BOOK REVIEW: RODRIGUEZ-PEREYRA, Gonzalo. *Two Arguments for the Identity of Indiscernibles.* (Oxford University Press, 2022, 144 pages)

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Abstract: *A critical review of Gonzalo Rodriguez-Pereyra's* Two Arguments for the Identity of Indiscernibles.

1. Introduction

In this review, I will describe some of the key subjects dealt with in Gonzalo Rodriguez-Pereyra's (GRP, from now on) latest book, *Two Arguments for the Identity of Indiscernible*. Since most of these key subjects are in the two first chapters I will comment on them more carefully than the rest of the book. Yet, I hope to cover interesting stuff in every chapter. The points I chose to comment on in length are those I believe to be more worthy of replies and that I hope will yield comebacks from other authors as well, but I also tried to

praise the book for doing the propaedeutic work that other writings on the Principle of Identity of Indiscernibles (PII) majorly gloss over. I hope the critical parts of this review do not eclipse the praising parts; to avoid any misunderstandings, though, let me put it bluntly: this book is absolutely important for the debate about PII and I really enjoyed the book.

2. Commentaries

For the reader who is not acquainted with PII, elsewhere, GRP called it "*one of the most substantive and controversial ideas in metaphysics*" (2006, p. 205-6). The principle is usually presented as saying that necessarily, whenever two objects share each and every property, it implies that these two objects are in fact the same object. Another formulation, preferred by GRP, is that "*necessarily, no two objects share all their properties*" (2022, p. 5). There is a long debate dating at least since the early 18th century (the Leibniz-Clarke correspondence) about whether the principle is an undeniable truth or whether it is possibly false under some circumstances. Over the last hundred years, some scenarios which allegedly present counterexamples to PII have been proposed. As a consequence, many philosophers felt the urge to defend the principle and show that the arguments based on those scenarios were defective in some way or another.

In recent years, there has been a lot of back and forth in this dispute. Arguments on both sides using scenarios with entities whose natures are still unclear as to us whether they could count as counterexamples to PII. Such entities range from graphs to the members of the Holy Trinity, from the understanding of entangled bosons to Cartesian minds. This has widened the interest in PII beyond the realms of pure

metaphysics, from pure mathematics to the philosophy of Christianism – adding more fuel to the controversial character of the principle. However, this book goes somewhat against this trend as GRP focuses his exposition and elaborates his arguments on the simplest scenario available, namely, Black's spheres scenario, which has been the standard scenario to discuss the topic since it was proposed in Black's 1952 dialogue.[11] He only briefly touches on some of these wider topics in some parts of the book, mostly at the very end, after he has presented his arguments, just enough to show how they can be used to solve the dispute even in such thorny cases.

Talking about the arguments, they are not radically new strategies to defend the principle. Thus, I see how a tough crowd might not be excited by them, given that they are not that distant from what has been already discussed. Nevertheless, I cannot see how one might not be impressed and satisfied by their carefully built and resistant structure. The arguments are simple, elegant, valid (of course) and persuasive. Thus, their effectiveness should be more than enough to earn praise as two of the most relevant arguments in defence of PII to be discussed.

The first argument, *the argument from Humean considerations*, is of the same kind proposed by Leibniz – as GRP himself states (p. 101) – and somewhat similar to the reading Jeshion (2006) makes of Della Rocca's defence of PII (2005). Briefly put, those are arguments that force the opponents of PII to abandon other principles they surely are not willing to abandon together with PII. Leibniz and Della Rocca used the Principle of Sufficient Reason and GRP uses (some

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[11] Black's spheres are an updated version of an earlier counterexample, namely, Kant's droplets. Presented in Kant's *Critique of Pure Reason.*

version of) a Humean principle: "Necessarily, no object necessitates another".

The second argument, called by GRP *the argument from grounding consideration*, is a very elaborated version of a discerning argument – it seems to me – along the lines of arguments proposed by Ladyman (2005), Saunders (2006), Hawley (2009) and Muller (2015), although the author does not say so. The main difference is that those arguments are based on relations, whereas GRP's argument is based on relational properties. This distinction might be one of the most contentious issues of the book with the current mainstream literature on PII.

The arguments themselves take up very little space in the book – they are presented and pre-emptively defended from possible objections just in the last chapter, **chapter 5**. Most of the book is dedicated to prolegomena to them and to the state of the debate over the truth or falsehood of PII. These prolegomena are crucial to the presentation of the arguments, not only because he tightly structures his arguments on the notions discussed there, but also because if one wants to present a point for or against PII, one should have to cover the topics on what PII is about and what would constitute a legitimate counterexample to PII, two features that few publications on the matter have done satisfactorily, and certainly no one has done with such range and depth before.[12]

Therefore, as interesting as these arguments are, I must say that the most important contribution of this book to the contemporary debate on PII is not the arguments per se, but chapters 1 and 2. GRP starts **chapter 1** explaining why the above formulation of PII is not really a formulation of PII,

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[12] Good examples of people who did so are Muller (2015); Ladyman, Linnebo and Pettigrew (2012); Adams (1979); Hawley (2009); and Rodriguez-Pereyra himself (2006).

but of what he calls *principle (1)*, a trivial principle which is the converse of the Principle of Indiscernibility of Identicals (IIP, for convenience here), which together might present a ground for the notion of Identity. PII, then, is a principle that says something more substantial, it says that "*necessarily, no two objects share all their non-trivializing properties*" (p. 7). The focus of the debate, then, should be to characterize what is a trivializing property, which is the subject of chapter 2. The rest of chapter 1 presents and discusses GRP's view about the components of PII, such as what an object covered by PII is; what modality is involved in PII; what kind of identity PII talks about; and, most importantly, what is a property and what kinds of properties are relevant for the debate over PII.

Most of the chapter is devoted to clarifying issues about properties. GRP spouses an abundant view of properties instead of a sparse one. After establishing that, he carefully explains why relations, viewed as relational properties should be considered under the scope of PII and then invests a lot of ink in drawing some dichotomies between the kinds of properties that usually are thought to be doing the work he does in chapter 2. The dichotomies he discusses are those between *pure* and *impure* properties and between *intrinsic* and *extrinsic* properties.

But before proceeding to chapter 2, let me comment on some interesting things about chapter 1. The claim that PII is not the converse of IIP is contrary to what most people think and might be a shock to many, but GRP's point is very compelling. One might argue that perhaps the notion yielded by principle (1) implying IIP and vice-versa is a trivial and uninteresting notion of identity and what people who discuss the grounds of identity should really be looking for is a minimal notion of identity, which is yielded by a non-trivial PII and a non-trivial version of IIP. In any case, this is an interesting advance in the debate.

The preliminary discussions about the components of PII are largely neglected in this debate, but they are of primary relevance. Two very important but perhaps contentious views GRP adopts are the notion of object to which PII is quantifying over, and the notion of metaphysical possibility involved in PII. Regarding the first, he claims concrete objects to be the relevant ones, that is, "*objects existing in space, time, or spacetime*" (p. 8), though at the end of the book he opens the possibility for the principle to be applied also to some abstract objects such as graphs and numbers. As for the latter view, he does not define the relevant notion of metaphysical possibility and hopes that the reader has a sufficient grasp on it (p. 8), though he extensively uses the notion in chapters 3 and 4.

To my knowledge, no one has extensively discussed modal aspects of PII apart from saying that it should be interpreted as either necessary, or contingent, or even that it is actually false. It is true that Black explicitly says that the principle intends to be logically necessary. However, at that time, modalities were blurry. Logical and metaphysical modalities were generally considered to be the same thing at the beginning of the 20th century and his arguments profusely exhale metaphysical content instead of dry logic, as noted by GRP (p. 75). Also, for Leibniz, who is largely considered the first invested proponent of the principle, these modalities were dependent on God's mind capacity and will, which is not an acceptable parameter for today's discussion. So, I believe that more can and should be said on the topic, and it is worth expanding the debate on which modalities are involved in saying that it is possible (or impossible) that there are indiscernible objects, especially given the recent developments in hyperintesionality debates (such as JAGO, 2014 and BERTO & SCHOONEN, 2017), for the discernibility part of PII has also an epistemic component that is also not exhaustively dealt with. I shall not

delve into such questions here, but I believe they will inform much of the future debate.

Back to speaking of the objects under PII, in section 1.4, he considers the possibility of properties being treated as objects under the scope of some version of PII. A suggestion, that would be theoretically virtuous since it would require the use of first-order quantifiers only. However, GRP stresses that PII verses only about concrete objects, what he takes properties *not* to be. Nevertheless, he is willing to play ball and considers that if these properties are viewed either as tropes or as universals, they should be treated as concrete objects and, thus, PII could be formulated using only first-order quantifiers. But he only does that to present reasons not to do so.

Now, one thing that caught my attention in this section is the fact that he simply assumed that if universals exist, they would be concrete and given that, he assumes that they would obey PII. This suggestion is expected for tropes, given that each occurrence of a trope characterizes a different object, but this suggestion is not so clear when it comes to immanent universals – which is what he is taking them to be, I suppose –, since the good old universals are not in this realm. O'Leary-Hawthorne (1995) has argued for this possibility, but this alternative was widely discarded for the many problems it raises, something GRP is certainly aware of since he has written (2004) on the subject.[13]

Another relevant issue about predicates, dealt with in 1.7, is that of relations. Some say relations should not count as properties covered by PII at all, since they are expressed by polyadic predicates. Others, GRP remarks, argue that some relational differences cannot adequately be put in property terms. In this case, if PII turns out to be false, two objects

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[13] For arguments against O'Leary-Hawthorne's view see ZIMMERMAN, 1995 and VIDEIRA, 2023.

that bear no difference in properties would still differ extra-numerically, for they would not only be numerically distinct, but they would also hold different relations between them. But it doesn't have to be like this, GRP argues. Since these relations can be transformed into relational predicates, which are monadic predicates, we can make this translation and solve this problem. His point is that any relation R held between two objects can be written as monadic relational predicates applied to a specific object, e.g., R*xb* or R*bx*, where some object will bear relation R to *b* and instantiate the property *bearing R to b* or *being borne R by* b, while the other object will not.

The solution is interesting, but I am not sure whether other philosophers would accept it. For example, Muller (2015) explicitly claims that a description of the scenario used as a counterexample to PII must not use names nor break the symmetry of the scenario, among other conditions to the thought experiment to count as a valid counterexample (p. 227). The same goes for the defences to these counterexamples. Arguably, both of these conditions are being violated by GRP here. It might be argued that Muller also claims that he settled these conditions because he is not clear about which properties are trivializing properties and those seemed just to be good candidates (pp. 221; 227). GRP, on the other hand, lengthily argues for his view of trivializing properties and NT-properties. His arguments might be accepted by Muller and company, once they read this book, though.

This debate is to be continued. On the other hand, the break of symmetry will be hard to swallow. GRP claims that symmetry is not needed for two objects to be weakly discernible since they can be symmetrically related by non-symmetric relation. But that is not the point. The fact is that the objects in the scenario are symmetrically related and,

according to Muller, this cannot be undone, under pain of trivialization.

Another controversial point in this section is when he says that:

> […] relative discernibility and weak discernibility apply only to objects that differ relationally, but it is important to note that even the first type of discernibility, absolute discernibility, can obtain between objects that differ relationally and even only relationally – for instance, two objects that differ only because one but not the other satisfies this open sentence with one free variable: '*Rxb*'. (p. 20)

Muller (2015) following Ladyman, Linnebo and Pettigrew (2012) claims that absolute discernibility implies relative discernibility, which in turn implies weak discernibility, which in turn implies distinction and "*all converse implications* (…) *fail.*" (2015, pp. 207-8). It seems that GRP is converting the implications, something Muller and company would not accept. Also, it strikes me as odd that he thinks that there might be (concrete) objects that differ only absolutely given that he embraces an abundant view of properties and Actualism. If there are (concrete) objects differing, they must be inserted in space, time, or spacetime, as he said earlier. This means that whatever objects there are, they are relationally or weakly discernible since they bear spatial and chronological relations to each other.

One might also wonder what GRP would say to a relationalist, a Hegelian, or someone that embraces a widened version of ubuntu, i.e., those who believe that relations rather than objects (or properties) have some kind of ontological priority, or even more radical versions that

claim that in fact there are only relations of relations with relations, and so on. Although these views have not been widely adopted nowadays, the growing popularity of Ubuntu philosophy and works such as Rovelli's interpretation of Quantum Mechanics might change that. Thus, it might be worth thinking about GRP's point in those terms. Could it survive this translation? I am not sure.

In the following section, GRP presents his views on the impure/pure properties dichotomy, which, for him, is basically the distinction between properties that have other (concrete or abstract) object(s) in particular as their part(s) and those that don't. At some point, he advances a possible objection to the remark that every non-relational property is pure that says that if properties are universals (of the immanent kind, again, I suppose) or tropes, what makes objects have them is a relation of the object to an occurrence of that universal, e.g., redness, or a particular reddish trope. The same strategy, he adds, could be adopted by the resemblance nominalist who might claim that what makes objects have those properties is a resemblance between them. Thus, in those cases, non-relational properties like *being red* should be viewed as relational and impure. In those cases, however, GRP shows that there is a confusion between (i) what makes the object have that property and (ii) what that property is. A relational affair of a property and the object displaying it does not make the property relational. The property, according to him, is a condition predicated by a predicate and nothing there requires it to be a relation between things. The fact that it is instantiated by or in a relation with an(other) object is another story. As he puts it "(…) the properties of *instantiating the universal redness, having this red trope*, and *being a member of that class* (…) even the property of *satisfying the predicable condition of being red* is relational and impure, and it is different from the property of *being red*" (p. 26).

Although his point is compelling, I am not sure I am convinced. I still have the impression that "to be…" might be a vulgar form of expressing a relation between two entities. In the same vein, this still made me think about the relationalist and his friends. What if the property of *being red* – the example GRP uses – is a relation between an eye and a reflected light beam; which in turn are themselves relations, respectively, between eye-form and chordate cells, and unabsorbed photons changing spatial regions; which in turn are relations of such and such, and so on. In that case, every property (if there is any property at all) is a relational property. Perhaps GRP thinks such ontic structuralism is not even worth commenting on. But again, I believe this kind of approach might gain some traction in the following years and may be worthy of some consideration.

In the last sections, he presents us his own views on the intrinsic/extrinsic property distinction, which I will not reproduce here for matters of space. Being so, one last thing I will comment on is that, although he acknowledges the shortcomings of his definition of intrinsic properties (p. 29), he claims it takes care of the clear and central cases relevant to the distinction and accommodates the platitude that says that having an intrinsic property is to have it independently of how the rest of the world is. Well, I am not so sure that that should be considered a platitude at all. Consider the intrinsic property possessed by humans of *having the humanoid form*. This is true of us, but only if we imagine that there is an external pressure stronger than the internal pressure of the human body. Otherwise, one would be scattered all over the imagined scenario. The reader might think that one can imagine the humanoid form without any external pressure, but then it would not be a humanoid form, since the humanoid body exerts internal pressure on the skin, and this is what gives us our shape. Thus, it seems that some intrinsic

properties require some relations to external objects or relations to exist.

With sufficient conceptual issues made clear, he proceeds to **chapter 2**, where he presents and discusses his characterization of what trivializing properties and non-trivializing properties (he calls them NT properties) are in this context. This is the point where many contemporary discussions about PII end up and very few results come from, since there is no agreement about which properties are allowed to discern objects in the scenarios. Very few philosophers involved in the debate took time to draw distinctions between the properties which pertinently discern objects in those counterexamples and which only trivially do so – Ladyman *et al.* (2012) and Muller (2015) are the only ones that come to mind – and certainly no one has done this in such depth as GRP in his (2006). But none of them came up with an end-of-conversation compelling case. Though he claims that most of his views on this point were presented in (2006), the final definitions of trivializing and NT-properties presented now are considerably different from those presented in the past, as he acknowledges (2022, p. 32). In this book, he presents a much more direct explanation with a clearer characterization of the kinds of properties involved and less complex examples, resulting in an overall better flow for the reader which certainly adds convincing power to his argumentation. Thus, in this book, GRP might have made it – I say *might*, because there is still room for debate.

He starts the chapter by characterizing negatively what is an NT-property by means of the definition of trivializing property. Then, he sets properties of identity as paradigmatic cases – as expected – and defines them as properties expressed by predicates that when bound to a variable in a lambda-expression will result in an identity sign (=) flanked by an individual variable and an individual constant that can be a proper name, a demonstrative a referential definite

description and even free variables playing the role of individual constant, that is, '(λx)(x=a)' (p. 32). This formulation cleverly excludes *being identical with something* and *being self-identical* while including, for example, *being identical with a*, *being a*, *being identical with a and being green*, *being identical with a or being green*, among other abundant properties. He notes that every object has such properties and that a difference concerning them is impossible to obtain without a numerical difference. Thus, to say that there is a difference concerning such properties is to say that there are distinct objects, which is trivial because this is principle (1).

From then on, he proceeds to introduce other properties, such as properties of difference which are complementary to properties of identity, and extensively argues that they can be used to establish principle (1) in the same manner. Therefore, properties of difference should also be considered trivializing. Among the many properties analysed in the chapter, I recommend the reader to highlight the discussions presented about *having all parts in common with a* and others like it, for there is a previous debate between Della Rocca (2005, 2008) and Jeshion (2006) that passes through this discussion, and about *being a member of {a}*, for it is an interestingly thorny case.

The most important point he makes in this chapter is the difference between what is to be a trivializing property and what makes a trivializing property trivialize; in other words, a distinction between the trivializing character of a property and that in virtue of what the property has that character. The trivializing character of those properties of identity consists in establishing only a numerical difference and nothing else, whenever objects differ in respect to them, whereas what makes these properties have this character is the fact that differing with respect to them is to differ numerically. To this he adds that the same goes for properties of difference and other discussed cases.

After an interesting discussion about tricky cases, the definition of trivializing property he ends up with is:

> D3. F is a trivializing property $=_{def.}$ (i) Possibly, two objects differ with respect to F, (ii) F contains at least one property of identity, and (iii) If G is any atomic property contained in F, and differing with respect to F requires differing with respect to G, G is a property of identity. (p. 51)

The definition of an NT-property is, then, defined negatively as that which is not a trivializing property (p. 50). Though the minutiae are ignored, we can roughly conclude that what is needed for a property to be an NT-property is that whenever two objects differ with respect to them, an extra-numerical difference is also established.

With these definitions in hand, in the two last sections of the chapter, he can talk more about the PII in a clearer way. So, he discusses issues like versions of PII that were considered the correct versions in the past, i.e., those that had only pure properties and those that had only intrinsic pure properties within the scope of the second-order quantifier; what the principle can and cannot establish, for example, he claims that it can derive *some* notion of individuation – though it is not the only way to do so – but it cannot ground identity, since it is not a grounding principle, but a supervenience one (p. 55); and what are the motivations for defending PII.

One interesting result GRP presents in section 2.7 is that PII is compatible with primitive identity since PII is not a grounding thesis but a supervenience thesis (*ibid.*). Thus, he expands on what was said in chapter 1 about principle (1) being used to ground identity and explains why PII is not fit to do this job. This shed some light on an epistemic aspect

of PII which is largely neglected. Discernibility is also an epistemic notion. I believe that this aspect of the principle is not dealt with satisfactorily here (nor anywhere else in any writing about PII), but at least it is discussed.

Chapter 3 is devoted to a very specific task: to establish Black's world. GRP strives to make sense of the scenario in which there is nothing except two exactly similar spheres symmetrically displayed against arguments that say that, if these spheres were to exist, they would have to present a difference in pure properties. To do so, he discusses many interesting issues related to the interactions between relations and properties, spatial properties and the nature of space itself, properties and sets, the nature of possibility and modal properties, among other things. He aims to show what is involved in constructing such a world in which there are two objects intrinsically and extrinsically indiscernible.

Notice that the aim of chapter 3 is to show that the property mechanics of a Black-like world work in a cohesive way that allows the existence of indiscernibles in a relevant sense. To argue for the metaphysical possibility of such a world is the aim of chapter 4, which works tightly connected with chapter 3. Though there is a lot to unpack and debate in this chapter, this review is already too long. Thus, I will turn to one issue at the end of the chapter that seems controversial to me and allows me to discuss something in the works of others that has been bothering me for some time now.

GRP criticizes Muller's discerning defence for using names in the relations used. Muller claims that spheres in Black's world are weakly discernible through their distance relations, i.e., one sphere holds a distance to the other and not to itself whereas the other also holds a distance to the former and not to itself. Yet he describes the world in which the spheres are by using the "names" Black gave to them. However, Muller is clearly using these names as

placeholders, not as real names. He explicitly says that these names cannot be eliminated from the description of the scenario, otherwise, there would be a definite description ascribed to them, which would make them absolutely discernible, i.e., discernible through trivializing properties – or the scenario could not be described at all. The names here are only working as tools to establish that there are two objects in the scenario and to help the architect of this world to orderly attribute the properties and relations where they belong, but, as Muller remarks, "*the question* which *sphere is Castor and* which *one is Pollux is not meaningful because it asks for something that is not to be hand – namely, definite descriptions*" (2015, p. 213, original emphasis).

I disagree with Muller, though. There is a way to avoid names in this case. We could use indexicals such as "one", "the other", or "another". In Brazilian Portuguese, this is done colloquially with a description like "one sphere is 2km away from the other sphere, whereas the other is 2km from the one." If the definite article "the" raises suspicion, we can eliminate it "one sphere is 2km away from another sphere which is also away from a sphere in a world where there are only two spheres". Or, Muller could have done like GRP does when he applies his second argument to unlabelled graphs using different variables "x" and "y". He says:

> […] We can assign one of the nodes to a variable and the other node to another variable. Indeed, the nodes being unlabelled, we can only resort to variables to describe the graph (…) There are no free variables in this description, but for this description to be true the variables 'x' and 'y' must be assigned different nodes. But then, once such an assignment has provided the variable's denotation, 'is a graph-theoretic object because

> x is a node' and 'is a graph-theoretic object because y is a node' express different properties […]. (2022, pp. 124-5)

It seems to me that Muller is using "Castor" and "Pollux" in the same way as GRP is using the bounded variables in the excerpt above. If this is so, then I believe that there is no reason not to accept Muller's discerning defence. There is an x that is 2km away from y and not from x, whereas there is a y that is away from x and not from y.

However, aren't "x" and "y" working as placeholders as much as Muller's names? In that case either one should be more charitable while reading Muller or the same criticism should be also applied to GRP's strategy. In any case, I will not delve further into that here.

Chapter 3 is meant to work intimately with **chapter 4**, where GRP discusses the metaphysical possibility of such a world as Black's which he strived to make sense of in the earlier chapter. In this chapter, he shows that different versions of PII that are widely accepted as PII are false. He discussed those versions previously, but in this chapter, he deals them the final blow. In doing so, he deals with some broadly known issues in the debate over PII such as Hacking's single sphere defence, the bi-location of spheres defence, the summing defence, Adam's argument against PII from almost indiscernible spheres, the recombination principle, the subtraction principle, among others. From these arguments against those "illegitimate" versions of PII, he presents his own argument against them and for the metaphysical possibility of a world with two spheres that are indiscernible concerning the kinds of properties these versions put forth.

The main issue that might be raised in chapter 4 is that it assumes a Lewisian way of talking about metaphysical modality – even though GRP assumes an actualist position

– and he gives very little room for alternatives. His rationale for doing so is discussed in chapter 1, but I believe that the reader might start thinking of reasons against doing so in chapter 4, given how little attention he pays to conceivability alternatives. The book spends little time discussing which is the correct way to interpret metaphysical modality, but at least it does. Most debates about PII gloss over modality issues completely. Therefore, even though I believe there are still disputes to be settled in this vicinity, the book has the merit of bringing the issue to the table. Perhaps, it might be – and I hope it is – used as a guiding point for these discussions that must take place.

One last thing worth noting in this chapter is that it discusses almost all of the most widely debated defences of PII covered by the literature and even presents a defence I must admit I was unaware of, namely, the overlap defence by Shiver. The only one he does not wrestle with here is the discerning defence, which was already touched on in earlier chapters and will be dealt with again in the final chapter, just before GRP proposes his arguments as alternatives. If the reader is in search of arguments against defences of PII – apart from the discerning defence – chapter 4 is the place to go.

In chapter 5, GRP presents his arguments for a different version of PII, a non-trivial version and non-defeated version of PII. Given that I already presented the two arguments at the beginning of this review.

3. Concluding remarks

There is more to be said about this book, but this review is already too long, and I hope to deal with other issues in separate papers. For now, my final thoughts are that it was a pleasant, instigating and elucidating read. It has a good

length, though I would not bother reading twenty-five more pages to see it dealing with some of the questions that pestered me, mostly because it has a good "flow". I mean, it dives whenever it must but never for too long, always coming back to the surface showing its findings. One can find quick explanations for some topics at a determinate point in the book and later find a lengthy development of the issue, which should satisfy different audiences.

Talking about audiences, I would not recommend this book as an introduction to PII, but I would certainly include it in the syllabus of a course about PII to be read after Black's dialogue and at least one or two papers defending PII (probably HAWLEY, 2009 and MULLER 2015). On the other hand, I can only hope that the book finds its way to the circles of metaphysicians, physicists and mathematicians debating PII, because many central themes neglected in most publications, such as modality and relations, are discussed very clearly and convincingly – though neither exhaustively nor exempt of criticisms – in this book. The book is a must-read for anyone working in PII related themes.

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