Two Arguments for the Identity of Indiscernibles

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Introduction

The goal of this book is to present and advance two arguments for the Principle of Identity of Indiscernibles, the principle that says that no two objects can differ only numerically. The two arguments appeal to very different philosophical ideas: one is based on a version of the Humean principle that rules out necessary connections between numerically distinct objects and the other one is based on ideas about what grounds the having of certain properties by objects.

But this book also presents and advances two arguments against the Principle of Identity of Indiscernibles. This is because the Principle of Identity of Indiscernibles comes in many versions, and some are true while others are false. This is exactly what I shall argue here. In particular, there are two versions of the principle that I shall argue against: these are the version that rules out the possibility of intrinsically purely qualitatively indiscernible objects and the version that rules out the possibility of objects that are both intrinsically and extrinsically purely qualitatively indiscernible. There are already conspicuous arguments against these versions of the principle (Black 1952 and Adams 1979). But there is reason to present new arguments against these versions of the principle, since I think Adams’ argument does not work (see Rodriguez-Pereyra 2017a) and the argument presented in Black's paper is subject to a powerful objection originally presented by Ian Hacking (1975). My arguments against those versions of the principle are persuasive, sound, and valid, and they are not subject to Hacking’s objection.

Now, philosophers nearly always assume that, in order to be non-trivial, any version of the Principle of Identity of Indiscernibles must quantify only over purely qualitative properties or, as I prefer to call them, pure properties. Impure properties, often called non-qualitative properties and sometimes called impurely qualitative properties, are those such that having them consists in being related to one or more
objects in particular; pure properties are those that are not impure. One of the main contentions of this book is that there is a non-trivial version of the Principle of Identity of Indiscernibles that quantifies over impure properties. And this is the version of the Principle of Identity of Indiscernibles for which I shall advance two arguments, based on the Humean and grounding considerations I mentioned above. I take the main contribution of the book to show that this is a non-trivial version of the Principle of Identity of Indiscernibles that has been neglected and for which there are compelling arguments.

Here is a brief synopsis of the book. The point of the first chapter is to lay out the elements I need to deploy my arguments for and against different versions of the Principle of Identity of Indiscernibles. Thus, in this chapter I shall introduce and explain several formulations of the Principle of Identity of Indiscernibles, and I shall explain my position on a range of issues, like objects and properties. I shall distinguish, for instance, between concrete and abstract objects, and between relational and non-relational, intrinsic and extrinsic, and pure and impure properties.

One important claim I make and argue for in Chapter 1 (Section 1.1) is that the principle that, necessarily, no two objects share all their properties, which is often considered a trivial version of the Principle of Identity of Indiscernibles, is indeed trivial but not really a version of the Principle of Identity of Indiscernibles. But this claim depends on a conception of the properties that trivialize the principle that, necessarily, no two objects share all their properties. Characterizing the class of trivializing properties, and distinguishing them from the non-trivializing properties, a complex and rarely attempted task, is the main object of Chapter 2. And once I have done that, it becomes clear that there is no trivial version of the Principle of Identity of Indiscernibles. A fortiori, the version of the principle I shall argue for is not a trivial version, although it is the weakest version of the Principle of Identity of Indiscernibles. Another important claim that will be argued for in Chapter 1 is that, contrary to what is always naturally assumed, the Principle of Identity of Indiscernibles is not the converse of the Indiscernibility of Identicals.

Now, it is often assumed that the point of the Principle of Identity of Indiscernibles is to ground numerical identity in the purely qualitative,
but since the version of the principle I shall argue for quantifies over impure properties, it is compatible with the identity of objects being primitive—indeed, since I shall argue against the version of the principle that rules out the possibility of objects sharing all their purely qualitative properties, it follows that the identity of objects is not grounded in the purely qualitative. But, as I shall argue in Section 2.7, the Principle of Identity of Indiscernibles is not a principle about what grounds what, nor does it make any priority claims. It is rather a supervenience thesis according to which there can be no numerical difference without some extra-numerical difference. Nevertheless, I shall argue in Section 2.8, there is one sense in which the Principle of Identity of Indiscernibles can provide a principle of individuation.

After that, I am ready to proceed to my arguments. In Chapter 3 I shall argue that the spheres of Black’s world are both intrinsically and extrinsically purely qualitatively indiscernible. This is necessary because some philosophers have argued that Black’s spheres are not indiscernible in the relevant sense. And then in Chapter 4 I shall argue that Black’s world is possible, which means that it is possible that there are objects that are both intrinsically and extrinsically purely qualitatively indiscernible. After rejecting three arguments for the possibility of intrinsically purely qualitative objects, I shall give my own argument that it is possible that there are intrinsically purely qualitative indiscernible objects (in the terminology to be introduced in due time, this is the claim that it is possible that there are objects sharing all their intrinsic pure properties). On the basis of that result, I shall then give an argument that establishes the possibility of Black’s world, and therefore it establishes that it is possible that there are objects that are both intrinsically and extrinsically purely qualitatively indiscernible (in the terminology to be introduced in due time, this is the claim that it is possible that there are objects sharing all their pure properties, including both intrinsic and extrinsic pure properties). The arguments are new, and one important and interesting feature is that they do not appeal to an imaginative conception of the situation obtaining in Black’s world, and therefore they are not vulnerable to the objection first made by Hacking in 1975. As I shall argue in Section 4.5, even if some of the premises or presuppositions of the second argument are rejected, it can
be reformulated in such a way that it establishes, if not the possibility of Black’s world, the possibility of objects sharing all their pure properties—and that is really my target.

Finally, in Chapter 5 I shall argue for the version of the Principle of Identity of Indiscernibles that rules out objects sharing all their non-trivializing properties, including impure ones. These are the argument from Humean considerations and the argument from grounding considerations I mentioned at the beginning. The arguments are largely independent from each other. But there is an interesting connection between them, which I shall point out in Section 5.5. Indeed, a consequence of the argument from grounding is that the version of the Humean principle I use in the other argument must be true. Nevertheless, since having two independent arguments makes my case more compelling, I provide independent reasons for the version of the Humean principle, reasons having nothing to do with the grounding argument. Finally, it is important to point out that although I shall largely focus my discussion on concrete objects, in the last section of the book, Section 5.7, I argue that the argument from grounding can be extended to abstract objects, and therefore that there are no objects, whether abstract or concrete, that share all their non-trivializing properties. Therefore, since, necessarily, every object is either abstract or concrete, the Principle of Identity of Indiscernibles is true of all objects whatsoever.

Although I find everything concerning the Principle of Identity of Indiscernibles fascinating and intriguing, there is a lot about it that I shall not discuss here—for instance, the status of the Identity of Indiscernibles in contemporary Physics, the relationship between the Bundle Theory and the Identity of Indiscernibles, Leibniz’s arguments for the Identity of Indiscernibles and the use he makes of it in his philosophy, whether there can be purely qualitatively indiscernible universals, and a detailed discussion of Adams’ argument against the Identity of Indiscernibles (except on the status of the Identity of Indiscernibles in contemporary Physics, I have written on the other topics in Rodriguez-Pereyra 2004, 2014, 2017a, 2017b, 2018). This is simply because this book is a single piece of argumentation towards supporting the weakest version of the Principle of Identity of Indiscernibles, and discussion of those and other topics is not necessary for my aims here.
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Preliminaries

1.1 The Principle of Identity of Indiscernibles (PII hereafter) has a non-modalized version and a necessitated version. I shall focus on the necessitated version, simply because it is the logically stronger of the two. If two things or objects differ purely numerically, or merely numerically, they differ solo numero. So, here is my first statement of PII:

PII: Necessarily, no two objects differ solo numero.¹

That there cannot be purely numerical difference means that numerical difference must always be accompanied by a difference other than numerical, which I shall call extra-numerical difference. Objects x and y differ numerically if and only if x and y are not one and the same object, or if and only if they differ with respect to which objects they are, while they differ extra-numerically if and only if they (also) differ in any way other than differing with respect to which objects they are. Since whenever objects differ extra-numerically they differ with respect to at least some property, PII is almost always, especially in the contemporary literature, formulated in terms of properties. Here is a common formulation:

(1) Necessarily, no two objects share all their properties.

For two objects to share a property is for both of them to have it; and for two objects to differ with respect to a property is for one of them to have it and the other one to lack it. So what principle (1) says is that necessarily,

¹ Indeed, Leibniz often formulates PII in terms of solo numero difference (see, for instance, Leibniz 2020: 14 and Leibniz 1967: 45; for a discussion of Leibniz’s different formulations of PII see Rodriguez-Pereyra 2014: 15–25).
no two objects have exactly the same properties. Now, as is well-known, principle (1) is trivially true. For among the properties that objects have are what I shall call properties of identity, sometimes called haecceities, that is, properties like being identical with Aristotle and being identical with Napoleon. It is, of course, trivially true that no two objects can possibly share such properties. Thus, in order to discuss a substantive and interesting principle, philosophers exclude from the formulation of PII those properties that they think would trivialize it.

Although the triviality of (1) is noted in virtually every paper on the subject, what is rarely discussed is why certain properties trivialize it. My answer to this is that properties of identity, and other trivializing properties, are such that differing with respect to them does not require differing extra-numerically. I shall develop this answer in Chapter 2. But what is pertinent to note here is that since trivializing properties are those such that differing with respect to them does not require differing extra-numerically, principle (1) is not really a version of PII. Indeed, PII states that objects cannot differ only numerically, but principle (1) is consistent with objects differing only numerically, since Principle (1) allows objects to differ only with respect to those properties differing with respect to which does not require differing extra-numerically. Therefore, principle (1) is not a version of PII.

1.2 That principle (1) is not a version of PII does not mean that PII cannot be formulated in terms of properties. As I said, whenever objects differ extra-numeric ally they differ with respect to at least one property. In particular, whenever objects differ extra-numeric ally they differ with respect to at least one property such that differing with respect to it requires differing extra-numeric ally. Thus, this is my second formulation of PII:

PII: Necessarily, no two objects share all those properties such that differing with respect to them requires differing extra-numeric ally.

Thus PII, unlike (1), contains a restriction in its quantification over properties, a restriction that excludes properties of identity and other trivializing properties. Since, as will become clear in Chapter 2, the properties such that differing with respect to them requires differing