there is an easy fix to that. As I said many times, for the Aristotelian actualist we can refer to nonactual individuals only through generic descriptions. Thus, we have only general propositions characterizing alien individuals. For instance, if we suppose that Pegasus is

an alien individual, then, as Aristotelian actualists, all we can say are only general truths about it. Suppose then, that [Socrates could be a friend of Pegasus] is actually true. Under the assumption of Aristotelian ersatzism, a proper name 'Pegasus' should be explained away and taken to be equivalent to some generic description (I say more about the underlying metaphysics of such a view in the following chapter). Call such a purely qualitative description D. Then, [Socrates could be a friend of Pegasus] should be paraphrased into [Socrates could be a friend of an individual that could satisfy D]. But, since description D actually exists (because it is a purely qualitative description), this proposition is actually true and can be evaluated as being true at Socrates-free worlds. We just then indicate modal relationships between an actual individual and an actual description that could be true of something.

And if both a and $x_1...x_n$ would be nonactual individuals, we would just link modally some qualitative descriptions that could be satisfied by some individuals. Such scenario is unproblematic by the Aristotelian actualist lights as well and is compatible with (7*). All truths expressing possibilities about possible individuals are general and exist necessarily. Thus, such modal truths will hold, unrestrictedly, at all worlds.

Let me summarize the investigations conducted in this chapter. As I argued, the most promising existentialist answer to Plantinga's antiexistentialist argument is one based on truth in/truth at distinction. A solution is to say that there are two senses in which propositions can be true relative to possible worlds, and that Plantinga's argument equivocates between those two senses of truth, which makes his argument inconclusive. After explaining that issue, I presented motivations that stay behind truth in/truth at distinction. I also showed how the proponent of it can square her

view with serious actualism and address some semantic inconveniences that supposedly follow from endorsing truth in/truth at distinction.

Chapter 6

Aristotelian Ersatzism Revisited

As I indicated in Chapter 2, a distinctive feature of Aristotelian ersatzism which makes it a kind of *Aristotelian* actualism is that it treats *actualia* and *possibilia* differently. More specifically, according to Aristotelian ersatzism there are three fundamental differences between *actualia* and *possibilia*: (a) Representational Difference concerning the ways in which *actualia* and *possibilia* are represented by possible worlds, (b) Metaphysical Difference concerning metaphysical nature of *actualia* and *possibilia* that is ascribed to them by possible worlds, and (c) Modal Difference regarding the nature and modal status of possibilities about *actualia* and *possibilia*. The aim of this chapter is to appeal to the results of the analyses provided in Chapters 3, 4, and 5 concerning issues of haecceitism and antihaecceitism, and existentialism, and to provide precise characterizations of Metaphysical, Representational and Modal Differences.

Overview of the chapter. First (6.1.), I focus on Metaphysical Difference and explain how it relates to the issues of individualism and generalism. Special attention is devoted to the issue of how generalist structures account for possibilities about alien individuals. I also address some possible objections to my proposal and explain why I take Metaphysical Difference to ground Representational Difference and Modal Difference. Next (6.2.), I move towards Representational Difference and explain how it relates to the issues of modal haecceitism and modal antihaecceitism. I argue that Representational Difference has three aspects: (a) while actualia are

subjects of haecceitistic possibilities, *possibilia* are not (6.2.1.), while we can provide transworld identifications of *actualia* through stipulation, we are unable to do that with respect to *possibilia* because they are worldbound (6.2.2.), and while extreme antiessentialism holds for *actualia*, extreme essentialism holds for *possibilia* (6.2.3.). Lastly (6.3.), I explain how existentialism relates to the Modal Difference and identify the consequences that follow from endorsing such a view.

6.1. Metaphysical Difference

Before I start, let me remind you of an important thought from Chapter 2. When analyzing ontological commitments of Aristotelian ersatzism, we should distinguish entities that represent possibilities (representatives) from entities which those possibilities concern. For the Aristotelian ersatzist, representatives are sentences of the world-making language. They are built from names of individuals and predicates of properties, as well as from some other vocabulary of world-making language such as connectives, operators, etc., which are required to provide sufficiently complex sentences capable of representing all relevant possibilities. While the ersatzist provides representatives of both *actualia* and *possibilia*, the ontology of entities which the possibilities concern is limited only to actual individuals and actual properties. There are neither genuine possible individuals nor genuine possible properties that could be subjects of (*de re*) possibilities. This ontological presumption is the source of Metaphysical Difference that is inherent to Aristotelian ersatzism. Given the analyses conducted in Chapter 5 concerning

¹³⁷ In what follows I will focus only on the ersatzist's account of individuals, leaving the issue of properties aside for most of the time.

metaphysical haecceitism and antihaecceitism, I propose to understand Metaphysical Difference the following way:

Metaphysical Difference: Individualism is true for *actualia* but generalism is true for *possibilia*.

Let me explain this view in more detail. I start by showing how exactly individualism and generalism fit into Aristotelian ersatzism. Then, I explain the consequences that follow from endorsing such a position. After doing that, I discuss an alternative position to my view defended by McMichael (1983a, 1983b) and Wang (2015) based on role metaphysics, and argue that it does not get rid of reference to possible individuals completely, and that a generalist account of *possibilia* is preferable. I close this section by defending a view that Metaphysical Difference is a core of Aristotelian ersatzism and that it grounds Representational Difference and Modal Difference.

6.1.1. Individualism and generalism

Let's consider *actualia* first. The actual world is represented by the actualized world and by worlds given by recombination of it as containing genuine individuals. And since actual individuals exist, they are subjects of individualistic facts such as a fact that Socrates is wise. Individualistic facts are represented in modal contexts by singular propositions. As a result, since both individualistic and general facts hold for actual individuals, actual individuals can be represented in modal contexts both by singular and general propositions. Additionally, as I explained in Chapter 4, for the individualist, individualistic facts cannot be reduced to general

facts; they are some further facts. Aristotelian ersatzism however does not entail any particular variant of individualism and is compatible with its moderate and extreme forms.

Things are quite different when it comes to possibilia. Since there are no possible individuals, possible worlds can represent them only indirectly and purely qualitatively. Thus, possible worlds which represent only alien individuals are purely qualitative worlds. In my view the most promising metaphysics that suits this purely qualitative approach to possible worlds is generalism, in which general facts are descriptions of generalist structures built out of actual qualitative properties or qualitative possible properties which are defined negatively as properties not identical to any actual qualitative property. 138 Nonqualitative actual properties cannot be included in generalist structures because nonqualitative actual properties, e.g., being Kripke, being as tall as Socrates and so on, are defined by relations to actual individuals. Thus, if a nonqualitative property were to be included in a generalist structure that accounts for the possibility of a possible individual, such a generalist structure would allow for possible individuals to stay in some primitive relation to some actual individual. However, possible individuals, since they do not exist, cannot stay in any relation to actual individuals, either directly or through staying in some relation to a nonqualitative actual property that is individuated by a relation to some actual individual.

There is one generalist structure that actually obtains: the qualitative structure that the actual world has (of course, the actual world besides exhibiting a particular generalist structure contains individualistic facts as well). All other structures actually exist, but do not obtain. Yet,

¹³⁸ Alien properties are required to account for the possibilities of radically alien individuals, that is, possible individuals that do not have any of the actual qualitative properties. I discuss such a scenario in more detail in the next chapter.

they could obtain, had an ersatz world representing a given generalist structure been actualized. The Aristotelian ersatzist proposes then to replace genuine possible individuals with actual but nonobtaining generalist structures. Thus, the only way she can legitimately speak about possible individuals is to refer to them as possible individuals *qua* generalist structures.

This, however, does not make Aristotelian ersatzism collapse into a form of proxy actualism. Generalist structures are not unique proxies of possible individuals. They are general and holistic, which means that a single generalist structure can account for possibilities of many possible individuals. Moreover, nonobtaining general structures seem to be much less controversial replacements of possible individuals than unexemplified thisnesses (or other kinds of unexemplified essences discussed in Chapter 5, section 5.3.) or contingently nonconcrete individuals existing at the actual world postulated by necessitists (see Chapter 2, section 2.1. for a critical discussion of necessitism). We already believe in qualitative actual properties and arrangements of them. Properties are also useful for other reasons than explaining modal issues, e.g., in our accounts of laws of nature, Humean supervenience, or our characteristics of different kinds of structuralism. In turn, thisnesses (or other kinds of individual essences) and nonconcrete individuals are postulated solely in order to provide an actualist explanation of modal concepts which mirrors one provided by modal realists. Thus, if the modal explanations that those concepts deliver turn out to be problematic (and I think they do, as I showed in Chapter 2), then there are not many other reasons to believe in such concepts.

At this point someone might ask why I prefer generalism rather than grounding qualitativism as a proper metaphysical account of surrogates of genuine *possibilia*. One reason is that grounding qualitativism says that individualistic facts are grounded in general facts. It

follows, then, that despite being grounded, there are individualistic facts involving possible individuals. But this is incompatible with the actualist tenet that there are no possible individuals, nor individualistic facts about them, regardless of whether those facts are grounded in, or are supervenient on, qualitative facts. For the same reason, any kind of metaphysical antihaecceitism *qua* theory of individuation which explains individuality of individuals in qualitative terms is incompatible with Aristotelian ersatzism (ignoring issues affecting the individuation issue as such).

6.1.2. Role metaphysics as an alternative to generalism

In the literature we can find some actualists who, like me, believe in the purely qualitative metaphysics of possible individuals, and whose metaphysics is not generalist, but appeals to a role metaphysics. Proponents of such an alternative position are McMichael (1983a, 1983b) and Wang (2015). There are some semantic differences between their positions, which are explained by Wang (2015, pp. 436-441). However, at this point we can ignore them. Instead, I will focus on the common metaphysics and explain how it could explain Metaphysical Difference. I shall argue that the generalist metaphysics is preferable.

Aristotelian ersatzism combined with the role metaphysics states that ersatz individuals represent ways for individuals to be, that is, qualitative roles. A qualitative role is a maximal and consistent property that an individual could exemplify. Maximality means that for any property X, a qualitative role R either includes or precludes X. Roles are consistent if they do not include contradictory properties, that is, if all properties included in a given role could be exemplified by something. Ersatz representatives of both actual and possible individuals represent their

qualitative roles. But—and here comes Metaphysical Difference—while roles of actual individuals can contain nonqualitative properties, roles of possible individuals are purely qualitative.

In order to obtain a qualitative role of a possible individual one could proceed as follows. Consider an ersatz world w according to which some donkey is talking and some pig is flying:

(1)
$$\exists x \exists y (Tx \land Dx \land Py \land Fy \land x=y)$$

Suppose that's everything that is the case at w. As McMichael suggests, (1983b, pp. 76), an easy way of recovering qualitative roles of individuals from characterizations of ersatz worlds is to simply swap one of the existential quantifiers with the lambda property abstract operator. Depending on the quantifier in (1) that is swapped, one could obtain either a qualitative role of a talking donkey or of a flying pig. Suppose one goes for the former: Then we should replace ' $\exists x$ ' with lambda operator. We then obtain a following qualitative role:

(2)
$$\lambda x \exists y (Tx \wedge Dx \wedge Py \wedge Fy \wedge x=y)$$

Which describes a maximal qualitative property of being an x such that there is some y such that x talks, x is a donkey, y is a pig and y is flying and x is not identical to y. (This is, of course, a highly simplified qualitative role of a talking donkey. In order to provide a truly complete description of such a role it would be required to determine, for any property X, whether a given role includes it or precludes it. But, for simplicity, let's assume that at world w there are just four properties).

As we can see, roles, in a similar way to descriptions of ersatz individuals, are highly extrinsic: they mirror whole ersatz worlds by including not only properties that would be intuitively taken to be intrinsic to a talking donkey (*being able to talk*, *being a donkey*) but many

extrinsic ones as well (ones exemplified by other individuals; in the current example, properties possessed by some pig). In general, for any atomic qualitatively discernible fact that obtains at a given world (*Fa*, *Ga*, *Hb*, ...), there will be a corresponding qualitative property represented by each fact, which should be included in a qualitative role recovered from a description of a world representing relevant facts.

The role of a talking donkey (2) is actually not played by any actual individual, but it could be played by some individual not identical to any actual individual, that is, by some particular talking donkey. Thus, possibilities involving possible individuals are easy to obtain. Role metaphysics seem thus to work well with Aristotelian ersatzism. A very welcomed consequence of endorsing it is that, as Wang observes, 'What is possible and necessary depends ultimately on facts about properties and relations between them' (Wang 2015, pp. 434).

However, I think the Aristotelian ersatzist should prefer generalist metaphysics over role metaphysics as a proper metaphysics of *possibilia*. A main reason is that since there are no possible individuals, when providing an account of possibilities about them, we should avoid any kind of quantification over them. However, role metaphysics cannot achieve that. Let me explain why I think so.

Although roles do not involve quantification over any particular possible individuals, they do involve quantification over domains of *some* possible individuals. However, it is widely held that quantificational sentences are grounded in their instances. If that's the case, then statements involving roles, such as (2) above, are grounded in statements about particular individuals who have those roles. This creates a difficulty for the proponent of role metaphysics if she wants to combine it with Aristotelian ersatzism. It turns out that her characterization of

roles commits her to the existence of particular possible individuals that could have relevant roles. This, however, is inconsistent with the actualist tenet that there are no nonactual individuals.

A possible reply to that argument could be that statements involving roles are ungrounded, and thus, fundamental. But this is a controversial claim, for it seems intuitive that not all roles should be taken as fundamental. Generally, any role of a nonfundamental individual should be taken as nonfundamental as well because it will involve some nonfundamental properties characteristic of a given nonfundamental individual.

Yet another response could be that quantified sentences are grounded in something else than their instances. However, it is unclear what could be a reliable grounding base for such claims other than their instances.

But perhaps a better way of characterizing roles is to follow Wang's proposal. She constructs roles, unlike McMichael, without reliance on quantificational sentences. She proposes recovering roles thus: Start with the ersatz world representing a talking donkey and a flying pig:

$$\exists x \exists y (Tx \land Dx \land Py \land Fy \land x=y)$$

from it one can recover an ersatz talking donkey:

$$(4) \qquad \exists y (Tx \land Dx \land Py \land Fy \land x=y)$$

And then one can just say that the ersatz talking donkey represents a maximal and consistent qualitative role that an individual could play. Each formula in (4): Tx, Dx, Py, Fy represents a property. All formulas taken together represent a maximal and consistent property that some individual could exemplify. Roles themselves then are characterized without any appeal to

quantificational statements. Thus, the issue affecting role metaphysics that I just indicated can be avoided.

Yet properties represented by those formulas, and qualitative roles built out of them as well, do involve reference to *some* individuals. For instance, the role represented by (4) involves properties of *being a talking donkey and being a flying pig* that do involve some implicit reference to *some* individuals, even if not particular ones. Roles are ways for *individuals to be* after all. I propose, however, that generalist metaphysics fits Aristotelian ersatzism better. It gets rid of any reference to individuals (even indirect) but views possible worlds (those representing only possible individuals) as purely qualitative descriptions representing generalist structures and nothing else.

Moreover, role metaphysics—in both McMichael and Wang's variants—takes roles to be highly extrinsic. Any role that an individual could play represented by some ersatz world w mirrors the whole world w. If we would then say that the roles determine the complete character of some possible individuals, it would follow that the existence and/or identity conditions of possible individuals are highly extrinsic. For instance, had ersatz world (3) been actualized, a talking donkey would exist and exemplify a property of being such that some individual not identical to it has a property of being a pig. This is an unwelcome consequence. It should not be the case that our account of possibilities for possible individuals forces us to abandon an intuitive view that existence and/or identity conditions of individuals are highly intrinsic to them. Ersatz individuals qua linguistic representatives can be extrinsic and mirror whole ersatz worlds. That's part of the standard characterization of linguistic ersatzism. But we should not take the existence and/or identity conditions of possible individuals themselves and all other individuals (because

actual individuals have associated qualitative roles as well) to be highly extrinsic. Generalism allows us to be neutral on that issue. The holistic nature of generalist structures does not represent existence and/or identity conditions of possible individuals as being highly extrinsic. This is so because generalist structures are salient about possible (or actual) individuals at all. They describe a qualitative character of a world in which something could exist. Thus, intuitively speaking, by providing a generalist description of an ersatz world, (3) we describe a place that could be inhabited by a talking donkey, rather than a way for a talking donkey to be. Thus, we are not forced to take the existence and/or identity conditions of individuals to be highly extrinsic or highly intrinsic. Generalism is neutral on that issue. Thus, we are not forced to revise our intuitions about individuals.

On top of that, generalism, if compared to the role metaphysics, provides a more systematic and precise explanation of how properties are arranged together and related to each other. Moreover, it allows us to mirror the expressive power of quantificational languages without any reference to individuals. Thus, we have a very strong tool to describe (indirectly, purely qualitatively) possibilities for possible individuals—one that is compatible with a view that there are no such individuals at all.

6.1.3. Generalism and possibilities

I shall now explain in more detail how generalist structures manage to account for the possibilities about alien individuals. According to the generalist approach to *possibilia*, ersatz representatives of *possibilia* involving quantificational descriptions should be paraphrased into generalist

descriptions which are free of quantification and which represent general facts. Thus, an ersatz world w representing a possible talking donkey and a possible flying pig:

$$\exists x \exists y (Tx \land Dx \land Py \land Fy \land x=y)$$

should be paraphrased into a generalist description that represents a generalist structure:

(5)
$$cc(T^1 \wedge D^1 \wedge P^1 \wedge F^1 \wedge \neg I^2)$$
 obtains

Intuitively it should be read: donkeyhood and talking and pighood and flying and nonidentity obtains. Instead of talking about a qualitative role of being a talking donkey that some particular talking donkey could play, we just say that a generalist structure (5) could obtain. In a similar way to roles, generalist structures are maximal and consistent. A consequence of generalism towards possibilia is identification of possible individuals with nonobtaining generalist structures built out of actual properties or properties defined negatively as not identical to actual ones. Thanks to that Aristotelian ersatzist can explain how modal concepts apply to possible individuals without making a commitment to any suspicious kinds of entities like individual essences or contingently nonconcrete objects.

Now, a natural question is how generalist structures account for the possibilities about possible individuals. That is, how can the Aristotelian ersatzist truly say that there could be a talking donkey or other possible individual?

She can do it only indirectly. Generalist structures determine a type of a world that could be inhabited by some possible individuals, rather than a fully specific world that would determine

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¹³⁹ However, they can easily be accommodated to account for impossibilities (if we care about explaining the notion of impossibility) if we allow generalist structures to include contradictory properties.

the individuals that play which qualitative roles or the number of individuals there are. In other words, generalist structures determine a possible qualitative character of the actual world that it could have exhibited. Intuitively, generalist structures provide a partition of a world. The more specific the general structure, the more fine-grained the partition. The cells that are the results of the partitions are places where individuals could be. The specificity of individuals and the cells they belong to cannot be determined. But in knowing a given generalist structure we know the possible qualitative state of the world. And we know that something could exist in such a world. To put it in yet another way, generalist structures prepare an ontological room for possible individuals and they characterize its qualitative character.

The actual world could exhibit a generalist structure S had an ersatz world w representing structure S been actualized. Had that been the case, then there would be a specific world of the type represented by the structure S. That is, such a world would specifically state the individuals and properties they have, as well as the number of individuals there are. However, until that is the case, all ersatz worlds representing *possibilia* are generalist worlds. For instance, had a world:

$$\exists x \exists y (Tx \land Dx \land Py \land Fy \land x=y)$$

been actualized, let's call it 'w', then at the actual world it would be the case that:

(5)
$$cc(T^1 \wedge D^1 \wedge P^1 \wedge F^1 \wedge \neg I^2)$$
 obtains

Thus, we know what would be a distribution of properties in the actual world had w been actualized. Had the actual world exhibited such qualitative character, there would be individuals existing within the actual world with such a qualitative character. Until that is the case, however, as things stand at w, the exact individuals and the roles they play cannot be determined; neither

can the number of individuals. Moreover, a single structure described by (5) is capable of representing all possibilities, e.g., of there being four individuals: one that talks, one that is a donkey, one that is a pig, and one that is flying, or of there being two individuals: one that is a talking donkey and another one that is a flying pig, or of there being one or three individuals. We can account for all of these possibilities through a single generalist structure. Thus, we do not overpopulate the actual world with a unique proxy for each possible individual, as in case of Plantingian actualism or necessitism. The specific possibilities that are represented by a given generalist structure is a matter of convention and (qualitative) stipulation (for more details on that see section 6.2.2. below).

6.1.4. Some objections to the generalist account of possibilia

Let me now address some possible objections to the view just presented.

First objection. A possible issue with my proposal could be that it entails that had a general ersatz world w been actualized, then the actual world would be in the way w represents. Thus, the actual world would be a generalist world. Thus, there would be no new individuals, because there would be no individuals at all. As a result, I am unable to hold Metaphysical Difference.

This objection follows from a misunderstanding. Ersatz worlds representing *possibilia* are generalist worlds, not because generalism is actually true or could be true of the actual world, but because, actually, we lack enough expressive resources to describe *possibilia* otherwise, that is, as being subjects of individualistic facts. In other words, ersatz worlds representing *possibilia* are treated as generalist worlds because they are impoverished if compared to ersatz worlds representing the actual world and its inhabitants. Generalist worlds represent types of worlds,

rather than particular worlds. Now, had one of such impoverished ersatz worlds been actualized, let's call it w, the actual world would not be impoverished as well, that is, it would not lack individuals and singular representatives of them. Instead, had w been actualized, the actual world would be the way represented by w, that is, it would be a type of a world represented by w. But since w is incomplete, it does not say everything that would be the case at the actual world had w been actualized: Had w been actualized, the actual world would also be a particular world of a type of a world represented by w. In order to represent this particular character of the actual world another ersatz world would be needed: an ersatz world built out of both general and singular propositions that would exist at the actual world had w been actualized.

Second objection. A related worry could be that Metaphysical Difference requires the Aristotelian ersatzist to take *possibilia* as having a distinct metaphysical nature depending on whether they are actualized or not. But this is problematic. It seems that entities cannot change their metaphysical nature from world to world. Something cannot be individual at one world but nonindividual at another world.

I think such criticism follows once again from a misunderstanding. According to Aristotelian ersatzism there are no possible individuals. There are only actually existing but nonobtaining general structures which are generic surrogates of *possibilia*. Of course, there could be possible individuals. But this possibility is accounted for indirectly by the general structures. Thus, it is not true that a possible individual is a general structure at one world, but a genuine individual at another world. Possible individuals *qua* general structures are always general (because generalist structures are essentially made out of qualitative properties), and genuine possible individuals just do not exist.

Third objection: One might wonder why not be a global individualist or a global generalist, both for the actual world and all the possible worlds. I think both options are problematic.

A common issue with both proposals is that Metaphysical Difference is entailed by Representational Difference and Modal Difference. In other words, if *actualia* and *possibilia* were to be treated uniformly on the metaphysical level, there would be no grounds for treating them differently on the representational and modal levels. However, a uniform treatment of *actualia* and *possibilia* would run against the very spirit of Aristotelian ersatzism: It would either follow that there are individualistic facts involving alien individuals, which, in turn, would allow us to represent them *de re*, or it would follow that there are no individualistic facts about actual individuals and that we are unable to represent *de re* possibilities about actual individuals. Both options run against our modal intuitions and basic tenets of Aristotelian ersatzism. Thus, if we want to preserve our intuitions and we want to make sense of Aristotelian ersatzism, we need to provide distinct metaphysics of *actualia* and of *possibilia*.

Perhaps one could argue that this indicates that Aristotelian ersatzism is just not true and we should endorse another actualist view which treats actualia and possibilia uniformly. But I believe that the view that actualia and possibilia should be treated differently has very strong intuitive support, which is independent from Aristotelian ersatzism, and that any plausible actualist view should account for these intuitions. In other words, I believe that any plausible actualist account of modality has to be at least partially Aristotelian (recall that, as I explained in Chapter 2, it is part of being Aristotelian about possible worlds that we treat actualia and possibilia differently). It seems intuitive that the actual world, among many varied entities,

contains some genuine individuals, which can be directly named, which are subjects of our singular thoughts and singular propositions, and which causally affect us (to just name a few roles that individuals are usually thought to play). In turn, there are no genuinely possible individuals because there are no such things at all. Thus, they cannot be directly named. They can be described only indirectly, by qualitative description. They cannot be subjects of our singular thoughts or singular propositions, and are causally ineffective. Both global individualism and global generalism run against those intuitions, either by entailing that we are mistaken about *possibilia* (in the case of global individualism), or about *actualia* (in the case of global generalism).

But a proponent of global generalism could say that it is possible to account for Representational Difference and Modal Difference even within generalist metaphysics applied to all worlds. For instance, the generalist could say that although both actual and possible individuals are replaced by generalist structures, the actual structures (ones associated with the actualized world and worlds givens by the recombination of it) are differently represented in modal contexts from possible structures (ones associated with alien world), because actual properties that constitute actual structures have a differing metaphysical nature to possible properties that constitute possible structures. More specifically, the generalist could argue that while quidditism holds for actual properties, structuralism is true for possible ones. Let me briefly explain both views.

I propose that, as in the case of haecceitism, we should distinguish modal and metaphysical variants of quidditism. According to metaphysical quidditism, identities of properties cannot be given purely qualitatively, that is, identities of properties cannot be identified with causal or nomological roles of the relevant properties, but are some further facts.

Perhaps identities of properties are primitive or perhaps to be a given property is to exemplify a quiddity, a property of being that very property. Structuralism 141 is a denial of metaphysical quidditism, according to which, to be a given property is to play a certain causal and nomological role, which is characterized purely qualitatively. However, those metaphysical views entail their modal counterparts. According to modal quidditism there are structurally indiscernible possible worlds, that is, worlds which exhibit the same pattern of causal and nomological roles, but which differ with respect to which properties play which causal and nomological roles. Such a view naturally follows if you believe that identities of properties are primitive or irreducibly nonqualitative. In turn, if you endorse structuralism about properties, then modal structuralism follows, according to which structurally indiscernible worlds are just identical. All possibilities involving properties are purely qualitative.

The generalist could try to mirror Representational Difference and Modal Difference which are both essential parts of Aristotelian ersatzism, by endorsing metaphysical quidditism for actual properties but denying it for possible properties. As a result, she could claim that there are distinct possible worlds which represent the same patterns of causal and nomological roles, but which differ with respect to the qualitative role that each actual property plays. Moreover, actual properties, since they exist, can be represented *de re*. That is not the case with regard to possible properties. Possible worlds representing those are always qualitatively discernible and all possibilities about possible properties are general ones.

¹⁴⁰ For more details on quidditism see Black (2000), Lewis (2009), Locke (2012), Curtis (2016), Smith (2016), Lenart (2021a).

¹⁴¹ For a discussion and defense of structuralism about properties see Shoemaker (1980), Hawthorne (2001). For a general overview of an argument between quidditists and structuralists about properties see Wang (2016).

Such a view is consistent. But it seems to be in tension with the spirit of generalism, according to which we should deny any differences between entities (individuals, properties) that are not qualitative differences. This is because such differences lead to empirical undetectability and to physically redundant explanations. ¹⁴² By allowing quidditism for actual properties, one allows: (1) properties to be either primitive or be individuated nonqualitatively, and (2) worlds representing such properties to differ numerically without differing qualitatively (observationally). However, the generalist, for similar reasons to those for which she is antihaecceitist towards individuals, should be antiquidditist (structuralist) towards properties. Thus, the generalist should endorse the structuralist view for both actual and possible properties. ¹⁴³ Thus, I think the global generalist cannot mirror the tenet of Aristotelian ersatzism, according to which, while there are *de re* possibilities for *actualia*, all possibilities involving *possibilia* are general. For the global generalist all representation is purely qualitative, and all possibilities must be general.

6.1.5. Metaphysical Difference grounds Representational Difference and

According to my view Metaphysical Difference grounds both Representational Difference and Modal Difference. In other words, it is due to the fact that actual and possible individuals have distinct metaphysical natures that the remaining two differences hold. Let me explain both points.

Modal Difference

¹⁴² See Chapter 4, section 4.5.1., where I presented an overview of arguments supporting generalism.

¹⁴³ Actually, Dasgupta, in his exchange with Turner in (Dasgupta and Turner 2016, pp. 38), indicated that the generalist should endorse structuralism in order to avoid the possibility of there being purely permutational differences between properties and their causal and nomological roles.

Firstly, let's consider the Representational Difference. If there were no actual individuals or individualistic facts involving them, but instead, all facts were general, it would make no sense to represent actualia directly (de re) through singular propositions, and maintain that what possible worlds represent de re about actualia does not supervene on what they represent qualitatively about them. The very notion of singular representation would make no sense if generalism were to hold for the actual world. Thus, if we want to maintain that actual individuals can be represented singularly in modal contexts, we have to assume some kind of haecceitistic metaphysics about those individuals (and as I argued in Chapter 4, the best kind of such metaphysics is individualism). Thus, modal haecceitism, in its extreme and moderate variants, requires metaphysical haecceitism to hold. Similarly in case of possibilia, if we want to maintain that possibilia can be represented only through qualitative sentences, that is, that extreme modal antihaecceitism is a proper view on the representation of possibilia, then one should endorse generalism towards possibilia. Only such an extreme variant of metaphysical haecceitism allows us to provide a sufficient reason for a claim that the notion of representation de re is illegitimate when applied to *possibilia* conceived *qua* generalist structures.

Modal doctrines of haecceitism and antihaecceitism could come apart from their metaphysical counterparts only under the condition that there were no possible words, and the only world was the actual world. In such a case, the problem of how possible worlds represent possibilities would not arise and we would be able to stick with the doctrines of metaphysical haecceitism or metaphysical antihaecceitism applied to the actual world without endorsing either a haecceitist or an antihaecceitist account of representation. But once we agree that there are possible worlds, we are obliged to provide an account of how possible worlds represent alternative

states of affairs. And, as I argue, the way we account for that depends on the metaphysics of *actualia* and of *possibilia* that we assume.

Secondly, let's consider the Modal Difference. If the metaphysics of the actual world were generalist, it would also be impossible to hold existentialism towards singular propositions (which is an essential view to my reading of Modal Difference). In other words, if there were no primitive actual individuals, it would make no sense to defend contingency of singular propositions involving those individuals. Existentialism requires metaphysical haecceitism to be true about at least some domain of individuals. For the Aristotelian ersatzist, the domain of individuals is the domain of the actual world. There are no other individuals. And we cannot just give up existentialism, because endorsing it is crucial for Aristotelian ersatzism as it allows the ersatzist to express an idea that what singular possibilities there are is a contingent matter, and that there are no de re possibilities about possible individuals, because there are no such individuals. There could be such possibilities, that is, there could be new individuals and new singular propositions that would be about them had worlds representing those individuals as existing been actualized. But until that is the case, our descriptions of such worlds are greatly impoverished.

I shall now move towards the Aristotelian ersatzist account of representation.

6.2. Representational Difference

As I explained in Chapter 2, according to Aristotelian ersatzism, ersatz worlds and ersatz individuals are representatives. While ersatz worlds are maximal and consistent sets of closed

sentences, ersatz individuals are subsets of ersatz worlds constructed as consistent and maximal sets of open sentences, open with respect to one variable. 144

Both ersatz worlds and ersatz individuals represent possibilities for worlds and individuals respectively. However, ersatz representatives are built differently depending on whether they represent actualia or possibilia: while ersatz constructions representing possibilities for actualia can represent actualia by names, and thus can involve singular sentences about them, ersatz constructions representing possibilities for possiblia cannot include their names or singular sentences about them. Because possiblia do not exist, all ersatz representatives of them have to be built out of general sentences representing generalist structures. This difference in a way in which the ersatzist constructs ersatz representatives for actualia and possibilia indicates Representational Difference: possible worlds represent actual and possible individuals differently. Now, by appealing to the results of the analyses conducted in Chapter 3, I propose to explain Representation Difference in the following way:

Representational Difference: extreme modal haecceitism is true for *actualia*, but extreme modal antihaecceitism is true for *possibilia*.

In other words, my view is that what ersatz worlds and ersatz individuals represent nonqualitatively about *actualia* does not supervene on what they represent qualitatively regarding them, In contrast to that, all truths that ersatz worlds and ersatz individuals represent for *possibilia* are purely qualitative (assuming that we consider worlds representing only *possibilia*; I shall call such worlds 'alien ersatz worlds' or just 'alien worlds'). There are no singular

¹⁴⁴ Equivalently, we might identify an ersatz world with a maximal and consistent conjunction of closed sentences, and an ersatz individual with a maximal and consistent conjunction of open sentences with respect to one variable.

truths about *possibilia* that might supervene on qualitative truths about them, but all truths about them are purely qualitative.

Representational Difference understood that way entails at least three further differences regarding modal aspects of *actualia* and *possibilia*, which concern their relationships to such issues as: (1) haecceitistic possibilities, (2) stipulation and (3) essentialism. I shall explain each of these issues in that order.

6.2.1. Haecceitistic possibilities

Endorsing extreme modal haecceitism for actualia entails that there are singular possibilities involving actual individuals and that those possibilities hold independently of how actual individuals are characterized qualitatively. It follows, then, that actual individuals can be subjects of haecceitistic possibilities, e.g., it is possible that you could have a qualitatively indistinguishable twin, or that Barack Obama could swap his qualitative role with Joe Biden. We might disagree on some particular examples, but generally, some haecceitistic possibilities involving actualia are genuine (below, in section 6.2.3., I explain why I think extreme modal haecceitism for actualia is preferable over its moderate counterpart). That's not the case, however, with respect to possibilia. Given that genuine possible individuals are replaced with generalist structures, it is impossible to represent possible individuals *qua* generalist structures singularly, through singular propositions. In other words, since there are no genuine possible individuals, there are no singular representatives of them. Since only general facts hold at alien ersatz worlds, all truths that represent what is the case at such worlds have to be purely qualitative. Thus, it is impossible to make sense of two alien ersatz worlds differing nonqualitatively with respect to which possible individual plays which qualitative role, or to make sense of an alien ersatz world at which the epoch of the world repeats itself and each epoch contains numerically distinct but qualitatively indistinguishable possible individuals.

As a result, no form of modal haecceitism can be true about possible individuals *qua* generalist structures. Moderate modal antihaecceitism is a nonstarter as well, because there are no singular truths about possible individuals that might supervene on general truths about them. The only remaining account of representation of *possibilia* available to the Aristotelian ersatzist is an extreme modal antihaecceitist one. All possibilities about possible individuals *qua* generalist structures are purely qualitative.¹⁴⁵

6.2.2. Stipulation

Additionally, extreme modal haecceitism towards *actualia* entails the stipulative (Kripkean) approach to transworld identifications. In order to determine whether some ersatz world represents *de re* possibilities concerning one and the same actual individual, or in order to determine which actual individuals have which qualitative character at which ersatz worlds, we are free to stipulate the individuals and worlds we have in mind. This can be done by simply inserting relevant sentences into relevant ersatz individuals or worlds (because according to the Aristotelian ersatzism *de re* representation works by naming). Thus, for instance, if you want to say of Socrates that possibly he is a talking donkey just insert a sentence 'Socrates is a talking

¹⁴⁵ For more details on how the issue of haecceitistic possibilities relate to the Aristotelian ersatzist's account of *actualia* and *possibilia* see Chapter 7, section 7.2.2. below.

donkey' into a description of the relevant ersatz world. And if that ersatz world is consistent, it will represent a possible way for Socrates to be. 146

Haecceitistic stipulation is, however, unavailable to the extreme modal antihaecceitist towards *possibilia*. Since possible individuals do not exist, we lack names for them. Thus, it is impossible to stipulate what alien ersatz worlds represent *de re* regarding particular possible individuals by inserting singular sentences into relevant worlds. For the extreme modal antihaecceitist, the notion of representation *de re* of individuals does not make sense at all, because all representation is done by purely qualitative sentences describing general propositions.¹⁴⁷

Someone might disagree and argue that it seems intuitive that we are able to formulate singular descriptions involving possible individuals, for instance, that we can think of a particular merely possible talking donkey, call it 'Frank', and say of *it* a singular truth such as, 'Frank is a talking donkey'. Thus, extreme modal antihaecceitism cannot be true for *possibilia*.

I think however that this intuition is very superficial and is overridden by a stronger intuition concerning our differing attitudes towards actual and possible individuals. It seems

 $^{^{146}}$ This view on stipulation might be supplemented by a Kripkean view on names according to which, speaking very roughly, the content of a name is its referent. As a consequence, qualitative descriptions associated with some individual x are never part of the content of its name. However, although haecceitistic stipulation naturally works with the Kripkean view on names, it does not entail it. However, it does entail that the content of names is not equivalent to qualitative descriptions. It can, however, include *some* qualitative descriptions. This qualitative content of a name will, however, not determine (across all possible worlds, or at worlds limited to those at which a given name exists) its referent.

¹⁴⁷ It is worth emphasizing that I constantly ignore the issue of representation of possibilities for actual and possible properties. There might be worlds that represent alien individuals *qua* generalist structures but those structures are built from actual qualitative properties. And if metaphysical quidditism is actually true, then actual properties involved in the relevant generalist structures will be represented nonqualitatively across possible worlds (through the nonqualitative descriptions of their quiddities). Thus, some alien ersatz worlds might, after all, represent some *de re* truths about actual properties. Thus, if one holds metaphysical quidditism for actual properties, then only radically alien ersatz worlds are purely qualitative worlds. Such worlds represent possibilities for possible individuals through generalist structures not built out of actual properties, but from possible ones. And supposedly, metaphysical quidditism (for reasons similar to those for which individualism does not hold for possible individuals) does not hold for possible properties. That being said, I stay neutral on the issue of whether metaphysical quidditism is true for actual properties or not.

obvious that actual individuals can be subjects of our singular thoughts, including modal thoughts concerning what could or could not happen to them. However, this is not the case with respect to possible individuals. Since they do not exist, they cannot be subjects of our singular thoughts. We cannot think of a possible individual as *this* or *that* individual, and, as a result, we cannot imagine *it* swapping its qualitative role with another particular possible individual, or *it* having an indiscernible duplicate. It seems very unintuitive to say, 'This particular talking donkey is more eloquent than any other possible talking donkey', or 'Your possible twin brother is very similar to you'. More generally, it is impossible to determine exactly to which particular possible individual we refer to on a given occasion. And this issue cannot be solved through haecceitistic stipulation, because we lack expressive resources to apply it to possible individuals.

I believe then that we should explain away an intuition that we can singularly refer to possible individuals and introduce names of them. As things actually stand, that is, given our actually available representational resources, we are unable to provide an ersatz world that would represent *de re*, by a name or another kind of directly referring linguistic device, particular possible individuals. All we can do as actualists when it comes to representing aliens is to provide generalist ersatz worlds which are purely qualitative representatives that represent some generalist structures that could obtain. The possibility of alien individuals is then accounted for by those structures. We can introduce names in order to name possible individuals *qua* generalist structures, but those names are nothing more than shortcuts for qualitative descriptions representing generalist structures. A name 'Frank' should then be explained away in two steps. First, we substitute it with a quantificational sentence, 'Something is a talking donkey', and then

this sentence should be paraphrased into a generalist statement, 'c($T^1 \wedge D^1$) obtains', which means that donkeyhood and talking obtain.

On top of that, since all generalist structures are worldbound, we do not at all need to solve the issue of transworld identification of possible individuals qua generalist structures. (Transworld identification of properties involved in generalist structures is given for free since it is assumed that qualitative properties exist necessarily. Thus, a predicate P naming a given actual qualitative property X can be a member of distinct alien ersatz worlds). Thus, there is no need to appeal to haecceitistic stipulation within the antihaecceitist approach towards possibilia.

That being said, a purely qualitative stipulation is indispensable even for the generalist. As I said in section 6.1.1, generalist structures are indeterminate on the number of individuals that would exist or on which individual would play which qualitative role, had a given structure obtained. For instance, reconsider an ersatz world representing a talking donkey and a flying pig. A structure represented by that world is as follows:

(S)
$$cc(T^1 \wedge D^1 \wedge F^1 \wedge P^1 \wedge \neg I^2)$$
 obtains

Now, S itself does not determine which individual has which qualitative role. We only know the qualitative character of the world and that at such a world something is not identical to something. Thus, it is determinately true that S accounts for there being two individuals, but S does not determine which individual has what qualitative character. S is compatible with any of the two possible individuals having any qualitative character. Perhaps possibilities including incompatible properties should be excluded, e.g., presumably nothing can be a donkey and a pig at the same world). Nevertheless, S is able to represent different possibilities. This indicates a more

general feature of my view, that a single generalist structure can account for many possibilities and which particular possibility we have in mind on the particular occasion can be determined by a qualitative stipulation and convention. For instance, we can stipulate that at some world w_1 S represents that something is a talking donkey and that something is a flying pig, but that at w_2 it represents something being a donkey and something being a talking flying pig, and so on. Of course, qualitative stipulation does not determine what general (qualitative) possibilities there are (as I just indicated, there might be some principles determining which qualitative properties are compossible and which are not, and which are independent of our stipulations). It only allows us to select what possible scenarios we have in mind when we consider a given generalist structure.

6.2.3. Essentialism

Representational Difference has also interesting consequences regarding the issue of essentialism. In what follows I argue that: (1) endorsing extreme modal haecceitism towards actual individuals entails some kind of radical antiessentialism, and that (2) endorsing extreme modal antihaecceitism towards possible individuals *qua* generalist structures commits us to either (a) the Leibnizian extreme essentialism, that is, to the claim that all properties included in a given generalist structure are essential to it, or (b) the antiessentialist property counterpart theory that accounts for modal variability of generalist structures by introducing counterpart relations linking properties involved in distinct structures. Let me explain claims (1) and (2) in order.

Actualia

According to the extreme modal haecceitism, what *de re* truths hold at some world *w* is independent from what qualitative truths hold at *w*. Therefore, there are no qualitative limitations imposed on what is possible *de re* for actual individuals: Any actual individual could have any qualitative character. One can then make use of qualitatively unconstrained haecceitistic stipulation and stipulate whatever she wants to by pairing any name of any actual individual with any qualitative description. *Prima facie*, the only essential features of actual individuals are their thisnesses (*being Socrates, being Kripke*, and so on) and properties that follow from having thisnesses (e.g., if some *x* exemplifies *being Socrates*, it follows that *x* exemplifies *being not identical to Kripke*). Thisnesses however, are purely nonqualitative properties. They do not impose any qualitative constraints on *de re* possibilities. Thus, even though thisnesses are essential to individuals, the extreme modal haecceitist can maintain that individuals lack any qualitative or impure (partially qualitative) essential properties. This, in turn, allows actual individuals to be subjects of haecceitistic possibilities.

Someone might find this view problematic and prefer a moderate variant of modal haecceitism according to which, although what *de re* truths hold at some world *w* does not supervene on what qualitative truths hold at *w*, *de re* representation is in some way or another qualitatively constrained. Thus, moderate modal haecceitism entails some kind of qualitative essentialism towards actual individuals that ascribes to them qualitative or impure essential properties. In other words, the moderate modal haecceitist maintains that not all combinations of names with qualitative descriptions will describe genuine possibilities. Some of our descriptions will represent impossibilities. For instance, if Socrates is essentially human, then it is not possible for him to be a poached egg or a musical performance. If so, a stipulated world

according to which Socrates is a poached egg will turn out to be an impossible world. In other words, although a world at which Socrates is a poached egg is a logically consistent world, that is, such a description represents a consistent way for an actual individual to be, it is not a way an actual individual *could* have been, because this is precluded by some essentialist truths.

It turns out then, that depending on whether you share some essentialist intuitions or not, you might prefer either a moderate or an extreme modal haecceitist account of representation involving actual individuals. Now, although it might be initially surprising, I think that extreme modal haecceitism is preferable over its moderate counterpart. Here are the reasons for which I think this is so.

As I just indicated, extreme modal haecceitism entails that any individual could have any qualitative character. Thus, it is possible, for instance, that Socrates could be a poached egg, a musical performance, a number 2, or a fictional character. However, such scenarios seem to be intuitively impossible. For many researchers such intuition is grounded in a metaphysical fact that individuals (such as Socrates) have some qualitative or impure essential features that preclude them undergoing such radical haecceitistic scenarios. There are, however, several ways in which we could make the extreme modal haecceitism a defensible view.

Presumably even the extreme modal haecceitist would like to deny that Socrates could be a musical performance, a fictional character, or a number 2.¹⁴⁹ In order to do so, she could impose some minimal essentialist constraints on the *de re* representation of actual individuals. For instance, she could say that individuals are essentially individual (thus, they cannot be processes

¹⁴⁸ Actually, there are quite a few researchers who think that extreme (modal) haecceitism is preferable over its moderate counterpart. For instance: Lewis (1986), Mackie (2006), Salmon (1996). Researchers who explicitly endorse moderate (modal) haecceitism include Adams (1979) and Legenhausen (1989).

¹⁴⁹ See Mackie (2006, pp. 166) who makes a similar point about extreme (modal) haecceitism.

or events), or essentially concrete (thus, they could not be abstract entities), or essentially contingent (thus, they could not be necessary beings), or essentially spatiotemporal (thus, they could not be entities outside space and time). These constraints are minimal in the sense that they do not impose (unlike more full-blown forms of essentialism do) restrictions on the qualitative character that a particular actual individual could or could not have. Even if all of the just-indicated features of individuals (as such) were to turn out to be essential to them, it would still be possible for any particular actual individual to have any qualitative character of any other actual individual. Thus, it would still be possible for Socrates to swap his role with Plato, to be an alligator or a poached egg.

But these possibilities for some researchers might still be hard to accept. However, the extreme modal haecceitist has resources to address that issue as well. She might refer to an idea that all of our evaluations of modal statements are always done within some context, and that evaluations vary in line with the context. Moreover, each context will lead to a certain distribution of truth values over modal claims. Thus, under one context a statement 'x is essentially F' might be true, but under another context it might turn out false. For instance, under some standard contexts of evaluation, when we investigate whether something is possible for an actual individual, we typically assume that the laws of nature are invariant from world to world under consideration. Yet, there are some other contexts in which we consider worlds with the laws of nature different from the actual ones. Thus, depending on the context, some possibilities may turn out genuine.

Moving back to our example: Under the standard context of evaluation, it is not possible for Socrates to be a poached egg. This is presumably the case due to the essentialist truth that

Socrates is essentially human or essentially born from certain human gametes. Thus, worlds at which he is not human are excluded from the context of evaluation. Yet, for the extreme modal haecceitist there are some equally legitimate contexts of evaluation, according to which we ignore such essentialist constraints. Under such contexts, there will be worlds at which Socrates is a poached egg. Overall, as Lewis indicates (1986, pp. 240), the extreme (modal) haecceitist agrees with the intuition that when we say that Socrates could not be a poached egg we say something true, but she disagrees when we say that Socrates could not be a poached egg and we intend to quantify unrestrictedly over all possible worlds. For the extreme modal haecceitist we can truly say that Socrates could not be a poached egg, only if we create a proper context and ignore some remote (if compared to the actual world) possible worlds such as ones at which there are only eggs. However, if we speak restrictedly and quantify over all possible worlds there are (that is, over all logically consistent constructions given by the principle of recombination), then we will find worlds at which Socrates is a poached egg.

However, a natural question arises: How exactly do we create a context?

A popular strategy is to endorse counterpart theory. A nice feature of the counterpart theory is that it is able to account for our essentialist intuitions, and at the same time to allow for context dependency of truth values of modal statements (or, as Lewis says, 'inconstancy'; see Lewis 1986, pp. 248). According to the counterpart theoretic account of essential properties, some individual x is essentially F, if all of its counterparts are F. That being said, at its bottom, counterpart theory is antiessentialist. One reason is that what counts as a counterpart of x is indeterminate. Counterpart relations are relations of qualitative similarity, but similarity is both vague and context dependent. Under some contexts, e.g., ones at which something counts as

Socrates' counterpart only if it is human, a poached egg will not count as his counterpart. However, under some other contexts, e.g., under which something counts as Socrates' counterpart if it is built from animal cells (dead or alive), a poached egg will count as Socrates' counterpart. Both contexts are legitimate. Some contexts might feel more natural (at least from the common-sense perspective) than others, but, on the metaphysical level, they are legitimate. As a result, individuals do not have essential properties independently of a given choice of counterpart relations. One and the same property under some contexts might count as essential to a given individual, but under some others as accidental. This, however, is inconsistent with the spirit of genuine essentialism, according to which essential properties are meant to be had independently of the context or description. Thus, the counterpart theorist can mirror our essentialist intuitions without making a commitment to genuine essentialism.

The Aristotelian ersatzist who opts for extreme modal haecceitism could appeal to the counterpart theory and achieve inconstancy of truth values of our modal statements that way. However, as has been indicated by Mackie (2006, pp. 154-168), the extreme modal haecceitist could obtain inconstancy of modal evaluations without endorsing counterpart theory. Instead, one could restrict possible worlds under consideration by restricting accessibility relations between worlds. For instance, she could say that under some choice of the restrictions of accessibility relations, worlds at which there are no humans are not accessible to the actual world, but under another, less strict choice of the restrictions, such worlds will be accessible to the actual

1.

¹⁵⁰ A view that essentialism as such entails that individuals have essential properties independently of a context is a default position in the literature. For more details see Forbes (1986), Paul (2006)

¹⁵¹ For a more detailed discussion of such an approach to possible worlds, see Salmon (1981, pp. 229-252, 1984, 1989 1996) and Chandler (1976). Lewis (1986) also indicates that we can restrict the worlds that are under consideration either by restricting counterpart relations or by restricting accessibility relations between worlds. Both approaches are equivalent.

world. Thus, under some conservative choice of accessibility relations a statement, 'Socrates could be a poached egg', will be false, but under another, more liberal choice of accessibility relations, such a statement will be true.

In conclusion, although literally (unrestrictedly) speaking, antiessentialism holds, under some relevant contexts any kind of essentialist truth can be taken as true. Thus, the extreme modal haecceitist can account for our essentialist intuitions, if they are properly understood.

On top of these remarks, as Lewis observes (1986, pp. 239-242), a crucial advantage of extreme modal haecceitism over its moderate counterpart is that it does not have a burden of explaining why some *prima facie* consistent worlds turn out to be inconsistent (impossible) after all. For instance, for the moderate modal haecceitist an ersatz world containing a sentence, 'Socrates is a poached egg', is for some reason inconsistent. And she has to explain what that reason is. But it is not an easy task.

Intuitively, a world at which Socrates is a poached egg is not logically inconsistent: It is provided by the principle of recombination and it represents a way for Socrates to be. Additionally, such a world is not precluded by any law of nature or any principle or axiom restricting possible connections between fundamental and nonfundamental properties, such as a principle saying that no electron can be positively and negatively charged at the same time, or a principle that no individual could be both a donkey and a pig at the same time. A world at which Socrates is a poached egg is also consistent with principles governing a relation between explicit and implicit representation of ersatz worlds (I say more about that issue in the following chapter), that is, principles explaining how explicit descriptions of fundamental reality can make true implicit descriptions of derivative reality. Suppose that the ersatzist assumes that the fundamental

explicit descriptions of ersatz worlds are descriptions of a distribution of fundamental particles over spacetime points (or over structures analogical to spacetime), and that everything else that an ersatz world represents is implicit, and follows from what such a world says explicitly about spacetime points. Such a view on implicit representation is consistent with there being a world at which Socrates is a poached egg. One can simply say that some ersatz world w says explicitly that there is distribution D of fundamental particles over spacetime points, and says that D implicitly represents that Socrates is a poached egg.

It turns out then that if an ersatz world at which Socrates is a poached egg is inconsistent, it is due to some further reasons, presumably principles that take the form of essentialist truths which preclude Socrates from having a qualitative character of a poached egg. If one includes such truths into an ersatz world, according to which Socrates is a poached egg, then such a world will become inconsistent and, thus, impossible.

Suppose that there is nothing wrong with providing such essentialist principles. The problem for the moderate modal haecceitist is that she has to provide not only more essentialist principles than her extreme counterpart, but also more kinds of them. While the extreme modal haecceitist leaves essentialist truths aside (besides some minimal ones, concerning categories of beings such as individuals as such or abstract objects as such), the moderate modal haecceitist introduces particular essentialist principles for each actual individual and fits them into ersatz worlds representing relevant individuals. Such principles constrain what qualitative character individuals could have. For instance, by inserting an essentialist truth: 'Socrates is essentially human' into descriptions of ersatz worlds representing Socrates, one precludes Socrates from having a qualitative character of a donkey or an egg. In order to preclude, in a systematic way,

counterintuitive scenarios postulated by the extreme modal haecceitist, the moderate modal haecceitist needs, however, to introduce essentialist principles for each actual individual. But this makes the moderate modal haecceitist's account of representation implausible because it requires her to explain too many things in order for her explanation of modality to work. Extreme modal haecceitism fares much better in that regard. It delivers an account of how ersatz worlds represent possibilities without determining essential features of actual individuals. This has two important benefits.

Firstly, we no longer need to know beforehand the essences of all actual individuals in order to explain how actual individuals are represented in modal contexts or what possible worlds there are. That requirement imposes too much burden on a philosopher who aims to analyze how modal concepts work for *actualia* (unless she assumes that modality is grounded in essence; I consider that view in a moment).

Secondly, giving up essentialism allows the extreme modal haecceitist to avoid another kind of primitive modality (besides consistency used to build ersatz worlds) because—at least in the traditional, modal view—essence is implicitly modal: Some x is essentially F iff at all possible worlds at which x exists, x is F. If one needs essence in order to explain how our modal concepts work, it turns out that one needs to know what modal truths there are in order to explain the nature of them. This makes the analysis circular.

It might be replied that earlier in this dissertation, when I defined ersatz worlds to be consistent sets of sentences (i.e., sentences that could be true together), I said that I am not

¹⁵² Proponents of such an approach to essence include Plantinga (1974), Kripke (1980), Gorman (2005), Zalta (2006), Wildman (2013), Cowling (2013), and Denby (2014).

concerned about primitive modality, for I do not aim to deliver a reductive analysis of modal concepts. Thus, I should not be bothered by primitive modality here either. But I think the current case of primitive modality is worse than the previous one, for at least three reasons.

Firstly, the less primitive the modality the better. I can allow for one primitive modal concept but not for two or more.

Secondly, the notion of consistency is not involved in any first-order claim about a particular individual but is a single higher-order concept that is applied to sets of sentences that constitute a possible world. Thus, by accepting consistency as a primitive modal notion I do not take as primitive any particular modal truth about a particular individual. I can then use consistency—one higher-order modal concept—to explain how all other first-order modal concepts work. This is not the case with respect to essential truths. They introduce primitive modality on the level of first-order truths involving individuals. Moreover, all essential statements appeal to the notions of necessity and possibility. Thus, we will be unable to explain those notions by relying on essentialist truths without circularity. For that purpose, we will need to appeal to the notion of consistency anyway.

Thirdly, and relatedly, while consistency is just one primitive modal concept used in the construction of all ersatz worlds, we will get as many primitive modal concepts and as many essential truths there are about actual individuals. Each essential truth will impose a unique primitive modal restriction on what is possible for some individual, that is, on our principle of recombination governing construction of possible worlds, i.e., ultimately, on the possible worlds there are. However, the less restriction imposed on the principle of recombination, the better.

One could defend moderate modal haecceitism by claiming that essence should be defined not modally but definitionally, in a Neo-Aristotelian way. Following Fine's remarks on that matter $(1994, 1995)^{153}$ we can say that some individual x is essentially F and what it takes to be x is to be F, or, equivalently, if it lies in the nature of x that it is F, or if it lies in the identity conditions of x that it is F (all of these formulations are used in the literature and can be treated as equivalent). By endorsing the definitional view, one could say that actual individuals have essences which restrict what is possible for them, and these restrictions are grounded in the natures of actual individuals, which are free of any modal import. Essences of that kind do not require modality; thus, one can appeal to essential truths within one's explanation of first-order modal concepts without a worry of circularity. In recent years, many philosophers have defined modality in terms of definitional essence. 154 As Fine famously stated it:

Far from viewing essence as a special case of metaphysical necessity, we should view metaphysical necessity as a special case of essence. For each class of objects (...) will give rise to its own domain of necessary truths, the truths which flow from the nature of the objects in question. The metaphysically necessary truths can then be identified with the propositions which are true in virtue of the nature of all objects whatever (Fine 1994, pp. 9).

As a result, since modality is explained by essence, we need to discover essences of things in order to understand modality at all. Otherwise, modality will be unexplained. Thus, my argument that

¹⁵³ For a further discussion of a definitional approach to essence see: Oderberg (2007), Lowe (2008) Koslicki (2012), Rosen (2015), Correia (2017).

¹⁵⁴ Proponents of reduction of modality to essence include Fine (1994), Correia (2006, 2012), Correia and Skiles (2019, Forthcoming), Michels (2019), Zylstra (2019b).

our explanation of modality should not force us to explain the nature of all things beforehand does not work.

However, I think that the notion of definitional essence does not save the moderate modal haecceitist. This is so for at least two reasons.

Firstly, she still has more kinds of essentialist principles governing the construction of ersatz worlds than the extreme haecceitist does. Moreover, there are a lot of those essentialist principles. Supposedly, every individual has a Finean essence. Thus, each essential truth about every individual provides a unique constraint imposed on the principle of recombination, and each of those truths must be added into each possible world.

Secondly, and more importantly, there are some good reasons to think that modality cannot be explained by essence. As recently pointed out, among many, by Leech (2018), Noonan (2018) and Romero (2019), a problem with the Finean approach to modality is that necessity just does not follow from Finean essences. In other words, from what individuals are, that is, from what lies in their identity conditions it does not follow that they have to be that way or that their identity conditions are necessary. For instance, if what it takes to be Socrates is for him to be human, it does not follow that Socrates is necessarily human. Thus, there is no easy transition from essence to modality. Essence is insufficient for modality. Thus, an appeal to definitional essences does not save moderate modal haecceitism from the counterarguments presented above.

One could try to save the reduction of modality to essence by appealing to a view that essence requires identity, and since identity holds with necessity, it follows that necessity can be explained by identity claims. A problem with such a view is that it is circular: we assume that identity holds with necessity. But in virtue of what does this necessity hold? If we say that it holds

in virtue of the essence of identity, we face a problem of how we transition from its essence to its necessity. But then an infinite regress appears. As Leech concludes (2018), in order to avoid it, we have to either modify further the Finean view (up to now we do not have an account of that kind), or treat essence and modality as two independent notions. I think that this is the way to go.

By taking into consideration all of the remarks that I have provided, I conclude that there are strong theoretical reasons (besides intuitive ones) to believe that extreme modal haecceitism is preferable over its moderate counterpart. I will now move to a discussion of how Representational Difference affects our modal account of *possibilia*.

Possibilia

According to Representational Difference, extreme modal antihaecceitism holds for possible individuals *qua* generalist structures. How does such a view relate to the issue of essentialism?

Firstly, recall the ersatzist construction of ersatz representatives of possible individuals. Since we lack names of possible individuals, we can represent them only by general sentences. Thus, we cannot represent the transworld identity of possible individuals simply by inserting a name of a particular possible individual into distinct alien ersatz worlds. Someone might try then to represent the transworld identity of a possible individual by inserting a complete qualitative description of it into two distinct ersatz worlds. This move, however, is unavailable to the Aristotelian ersatzist. As I have already indicated, ersatz individuals (of both actual and possible individuals) mirror whole worlds. Thus, by fully describing a given ersatz individual, one fully describes a world of which a given ersatz individual is a member of. To give an example. Recall a world w at which some donkey is talking and some pig is flying:

(1)
$$\exists x \exists y (Dx \land Tx \land Py \land Fy \land x \neq y)$$

By providing a complete qualitative description of one of the possible individuals represented by such a world, a talking donkey let's say, one mirrors the whole world:

(2)
$$\exists y (Dx \land Tx \land Py \land Fy \land x \neq y)$$

In other words, in order to fully describe what it takes to be a talking donkey one has to fully describe the world in which a given talking donkey exists. This, however, makes us unable to represent the transworld identity of a talking donkey. For instance, we cannot provide a possible world at which that very talking donkey is a talking horse. In order to do that, we would need to insert (2) into another world and add to it another predicate 'being a horse' (*H* in short). Thus we get:

(3)
$$\exists x \exists y (Dx \land Hx \land Tx \land Py \land Fy \land x \neq y)$$

We can then recover a description of an ersatz talking donkey which is a talking horse:

$$(4) \qquad \exists y (Dx \land Hx \land Tx \land Py \land Fy \land x \neq y)$$

But (4) does not represent a talking donkey at all because it does not include (2). Instead, it represents something that is a donkey and a horse and it talks (ignoring facts about a pig). Thus, we do not get the transworld identity of a talking donkey. What we get is a description of an individual similar to a talking donkey which exists at a world described by (3). Additionally, (4) says that there is something that is both a donkey and a horse. And supposedly nothing can be both a donkey and a horse. This can be generalized: Whenever you try to represent an ersatz

individual associated with the possible individual as transworld identical, you change a description of the ersatz individual in question, because ersatz individuals are holistic. Thus, by changing a world in which a given ersatz individual exists, you change the ersatz individual itself. And since alien ersatz worlds are always qualitatively discernible, a particular ersatz individual cannot exist at more than one world. All ersatz individuals associated with possible individuals are worldbound.

The issue with obtaining transworld identity of possible individuals is also reflected on the metaphysical level. As I said, ersatz individuals associated with possible individuals represent generalist structures. Consider a generalist structure represented by (2):

(5)
$$cc(D^1 \wedge T^1 \wedge P^1 \wedge F^1 \wedge \neg I^2)$$
 obtains

Now, how could we represent the transworld identity of a talking donkey *qua* a generalist structure? Or, to generalize, how can we represent the transworld identity of generalist structures in general? The short answer is: we cannot. We are unable to insert the structure described by (5) into other possible worlds. Descriptions of generalist structures are holistic, that is, they describe the whole ersatz world in which they are involved. Thus, by inserting (5) into some world w^* , you would get a qualitatively indiscernible world from the original ersatz world w. Although generalism itself is neutral about whether PII holds for worlds, linguistic ersatzism is not neutral on that matter: Since sets are individuated by their members, there cannot be two ersatz worlds with exactly the same members. Thus, $w^*=w$. Thus, we cannot get the transworld identity of generalist structures. All individuals qua generalist structures are worldbound.

I shall explain this in an example. Consider a very simple world w_1 at which only a talking donkey exists and nothing else. A generalist structure that w_1 exhibits is: $c(T^1 \wedge D^1)$ obtains. If you were to try to represent a talking donkey as a talking pig, you would need to add another property $P(being\ a\ pig)$ into: $c(T^1 \wedge D^1)$ obtains. Thus, you would get a world w_2 at which $c(T^1 \wedge D^1 \wedge P^1)$ obtains. The world w_2 is one at which donkeyhood and pighood both obtain, but we wanted to construct a world at which only pighood obtains. However, a world w_3 at which $c(T^1 \wedge P^1)$ obtains does not represent the transworld identity of a generalist talking donkey, that is, of a fact $c(T^1 \wedge D^1)$ obtains. Such a fact does not obtain at w_3 . It thus lacks transworld identity.

One cannot also represent transworld identity of a fact $c(T^1 \wedge D^1)$ obtains by saying that there is a possible world w_4 at which both $c(T^1 \wedge D^1)$ and $c(T^1 \wedge D^2)$ obtain, and that w_4 represents transworld identity of $c(T^1 \wedge D^1)$ obtains which obtains at w_1 , because generalist structures are maximal; they mirror whole worlds. Thus, if facts $c(T^1 \wedge D^1)$ and $c(T^1 \wedge P^1)$ are maximal facts that obtain at w_4 , we would say of w_4 that it exhibits both maximal structures. But that would make w_4 inconsistent, for it would be true of w_4 that D obtains and that at the same time D does not obtain but P obtains instead.

Thus, we are unable to make sense of the transworld identity of generalist structures. As a consequence, no generalist structure could be otherwise than it is in a world that represents it, that is, all properties involved in a given generalist structure are essential to it. In other words, everything that it takes to be a given possible individual *qua* generalist structure is to be that very structure. If you change a single property in a given structure, you change the structure itself. Of course, the Aristotelian ersatzist can account for the transworld identity of properties involved in generalist structures, e.g., there are many distinct ersatz worlds representing donkeys, that is, at

which *donkeyhood obtains*. There is no problem with that. But maximal and consistent generalist structures that are surrogates of possible individuals are worldbound. Thus, it turns out that modal antihaecceitism entails some extreme, Leibnizian form of qualitative essentialism towards *possibilia*.

For some this might seem controversial. The Aristotelian ersatzist could try to recover modal variability of generalist structures. There are at least two options available to her. The first option is to modify the Leibnizian account so that we avoid extreme essentialism. Another one is to endorse property counterpart theory for worldbound generalist structures. Counterpart theory, due to the inconstancy of our modal evaluations that follows from it, would allow us to endorse some radical form of antiessentialism towards generalist structures.

Let me consider both options. I will argue that the unmodified Leibnizian extreme essentialist view and property counterpart theory deliver two alternative and promising accounts of modal properties of possible individuals *qua* generalist structures. Despite the fact that they seem to be radically different views, I shall argue they deliver very similar explanations. Most importantly, I will show that the Leibnizian is able to mirror antiessentialist intuitions that come together with (property) counterpart theory by providing a plenitude of generalist structures.

Modified Leibnizian essentialism I: world-indexed properties

According to the Leibnizian essentialism towards generalist structures, each one has all of its constitutive properties essentially, as well as properties that follow from the constitutive properties. By appealing to a distinction between constitutive and consequential essential properties (Fine 1995, Zylstra 2019a), we might say that properties constituting a structure are

constitutively essential to it, while properties that follow from the constitutive ones, are consequently essential to it.

This position is obviously very extreme. There are at least two ways one could avoid extreme essentialism towards generalist structures. I think both of them suffer from some serious issues and that the unmodified view is the least problematic.

The first option is to say that generalist structures do not contain monadic properties but properties relativized to possible worlds. In order to account for modal variability of generalist structures, one could then say that generalist structures are conjunctions of world-indexed properties. Thus, generalist structures after all are extended across possible worlds: They have distinct parts at distinct worlds. This in turn allows them to vary from world to world. For instance, the structure of a talking donkey S instead of simply containing T and D, contains $T@w_1, D@w_2$:

(6)
$$c(T^1@w_1 \wedge D^1@w_1)$$
 obtains

If one then says that a talking donkey could be a talking pig, one should build a conjunctive generalist structure S containing (6) as one of its conjuncts and another generalist structure associated with a talking pig— $c(T^1@w_2 \land P^1@w_2)$ obtains—as it's another conjunct. As a result, S would have the following form:

(7)
$$(c(T^1@w_1 \wedge D^1@w_1) \text{ obtains } \wedge c(T^1@w_2 \wedge P^1@w_2) \text{ obtains) obtains}$$

¹⁵⁵ A similar idea, but applied to the Leinibizan complete concepts is discussed by Adams (1979, pp. 9-10). A single complete concept might include alternative possible histories for a single individual.

For each additional possibility for a talking donkey, one then can add another conjunct which will account for that possibility.

I think there are several issues with this view.

Firstly, according to this view all properties are identified with relational properties. As a result, we are unable to make sense of a difference between relational properties like *being five* meters away from Kripke or being as tall as Michael Jordan and monadic properties such as being wise or being red. This is problematic because we have a strong intuition that some properties are intrinsic rather than relational.

Secondly, such an account of generalist structures clashes with the notion of consistency of generalist structures. A generalist structure is consistent if all of the properties involved in a given structure could be instantiated. However, conjunctive generalist structures are inconsistent in that sense, because it is impossible for all of the world-indexed properties involved in a given conjunctive generalist structure to be instantiated at the actual world. For instance, it is impossible that (7) is actualized at the actual world. And since for the Aristotelian ersatzist only the actual world can actualize ersatz worlds, (7) cannot be actualized.

In response to that argument the Leibnizian could appeal to the notion of relative actualization, according to which every world is actualized relatively to itself. Then the consistency of generalist structures could be obtained: All of the world-indexed properties can be instantiated relatively to possible worlds to which they are indexed. Thus, if we look at (7), its first conjunct obtains at w_1 and its second conjunct obtains at w_2 . Thus, (7) is consistent because all properties involved in it could be instantiated. But this is problematic because Aristotelian

ersatzism requires the absolute notion of actualization because only under such a notion of the actualization one is able to take a privileged perspective of the actualized world on modal space.

A third—and probably most devastating—issue with the view under consideration is that a conjunctive structure such as (7) cannot be exhibited by a single world. In what sense then is (7) a *possible* structure? Is it a possible way for the actual world to be? From the Leinibizian analysis of modality it follows that a proposition p is true iff p is true at least at some world. However, (7):

(7) $(c(T^1@w_1 \wedge D^1@w_1) \text{ obtains } @w_1 \wedge c(T^1@w1 \wedge P^1@w_1) \text{ obtains } @w_2) \text{ obtains}$ cannot obtain at any particular world because a single world cannot exhibit two distinct maximal structures that constitute (7). Thus, (7) is impossible.

Perhaps (7) could be taken to be possible in terms of its conjuncts obtaining at relevant ersatz worlds. But this does not work either: Even if each conjunct of (7) is possible, (7) taken as a whole is not possibly true at any particular world, that is, no single world could be the way described by (7). An analogy: Although there are worlds at which there are circles and worlds at which there are squares, there are no worlds at which there are round circles. Perhaps, then, (7) represents a way for many worlds to be. But this does not work as well, for possible worlds are meant to be ways the actual world could be (at least for the actualist). Otherwise, there is no point in introducing them.

Modified Leibnizian essentialism II: disjunctive structures

Another way one could modify generalist structures is to take them to be disjunctive. Each disjunct represents a possible way for the actual world to be. Thus, when we consider a structure

representing talking donkey: $c(D^1 \wedge T^1)$ obtains and we want to say that it could contain P; instead, we should introduce another structure and build a disjunctive structure:

(8)
$$(c(T^1 \wedge D^1) \text{ obtains } Vc(T^1 \wedge P^1 \text{ obtains})) \text{ obtains}$$

However, the main issue with such a proposal is that, similarly to (7), (8) it seems impossible: no single world can be such that such a disjunctive fact obtains at it. This is so because both disjuncts are assumed to be maximal. Thus, a particular world cannot exhibit two alternative maximal generalist structures, but only one of them. In response, one could say that each disjunct is true at some worlds w_1 and w_2 respectively. Because of that both are possible and thus (8) taken as a whole is possible. But once again, one is then making use of relative actualization rather than absolute one, which is required by Aristotelian ersatzism. Although those disjuncts can be both true relative to some distinct possible worlds, they cannot be both true in the absolute sense of the actual world. Thus, (8) cannot be actualized. Thus, (8) is impossible.

I conclude among the three views just considered, the original Leibnizian extreme essentialism is the least problematic.

Property counterpart theory and antiessentialism

Extreme essentialism towards *possibilia* for some might be hard to accept. One could argue that it seems intuitive to ascribe modal properties to *possibilia* (after all, this is a thought that underlies a problem of iterated modalities indicated by McMichael 1983a). For instance, it seems intuitive to claim that a talking donkey instead of being a donkey could be a talking pig, or that the seventh son of Kripke, instead of being a philosopher could be a tax collector, and so on. If so, our ersatzist

explanation of possible individuals should account for such possibilities. It if does not manage to account for them, we have a strong (intuitive) argument against it.

In order to account for a modal change of possible individuals, the Aristotelian ersatzist could appeal to the counterpart theory. 156 According to Lewisian modal realism coupled with counterpart theory, one can account for modal properties of possible individuals by simply introducing counterpart relations between those individuals themselves. As a result, a possible individual x is possibly F iff some x^* is a counterpart of x and is F, and a possible individual x is necessarily F iff all counterparts of x are F. Now, the ersatzist could borrow counterpart theory without modal realism. However, since the ersatzist does not believe in possible individuals, she has to provide an alternative account of the relata of counterpart relations in order to make her view compatible with counterpart theory.

The only available candidates for the relata of actualist counterpart relations are: (a) ersatz representatives of possible individuals or (b) generalist structures represented by those representatives. Consider option (a) first. Under such a view one recovers modal properties of possible individuals by providing an account of modal properties of ersatz representatives themselves.

¹⁵⁶ Researchers who combined counterpart theory with actualism include Stalnaker (1986), Roy (1995), Heller (1998a, 1998b, 2008), McMichael (1983a, 1983b) and Wang (2015).

The first difference between the view that I consider here and views defended by those philosophers is that, to my understanding, all of the currently available actualist views based on counterpart theory are not Aristotelian, but Platonic. They use counterpart theory to account for modal properties of both *actualia* and *possibilia* and to provide a purely qualitative account of modalities. However, my view is Aristotelian, hence counterpart theory can provide an explanation of modalities involving only *possibilia*, because only possible individuals are represented purely qualitatively and as worldbound. Since we can make transworld identifications of *actualia* easily, counterpart theory is not applicable to them. Secondly, unlike McMichael and Wang, for the reasons explained above in section 6.1.2., I do not appeal to role metaphysics but prefer generalism as a purely qualitative metaphysics of *possibilia*. Thirdly, unlike Stalnaker, who takes counterpart relation to be identity, I stick with the standard approach and take counterpart relation to be a relation of qualitative similarity.

An initial issue with this approach is that we account for modal properties of sets of sentences rather than possible individuals. According to such a view, for a talking donkey to be possibly a talking pig is for an ersatz world w_I —a set of sentences—that contains a sentence 'Something is a talking donkey' to have a counterpart ersatz world w_2 that contains a sentence 'Something is a talking pig'.

It could be argued that this is not a problem at all because for the ersatzist, modal properties of possible individuals hold in virtue of modal properties of representatives. That's why, after all, actualist views in general are treated as *reductive* accounts of *possibilia*: They explain away *possibilia* by introducing some replacements of them that play the same or similar theoretical roles to that of *possibilia*.

Let's grant that. But as Merricks (2003)¹⁵⁷ indicated there are several issues with the ersatzist account if it takes ersatz representatives to be the relata of counterpart relations. Although Merricks indicated five separate issues with such a view, we can focus on the two most devastating ones (see Sider 2006, pp. 6):

- (1) What ersatz representatives represent depends on what we do, that is, on our interpretations of world-making sentences.
- (2) There are many equally good candidates for ersatz representatives. No single analysis is better than the other one.

In other words, a first issue is that ersatz representatives do not represent possibilities by themselves, i.e., intrinsically, but extrinsically, in virtue of our interpretations of them. For

¹⁵⁷ See also Sider (2006), and Woodward (2017) for a further discussion of Merricks' position.

instance, suppose that following Quine (1969), we take ersatz worlds to be mathematical beings—more specifically, sets of ordered pairs—where the first member of each ordered pair is an ordered quadruple representing a point of a spacetime¹⁵⁸, while the second member is either 1 or 0, 1 representing a point as occupied by something and 0 representing a point as unoccupied. Heller (2008) modifies this account slightly by taking the second member of an ersatz world to represent (also purely mathematically) a property that is had by a given point.

Sets of numbers by themselves do not represent possible states of affairs. And because every language needs an interpretation, such an observation applies to any kind of language that could be used by the ersatzist as a base of the construction. For instance, depending on our interpretations, one and the same mathematical description could represent anything. For instance, 0 could represent a point of spacetime being occupied and 1 represent it being unoccupied. It is we who interpret sets to represent relevant facts. Sets in themselves just sit there and do nothing (Merricks 2003, pp. 535). If sets represent facts, they represent them not intrinsically, but extrinsically.

This has a further consequence: At worlds at which there are no interpreters, sets will represent nothing. It could be replied, though, that it is sufficient to provide the interpretation in the actual world (this is Heller's reply, see Heller 1998a, pp. 314-315). And then, since according to Aristotelian ersatzism modal space depends on the happenings at the actual world, we would have a univocal interpretation of a whole modal space. But Merricks' answer is that we

¹⁵⁸ For worlds with different structures the ersatzist would of course provide relevant mathematical descriptions. Following the simple approach presented in the text, we could provisionally assume that n-dimensional spacetimes would be represented by an n-tuple such that each number included in it represents the coordinate of a point within n-dimensional space.

are unable to provide an actualist interpretation of sets representing possible individuals. Thus, we cannot represent possibilities involving them at all, even qualitatively.

The ersatzist could reply that our ersatz constructions are interpreted in the Lagadnionan way, according to which every entity names itself, regardless of whether we can determine which name refers to which entity. Merricks observes that this is the least problematic account of representation available to the ersatzist. However, he thinks that it is still problematic:

(...) According to this approach, an object represents itself in worlds according to which it exists; it is somehow a constituent of every world that represents it; it is, so to speak, its own counterpart in various worlds. Given this view, the "counterpart relation" is numerical identity. But the counterpart relation is not identity. So this view is not a version of counterpart theory at all. Indeed, because this view says that each object represents itself in various worlds, its closest cousin is the paradigm of anti-counterpart theory: modal realism with overlap (Merricks 2003, pp. 539).

I disagree. The Lagadonian interpretation does not make ersatzism a kind of modal realism with overlap. As I argued in Chapter 3, we should distinguish genuine transworld identity of individuals and properties from transworld identity of names and predicates that name those individuals and properties. The ersatzist is committed to the latter but not to the former. Genuine individuals and properties are never parts of ersatz worlds. Ersatz worlds are representatives and two distinct ersatz worlds can contain in their domains common names or predicates. However, that does not mean that actual individuals and actual properties named by their representatives are parts of domains of ersatz worlds. For instance, suppose that Socrates is named by a name

'Socrates' in the Lagadonian manner. The name 'Socrates' can be included in different ersatz worlds, but that does not mean that Socrates—a concrete individual—is a literal constituent of those different ersatz worlds (the same holds for properties and predicates naming them).

However, it might be argued that a commitment to transworld identity of representatives is problematic for the ersatzist. Our intention was to recover modal variability of generalist structures by applying counterpart theory to predicates representing properties involved in those structures. But if predicates are extended across possible worlds, then counterpart theory cannot apply to them, because it requires that the relata of counterpart relations are worldbound. I think however that this issue can be easily avoided if we apply counterpart theory not to particular predicates but to the representatives of whole generalist structures, which are worldbound.

However, there is a further issue indicated by Merricks with the proposal that counterpart theory should be applied to representatives. The issue is that we have many candidates for ersatz representatives. This issue stems from the fact that our Lagadonian language L can take various forms. Ersatz individuals and worlds can be constructed in any way we want. Thus, a link between modal features of such representatives to modal features of represented individuals will be arbitrary as well. Thus, no systematic and stable account of modal properties of possible individuals would be given. For instance, under the assumption of the mathematical language as a proper world-making language, an occupation of a spacetime point can be represented by number 1, but also by 2, by an ordered pair <2, 5> or 2^{12} . On top of that under some constructions of ersatz individuals, e.g., ones which identify them with sets of numbers, it is hard to tell how to measure similarity between individuals so constructed. For instance, suppose that x is an ersatz

individual constructed as $\{<1,2>,<3,4>\}$, y is $\{<5,6>,<7,8>\}$ and z is $\{<9,10>,<11,12>\}$. It seems impossible to provide an objective measure of similarity between those constructions.

For these reasons it seems that it is very difficult to maintain a view that counterpart theory applies to representatives. ¹⁵⁹ I think that a better option is to apply counterpart theory not to the representatives, but to the generalist structures described by ersatz representatives. Counterpart relations hold between generalist structures. We can then evaluate similarity between distinct generalist structures by comparing qualitative properties involved in them and by determining similarity relations between those properties (this might involve, e.g., comparing their causal or nomological roles). In effect, we will obtain modal properties of generalist structures which will then indirectly account for modal properties of possible individuals. For instance, a talking donkey could be a talking pig iff a generalist structure S: $c(T^1 \wedge D^1)$ obtains has a counterpart structure S^* that is relevantly similar to the initial structure S, e.g., S^* could look like: $c(T^1 \wedge D^1)$ obtains. We can easily determine relevant similarity relations holding between properties involved in S and S^* because all explicit properties of generalist structures are qualitative properties.

This variant of property counterpart theory differs from that of Heller (1998a). Heller defends a view which applies counterpart theory to worldbound properties. However, I find an assumption that properties are worldbound highly problematic (and I cannot find any arguments in Heller's article that would support such an assumption). It seems very intuitive that a single qualitative property might exist at distinct possible worlds, e.g., that properties such as *being*

¹⁵⁹ That being said, see Sider (2006) and Woodward (2017) for some replies to Merricks and for a defense of counterpart theory applied to representatives.

human, being red could exist at distinct worlds. This however does not apply to maximal constructions out of them, i.e, generalist structures. Those are always worldbound (for the reasons explained above), even though properties involved in them are extended across worlds. An advantage of my view over Heller's is that it is neutral over the matter whether particular properties are worldbound or transworld identical.

An important consequence of counterpart theory as such is that it introduces contextual analysis of modal properties. Thus, it allows us to avoid extreme essentialism towards generalist structures that follow if they are worldbound. Under certain contexts one and the same property might be essential to a given structure, while under some other contexts it could be accidental. Thus, despite being worldbound, generalist structures lack essential properties. We can, of course, say that structure S essentially includes F if all counterpart structures of S include F. But this truth holds only within an essentialist context. However, there are equally legitimate nonessentialist contexts under which some structure S* might count as a counterpart of S, even though S* lacks F. Both essentialist and nonessentialist contexts are equally legitimate. No context is objectively better than another, although for some pragmatic reasons we might more often endorse one context rather than another. For instance what is possible to a talking donkey depends on the context. Whether it could be a talking pig, or a flying alligator or a poached egg all depends on the properties of a talking donkey that are taken to be relevant for evaluation of counterpart relations.

An important feature of counterpart theory is that, despite introducing contextdependency of our modal evaluations, counterpart relations are able to represent possibilities in a nonarbitrary way which does not depend on what we do. It is true that our interests determine the aspects of properties that are taken to be relevant for our investigations. That is, we chose a context of similarity. But what is represented within a given context is an objective matter, it does not depend on what we do but depends on the qualitative character of the compared properties, which is an objective matter.

Moreover, qualitative properties do not ontologically depend on any individuals, thus, they are necessary. And since generalist structures associated with *possibilia* are purely qualitative, they necessarily exist as well. Thus, we avoid the issue that our analysis of modal properties might turn out contingent and dependent on us.

Extreme essentialis or antiessentialist property counterpart theory?

Although the Leibnizian and counterpart-theoretic analyses of modal properties of generalist structures seem to differ radically—the former is radically essentialist, while the latter is radically antiessentialist—at their bottom are very similar views. Both views agree that generalist structures are worldbound and that, strictly speaking, no generalist structure could be different than it is according to a possible world that represents it. The Leibnizian essentialist claims that modal properties of generalist structures are accounted for by the properties those structures include: Evey property included in a given structure is essential to it. In turn, the property counterpart theorist claims that generalist structures have their modal properties indirectly, not in virtue of the properties they included, but in virtue of similarity relations that the structures in question bear to other similar structures. Given the inconstancy of our modal evaluations that comes with counterpart theory, the modal variability of generalist structures is so extreme, that under some

relevant context, any structure could be a counterpart of any other structure. Thus, antiessentialism follows.

That is not the case for the Leibnizian. She does not allow for inconstancy when it comes to an evaluation of modal statements about possibilia. Thus, strictly speaking, no generalist structure could be different than it is according to a world that represents a given structure as obtaining. This might seem problematic, because inconstancy of truth values of our modal statements seems to be very intuitive (see Lewis 1986, Mackie 2006) and should be accounted for by our account of modality. However, the Leibnizian can provide a nice substitute for it and say that whenever the counterpart theorist claims that a structure S could contain property G instead of F in virtue of a structure S^* , a counterpart of S, containing G, the Leibizian could just drop counterpart relations linking S and S^* , and say that we got two similar but distinct structures, Swhich includes F and S* which includes G. Thus, although it is not true that S could not contain G, either directly or indirectly, through counterpart relations, there is a structure S^* which contains G. For instance, when we say that a generalist talking donkey could be a generalist flying pig, the Leibnizian provides a paraphrase of such a claim and says that in such a case we refer to two qualitatively different ersatz worlds representing two qualitatively different (although very similar) generalist structures: one which represents reality as containing donkeyhood and talking and another one which represents reality as containing *pighood* and *flying*.

In effect, instead of modal variability of modal structures, we get a plenitude of structures each of which has all of its properties essentially. In order for this to work, we need to get the plenitude of worlds though. However, it can be easily obtained if we allow for an unrestricted principle of recombination which will allow us to freely recombine qualitative properties, either

actual or alien (which are represented negatively), and obtain new structures that way. As I argued in Chapter 6, it is a virtue of a view, if it does not impose any primitive modal restrictions on the principle of recombination. And the Leibizan view is not committed to any particular essentialist claims that would impose restrictions on the principle of recombination.

In conclusion, although counterpart theory and the Leibnizian view are claimed to be radically different, they are not. They provide very similar explanations of our modal intuitions. The account we choose will depend on whether we prefer counterpart-theoretic or non-counterpart-theoretic explanation of modality. A nice feature of the counterpart-theoretic account is that it provides benefits that usually come with the counterpart theory. For instance, we might be able to account for contingent identity and solve some issues regarding material constitution, deny S5 as a correct logic of modality (because counterpart relation is intransitive), and many others. On top of that, property counterpart theory does not suffer from the Humphrey objection (as shown by Wang 2015 and as I argue in section 7.3.2. below): we analyze modal properties of complexes of properties. Thus, for a generalist structure S it is relevant how some other generalist structure S^* is characterized qualitatively. ¹⁶⁰

That being said, an advantage of the Leibnizian approach is that it takes properties involved in those structures to account for possibilities intrinsically and determinately by their very nature, not extrinsically and vaguely, that is, in a way that is dependent on our interests and on a context of similarity. No mediation through counterpart relation is needed. In order to recover modal variability of generalist structures we just introduce the plenitude of generalist

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¹⁶⁰ I say more about the Humphrey objection with regard to my account in Chapter 7 in section 7.3.2.

structures. And such a plenitude is given by the principle of recombination, which we already accept as a principle governing modal space.

Let me now move to Modal Difference, which is the third explanatory difference between *actualia* and *possibilia* that is constitutive to Aristotelian ersatzism.

6.3. Modal Difference

According to Modal Difference:

Modal Difference: Existentialism is true. Thus, while there are singular and contingent possibilities about actual individuals, all possibilities about possible individuals are general and necessary.

In my view, a main reason to endorse Modal Difference is that existentialism about singular propositions is true. In what follows, I present some consequences that follow endorsing Modal Difference as just characterized.

Firstly, existentialism is a reason (although not a sufficient one) to endorse (extreme) modal haecceitism for *actualia* and (extreme) modal antihaecceitism for *possibilia*. According to Aristotelian ersatzism, there are only actual individuals. Thus, under the assumption of existentialism, there are singular propositions of only actual individuals, but there are no singular propositions about nonactual individuals. Of course, the mere fact that we accept singular propositions about actual individuals does not entail that the truth values of those propositions do not supervene on qualitative propositions true of actual individuals. Thus, contrary to Kaplan, accepting singular propositions is not sufficient for (extreme) modal haecceitism. Nevertheless,

extreme modal haecceitism (as well as its moderate counterpart) requires singular propositions. If there were no singular propositions, we would be unable to make sense of a notion of singular possibilities and *de re* representation at all. And analogically for modal antihaecceitism, although denying singular propositions is not sufficient for extreme modal antihaecceitism, it is necessary for it. If there were singular propositions about *possibilia* we would be able to represent possible individuals *de re*, and this would be true even if what nonqualitative (*de re*) truths are represented by a given world would supervene on what qualitative truths it represents. However, given that we accept existentialism and a view that there are no possible individuals, it follows that there are no singular propositions about them, either primitive or supervenient on general propositions.

Secondly, endorsing existentialism leads to the conclusion that the space of singular possibilities is contingent matter. Since *de re* possibilities about individuals are modeled on singular propositions, and singular propositions are contingent, it follows that what *de re* possibilities there are is a contingent matter (as long as we focus on *de re* possibilities for contingent individuals, but not necessary ones like God). For instance, if there were no Socrates, then there would be no *de re* possibilities and necessities about him. There would be only general possibilities modeled on general propositions such as [There could be a person being *F*, *G*, *H*...], but whether such a person is Socrates could not be determined because we would lack expressive resources to state any singular facts about Socrates.

For the Aristotelian ersatzist, contingent status of modal space is a welcomed consequence. Such a view accounts for an intuition that, had the actual world been different, i.e., had other individuals existed, other *de re* possibilities would hold. For instance, had generic ersatz worlds representing the generalist talking donkey been actualized, there would be a particular

talking donkey and *de re* possibilities involving it. For the Aristotelian ersatzist, the specific shape of modal space depends on the character of the actual world: All we can say about modal space is grounded in how the actual world is. And as long as we agree that the actual world could be different in some respects, then it is no surprise that modal space grounded in the state of the actual world could vary as well.

Platonists such as Plantinga, Linsky, Zalta and Williamson disagree with that view on modal space. They maintain that modal space is necessary. It never changes. Supposed intuitive changes of it can be accounted for indirectly. For this purpose Plantinga introduced thisnesses and necessitists introduced contingently nonconcrete individuals (check Chapter 2 for details). In general, according to Platonism about modal space we should treat each possible world on its own, as being 'out there' (thus, for the necessitist, the primary notion of truth is inner truth). Yet, not all of them are actualized. The character of modal space does not depend on which of the possible worlds is actualized. Instead, the uniqueness of actuality reduces just to the fact that there is one ersatz world that represents the actual world correctly: the actualized world. But the world among many possible worlds that is actualized does not influence a character of modal space. Other world-stories are necessarily such that they could be actual and all of these alternative stories already exist. There are no contingently existing world-stories.

In my view, Aristotelian ersatzism is more truthful to the actualist intuitions. By endorsing existentialism, it gives justice to the claim that actuality (in the absolute, nonrelative sense) is unique and that it provides us with a privileged perspective on modal space. The character of the actual world determines what possibilities there are. And a basic reason for treating actuality as privileged is that we do not have any ways of describing singular possibilities

involving alien individuals. This also provides a strong case against Platonic actualism: Since we cannot name possible individuals, we are unable to name particular individual essences or contingently nonconcrete individuals that go proxy for possible individuals. We simply are unable to provide any examples of such proxies. For the Aristotelian ersatzist our inability of doing so suggests that *actualia* and *possibilia* are fundamentally different. Partially, this difference consists in Modal Difference, that is, in the fact that while there are *de re* possibilities involving actual individuals, all possibilities about possible individuals are general. However, there could be *de re* possibilities involving possible individuals had those individuals existed.

Thirdly, existentialism supplemented with the truth in/truth at distinction (which I extensively discussed in Chapter 5), forces us to reconsider the standard possible world analyses of possibility and necessity according to which:

- (1) Proposition p is possible if it is true relative to some possible world w.
- (2) Proposition p is necessary if it is true relative to all possible worlds. ¹⁶¹

If the Aristotelian ersatzist would apply the standard notion of the inner truth to the Leibnizian biconditionals, then both analyses would lead to some counterintuitive consequences. Consider (1) first. If it is read in terms of the notion of inner truth, then it makes propositions such as [Not[Socrates exists]] false at Socrates-free worlds, e.g., a world like the actual world but without Socrates, let's call it $w_{Socrates}$. Thus, we are unable to state Socrates' nonexistence at worlds at which he does not exist. However, it seems very intuitive that we should be able to do that. Similarly, a

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¹⁶¹ These are analyses of *de dicto* modalities. Obviously, analogical ones can of course be formulated for *de re* modalities.

proposition [Possibly[Socrates exists]] is not true in a w-Socrates. Thus, from the perspective of w-Socrates it is not true that Socrates could exist. It would follow then that in w-Socrates it is impossible that Socrates could exist. But it seems very intuitive that Socrates could exist at w-Socrates (assuming that Socrates' existence at such a world would not make w-Socrates inconsistent).

In order to avoid such consequences, (1) should be taken to involve the notion of outer truth instead. Such a move will then allow us to evaluate singular propositions as true even at worlds according to which there are no individuals involved in the relevant singular propositions. For instance, we can take actual individuals, make any singular propositions we want to make about them, and evaluate those propositions at distinct possible worlds, including worlds at which there are no actual individuals which are being characterized by the prepositions in questions. As I indicated in Chapter 5 that there will be plenty of actually existing singular propositions—including negative existential and modal singular propositions—about Socrates that will be true at Socrates-free worlds, even though none of them will be true in such worlds.

Analogically for (2): If (2) were to involve the notion of inner truth, then, for example, a necessarily true proposition such as [Socrates exists if Socrates exists] would turn out to be not necessary in $w_{-Socrates}$, because in $w_{-Socrates}$ there are no singular propositions about Socrates. It would follow then that [Socrates exists if Socrates exists] is not true in all possible worlds (and similarly for all other necessary singular propositions involving Socrates). In order to solve this issue, (2) has to be read in terms of the notion of outer truth. In such a case, any actually existing singular proposition which is necessarily true in the actual world will be true at any possible world accessible to the actual world, i.e., which is a counterfactual possibility for the actual world and its inhabitants.

As we can see then, existentialism entails that the notion of outer truth is a default notion of truth involved in our evaluations of propositions at possible worlds. But what about evaluation of propositions about an individual which does not actually exist? My view implies that no such individual could exist because there are no actual singular propositions about possible individuals that could be evaluated at a range of possible worlds. However, obviously, there could be some individuals which are not identical to any of the actual individuals, e.g., Saul Kripke might have a twin brother, or there could be a talking donkey. Thus, my view runs against these strong intuitions and turns out very similar to neccesitism.

My reply: According to Aristotelian ersatzism possible existence of possible individuals is accounted for, not by singular propositions, but by general ones, which describe generalist structures that might obtain at the actual world. Thus, the possibility of alien individuals, e.g., a possibility of there being a talking donkey, is accounted for by a generalist ersatz world that represents a generalist talking donkey, that is, a structure of co-obtaining properties: *talking* and *donkeybood*. Had such a world been actualized, then there would be a talking donkey. We cannot represent the possibility of a talking donkey *de re*. All we can do is to represent its possibility by representing a possible qualitative state of the actual world that could obtain, and that this state leaves ontological room for a new individual. Thus, a counterargument that my view does not enable us to state directly the possibility of some particular possible individual existing does not apply to it. The fact that my view does not provide individual possibilities for aliens is a virtue, not a vice.

Fourthly, a view that there are no singular propositions about possible individuals influences a way in which ersatz worlds can be maximal, i.e., fully specific. It turns out that with

respect to possible worlds representing generic possibilities for alien individuals, the standard notion of maximality does not apply. For instance, an alien ersatz world w representing just a talking donkey as existing can represent such a possibility only through general propositions. Thus, world w will be representationally maximal, that is, it will say all truths there are to be said in our actually available expressive resources. That is, for any qualitative sentence s constructed out of actually available expressive resources, either s or not-s is true at some alien world w. However, world w will be ontologically nonmaximal, because no individualistic fact or its negation holds at it w. Thus, if taken from its own perspective, w does not determine truth values of any singular propositions about a talking donkey, that is, propositions representing individualistic facts about a particular talking donkey which would exist had w be actualized. Thus, ersatz worlds representing aliens are types of worlds rather than fully specific worlds. 162 Worlds like w do not determine truth values of all propositions that would exist had w been actualized.

It is important to note that representational maximality is governed by the notion of truth at. Therefore, under the assumption of such a notion of truth as a primary notion of truth, alien ersatz worlds can be treated as maximal. But as soon as the notion of truth in is considered, which is characteristic of ontological maximality, then worlds representing aliens will be ontologically nonmaximal, because no singular proposition about a talking donkey can be true *in* any of the alien worlds. An ersatz world representing aliens could be ontologically maximal only if it were actual in the absolute sense. Only then would new individualistic facts about new individuals hold and a given alien world would be ontologically maximal.

¹⁶² For a similar observation see Adams (1981, pp. 21).

Fifthly, contingentism about modal space that follows from existentialism might suggest that S5 modal logic cannot be true. But as I have shown in Chapter 5 when I was discussing existentialism and the truth in/truth at distinction, if the Aristotelian ersatzist's approach to possible worlds is rightly understood, S5 can be saved. But it does not have to be saved. As I have shown, the Aristotelian ersatzist has the freedom to choose the kind of modal logic she prefers.

Initially, it might be thought that S5 cannot be true within Aristotelian ersatzism, because S5 requires that all possible worlds are accessible to each other. However, Aristotelian ersatzism has the consequence that some possible worlds exist contingently or contain contingently existing singular propositions. For instance, consider the Socrates-free $w_{-Socrates}$, a world which is accessible to the actualized world $w_{@}$. Had $w_{-Socrates}$ been actualized, $w_{@}$ would not be accessible to it. Thus, the accessibility relation is not symmetric. Thus, S5 and S4 fail.

But, as I argued in Chapter 5, as Aristotelian actualists we never evaluate modal space from the perspective of a possible world taken as alternative actuality. In contrast, we have a fixed notion of actuality associated with the actual world, from the perspective of which we evaluate modal space. In such a case, every world (speaking unrestrictedly) will be accessible to each other, because domains of all worlds will be subdomains of the domain of the actualized world. That being said, this view should not be confused with Platonic actualism that usually comes together with a domain-inclusion view (see Bennett 2005). As I show below in Chapter 7, the Aristotelian ersatzist's claim that all ersatz worlds have domains built out of the elements of the domain of the actualized world is consistent with alien ersatz worlds representing—by the use of generalist structures built from actual properties—alien individuals which are not included in the domain of the actualized world.

Sixthly, contingency is also important in another respect. Since ersatz worlds are constructed from sentences, had some additional individuals existed, our world-making language would be enriched by the additional sentences describing those new individuals. In effect, new ersatz possible worlds would exist. Similarly, had some actual individuals $a_1...a_n$ cease to exist, singular sentences involving them would no longer exist. Thus, some worlds representing individuals $a_1...a_n$ would cease to exist as well.

Now, if there are contingent ersatz worlds, their domains are also contingent. There are two types of domains associated with alien ersatz worlds: (1) domains containing purely qualitative representatives representing alien individuals through generic descriptions, and (2) domains defined negatively representing aliens through negative descriptions. Both kinds of domains are contingent. Had worlds having those domains been actualized, those domains would be enriched by the names of new individuals. Now, since the actualist uses members of the domains to provide some theoretical applications, e.g., to define propositions and properties, it follows that some of these applications and definitions will be contingent as well. That is, had relevant domains been enriched by the new elements, new applications and constructions could be provided. Thus, we have another argument, this time independent from the thesis of existentialism, for the contingent existence of some propositions and properties (as well as of any other entities identified with members of the domain of ersatz worlds).

Let me now move to the last chapter of this dissertation, in which I present some applications of Aristotelian ersatzism. I will also resist some possible objections to my view.

Chapter 7

Aristotelian Ersatzism: Semantic and Metaphysical

Applications

In this chapter I present some semantic and metaphysical applications of Aristotelian ersatzism. Ersatz possible worlds and ersatz individuals, similarly to genuine *possibilia*, can be used for many theoretical purposes such as an analysis of counterfactuals, propositions, properties, knowledge, supervenience, and many others notions which are usually thought to be analyzed in terms of modal notions. In this chapter I focus on a narrow range of semantic and metaphysical applications which are expected from any successful ersatzist' account of modality.

Firstly, I shall focus on the three semantic issues that emerge for the Aristotelian ersatzist if she wants to combine her view with the standard (Kripkean) varying domain semantics. These issues are so called (after Divers 2002, pp. 210-227): the D-problem, the Q-problem, and the V-problem. How do these issues arise for the Aristotelian ersatzist?

Kripkean semantics says that the universal domain D (a set of all domains) is not identical to the domain of the actualized world. Thus, this semantics entails a view that there are entities which exist but which are not actual. The D-problem is the issue of how the Aristotelian ersatzist can allow for varying domain semantics without allowing for entities which exist but are not actual. In other words, the D-problem considers an issue of how to construct domains of worlds. I argue that domains of ersatz worlds which represent possibilities for the inhabitants of the actual

world are constructed differently than domains of alien ersatz worlds which represent possibilities about alien individuals. I also argue that D, the set of all domains of all worlds, does not contain alien individuals (or alien properties) nor their proxies. In turn, the Q-problem concerns an issue whether the Aristotelian ersatzist can preserve a view that two distinct worlds are able to represent one and the same individual as existing at them. I argue that as long as actual individuals are concerned, the ersatzist can represent their transworld identity simply by inserting a name of an actual individual into distinct ersatz worlds. This is not the case with regard to possibilia. Possible individuals qua generalist structures are represented as worldbound. Lastly, the V-problem is a problem whether a predicate can have as its extension at a world an individual that does not exist in that world. I present an existentialist solution to that problem based on the truth in/truth at distinction.

Then I am going to focus on metaphysical metaphysical applications of Aristotelian ersatzism. It is widely agreed that there are three kinds of possibilities that are usually difficult to explain by the ersatzist. Those include: (a) possibilities of aliens, (b) possibilities of indiscernibles and haecceitistic possibilities, as well as (c) iterated modalities involving alien individuals. I argue that possibilities of aliens are accounted for by the actually existing generalist structures that do not obtain but could obtain. Next, I explain the Aristotelian ersatzist is able to account for indiscernibles and haecceitistic possibilities. I argue that while there can be qualitatively indiscernible but numerical distinct actual individuals and that there are haecceitistically different possibilities involving such individuals, this is not the case with respect to possible ones. Possible individuals qua generalist structures are always qualitatively discernible and are never subjects of haecceitistic possibilities. Lastly, there is an issue of iterated modalities with regard to possible

individuals. The problem is that it seems intuitive to ascribe modal properties to possible individuals themselves, e.g., it seems intuitive that a talking donkey could be a talking pig or that Kripke's twin brother who is initially represented as being a philosopher could be a tax collector instead. Actualists usually have troubles in accounting for iterated modalities, because such possibilities require a possible individual to be quantified over and extended across worlds. According to my view, a proper ersatzist answer to that issue is to deny that there is any iteration at all. No possible individual *qua* generalist structure can be represented as existing at more than one possible world. Every possible individual *qua* generalist structure is worldbound. At this point one faces a choice point.

One option is to say that all properties of possible individuals *qua* generalist structures are essential to them. Yet, as I have shown in Chapter 6, it is easy to mirror modal variability of aliens: Whenever you say that an alien individual changes some property, I introduce a new generalist structure that accounts for that change. Instead of modal variability we have thus a plenitude of qualitatively discernible generalist structures.

Another option is to recover modal variability of possible individuals by introducing property counterpart theory We can then recover modal properties of generalist structures by introducing counterpart relations that hold between distinct structures and indirectly account that way for modal properties of possible individuals themselves. At this point I will not try to determine which option is the correct one. The ersatzist is free to choose whatever option she prefers too. What is important is that both solutions allow us to maintain that all iterated modalities involving alien individuals are false.

I shall close the chapter by discussing some possible counterarguments towards my position. First, I focus on the issue of representation. Since Lewis (1986) it is agreed that ersatzist needs to provide an account of representation, that is, an account of how abstract representatives manage to represent possible states of affairs. A more specific issue on which I shall focus on is the issue of implicit representation called, after Heller (2008), 'the Donkey Problem'. According to the Donkey Problem, the Ersatzist needs to explain how she is able to transition from explicit representation of fundamental matters, e.g., descriptions of arrangements of points of spacetime, to the implicit representation of nonfundamental matters, e.g., truths about talking donkeys. Lewis indicates few issues associated with some available ersatzist accounts of implicit representation. I argue that issues indicated by Lewis can be easily solved once we agree that ersatz worlds represent explicitly fundamental truths. If so, all implicit truths follow from the explicit ones for free. Second, I focus on the Humphrey objection. I show that it does not apply to my account of modality. Third, I investigate whether my position falls into a category of pictorial or magical ersatzism. I argue that it does not.

Overview of the chapter. First (7.1.) I focus on semantic applications. I show how Aristotelian ersatzism can accommodate Kripkean semantics by addressing the D-problem (7.1.1.), the Q-problem (7.1.2.) and the V-problem (7.1.3.). After discussing these semantic issues, I turn to the metaphysical applications (7.2.). First (7.2.1) I discuss the possibility of aliens. Then (7.2.2.) I move towards the possibilities of indiscernibles and haecceitistic possibilities. Lastly (7.2.3.). I show how the Aristotelian eratzist should approach the problem of iterated modalities. I close

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¹⁶³ The original characterization of the problem can be found in Lewis (1986, pp. 153-157).

this chapter (7.3.) by addressing three possible objections to my position: (a) that it has issues with the notion of implicit representation, (b) that it cannot avoid Humphrey Objection, and (c) that it is a kind of pictorial or magical ersatzism.

7.1 Semantic applications

In this section I focus on the issue of how the Aristotelian ersatzist can accommodate Kripkean semantics to her view.

Recall that the standard Kripkean models are sextuples: < W, @, R, D, Q, V>, where W is the set of all possible worlds, @ is the actualized world, R is accessibility relation, D is the set of all possible individuals, Q is a function assigning to each world a domain of individuals D(w) which is a subset of D, and V is a function assigning elements of D to the extensions to predicates and truth values to sentences at each world.

As observed by Bennett (2005), the Aristotelian actualist cannot accept this semantic framework at face value. 164 Instead, she has to somehow accommodate Kripkean semantics to be compatible with her metaphysical views. And, as Aristotelian actualists, we want to preserve Kripkean semantics because it is convenient, intuitive and it does not validate BF, CBF and NE principles which for many philosophers of modality are highly counterintuitive. 165

¹⁶⁴ A similar observation is made also by Menzel (1990). He also cites Hodes (1986, pp. 369), McMichael (1983b, pp. 97).

¹⁶⁵ For more details on the last point see Chapter 1, section 1.5. above. There are of course researchers such as Linsky, Zalta and Williamson for whom BF, CBF and NE principles, if rightly understood, do not stay in conflict with our modal intuitions.

Now, John Divers (2002) identified three problems that emerge for the (Aristotelian) actualist when she wants to endorse Kripkean models: the D-problem, the Q-problem and the V-problem. I will focus on them in that order.

7.1.1. The D-problem

As I just said, according to the standard interpretation of the Kripkean semantics, each possible world w has an associated domain of entities represented as existing at w. To put it differently, for any world w, if it is true that x exists according to w, then its domain D(w) contains a member m which represents x as existing according to w. If you are a modal realist, a representative m will be identical to a concrete individual being represented by m. However, if you are an actualist, concrete possible individuals cannot represent themselves because there are no such individuals. Instead, you have to introduce some abstract representatives that are proxies or surrogates of genuine (concrete) possibilia. In effect, under the assumption of actualism, domains of worlds are not constituted by possible individuals or possible properties, but by their actually existing representatives, that is, names and predicates.

Now, how does the D-problem emerge for the Aristotelian ersatzist specifically? Well, since alien individuals are possible (in what follows I shall ignore, with some exceptions, the issue of alien properties and focus solely on individuals), it follows (from the Kripkean model) that there are possible worlds representing aliens as existing, that is, that there are worlds with domains of entities which are not subsets of the domain of the actualized world. Thus, by endorsing the varying domain semantics, we are committed to accept possible worlds with domains including

¹⁶⁶ Note that it is the actualized world, i.e., maximal consistent set of sentences true of the actual world, that has an associated domain of entities, not the actual world, which is not a set but a concrete entity.

alien individuals. And this seems to run against the Aristotelian ersatzist assumption (shared by many other actualists) that everything that exists is actual. Thus, it turns out that the Kripkean semantics is possibilist in nature.

One possible solution is to stipulate that D, the set of all domains of all worlds, is identical to the domain of the actualized world: $D=D(w_{@})$. This solution to the D-problem is endorsed by necessitists and by Plantinga. In order to account for the possibility of aliens, necessitists say that everything exists necessarily but not everything is necessarily concrete. Actually, there are many necessarily existing but contingently nonconcrete entities which could be concrete. Similarly, for Plantinga, every possible individual is substituted by a necessarily existing but actually unexemplified thisness which could be exemplified.

As I explained in Chapter 2, Bennett calls such a view 'domain-inclusion actualism'. This is so because such a view includes a domain D (domain of all individuals that exist according to all worlds) into the domain of the actualized world. Aristotelian ersatzism stays in a strong opposition to that view: It says that it is intuitively obvious that not everything that possibly could exist, exists in the actual world. There could be individuals that actually do not exist. Bennett calls such a view 'nondomain-inclusion actualism'. According to that kind of actualist view, there are many domains which are not included in the domain of the actualized world. This has at least two advantages over necessitism and Plantingan proxy actualism. Firstly, if you stipulate that $D=D(w_{\oplus})$, then you overpopulate the domain of the actualized world $D(w_{\oplus})$, because you have to include in $D(w_{\oplus})$ a proxy for each possible individual. Thus, your ontology will turn out isomorphic to that of the modal realist. Aristotelian ersatzism avoids that issue. Secondly, Aristotelian ersatzism takes the possibility of aliens more seriously than its Platonic

alternatives: there could literally be things which are not identical to any actual individual or to any actual abstract entity.

Let's then explore an alternative, Aristotelian solution to the D-problem.

By appealing to Bennett (2005) I claim that Aristotelian ersatzism should be taken as a kind of nondomain-inclusion actualism, that is, a kind of actualism which agrees that there are domains of worlds which are not subsets of the domain of the actual world (this is consistent with domains of many worlds being subsets of the domain of the actualized world). Thus D, the set of all domains of all worlds is not identical to the domain of the actualized world. This however does not commit us to the existence of nonactual individuals in the domains which are not included in $D(w_{\omega})$, because the Aristotelian ersatzist maintains that everything that exists is actual. Thus, all entities that exist are included in $D(w_{\omega})$. However, we acknowledge that there could be possible individuals. And this is true because we say that there are worlds which represent the existence of possible individuals. But those worlds do not represent those individuals directly, through names. Thus, properly speaking, domains of ersatz alien worlds do not contain ersatz individuals understood as individual representatives of alien individuals. This is so because as Aristotelian actualists we have limited representational resources available to us and we cannot construct ersatz worlds representing possible individuals directly, by names. All that we can do is to provide purely generic descriptions of them.¹⁶⁷ For that reason, even though ersatz alien worlds are representationally maximal, that is, they determine truth values of all sentences expressible in the actually available Lagadonian language, such worlds are nevertheless ontologically underspecifc. Intuitively, in such worlds there is a room for new individuals that could exist had those worlds

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 $^{^{167}}$ For more details on how to account for the possibility of aliens see section 7.2.1. below.

been actualized. But the possibility of these new individuals is accounted for not by individual representatives but by generic ones which represent generalist structures that could obtain. Thus, domains of alien worlds contain only predicates of actual properties (which are being recombined) which constitute relevant generic representatives and domains of ersatz alien worlds.¹⁶⁸

As we can see then, domains of different kinds of ersatz worlds will be constructed differently. Thus, Representational Difference and Metaphysical Difference that constitute Aristotelian ersatzism lead to the Semantic Difference as well:

Semantic Difference: Domains of ersatz worlds representing actual individuals are constructed differently than domains of ersatz worlds representing possible individuals.

This semantic difference has a consequence that truth conditions of statements involving actualia and possibilia will have distinct form. It is a kind of semantic complication and inconvenience (if compared to the standard Kripkean model)¹⁶⁹, but such a complication is required if one wants to preserve the metaphysics underlying Aristotelian ersatzism developed in this dissertation.

With respect to Semantic Difference, I propose to discern three kinds of ersatz worlds with their three kinds of domains:

1.

¹⁶⁸ This is so as long as we are accounting for the possibility of alien individuals by using actual expressive resources, i.e., actual predicates naming actual properties. Such alien individuals are taken to have qualitative character built out of actual qualitative properties. However, there can be more radical aliens, with qualitative character built out of alien qualitative properties. For more details on that issue see section 7.2.1. below.

¹⁶⁹ See Divers (2002, pp. 347-348, note 19) who makes a similar point about possible readings of Plantingan semantics.

- (1) Ersatz worlds that represent possibilities for the actual individuals with actual properties.
- (2) Ersatz worlds that represent possibilities for alien individuals with actual properties.
- (3) Ersatz worlds that represent possibilities for alien individuals with alien properties.

Worlds of the first kind are very intuitive. Since the Lagadonian language is such that every individual and property names itself, as long as actual individuals and actual properties are concerned, we have names for them. Thus, they can represent themselves. Therefore, domains of the actualized world together with the domains of worlds representing possibilities for members of the actualized world will be built out of the names representing actual individuals and predicates representing actual properties.

Worlds of the second kind present a first and at the same time default way the Aristotelian ersatzist accounts for alien individuals. Consider the possibility of a talking donkey. Such an individual is alien but is meant to have a qualitative character built out of actual qualitative properties. In order to account for its possibility we need to take three steps. First, for simplicity, let's assume that to be a talking donkey is to exemplify just two properties: talking (T) and being a donkey (D). Consider then an alien ersatz world w at which only a talking donkey exists: $\exists x(Tx \land Dx)$. World w represents a generalist structure: $c(T^T \land D^T)$ obtains, which says that talking and donkeybood obtain. Now, had w been actualized, then there would be a talking donkey.

Domains of such worlds partially overlap with the domain of the actualized world:

Generalist structures that account for the possibilities of alien individuals are constructed out of

actual properties. Thus, domains of worlds representing alien individuals will include predicates of actual properties. However, such domains will not contain particular representatives (names) of particular talking donkeys, golden mountains and other alien individuals. Such worlds represent possibilities generically, in virtue of generalist structures. This is all we can actually say about the representation of possibilities about possible individuals such as a talking donkey. For instance, we are unable to provide any de re truth involving a particular talking donkey that would involve its name. There could be singular truths involving a particular talking donkey if a world generically representing the possible existence of some talking donkey had been actualized. Our generic description leaves room in a domain of that world for an individual that could have a qualitative character of a talking donkey. But actually there is no such individual. Domain of such a world (assuming that it represents only alien individuals) represents reality in purely generalist terms as a co-occurrence of some n-adic properties. Thus, metaphysically speaking, we do not identify a particular possible individual—a talking donkey—with some unique qualitative role that it could have. That would be a kind of bundle theory which recovers individuality of individuals from their qualitative features. This however presumes that possible individuals can be described uniquely. Instead, the Aristotelian ersatzist talks about possible individuals indirectly qua generalist structures. Generalist structures are alternative ways for the actual world to be. And had it been in one of these ways, new individuals would exist.

Worlds of the third kind are most problematic for the Aristotelian ersatzist to describe. Here we are talking about radically alien individuals, which have alien properties. Thus, we cannot represent possible existence of such individuals in virtue of constructing purely general domains out of actually existing properties. All we can do as ersatzists is to describe such domains

negatively, as containing predicates of properties not identical to any actual properties. We can then provide purely negative descriptions of generalist structures built out of such alien properties and account for the possibility of radically alien individuals that way. Such descriptions of radical aliens will also be representationally complete in a sense that we say of radically alien individuals all truths statable within our representational resources, but such descriptions are ontologically incomplete in a very radical way because if we evaluate radically alien ersatz worlds from their own perspectives, we will be unable to describe directly, by a name or by a predicate, any element of its domain, neither a property nor an individual.

But the problem of constructing domains of radically alien worlds is not particular only to Aristotelian ersatzism. A proponent of any kind of possible world framework will have difficulties with referring to radical aliens, including the Lewisian modal realist. What is important though is to make our view able to account for such possibilities and make such possibilities consistent with the theory. As we can see, Aristotelian ersatzism is consistent with radically alien individuals.

I conclude that the Aristotelian ersatzist can solve the D-problem. All possible worlds have their own domain of (ersatz) individuals. However, the actualized possible world— $w_{@}$ —coupled with possible worlds given by recombination of its elements, contains singular ersatz individuals. Moreover, each domain of a world given by a recombination of elements of $w_{@}$ will be just a subdomain of the $D(w_{@})$. Thus, with respect to such worlds domain-inclusion view is correct.

However, that is not the case with respect to alien worlds. Domains of those worlds contain generic ersatz individuals which are built from actual predicates naming actual qualitative

properties. But those predicates, since they name actual properties, are contained in $D(w_{@})$. Thus, it might be thought that domains of alien worlds are also included in the domain of the actualized world. This however is incorrect due to the fact that domains of alien worlds are incomplete. Had an alien world w been actualized, its domain D(w) would include new ersatz individuals that would represent new individuals that would exist in w. Thus, Aristotelian ersatzist maintains that there could be individuals which do not actually exist, even though no such individual is included in $D(w_{@})$.

Lastly, radically alien worlds have domains characterized purely negatively. They do not overlap in any respect with $D(w_@)$. Thus, with respect to these worlds, no matter if evaluated from the perspective of the actual world or from their own perspective, we should endorse the nondomain-inclusion view. Radically alien ersatz worlds provide us with another case of individuals that could exist but whose representatives are not included in $D(w_@)$.

7.1.2. The Q-problem

According to the intuitive explanation, function Q allows for a member of D to be in the local domains of at least two distinct worlds. Thus, a single member of D can be represented as existing by two distinct possible worlds. Thus, function Q allows for the transworld identity of individuals. Now, how does Aristotelian ersatzism relate to this issue?

Generally, as I explained it earlier, Aristotelian ersatzism does not allow for genuine transworld identity. The actual world is concrete and possible worlds are abstract and there is no overlap between them. Nevertheless, Aristotelian ersatzism does allow for the uncontroversial transworld identity of abstract representatives: Ersatz worlds are just sets of sentences and it is

uncontroversial to assume that sets can overlap. For instance, a sentence, such as 'Socrates is human', can be a member of distinct domains of distinct ersatz worlds, that is, distinct ersatz worlds can represent Socrates as being human. This view combines naturally with the stipulative account of transworld identifications: We can identify Socrates across distinct possible worlds by simply stipulating (describing) relevant worlds as containing Socrates and we do that by inserting a proper name 'Socrates' into descriptions of relevant worlds. Most importantly, as far as actual individuals are concerned, we can do that independently of our knowledge of the qualitative character of Socrates and of the qualitative character of worlds at which he exists.

However, such an approach to transworld identity does not work for possible individuals because those are replaced by generalist structures. And for reasons indicated above, all generalist structures (as well as their descriptions) are worldbound. All we can get is the transworld identity of properties (predicates) involved in generalist structures. We can achieve that by inserting a predicate of some qualitative property involved in a given generalist structure, e.g., being donkey into distinct possible worlds. Thus, distinct ersatz worlds can represent the same qualitative properties in virtue of their domains containing the same predicates. That being said, no alien ersatz worlds can fully overlap because alien ersatz worlds are always qualitatively discernible. (Ersatz worlds representing possibilities for actual individuals cannot fully overlap either, but for a different reason. Such worlds can be qualitatively indiscernible, that is, they can share all qualitative properties, but they have to differ in some nonqualitative aspects concerning individuals and their nonqualitative properties. Like I said earlier, all ersatz worlds are sets, and sets are individuated by their members. Thus, there cannot be two distinct ersatz worlds having exactly the same members).

At this point, someone could argue that since qualitative properties exist necessarily, every ersatz world contains all qualitative properties. Thus, at every ersatz world there are all the same generalist structures. In effect, generalist structures are extended across possible worlds after all. However, I disagree. Generalist structures are maximal. You get one structure per one world. Thus, although all the same qualitative properties exist at all possible worlds (excluding radically alien possible worlds at which only radically alien qualitative properties exist), there are no possible worlds that agree on what properties are instantiated. This is so because instantiated properties are arranged into generalist structures. And, since generalist structures are maximal, there cannot be two worlds that exhibit the same generalist structures. Thus, there are no worlds that agree on what properties are instantiated at them.

7.1.3. The V-problem

A function V in Kripkean semantics is understood as a function assigning to each n-placed predicate at each world an extension, that is, some members of D. It does not require however that n-placed predicate p which is a part of a description of some world w has as its extension only individuals which exist at w. Thus, according to the intuitive understanding of the function V, a predicate such as *being human* can have as its extension Socrates even in worlds in which Socrates does not exist. As a result, a proposition [Socrates is human] can be true in worlds in which Socrates does not exist (see Divers 2002, pp. 224).

The Aristotelian ersatzist, due to her commitment to existentialism, cannot accept such understanding of V. According to Aristotelian ersatzism, for any world w in which an individual a does not exist, there are no singular truths about a which are true in world w. At best, if a is an

actually existing individual, we can take actually existing singular propositions involving a and evaluate them at a-free worlds such as w. Those propositions will be then true or false at w (but they will be false in them).

As I showed in Chapter 5, existentialism comes together with serious actualism for propositions, according to which:

Serious Actualism for Propositions: A proposition p is true according to w if and only if p exists according to w.

However, for reasons that I provided in Chapter 5 (section 5.5.4.), the Aristotelian ersatzist should modify Serious Actualism for Propositions, and weaken it a little bit. According to its weaker form, it says:

Weak Serious Actualism for Propositions: A proposition p is true at w iff either (a) a proposition p exists in w or (b) p exists in the actualized world $w_{@}$ or in a world given by the recombination of $w_{@}$, and w is counterfactual relative to $w_{@}$ or to a world given by the recombination of $w_{@}$.

Weak Serious Actualism for Propositions allows us to evaluate a proposition p at some world w as true even if p does not exist in w. It is sufficient that p actually exists in w_{e} or in a world given by the recombination of its elements. For instance, given that Socrates actually exists, we can formulate propositions about him, and evaluate them at other possible worlds, including worlds at which Socrates does not exist (on the condition that those worlds are accessible to the actual world). This requires us to view possible worlds not from their own perspective (as alternative actualities), but from the perspective of the actualized world (as counterfactual possibilities for

the actualized world and its members). Now, we can apply these remarks to the current issue and introduce an analogue of Weak Serious Actualism for Propositions for predicates:

Weak Serious Actualism for Predicates: An individual x can be an extension of a predicate p at a world w iff: (a) x exists in w, or (b) x exists in the actualized world w or in a world given by the recombination of w, and w is counterfactual relative to w or to a world given by the recombination of w.

As long as actual individuals are concerned, given (b), they can be extensions of predicates even at worlds in which those individuals do not exist. For instance, Socrates can be an extension of 'humanity' even at worlds in which he does not exist, as long as those worlds represent possibilities for the actualized world or to the worlds given by recombination of it. It is worth mentioning that neither (a) nor (b) can be true of an alien or radically alien individual. Since such individuals do not exist but only could exist, they cannot be extensions of the actual predicates at all because there are no such individuals. All we can say is that those individuals could be extensions of the actual predicates.

7.2. Metaphysical applications

Now, I will present metaphysical applications of Aristotelian ersatzism. I focus on the issues of:
(1) possibility of aliens, (2) possibility of indiscernibles and haecceitistic possibilities, and (3) iterated modalities. Let me explain each issue in order.

7.2.1. Alien individuals

I have already touched on the topic of alien individuals when I discussed the D-problem. It is intuitively true that:

Alien Individuals: Possibly, there could be an individual not identical to any actual individual.

For instance, there could be a talking donkey, a million-carat diamond, or you might have a twin brother or sister (assuming that actually you have none). A general argument for Alien Individuals can be built on an analogy. We can easily imagine a possible world w which is a contracted version of the actualized world $w_{@}$ such that it does not include one of the actual individuals that exist in $w_{@}$. Now, had w been actualized, world $w_{@}$ would represent a possibility for it, that is, it would be true of w that it could have contained an additional individual which is represented as existing by $w_{@}$. Analogically, it is possible that $w_{@}$ is a contracted version of some alien world, that is, a world representing an alien individual besides actual ones.

Can the Aristotelian ersatzist account for Alien Individuals? *Prima facie* it seems to be problematic. According to Aristotelian ersatzism possible worlds represent individuals and properties works by naming them. However, since only actual individuals exist, the ersatzist has names only for them. She lacks names for alien individuals. As a result, she cannot represent any particular alien individual (or alien property) by inserting its name (or a predicate) into some ersatz world. However, although the ersatzist cannot name aliens, she can use actual names and actual predicates to indirectly represent possibilities involving alien individuals, without mentioning them explicitly.

It is possible to discern at least two ways by which the Aristotelian could provide an indirect description of alien individuals. Which way one should choose depends on whether usual or radical aliens are concerned.

Consider usual aliens first such as a talking donkey, which have qualitative character built out of actual qualitative properties. As I explained in Chapter 6, a possibility of an alien individual such as a talking donkey cannot be accounted for by a qualitative role R that some individual could play—TD(x)—because the notion of a qualitative role is part of individualistic metaphysics after all. Moreover, roles represent identity and/or existence conditions of individuals as highly extrinsic. As I argued, Aristotelian ersatzism should instead be combined with generalist metaphysics towards *possibilia*, for it squares better with the Aristotelian actualist tenet that there are no possible individuals nor unique proxies of them. By appealing to generalism, the Aristotelian ersatzist accounts for the possibility of aliens by introducing generic representatives representing generalist structures of co-obtaining actual qualitative properties. Thus, strictly speaking, ersatz representations of aliens are no longer ersatz *individuals*. They play theoretical roles of ersatz individuals, but are rather generic ersatz representatives which represent possible individuals *qua* generalist structures.

How exactly generalist structures account for such possibilities? Instead of saying that a role *being* a talking donkey could be true of something:

TD(x)

the Aristotelian Ersatizt talks about a generalist structure such that talking (T) and donkeyhood

(D) obtain:

$c(T^1 \wedge D^1)$ obtains

And had such structure obtain, that is, had an ersatz world representing it been actualized, then the actual world would be such that *talking and donkeyhood obtain*. Of course, this does not represent a particular talking donkey, but nevertheless, we get something close to it: had *talking* and *donkeyhood* obtain at the actual world, the actual world would have ontological room for some new individual that could exist within a world with such qualitative character. We should think about generalist structures as providing a partition of a world. The more detailed our description of a generalist structure is, the more precise the partition is, and so is our representation of *possibilia*.

A very nice feature of the generalist approach, if looked from the Aristotelian ersatzist perspective, is that it allows us to completely get rid of any reference to alien individuals. This, in turn, allows us to reconsider some issues associated with Aristotelian ersatzism, namely that it provides incomplete characterization of alien individuals and that it cannot deliver a unique ersatz individuals for each alien individual. These accusations follow from the presumption of individualistic metaphysics towards *possibilia*. But given that we explain modality from the perspective of the actually available representational resources, we should endorse generalist metaphysics of aliens. And from that standpoint, claims about incompleteness of descriptions of aliens or of lack of unique ersatz representatives of aliens make no sense at all. Thus, endorsing generalism allows us to avoid issues associated with ersatzism since Lewis.

This is how the story goes for usual aliens, which can be described indirectly by using actual properties and by building generalist structures out of them. However, remind that alien individuals could also be radically alien, that is, they could play qualitative roles built not out of

actual properties but from alien properties that could exist had relevant alien worlds been actualized (e.g., there could be an alien fundamental individual exemplifying alien fundamental properties). In such a case we cannot give a description of aliens in terms of maximal qualitative descriptions built out of actual predicates which represent generalist structure built out of actually existing properties. In the case of radical aliens, we are left with the purely negative description of their possibility. By sticking with the generalist approach, we should represent the possibility of radical aliens by representing an alien generalist structure built out of alien properties. And we can represent such a structure by saying that there is a possible world with a structure such that properties $X_1...X_n$ co-obtain, and properties $X_1...X_n$ are not identical to any actually existing properties $F_1...F_n$ for which we have predicates. Had such a radically alien structure been actualized, there would be new individuals within such a structure.

7.2.2. Indiscernibles

The second issue of expressive power associated with Aristotelian ersatzism, is whether it can account for the possibility of indiscernibles, i.e., qualitatively indiscernible but numerically distinct individuals. Following Lewis, we can discern two problems of indiscernibles: one concerning worlds, and another one concerning individuals. Can the Aristotelian ersatzist account for both possibilities? The short answer is: it depends. Let me elaborate on that.

Indiscernible worlds

Consider the possibility of indiscernible possible worlds first. According to Aristotelian ersatzism, worlds are maximal and consistent sets of sentences, and because sets are individuated

by their members, there cannot be two sets with exactly the same members. Thus, there cannot be two absolutely indiscernible ersatz worlds, i.e., worlds which do not differ in any, both qualitative and nonqualitative respect. Ersatz worlds have to be always discernible. That being said, they do not have to be *qualitatively* discernible, at least, as far as worlds representing possibilities for the actual individuals are concerned. If we consider such worlds, then two ersatz worlds can be qualitatively indiscernible but can differ nonqualitatively with respect to what singular sentences are true at them. For instance, there is a possible world involving you and Joe Biden at which you swap qualitative roles with each other. Such a world is a qualitative copy of the actualized world, but it differs nonqualitatively with regard to which individual plays which qualitative role, and such differences can be grapsed by the relevant nonqualitative sentences holding at the relevant worlds.

This however does not work for ersatz alien worlds representing possibilities for alien individuals. Since there are no alien individuals (nor alien properties), alien worlds representing them cannot include names or predicates of such entities. Thus, alien worlds have to be characterized purely qualitatively. And since worlds are individuated by their members, any two distinct purely qualitative worlds have to differ qualitatively with some respect.

More specifically, if we consider two worlds w_1 and w_2 representing the same generalist structure: $c(F^1 \land G^1)$ obtains, then w_1 and w_2 should be judged identical because there is no qualitative difference between them. As I explained in Chapter 4, generalism and extreme modal antihaecceitism as such does not commit us to PII: perhaps there are duplicates of qualitative worlds. But if generalism and/or extreme modal antihaecceitism are coupled with the ersatz view

that possible worlds and possible individuals are sets of sentences, then *PII* must follow for worlds and individuals so understood.

Is this a bad result? Lewis at some point observed that it is an open matter whether according to modal realism there are duplicates of qualitative worlds. Aristotelian ersatzism loses neutrality on that matter for it denies such a possibility. But it does so only for alien worlds, which do not involve any actual individual. In case of worlds involving *actualia*, Aristotelian ersatzism allows for qualitative duplicates of worlds involving them, as long as they differ nonqualitatively (e.g., haecceisticaly). We can then have duplicates of worlds built out of the members of the actualized world, but no duplicates of qualitative alien worlds. And I do not see any theoretical reason why we should introduce duplicates of qualitative *alien* worlds. Until such a reason is provided, I do not think that a denial of such duplication is a drawback of Aristotelian ersatzism.

Indiscernible individuals

However, as Lewis observes, while we do not have strong intuitions supporting a claim that there are indiscernible possible worlds, it is very intuitive to think that there are indiscernible individuals, alike in their intrinsic natures, and in their extrinsic properties as well, but which nevertheless are numerically distinct. Examples include symmetrical worlds, worlds of two-way eternal recurrence of epochs, or worlds representing qualitatively indiscernible twins. If at least some of these or similar scenarios are genuine (and many researchers think that this is the case), a successful theory of modality has to account for a possibility of indiscernible individuals.

Consider a symmetrical world w such as Max Black's (Black 1952) world containing nothing but two indiscernible spheres. Ersatz characterisation of w is as follows:

(1)
$$\exists x \exists y (Px \land Py \land x \neq y)$$

Predicate P fully describes the qualitative character of each sphere. World w then says that there are two spheres having the same qualitative character but which are numerically distinct.

Now, as far as actual individuals are concerned, Aristotelian ersatzism has no issues with explaining possibilities of indiscernibles. Since actual individuals exist we have names for them, and those names cannot be substituted with some qualitative descriptions. Thus, we can make sense of two actual individuals being numerically distinct even if they are characterized by the same qualitative truths. On the representational level we can simply insert names (and predicates) into a description of w:

(2)
$$\exists x \exists y (x=a \land y=b \land Ra \land Rb \land a \neq b)$$

Thus, the representation of w is partially qualitative and partially nonqualitative. Additionally, on the metaphysical level, we are able to represent w as a world at which, besides qualitative facts (e.g., a fact stating that R is instantiated), some individualistic facts obtain (such as Ra and Rb), and those facts are irreducible to qualitative facts, because we cannot substitute names 'a' and 'b' with qualitative descriptions. This procedure can then be generalized to apply to all worlds given by the recombination of the actualized world.

This is not the case with regard to ersatz worlds representing possibilities for aliens, either usual or radical. (In what follows I focus on usual aliens, but analogical remarks hold for radical aliens as well). Due to the fact that as Aristotelian ersatzists we do not have names for alien individuals, we are left with generic descriptions of indiscernibles:

$$\exists x \exists y (Rx \land Ry \land x \neq y)$$

Predicate R describes a qualitative role not identical to any role actually played by any actual individual. Suppose that it is a role of being a talking donkey. The ersatzist could then say that (3) represents a possibility of there being two indiscernible talking donkeys. 170

But, as Lewis observes, the problem for the linguistic ersatzist (and thus for the Aristotelian ersatzist as well) is that (3) does not provide us with two distinct surrogates of two alien individuals, that is, with two indiscernible talking donkeys, but it only gives us one ersatz representation that has to work for both. This is a serious issue because we need ersatz individuals in the domains of worlds in order to provide some semantic and metaphysical applications (see Divers 2002, pp. 276). Lewis expresses his criticism as follows:

According to an ersatz world that represents such repetition in time or space, there are many indiscernible individuals. But we do not have correspondingly many indiscernible ersatz possible individuals, all actualised according to this ersatz world. One must do for all. What the ersatz world says, or implies is that the one ersatz individual is actualised many times over. So where we ought to have many indiscernible possibilities for an individual, we have only one. Imagine a full description of a world of eternal recurrence, with a certain role – say, that of a conqueror rather like Napoleon – filled once in every indiscernible epoch. There are infinitely many indiscernible possibilities for filling the Napoleonic role in such a world. Or so it surely seems. But no: there is only the one ersatz individual, only the one linguistic description of a filler of the role.

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¹⁷⁰ If we were talking about radical aliens, we would have to add a further requirement imposed on qualitative roles of aliens that properties $X_1...X_n$ constituting some role R^* that a radical alien could play are not identical to any actual properties $F_1...F_n$.

Is it so or not that there are many possibilities? Neither choice is satisfactory. Say yes, and the possibilities cannot be the ersatz individuals. Then what else is there for them to be? Say no, and we lose what seems to be a valid implication: if there is a possibility according to which there are many different individuals, then there are many different possible individuals associated with that possibility (1986, pp. 158).

Thus, if one says that (3) represents two possibilities—one for each talking donkey—then, as Lewis correctly observes, possibilities are not always possible worlds. Thus, we abandon Modal Correspondence between possible worlds and possibilities. This opens up a route to cheap haecceitism. However, as I argued in Chapter 3 (section 3.5.), we should maintain Modal Correspondence and avoid cheap haecceitism. One could then say that (3) does not represent two distinct possibilities, that is, even though (3) represents two talking donkeys as being qualitatively indiscernible, it does not represent two possibilities for two individuals, but only one possibility. However, as Lewis rightly observes, this is highly counterintuitive and I agree with him on that point.

How the Aristotelian ersatzist should then represent a possibility of indiscernible alien individuals? One possible solution is to try to recover distinct ersatz individuals from (3) by unbinding one variable. You then obtain two linguistic representatives of two talking donkeys:

Ersatz Talking Donkey₁:
$$\exists y(Rx \land Ry \land x\neq y)$$

Ersatz Talking Donkey₂:
$$\exists x(Rx \land Ry \land x \neq y)$$

But these descriptions are just notational variants of one and the same ersatz individual. This is so because ersatz alien individuals are individuated solely by the qualitative sentences they involve.

Thus, since Ersatz Talking Donkey₁ and Ersatz Talking Donkey₂ contain the same qualitative sentences, they are one and the same alien ersatz individual. We made no progress. Lewis himself considers a similar reply that the ersatzist could make but immediately criticizes it:

You might say: 'if multiplicity is wanted, no sooner said than done – let's make many ordered pairs, pairing the one linguistic ersatz individual with each of the infinitely many integers.' But multiplicity was not all I wanted. This is an irrelevant multiplicity. We have the infinitely many new representations, differing now by the integers built into them; and we have the infinitely many indiscernible possibilities that ought to be acknowledged. But the many representations do not represent the many possibilities unambiguously, one to one. Rather, each of the many new representations is ambiguous over all the many possibilities, just as the one original representation was. Nothing has been gained. (Lewis 1986, pp. 158)

Another solution to the problem of indiscernibles has been proposed by Roy (1995) and Melia (2003). They aimed to account for indiscernibles by enhancing the expressive power of the world-making language L. Their idea was to introduce some new primitive representatives which would manage to represent possible individuals independently of how those individuals are represented qualitatively. With such an enriched world-making language, we would be able to represent indiscernible possible individuals and address Lewis' counterargument. Wang (2015, pp. 429) calls such a solution to the problem of indiscernibles the 'arbitrary representatives strategy'.

¹⁷¹ See also Divers (2002, Ch. 17) and Wang (2015) for a discussion of the arbitrary names solution to the problem of indiscernibles.

According to Roy's variant of it, we should enrich the expressive power of our worldmaking language L by adding to it arbitrary names, which are a kind of empty names. In order to obtain arbitrary names one should pair a name of an actual individual with an empty set: $\langle a, \emptyset \rangle$ (see Roy 1995, pp. 228, Melia 2003, pp. 23-24). Arbitrary names can then be used as placeholders for possible individuals. This makes us able to represent the transworld identity of possible individuals: a possible individual x is transworld identical if one and the same arbitrary name, <a, Ø> let's say, is a member of at least two distinct ersatz worlds. Such a view makes it also possible to represent indiscernible possible individuals. This can be achieved by introducing an ersatz world containing two distinct arbitrary names, $\langle a, \phi \rangle$ and $\langle b, \phi \rangle$, paired with the same qualitative description representing the same qualitative way for an individual to be. We can also allow for haecceitistic possibilities about possible individuals because arbitrary names—similarly as genuine names of actual individuals—are not descriptively connected to possible individuals (Wang 2015, pp. 429). Therefore, it is possible to freely recombine any arbitrary name with any qualitative description and obtain haecceisticaly different alien ersatz worlds, which say the same qualitative truths but which differ over which arbitrary name is paired with which duplicate of a qualitative description.

Melia shares this view but interprets it a little bit differently. For Melia, abstract representatives are not names, but, as he calls them, 'pixels'. They cannot be names because there are no referents (possible individuals) to which those names can refer. Thus, we are unable to determine the meaning of arbitrary names (see Divers 2002, pp. 281). The primary role of

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¹⁷² Melia also provides pixels for properties. These are identified with ordered pairs of an actual property and an empty set.

pixels is thus not representing which alien individual is which one, that is, which alien plays which qualitative role, but representing which possible individual is identical (or not identical) to which possible individual. Melia is then able to represent indiscernible aliens by introducing an ersatz world containing two distinct pixels which are paired with the duplicates of the qualitative description. Since pixels are different, such a world represents nonidentity of possible individuals, even though they are represented as being the same qualitatively. And in order to do that, we do not have to determine which possible individual is paired with which duplicate of the qualitative description.

I think however that the arbitrary representatives strategy, in both described variants, is unsatisfactory.

A first issue with such a view (see Wang (2015, pp. 429-430) is that arbitrary names cannot be interpreted in a realistic way, that is, it is impossible to determine their referents. Thus, the resulting semantics which include arbitrary names will contain unrealistic elements. I am however not interested in providing unrealistic actualist semantics that can somehow manage to provide rules of validity for modal claims. Instead, I am looking for a metaphysical analysis of modal issues, e.g., how possible worlds represent or what are truthmakers for modal statements. Because of that, elements of L that do represent or which provide truth conditions for modal claims have to be interpreted realistically, as being a part of reality, that is, a part of the ontology accepted by the ersatzist.

A second issue is that arbitrary representatives seem to not give justice to the initial worry indicated by Lewis, that the ersatzist will not provide enough individuals within the domains of alien ersatz worlds. Since arbitrary representatives are unrealistic elements of the semantics, they

do not allow us to fill the domains of the relevant alien ersatz worlds with names naming particular possible individuals. But, as it is argued by Lewis and Divers, we need particular possibilia or their proxies/surrogates in the universal domain D for many theoretical purposes. Thus, the proponent of arbitrary representatives is unable to match modal realist explanations.

A third issue with Roy and Melia's proposal is that it assumes (modal) haecceitism both for actual and possible individuals, that is, that both kinds of individuals can be involved in possibilities of indiscernibles and haecceitistic possibilities. However, as I have explained in this dissertation, there are deep representational and metaphysical differences between *actualia* and *possibilia* which suggest that they cannot be treated uniformly. One of those differences—Representational Difference—is that while actual individuals can be involved in possibilities of indiscernibles and haecceitistic possibilities, it is not the case with regard to possible individuals. Those are always qualitatively discernible. Thus, no form of modal haecceitism can be true for possible individuals.

What should be then a proper ersatzist response to the problem of indiscernibles?

On a semantic level, Lewis' argument against ersatzism, according to which it lacks expressive power required to account for indiscernible aliens, is that in the universal domain D there are just not enough ersatz individuals required to represent such possibilities. But to expect from the ersatzist that she will populate the domain D with a unique ersatz individual for each genuine possible individual is to make a particularist fallacy (see Wang 2015). ¹⁷⁴ Based on my last

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¹⁷³ On top of that, Melia assumes quidditism, which is an analogue of haecceitism for properties, both for actual and possible (alien) properties. He calls such a view 'second-order haecceitism'. See Melia (2001, pp.21-22). For more details on quidditism see Chapter 6, sections 6.1.4., and 6.2.1. above.

¹⁷⁴ Wang (2015) makes a similar point but avoids particularist fallacy for different reasons and in a different way, by relying on role metaphysics instead of generalism. As I explained in Chapter 6, I think however that a generalist approach to *possibilia* is preferable.

point, we should not try to introduce unique representatives for possible individuals. Instead, representatives of possible individuals are generic, they represent generalist structures that could obtain. There are several advantages of avoiding particularist fallacy.

Firstly, we avoid the issue associated with proxy actualism of overpopulating the universal domain D with unique proxies for each possible individual such as unexemplified individual essences or contingently nonconcrete individuals. But, as I argued, overpopulating the universal domain D is bad from the actualist standpoint because it makes the actualist ontology isomorphic to that of modal realism, and one of the main promises of actualism was that it is able to provide safter and sanier ontology than that of modal realism.

Secondly, by denying unique stand-ins for *possibilia* we are more in line with the actualist tenet according to which everything that exists is actual, that is, that there are no *possibilia*. If there are no such things, we should not expect to have unique proxies for each possible individual, but rather represent them generically through qualitative representations (which actually exist). That said, there could be individuals which are not identical to any of the actual individuals. However, it is possible to account for such possibility through our actually available purely qualitative representational resources.

Moving back to the main point though, for the Aristotelian ersatzist, strictly speaking, there are no indiscernible alien ersatz individuals. That being said, the Aristotelian can account for the possibility of indiscernible possible individuals by saying that there could be two qualitatively indiscernible individuals which are not identical to any actual individual. How can this be done?

According to Wang, ersatz individuals represent qualitative roles, that is, qualitative ways for individuals to be. Qualitative roles are complex properties that can be multiply exemplified. Each such exemplification will give us a distinct possibility, which is qualitatively indiscernible from another one. That way we can account for the possibility of indiscernible aliens. For instance, consider an ersatz world representing two talking donkeys:

(1)
$$\exists x \exists y (TDx \land TDy \land x \neq y)$$

We can then extract an ersatz individual from its description:

$$(2) \qquad \exists y (TDx \wedge TDy \wedge x \neq y)$$

Such an ersatz individual represents a qualitative way for something to be: being such that something is a talking donkey and that those two individuals are not identical. Now, had (1) been actualized, such a qualitative role would be exemplified twice over. If that would be the case, there would be two qualitatively indiscernible but numerically distinct talking donkeys.

My proposal is similar, but for reasons already explained in Chapter 6, I propose to paraphrase all statements about qualitative roles into statements about generalist structures. Thus, under my account, an ersatz world (1) represents a generalist structure that could obtain at the actual world:

(3)
$$cc(R^1 \land pR^1 \land \neg I^2)$$
 obtains

Under this generalist approach to alien ersatz worlds, we can clearly see that when we try to provide two ersatz individuals for each alien talking donkey:

Ersatz Talking Donkey₁: $\exists y(Rx \land Ry \land x \neq y)$

Ersatz Talking Donkey₂: $\exists x(Rx \land Ry \land x \neq y)$

both represent the same qualitative way for a world to be:

Generalist Talking Donkey: $cc(R^1 \land pR^1 \land \neg I^2)$ obtains

Generalist Talking Donkey₂: $cc(R^1 \land pR^1 \land \neg I^2)$ obtains

Both generalist structures are qualitatively indiscernible. Thus, since *PII* holds for them, they are one and the same structure. Thus, the possibility of indiscernible talking donkeys is explained simply by:

Generalist Indiscernible Talking Donkeys: $cc(R^1 \land pR^1 \land \neg I^2)$ obtains

Intuitively, it means that donkeyhood obtains twice at a given world and those two occurrences of donkeyhood are not identical. Now, had an ersatz world (1) been actualized, that is, had the actual world exhibit generalist structure: $cc(R^1 \land pR^1 \land \neg l^2)$ obtains, then there would be two indiscernible talking donkeys. Intuitively, a generalist structure represents a qualitative character of a world containing two talking donkeys. That's all we can represent about indiscernible aliens given our currently available expressive resources. Additionally, as Melia observes (2003, pp. 23), we should distinguish an issue that some of our ersatz descriptions are incomplete from an issue that as ersatzists we conflate some possibilities that are intuitively taken to be distinct. While conflating possibilities is a genuine issue, providing incomplete descriptions of some possibilities is not an issue. It rather indicates a fundamental fact about modality that not all possibilities can be described completely given our actually available expressive resources. The Aristotelian

ersatzist does not conflate possibilities involving aliens. She just claims that we cannot describe them fully. It is a virtue not a vice of Aristotelian ersatzism that it accounts for such a phenomenon.

7.2.3. Iterated modality

A third issue of expressive power associated with Aristotelian ersatzism is the problem of iterated modalities. Consider a following claim:

Iterated Modality: Possibly, there could be an individual x which is not identical to any actual individual and is F, but x could be G instead of being F.

Iterated Modality involves iteration of modal operators: First we claim that possibly there could be something not identical to any actual individual and be F, e.g., a donkey that talks, and then we claim that possibly that very talking donkey could be a talking pig instead. Iterated Modality seems *prima facie* intuitive. In other words, it is intuitive to think that alien individuals could change some of their properties that are ascribed to them.

However, as indicated by McMichael (1983a), Iterated Modality is problematic for the actualist to account for because it involves quantification over nonactual individuals, in my example, to a talking donkey. Thus, by allowing for Iterated Modality one makes ontological commitment to a talking donkey, an alien individual, and this runs against the actualist tenet that there are no possible individuals.

To see this issue more clearly, let's paraphrase Iterated Modality into a first-order description. Consider the possibility of there being a talking donkey, and that it could be a talking pig instead. As before, *T* stays for *being able to talk*, *D* for *being a donkey* and *P* for *being a pig*.

Iterated Modality*: $\Diamond \exists x (TDx \land \Diamond TPx)$.

We can then provide truth conditions for Iterated Modality*:

Truth Conditions for Iterated Modality*: Iterated Modality* is true iff there is a possible world w_1 at which there is some individual x not identical to any actual individual and x is a talking donkey, and there is a possible world w_2 at which x exists and x is a talking pig.

The Aristotelian ersatzist can easily accept the first part of the analysis involving world w_I . In doing so she can appeal to the ersatzist account of aliens presented above in section 7.2.1. She can describe a possibility of a talking donkey generically without making a commitment to any nonactual individual. But the second part of Truth Conditions for Iterated Modality* is problematic for her, because it ascribes a *de re* modal property to an alien individual itself, that is, to a particular talking donkey. At w_2 a talking donkey has to be represented as existing in order for it to have a *de re* possibility of being otherwise than it is in w_I . Thus, the actualist is committed to the existence of aliens.

I think however there is an easy way out of this trouble. In my view, the ersatzist should deny that alien individuals can be subjects of Iterated Modality (iteration of modal operators involving actual individuals is unproblematic).¹⁷⁵ The problem that supposedly follows from Iterated Modality for the actualist, if Iterated Modality is applied to possible individuals, is that it presupposes that a single alien individual can be represented as existing by at least two distinct possible worlds: As we can see if we look at Truth Conditions for Iterated Modality*, an

¹⁷⁵ Similar solution to the iterated modalities issue has been proposed by Fitch (1996). He did not however support, as I did, his view by systematically developing metaphysics for Aristotelian ersatzism.

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individual x represented by w_1 is identical to an individual x represented by w_2 . First, an individual x is represented as an alien individual and as being a talking donkey at w_1 , and then it is represented as an existing *simpliciter* and as being a talking pig instead of being a talking donkey.

But under the assumption of Aristotelian ersatzism we cannot make sense of the transworld identity of aliens. We have an intuition that we should be able to say of one and the same alien donkey that it could be talking at one world and flying at another world, but this is only a seeming, which should be explained away. According to Aristotelian ersatzism, all instances of Iterated Modality applied to alien individuals, if taken at face value, are false. We cannot make sense of the transworld identity of aliens. As I have already explained, the Aristotelian ersatzist replaces alien individuals with generalist structures which are worldbound and obey PII. Thus, no alien individual qua generalist structure can be extended across possible worlds. In consequence, no alien individual qua generalist structure could be otherwise than it is at some possible world that represents it. All properties of alien individuals qua generalist structures are essential to them. However, despite that, the Aristotelian ersatzist is able to account for the intuitions lying behind iterated modalities involving aliens. She can simply say that whenever we have a plausible case of a possible change of an alien individual, what it truly means is that there is one generalist structure G and another generalist structure G^* , which is very similar to G, but is a distinct structure. Thus, whenever one would intuitively say of a possible individual x that could be G instead of being F, the Aristotelian ersatzist introduces two generalist structures: One including F and another one, very similar to the initial structure, which contains G instead of F. As a result, every supposed change of an alien individual x requires a new generalist structure to be represented by some ersatz world. Therefore, strictly speaking, Iterated Modality*, if applied

to alien individuals, is not true. Instead of iteration of modalities involving a single generalist structure, we have a plenitude of similar but distinct generalist structures.

By moving back to our example and Iterated Modality*, it is impossible for a talking donkey to be a talking pig. What is possible is that there is a talking donkey and that there is a talking pig. But these are two distinct possible individuals. No iteration of modalities is involved here. Thus, what Iterated Modality* indicates is that there is a possible world w_1 at which $c(T^1 \land D^1)$ obtains and there is a possible world w_2 at which $c(T^1 \land P^1)$ obtains. But w_1 and w_2 are two distinct worlds representing two distinct alien individuals. As I showed above, the Aristotelian ersatzist has no troubles with that.

At this point, similarly as before, the Aristotelian ersatzist has a choice point: She could either say that all properties included in the generalist structures are essential to them, or indirectly account for modal properties of generalist structures by introducing counterpart relations between them. In the latter case she could then provide counterpart-theoretic truth conditions for Iterated Modality*:

Counterpart-theoretic Truth Conditions for Iterated modality*: Iterated Modality* is true iff there is a possible world w_1 at which $c(T^1 \wedge D^1)$ obtains and there is a possible world w_2 at which $c(T^1 \wedge P^1)$ obtains, and $c(T^1 \wedge P^1)$ is a counterpart structure of $c(T^1 \wedge D^1)$.

Which solution one will choose will depend on whether one prefers antiessentialism and inconstancy of our modal evaluations that comes with property counterpart theory, or extreme essentialism applied to generalist structures coupled with the plenitude of generalist structures given by the unrestricted principle of recombination, which is able to account for the supposed

Aristotelian ersatzist chooses, each of them entails that the original truth condition for Iterated Modality*, which commits us to the transworld identity of alien individuals, is incorrect. Thus, both accounts provide a solution to the issue indicated by McMichael (1983a).

7.3 Some further issues

I would like to close this chapter by discussing some objections that might arise towards the view that I presented. Of course, I cannot cover all possible objections.¹⁷⁶ In what follows I focus on just three fundamental ones: (1) on the issue of how ersatz worlds manage to represent implicitly all relevant truths (7.3.1.), (2) on whether my view suffers from some kind of Humphrey Objection (my answer will be negative) (7.3.2.), and (3) on whether my account of representation associated with Aristotelian ersatzism is just a variant of pictorial or magical ersatzism, which, as indicated by Lewis, both are rather implausible accounts of representation (my answer will be negative) (7.3.3.).

7.3.1. Implicit representation

For Lewis, there are two main issues associated with linguistic ersatzism. One is that it introduces primitive modality, another is that it lacks expressive power and is unable to account for all genuine possibilities. In sections 7.2.1., 7.2.2., and 7.2.3., I addressed issues associated with the problem of expressive power. In this section I shall focus on the issue of primitive modality.

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 $^{^{176}}$ Some objections with regard to generalist approach to *possiibilia* has been already discussed in Chapter 6 in section 6.1.4.

Lewis distinguishes two variants of the primitive modality objection to (linguistic) ersatzism. First is that consistency is a primitive modal notion which is required in the construction of ersatz worlds. As I explained it earlier in Chapter 2, I am not bothered by this objection because my aim was not to provide a reductive account of our modal concepts, but a regimentation of them. In doing so, one can appeal to a one modal notion in order to explain other ones. There is however a second variant of primitive modality objection which affects the ersatzist's account of implicit representation.

How does the problem of implicit representation arise for the linguistic ersatzist? Recall that ersatz worlds represent possible states of affairs by sentences. More specifically, worlds represent by what they say (describe) explicitly and by what is implied by what they say (describe) explicitly. Now, as Lewis observes, the notion of implicit representation involves primitive modality:

The second need for primitive modality comes *via* implicit representation. It may be that so-and-so, according to a certain ersatz world, not because there is a sentence included in that world which just means that so-and-so, no more and no less; but because there are sentences which jointly imply that so-and-so. There might be a single sentence which implies that so-and-so but does not just mean that so-and-so because it implies more besides; or there might be a finite or infinite set of sentences which jointly imply that so-and-so. This implication is prima facie modal: a set of sentences implies that so-and-so iff those sentences, as interpreted, could not all be true together unless it were also true that so-and-so; in other words, if it is necessary that if those sentences are all true together, then so-and-so (Lewis 1986, pp. 151).

In response, the ersatzist could try to avoid implicit representation altogether and say that all representation is done explicitly. But, as Lewis correctly observes, each ersatz world represents implicitly that it correctly represents the actual world. An ersatz world cannot represent this fact explicitly, because it would need then to describe every other ersatz world and explicitly say of each of them that they incorrectly represent the actual world. But such a position is very extreme and implausible. It is like there could be a book in the library that would involve the content of all other books, and say of all of them that they incorrectly represent reality.

Another possible way out would be to provide a very rich world-making language capable of stating all relevant truths explicitly. As Lewis observes, if our world-making language is rich, e.g., if it looks like an idealization of English, then it will say a lot of things explicitly (about donkeys, humans, cities and so on). However, an issue with such a language is that the more explicit truths an ersatz world represents, the easier it is for it to be an inconsistent world which says that F is the case explicitly, but by implying that not-F is the case.

Thus, as Lewis suggests (and I think he is right in that regard), the ersatzist should prefer a more modest world-making language, which states explicitly only atomic sentences describing fundamental facts. Supposedly such a language could be a mathematical language. For instance, ersatz worlds could be understood as sets of ordered pairs $\langle x_n, y_n \rangle$ where x_n describes a location in an n-dimensional manifold, and y_n describes which locations are occupied (see Quine 1969, Lewis 1986, pp. 146-148) or, equivalently, y_n might describe fundamental properties, which are then distributed over the manifold (see Heller 1998a, 1998b). Maximal and consistent sets of $\langle x_n, y_n \rangle$ are ersatz worlds. Worlds so characterized are stipulated to represent explicitly all fundamental facts that hold at them.

However, there is a problem of implicit representation affecting such a construction. Ersatz worlds given in such a modest language say very little explicitly. They are silent about donkeys, humans, cities and all other nonfundamental individuals that seem to be important for our modal theorizing. Thus, in order for ersatz worlds so characterized to be maximal, we need to appeal to implicit representation and explain how implicit truths describing nonfundamental facts follow from explicit truths describing fundamental facts. For instance, we have to explain how explicit truths describing fundamental facts make true statements saying that a donkey exists. This is the so-called the Donkey Problem (after Heller 2008), and it can be generalized to any nonfundamental fact. The Donkey Problem is a problem of recovering implicit nonfundamental truths from explicit fundamental truths.

A first solution to the Donkey Problem that the ersatzist could provide is to define consistency as logical entailment (see Lewis 1986, pp. 152-153). That way one does not treat it as a modal primitive. Subsequently, one can use logical entailment to transition from explicit truths to implicit ones. But in order to do that, it is required to add some bridging axioms which will link fundamental truths with nonfundamental ones and then add those axioms into our definition of logical entailment. An axiom could look like this: 'If such-and-such descriptions representing fundamental facts are true at w, then such-and-such descriptions representing a donkey as existing are true at w'.

But the problem is that such axioms involve primitive modality. They just say that such and-such explicit truths *could* not be true without such-and-such implicit truths being true as well. In other words, the required axioms state necessary truths. And these instances of primitive modality are more problematic than the issue of consistency because we will need a distinct axiom

for each implicit truth. And each axiom will introduce a distinct primitively modal truth that will explain the modal link between some explicit fundamental truths and some implicit nonfundamental ones. Thus, such a view suffers from very similar issues to the ones associated with the account of representation based on moderate modal haecceitism which I discussed in Chapter 6, section 6.2.3.

A first issue is that we will have an infinite number of primitive modal truths required by our account of implicit representation. Even if we agree that it is not our intention to propose a reductive theory of modality, a theory of modality that presupposes an infinite number of primitive modal truths in order to deliver an adequate analysis of modal concepts is very ideologically unparsimonious.

A second issue is that, similarly as before, it turns out that in order to explain how possible worlds represent, we need to settle some difficult substantial issues. This time, instead of explaining the identity conditions of each individual, we need to explain how particular fundamental facts give rise to particular nonfundamental facts. For instance, we have to explain how facts about donkeys follow from the facts about distribution of particles. Moreover, we need to provide such an explanation for each nonfundamental fact involving nonfundamental individuals. This imposes too much burden on the ersatzist. Modal realism has a huge advantage over ersatzism in that regard: a genuine possible world w represents that a donkey talks if it literally contains a concrete talking donkey. There is no need to analyze what grounds a fact that some donkey talks in order to get facts about modality right.

Both issues indicate that the ersatzist has troubles with including implicit nonfundamental truths into descriptions of ersatz worlds. Maybe she should then get rid of

implicit representation altogether, and stick with ersatz worlds described purely explicitly? As I explained above, it is implausible that we can have a language stating explicitly all possible truths. Some truths have to be represented implicitly. Moreover, the more we represent explicitly the easier it is to get inconsistent worlds. Of course we could introduce some axioms which would determine which explicit descriptions are consistent and which are not. But these axioms would involve primitive modality as well and we would not move forward.

I think the best move is to stick with a very thin explicit representation that gives us only fundamental descriptions of ersatz worlds and to pair it with very rich implicit representation in such a way that will avoid the problem of primitive modality. How can this be done? Let me overview three solutions. The first one (a) is to accept primitive modality. The second one (b) is to link implicit and explicit truths through conventional interpretation of implicit truths. The third one (c) is to introduce primitive grounding relations that would hold between fundamental and nonfundamental facts. I argue that the grounding solution is preferable.

A primitive modality solution

The linguistic ersatzist could say that for a similar reason as she was not bothered by primitive modal concepts involved in her construction of worlds (consistency), she is not bothered by primitive modal concepts involved in her account of implicit representation, that is, by the presence of modal axioms bridging explicit and implicit representation. If you want a reductive analysis of modality, you should choose modal realism. But if you dislike its ontology, you should abandon an ambition to have a reductive analysis, endorse ersatzism, and accept the primitive modality that comes with it. Ersatzism does not give us a reduction of modality, however, it gives

us safier and sanier ontology if compared to that of modal realism. It is negotiable whether it is better to have a reduction of modality or safer ontology. It all depends on what you consider as a cost and as a vice of a theory. But actualists tend to agree that it is better to have safer ontology.

However, a problem with that solution is that primitive modality in the case of implicit representation is much worse than the primitive modality involved in the construction of worlds. A reason for this is that while there is just one single modal notion of consistency used in the construction of possible worlds, here we have infinitely many primitive modal bridging axioms. As I argued in Chapter 6 (section 6.2.3.), my argument against the essentialist account of representation of *actualia* was exactly that it involved an infinite number of primitive modal principles explaining relationships between qualitative character of individuals and their identity. Similar issue arises here, and I think we should look for an alternative answer to Lewis' primitive modality objection.

A conventionalist solution

Another and more promising solution to the issue of implicit representation has been provided by Mark Heller (1998a, 1998b, 2008). According to Heller, worlds can be described completely without mention of any nonfundamental individuals such as donkeys, humans, cities, corporations and so on. 177 We can then stipulate that our thin world-making language L is capable of describing all the facts. By providing a complete explicit characterization of a given ersatz world, we provide a complete description of what is the case at it. (For Heller a fundamental description of reality involves a description of a manifold and distribution of qualitative

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¹⁷⁷ This of course applies to properties as well: complete description of the world does not require reference to nonfundamental properties such as *being human*, *being cheap*, or *being taller than Kripke*.

properties over that manifold. It is a kind of Quinean metaphysics). As a result, in order to determine what is the case at worlds, we do not have to analyze in virtue of what fundamental facts some nonfundamental facts hold, e.g., in virtue of what fundamental facts a donkey exists or New York City exists. There are no nonfundamental facts at all. All statements about nonfundamental matters are nonfactual. As a result, we do not have to introduce axioms bridging explicit truths with implicit ones. All representation is done explicitly.

That being said, our talk about talking donkeys, humans and cities seems to be true. It is also intuitive to talk about possibilities involving such individuals. Thus, the ersatzist had better not propose an error theory of all statements involving nonfundamental individuals and of our ordinary modal thought involving them. To avoid such a revisionary position, we can defer to Heller once again. He proposes to treat statements about nonfundamental individuals as just less perspicuous ways of describing fundamental reality. Different kinds of nonfundamental descriptions are just different interpretations of fundamental descriptions. But, for Heller, an interpretation of a fundamental description of an ersatz world is not part of a world-story associated with a given world. It is something that we—the interpreters—do with ersatz worlds. When we say that there are donkeys at some ersatz world we introduce some convention according to which such-and-such fundamental description makes true a statement that some talking donkey exists. But such a statement does not involve any metaphysical analysis of donkeyhood in terms of fundamental facts. Instead, it merely involves a linguistic analysis of the predicate 'being a donkey' which determines its application conditions. For instance, we can define 'being a donkey' as a predicate that applies to such-and-such distributions of properties over the manifold. According to such an interpretation, if such-and-such fundamental facts

obtain at w, then we can describe w as a world at which a donkey exists. But it is true at w that a donkey exists not in virtue of those fundamental facts, but in virtue of our conventions. An important feature of such conventions is that they are arbitrary. Depending on the context, a predicate 'being a donkey' could have different application conditions and be applicable to other fundamental facts. Or we could just get rid of such a predicate and provide another one. We could also endorse an ontological convention according to which there are no ordinary objects at all and do not try to explain application conditions of 'being donkey or any other predicate applying to nonfundamental properties. As a consequence, nonfundamental individuals (and properties) turn out to be conventional objects whose existence and identity conditions depend on the conventions we choose and which explain the link between fundamental descriptions with nonfundamental descriptions involving nonfundamental individuals (Heller 2008, pp. 88). The only objective (nonconventional, factual) reality is fundamental reality.

As a result of this, the ersatzist should not be bothered by the primitive modality inherent to implicit representation. World-stories can represent everything that is the case at them explicitly, while all the work done previously by the implicit representation is now done by our interpretations of the fundamental language. As a result, we no longer need to introduce modally loaded bridging axioms.

That being said, I think the ersatzist would still need some modal axioms linking her conventional statements about nonfundamental individuals with fundamental descriptions. Such an axiom could look like this: 'Necessarily, if such-and-such fundamental facts obtain, then it is the case that something is a donkey'. However, modality involved in such an axiom would not make our analysis of possible worlds circular, because our conventions and interpretations

are not parts of the internal stories of worlds. Axioms governing interpretation are linguistic, not metaphysical. They govern application conditions of our nonfundamental and conventional predicates, not explanatory relations between nonfundamental and fundamental facts.

A first potential issue with this view runs as follows.

Heller assumes the Quinean metaphysics as a correct metaphysics of the fundamental reality. However, at no place does he explain why he thinks it is the correct metaphysics, and whether it is conventional or objective. But let's ignore that, and, following Heller, assume that Quinean metaphysics is objectively true about fundamental reality. A first issue that might emerge is that such a view seems to be incompatible with Aristotelian ersatzism, because Quinean metaphysics is globally antihaecceitistic, that is, it applies to all possible worlds unrestrictedly. However, as I have shown, according to Aristotelian ersatzism metaphysical antihaecceitism, in a form of generalism, applies only to possible worlds representing possible individuals. In case of possible worlds representing possibilities for actual individuals, metaphysical haecceitism, in a form of individualism, follows.

An easy fix is to say that possible worlds that represent possibilities for *actualia* represent the actual world has a modified Quinean metaphysics such that the manifold of the actual world is inhabited not only by qualities but by primitive individuals as well, which are irreducible to qualities. Perhaps fundamental particles could be an example of fundamental individuals compatible with the spirit of the Quinean metaphysics. Thus, while possible worlds representing possibilities for actual individuals (explicitly) represent reality as containing primitive fundamental individuals, possible worlds representing possibilities for possible individuals (explicitly) represent reality as a purely qualitative place.

Moreover, even if such a modification would not work, or if the Quinean metaphysics would turn out incorrect metaphysics of fundamental reality, the ersatzist could say that no matter which metaphysics of the fundamental reality is true, the metaphysics that she *can* accept is the one which allows for an explicit representation of actual individuals, but denies it for possible individuals. Thus, the initial issue could be addressed by the conventionalist.

However, there is another, more serious issue with Heller's proposal, indicated by Sider (2011, pp. 338). As Sider observes, if our aim would be only to provide a consistent theory of possible worlds that avoids primitive modality, then Heller's solution could work. But besides theory of possible worlds we want theory of modality, and those two theories are connected. To see this, let's reconsider Leibnizian biconditionals:

It is possible that p iff p is true at some possible world

It is necessary that p iff p is true at every possible world

Suppose that p is a statement about a donkey, e.g., 'A donkey exists'. In order to provide an adequate theory of modality, we not only need to say that p is true at some possible world w, but also explain how w manages to represent that p holds at it. Now, since we agreed that no world explicitly represents facts about donkeys (or other nonfundamental individuals), such facts have to be represented implicitly. Thus, the problem of implicit representation reappears once again.

In response, a proponent of Heller's view could maintain that we should not require p to be represented implicitly by some world w. Determining which nonfundamental truths are represented at which possible worlds is just a matter of our conventions. One could then introduce some axioms governing the application condition of a predicate 'being a donkey' which

would link it with some representations of fundamental facts. And since those axioms can be just stipulated, they do not involve primitive modality.

However, it could be then argued that In order to provide a systematic account of what nonfundamental truths hold at ersatz worlds, the conventionalist needs to provide an infinite number of relevant conventions and stipulations. But we—the interpreters—cannot provide an infinite number of interpretations in a finite amount of time. Thus, we are unable to finish our explanation of implicit representation and finish our theory of modality.

In response, a conventionalist could try to limit a number of conventions by introducing some general ones, that do not link particular nonfundamental predicates with particular fundamental facts, but rather some generic predicates such as 'being an ordinary object' with some collections of fundamental facts, e.g., all facts about arrangements of particles. That way we could greatly limit a number of conventions required to finish our analysis of modality. That's a fair point.

However, the most serious issue with the conventionalist view is that If a relationship between fundamental and nonfundamental truths is to be determined by stipulation and convention, then it follows that which nonfundamental truths hold at which worlds depend on us. Which in turn entails that what possibilities hold for nonfundamental entities also depends on us. This however is unacceptable if you want to maintain that modality is an objective matter. Moreover, had there be no interpreters, it would be indeterminate at which worlds which nonfundamental truths hold. Thus, it would be indeterminate what possibilities there are. Thus, our theory of modality would be unfinished.

In response, a conventionalist could say that assuming that nonfundamental individuals are conventional, it is natural to treat possibilities about conventional entities to be conventional as well. Thus, the fact that our modal stipulations, which enable us to determine which nonfundamental truths hold at which world, depends on *us* is not a problem. If there would be no us, there would be no conceptual schemas that introduce conventional entities. Therefore, there would be no possibilities for those entities either. As a result, while modal statements involving fundamental entities are objective, all other modal statements are not.

An issue with this answer is that it entails nonfactualism about modal statements involving nonfundamental entities. If that is the case, then we should endorse some kind of error theory with regard to our theoretical and ordinary modal thought about nonfundamental matters. For many researchers this will be unacceptable because the main part of our modal analyzes and everyday modal thinking concerns modal statements involving nonfundamental individuals. It seems very intuitive, both on the theoretical and practical level, to think that nonfundamental individuals have genuine modal features. Moreover, one of the main reasons for endorsing the possible world framework is to provide truth conditions for our ordinary modal statements. If we treat majority (if not all) of those modal statements as nonfactual, it seems that one of the main reasons for endorsing possible worlds is rejected.

Additionally, and more relevantly to Aristotelian ersatzism, it would be problematic to combine a view that nonfundamental statements are nonfactual with a view that those statements are formulated in the Lagadonian language: If every individual and property names itself, then nonfundamental statements given in the Lagadonian language should name genuine individuals and predicates and, thus, describe genuine nonfundamental facts. The conventionalist could

reply that nonfundamental statements are not given in the Lagadonian language but in some other kind of language. But this would greatly complicate an ideology of linguistic ersatzism. We would also need an account (which we do not have) of how those two kinds of languages interact,

Finally, the conventionalist could argue that nonfundamental modal statements are factual after all. However, they are not about possible worlds and their inhabitants but rather about our interpretations and stipulations. This answer is however unsatisfactory, because facts about our interpretations are not *modal* facts strictly speaking. Thus, we would be left with nonfactuality of a great chunk of our modal discourse.

A grounding solution

I think that a preferable solution to the issue of implicit representation is one based on the notion grounding. A solution is straightforward: First, we say that statements which are explicitly true at an ersatz world w describe fundamental facts. Then we say that statements which are implicitly true at w describe nonfundamental facts. Lastly, we link implicit nonfundamental truths with explicit fundamental truths through grounding relationships and say that nonfundamental facts hold in virtue of fundamental ones. Now, since nonfundamental statements are factual if they are grounded in factual statements (see Fine 2001), nonfundamental modal statements are factual in virtue of being grounded in fundamental modal statements which are factual. Moreover, since grounding is an example of the ultimate metaphysical explanation of nonfundamental facts in terms of fundamental ones, we are able to avoid conventionalism and error theory that comes with it. However, what about the primitive modality objection?

Well, it could be pointed out that grounding is necessary, which is the orthodox assumption about grounding after all: If A grounds B, then A necessitates B, that is, if A obtains and A grounds B, then B has to obtain. If so, it turns out that the notion of grounding is implicitly modal. Thus, grounding relations linking nonfundamental facts with fundamental ones will once again introduce primitive modality.

Initially, one could try to address that issue by undermining the orthodox view and say that grounding relations hold contingently. However, in order for this to work, we would have to assume that *all* cases of grounding relations that hold between nonfundamental facts and fundamental ones are contingent. This is a very controversial view, and it is not a view defended by grounding contingentists such as Leuenberger (2014) and Skiles (2015). They argue for a more moderate and plausible position that *some* grounding relations seem to hold contingently, e.g., those that hold between accidental generalizations and their instances.

I think that a preferable way of mitigating the issue of primitive modality that comes with the notion of grounding is to appeal to the notion of nondistributive collective grounding (Dasgupta 2014, see also Chapter 4, section 4.5.1.), and say that all nonfundamental facts at a given world w are collectively grounded in fundamental facts holding at w. Thus, even though grounding entails necessitation, we have only one primitive modal axiom that characterizes the relation of collective grounding as such, and which holds for all ersatz worlds. This is a reasonable price to be paid. Thanks to that axiom, for any world w at which it is the case that a donkey exists, this fact, together with other nonfundamental facts holding at w, is collectively grounded in

¹⁷⁸ Grounding necessitarianism is a default position on grounding, see. Rosen (2010), Fine (2012). However, some argued against it and defended grounding contingentism, e.g., Leuenberger (2014) and Skiles (2015). For a defense of grounding necessitarianism against some of the arguments presented by Leuenberger and Skiles see O'Conaill (2018), or my Lenart (2021b).

fundamental facts that obtain at w. Another advantage of this is that it allows us to ground nonfundamental facts taken as a whole without providing unique fundamental grounds for each nonfundamental fact taken on its own. For instance, we are not forced to explain what fundamental matters make it the case that Socrates exists, that you are a philosopher.

Let's now turn back to Sider's question, which was problematic for the conventionalist to answer: When will a world represent that a donkey exists? Can we determine that based on what a given world says explicitly about fundamental reality? My answer is negative. We cannot recover particular nonfundamental facts from particular fundamental facts because we are unable to provide unique grounds for particular nonfundamental facts. How then can an ersatz world manage to represent that a donkey exists at it? In order to account for that we need to take a two step procedure. First, we stipulate an ersatz world w according to which a donkey exists by saying that 'A donkey exists' is true according to w. If w is consistent, then it will be a possible ersatz world. In the second step we apply a general principle about collective grounding and say that a statement 'A donkey exists', together with other remaining nonfundamental statements which are implicitly true at w, are collectively grounded in fundamental truths which are explicitly true at w. Such a procedure can then be applied to any other nonfundamental fact that is stipulated to hold at w. In general, every consistent ersatz world will be such that nonfundamental implicit truths that hold at it, will be grounded in fundamental explicit truths that hold at it. It follows then that every nonfundamental fact at every possible ersatz world, including very remote ersatz worlds which represent that Socrates is a poached egg or you are an alligator, has to be grounded in a collection of the fundamental facts that hold at the relevant worlds. Thus, the grounding approach to implicit representation presumes that every possible ersatz world has a layered

structure of reality and that while a fundamental layer consists exclusively in explicit truths, nonfundamental layer consists exclusively in implicit ones. I think that it is a very natural and uncontroversial way of looking at the actual world and ways that the actual world could be, that is, possible worlds.

7.3.2. Humphrey objection

It might be argued that our generalist account of *possibilia* is susceptible to some kind of the Humphrey objection. I proposed to analyze modal properties of *possibilia* in terms of properties involved in generalist structures. But it could be argued that the fact that some possible individual has some modal property F is not *explained* by the nonmodal facts about properties involved in some generalist structures. Thus, the Humphrey objection follows. However, the Aristotelian ersatzist can easily avoid the Humphrey objection.

Originally, the Humphrey objection was raised by Kripke against Lewisian modal realism combined with counterpart theoretic analysis of modal properties. Consider a modal statement:

(1) Humphrey might have won the election

For Lewis, (1) is true if Humphrey has a counterpart, Humphrey* who wins the election in some possible world w. However, according to Kripke:

Humphrey could not care less whether someone else, no matter how much resembling him, would have been victorious in another possible world (Kripke 1980, pp. 45).

In other words, it is irrelevant to why Humphrey has a modal property of *possibly winning* that some other individual, very similar to Humphrey, has that property. In other words, the fact that

Humprey's counterpart has a property of *winning* does not explain the fact that Humphrey has a modal property of *possibly winning*.¹⁷⁹

Chrisopher Menzel (1990) provided a variant of this objection when he criticized McMichel's position, which is very similar to Wang's and to my position: We all analyze modal properties of *possibilia* in virtue of some facts about qualitative properties. As Menzel writes (here I quote him after Wang 2015, pp. 435-436):

McMichael suggests that we alter our understanding of what it is to say that an individual might have had a certain property. Thus, on his semantics, that Kripke might have been a carpenter is not ultimately a fact about that guy, Kripke, at least not directly. Rather it is a fact about the 'maximal' purely qualitative property, or role that Kripke alone in fact exemplifies, viz., that some role 'accessible' to Kripke's role includes the property of being a carpenter. This move abandons strong intuitions about *de re* modality and the semantics of names, and so, for my tastes anyways, is also unpalatable (Menzel 1990, pp. 367-368).

How does the Humphrey objection relate to Aristotelian ersatzism? The details will differ once again depending on whether actual or possible individuals are concerned. However, in both cases the Humphrey objection will not apply.

Consider *actualia* first. Since actual individuals can be named, they can be represented as extended across possible worlds. Thus, when analyzing modal properties of actual individuals we do not have to endorse counterpart theory or any other purely qualitative analysis of their modal properties. The original Humphrey objection does not apply then. Menzel's variant of it does not

¹⁷⁹ See also Divers (2002, Ch. 8), De (2018) for a further discussion of the Humphrey Objection.

apply as well because *actualia* are not substituted with qualitative roles or generalist structures, but are involved in individualistic facts. Thus, singular modal facts about an actual individual x are about that very individual and are to be explained by other facts about x that hold at the relevant world.

Matters look differently when we move towards possible individuals. As I claimed in Chapter 6, section 6.1., the Aristotelian ersatzist should swap possible individuals with generalist structures. Thus, all statements describing modal facts about possible individuals are to be paraphrased into statements describing nonmodal facts about properties involved in some relevant generalist structures. For instance, instead of talking about a talking donkey that it could be a talking pig, the Aristotelian ersatzist says that there are two generalist structures, one that describes donkeybood and talking as obtaining, and another one that describes pigbood and talking as obtaining. But this does not mean that we analyze modal facts about particular possible individuals in virtue of nonmodal facts about generalist structures. We just no longer talk about particular possible individuals and their de re modal properties for there are no such individuals. Thus, Menzel's argument that 'this move abandons strong intuitions about de re modality and the semantics of names', does not apply to my view at all. There are no de re modalities involving possible individuals and we do not have names for them. Thus, the argument from irrelevance inherent to Menzel's variant of the Humphrey objection does not apply to my view.

As I showed above, one could pair generalist approach to *possibilia* with the property counterpart theory and recover modal properties of possible individuals *qua* generalist structures that way (such a view is very similar to Wang's proposal, with a small difference that the qualitative roles are replaced by the generalist structures). But, following Wang, the Humphrey

objection would not apply to that view as well. This is because what are the modal properties of possible individuals *qua* generalist structures depends on how other generalist structures are. That is, under such a view we investigate relationships between qualitative properties and say that some constructions out of qualitative properties could be different in virtue of some other constructions of qualitative properties being so-and-so. Definitely, how some generalist structure is, can be relevant for how some other generalist structure could be.

In turn, if we opt for the Leibnizian route and say that all properties involved in a given generalist structure are essential to it, we can safely avoid the Humphrey Objection, because each generalist structure has its modal properties independently from how other structures are. A cost of such a view is commitment to extreme essentialism, but, as I showed, it is possible to account for our intuitions of modal variability of possible individuals by introducing a plenitude of generalist structures. Whenever we say that a possible individual could be different than it is according to some world, e.g., that a talking donkey could be a talking pig instead, what we mean is that there is a world w at which donkeyhood and talking obtain, and that there is a distinct world w at which pighood and talking obtain. Both structures, although being similar, are not linked by counterpart relations. They just describe two alternative ways the actual world could be.

7.3.3. Magical or pictorial representation?

The last issue that I would like to discuss is whether Aristotelian ersatzism could be criticized for being a kind of magical or pictorial ersatzism. My answer is negative. I maintain that the

Aristotelian ersatzist's account of representation is purely linguistic, it works by naming and, thus, avoids issues associated with pictorial or magical accounts of representation.

Let's consider magical ersatzism first. Lewis says (1986, pp. 174-191) that magical ersatzism introduces abstract simples which represent individuals or properties by magic. That is, a relation between an abstract simple and an individual or a property being represented is primitive. For Lewis every actualist account which postulates unique proxies for possible individuals (let's ignore the issue of properties), such as Plantingian individual essences, will be a variant of magical ersatzism, as long as representation of possible individuals is concerned. This is because it is unclear how a proxy could represent one possible individual rather than another one given that possible individuals do not exist and do not stay in any unique relation to a proxy. It is impossible thus to provide a determinate answer to that issue. Representation is magical. 180

Definitely, Aristotelian ersatzism is not a kind of magical ersatzism. It does not introduce proxies. It introduces generalist structures which are generic surrogates of possible individuals. But those structures do not represent possible individuals in any way. Generalist structures are not representatives after all. Instead, they are alternative qualitative states of the actual world. Had the actual world been in one of those ways, some new singular possibilities would hold. But generalist structures *qua* facts do not represent anything. Generalist structures are just facts that do or do not obtain. Among many generalist structures, one generalist structure obtains. This is the structure exhibited by the actual world. Others structures do not obtain, but could. According to Aristotelian ersatzism, what represents possibilities are ersatz worlds made out of sentences of a world-making language *L*. They represent individuals by names and properties by

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¹⁸⁰ That said, for a defense of magical ersatzism against Lewis' objections see Denby (2006), Nolan (2020).

predicates. Represented individuals and properties constitute then individualistic and generalist facts which account for singular and general possibilities respectively. No magic is required at any point.

For similar reasons, Aristotelian ersatzism is not a kind of pictorial ersatzism. Pictorial ersatzism says that abstract representatives represent by isomorphism between them and entities meant to be represented. But, as Lewis observes (1986, pp. 165-174), it is very difficult to explain the nature of isomorphism between abstract representatives and genuine actual or possible individuals which are conceived as concrete entities.

Now, according to Aristotelian ersatzism ersatz worlds represent generalist structures, and then, those structures account for relevant possibilities about possible individuals. But those structures are not isomorphic to possible individuals. Those structures are built out of properties and are alternative qualitative states of the actual world which indirectly account for the possibility of possible individuals. Those structures however are not isomorphic to actual or possible individuals. They just are some possible arrangements of properties. Additionally, as I have already explained, generalist structures are not representatives. According to Aristotelian ersatzism all representation is done by ersatz worlds. But those do not represent by isomorphism between sentences of L and possible entities but by sentences of L naming actual individuals and actual properties.

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