The principle of Sufficient Reason and the Principle of Identity of Indiscernibles in the Leibniz-Clarke Polemic

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Abstract *In this paper, I survey Leibniz' views supporting relationism, and contrast them with the arguments of the Newtonians in favor of substantivalism. I examine the famous Leibniz-Clarke correspondence and discuss the role of Leibniz' metaphysical principles (the principle of Sufficient Reason, according to which nothing happens in the universe without a reason why it should be so rather than otherwise, and the principle of Identity of Indiscernibles, or the view that there is no such thing as a pair of numerically distinct objects which are indiscernible from each other). I intend to advance an interpretation of the main issues dealt with in the debate aiming at an answer for the two following questions: (1) whether the Principle of Sufficient Reason entails the Principle of Identity of Indiscernibles, and (2) whether Leibniz uses the latter in more than one modal sense in his letters.*

Key Words: Leibniz, Clarke, Newton, Relationism, Substantivalism, Science, Theology Metaphysics, Space, Time, Principle of Sufficient Reason, Principle of Identity of Indiscernibles.

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El principio de Razón Suficiente y el Principio de Identidad de los Indiscernibles en la Polémica Leibniz-Clarke

Resumen

En este artículo repaso las ideas de Leibniz en apoyo de una concepción relacionista del espacio y las contrasto con los argumentos de los newtonianos a favor de la concepción substancialista. Examino la famosa correspondencia Leibniz-Clarke y discuto el rol de los principios metafísicos leibnizianos (el principio de Razón Suficiente, según el cual nada ocurre en el universo sin una razón por la que deba ser así mejor que de otra manera, y el principio de Identidad de los Indiscernibles, o la posición de que no existe un par de objetos distintos numéricamente que sean mutuamente indiscernibles). Intento arribar a una interpretación correcta de los problemas principales de que trata la polémica con el fin de obtener una respuesta para las dos preguntas siguientes: (1) si el Principio de Razón Suficiente implica el Principio de Identidad de los Indiscernibles, y (2) si durante el debate, Leibniz emplea el último principio en más de un sentido modal.

Palabras Clave: Leibniz, Clarke, Newton, Relacionismo, Substantivalismo, Ciencia, Teología, Metafísica, Espacio, Tiempo, Principio de Razón Suficiente, Principio de Identidad de los Indiscernibles.

It has been a commonplace to locate Leibniz' views supporting relationism in the lively exchange between him and Clarke (Newton's noteworthy advocate, and for some historians his mouthpiece) between November 1715 and August 1716. In this series of letters the correspondents debated on matters pertaining to science, theology and metaphysics. Leibniz not only expressed his disagreement with the theological consequences of Newton's philosophy of nature, but also gave a detailed exposition of his misgivings concerning the reality of space and time and charged his opponents with distorting his own views about the world while fustigating them for their apparent nonchalance about what he considered the pivotal principles of his own metaphysics. In effect, Leibniz made extensive use in his arguments against the Newtonians of both the principle of *Sufficient Reason* (henceforth PSR), according to which nothing happens in the universe without a reason why it should be so rather than otherwise, and the principle of *Identity of Indiscernibles* (henceforth PII), or the view that there is no such thing as a pair of numerically distinct objects which are indiscernible from each other. Scholarly debates have concentrated in three main areas: the feasibility of supporting a relational theory of space and time in Leibniz' metaphysical principles, the investigation of the logical relationship between PSR and PII, and the correct construal that needs to be given for PII so that Leibniz' views are properly depicted. I will deal

in this paper exclusively with arguments in the last two areas. I have the very modest objective of finding out clues to solve the two following questions which I think can represent adequately the relevant problems in those areas: (1) whether PSR entails PII, and (2) whether Leibniz uses PII in more than one modal sense in the debate. After providing some background about both principles, I will try to excogitate an answer by considering the Leibniz-Clarke correspondence and attempting a tenable interpretation of the matters at issue.

The Principle of Sufficient Reason

PSR is a crucial notion in this debate.[1] Leibniz considered it a very fundamental piece of his argument and complains in *L* III.2 that his opponent "grants it only in words, but in reality denies it."[2] Moreover, he believes that this principle is a requisite to proceed from mathematics to philosophy. Since Leibniz blamed the spread of materialism and the decay of natural religion in England on mathematical principles and atomist views, this remark can be understood as providing basis for two different points. One being a warning about the dangers posited by the principles of mathematical philosophy for good religion, and the second being a subtle way of denying that the Newtonians were engaged in good philosophizing, taking into consideration their reliance upon such principles. Most of the argument, however, hinges on what has been called the theological reading of PSR.[3] In effect, Leibniz seems to imply that God's actions are somewhat constrained by this principle, in such a way that one should expect that in cases where there are several possibilities available, even the Almighty would choose according to the highest standards of rationality, revealing a logical connection between PSR and the choice made, namely that it is agreeable to the infinite divine wisdom. It is not just that every event has a cause and hence that there are no

[1] Leibniz spoke highly of PSR in several places, and regarded the principle as a unique achievement. "This axiom, however, *that there is nothing without a reason,* must be considered one of the greatest and most fruitful of human knowledge, for upon it is built a great part of metaphysics, physics and moral science; without it, indeed, the existence of God cannot be proved from its creatures, nor can an argument be carried from causes to effects or from effects to causes. So true is this that whatever is not of mathematical necessity, as, for instance, are logical forms and numerical truths, must be sought here entirely." ("On the general characteristics" (ca. 1679), Loemker, (vol. 1), pp. 349-50)

[2] See: *G. W. Leibniz and Samuel Clarke Correspondence.* Roger Ariew (Ed.) Indianapolis: Hackett Publishing Company, 2000. p. 14. In what follows I will give all citations from the correspondence according to the customary usage.

[3] According to Earman's suggestions. See: Earman, John. *World Enough and Space-Time.* Cambridge: MIT press, 1989.

exceptions to PSR, as its causal reading allows us to suppose, but that God himself must have a good reason to actualize any possible world, and *a fortiori* must have a good reason to choose between alternative states of affairs.

Leibniz thought that the substantivalist notion of space with its inability to distinguish alternative states of affairs in terms of location of bodies, provided no such reason to God (or any other being), violating his metaphysical principle. But PSR does not produce much enthusiasm on the side of the Newtonians, as Clarke's challenges in *C* II.1 illustrate. The mathematical principles of philosophy, rather than supporting the materialist view that the universe might have arisen from mere mechanical principles, of necessity and fate, show that the world can only be the effect of an intelligent and free cause; and that the reason for His actions is oftentimes His will:

> There can be no other reason but the mere will of God, for instance, why this particular system of matter should be created in one particular place, and that in another particular place, when (all place being absolutely indifferent to all matter) it would have been exactly the same thing *vice versa*, supposing the two systems (or the particles) of matter to be alike. And if it could in no case act without a predetermining cause, any more than a balance can move without a preponderating weight, this would tend to take away all power of choosing and to introduce fatality.[4]

God's will should be a sufficient reason to account for His decisions even in cases where the absence of differences would prevent less perfect agents from making a sensible choice. Moreover, what looks impossible or inconceivable for the limited human mind might fall within the scope of His. Clarke certainly thinks that God must not be put in such predicament unless one reduces drastically his power, independency and freedom to act, precisely along the lines of some materialists. But this kind of response does not satisfy Leibniz. On his opinion, the difficulties of Clarke's objection can be met satisfactorily by rejecting the doctrine of absolute space which is the source of many philosophical mistakes and is the more salient point of disagreement between the Newtonians and him. As Belot rightly notices it, Leibniz appeals to PSR to construct a *reductio* argument with the intention to show that the doctrine of absolute space is wrong. The argument appears in the third letter:

> I say then, that if space was an absolute being, something would happen for which it would be impos-

[4] *G. W. Leibniz and Samuel Clarke Correspondence.* (Op. Cit). p. 11.

> sible that there should be a sufficient reason –which is against my axiom. And I prove it thus: Space is something absolutely uniform, and without the things placed in it, one point of space absolutely does not differ in any respect whatsoever from another point of space. Now from this it follows (supposing space to be something in itself, besides the order of bodies among themselves) that it is impossible there should be a reason why God, preserving the same situation of bodies among themselves, should have placed them in space after one particular manner and not otherwise –why everything was not placed the quite contrary way, for instance, by changing east into west. But if space is nothing else but this order or relation, and is nothing at all without the bodies but the possibility of placing them, then those two states, the one such it is now, the other supposed to be the contrary way, would not at all differ from one another.[5]

We can recast this argument as a straight *modus tollens*. Suppose that space is absolute, as the substantivalist holds, then PSR is false. But PSR cannot be false therefore space is not absolute. Leibniz purports to establish the absurdity of the unwelcome assumption in the first premise by showing that according to it, God would not have a sufficient reason to choose the arrangement of things in the actual world instead of the counterpart state in a possible world that would be symmetrical to ours. The gist of the argument lies on four intermediate steps: (a) any two points of empty space are the same in every respect; (b) things in the world are ordered in some determinate way; (c) the order in the actual universe is different from some contrary order; (d) there is no sufficient reason why God actualizes the world in the way He does, instead of preferring some other way. The conclusion suggests itself: something happens for which there is no sufficient reason. But I find worth noticing that the Leibnizian picture of a homogeneous and isotropic space does not leave God in a better position. Disregard for one moment the role of PSR in Leibniz' relationist view, under which space can be defined as the possibility of placing things in it. If there are no differences whatsoever between disjoint points of empty space (which as far as I can see is a tenet in both the substantivalist and the relationist theory), then I fail to see how God could have a good reason to prefer the actual arrangement of things in space over its counterpart in any other

[5] *L* III.5 Earman has pointed out that Leibniz' arguments against absolute space are not drawn from "a well-stocked arsenal of confutations of substantivalism" ('I have many demonstrations, to confute the fancy of those who take space to be a substance or at least an absolute being. But I shall use, at the present, one demonstration'. p. 26) but rather are "the product of opportunism and one-upmanship." See: Earman (op. cit.) p. 117

possible world. Why, indeed, does He prefer one particular point of space to another? The puzzle goes in a way that seems quite similar to what Leibniz finds problematic regarding the supposition of absolute space.

Earman's reconstruction of this argument emphasizes the proliferation of possible worlds that would result from the supposition that space is a substance in the sense of being an irreducible object of predication. One can postulate indefinite possible worlds by simply shifting the bodies in space one mile further to the east as one moves from one world to the next, starting with the actual world. In Earman's words: "such a richness of possibilities is an embarrassment from the point of view of the PSR, since God would be placed in the situation of Buridan's ass, with no good reason for actualizing one of the possibilities rather than another."[6] Furthermore, PII another cardinal principle of Leibniz' metaphysics is also threatened by this proliferation of worlds. Before analyzing how Leibniz moves from PSR to PII, let us see the fundamentals of the latter.

The Principle of Identity of Indiscernibles

It seems that PII is not a univocal notion. One can find frequent references in the literature to a principle sometimes called 'Leibniz' Law', 'Leibniz' Principle of Identity of Indiscernibles' or 'the Principle of Substitutivity'. Such confusion indicates that there must be a close relationship among the purported principles so designated. Letting issues of ambiguity aside, it transpires that the three labels just mentioned do not refer to the same concept. Scholars like Ishiguro, for example, have pointed out that the common construal of 'Leibniz' law' picks on the Principle of Indiscernibility of Identicals, whereas the Principle of Substitutivity is employed to define identity of concepts. The disagreements about what could be the correct way to understand each of the three principles contrast with the almost universal agreement about the falsity of the Principle of Substitutivity.

Let us try to see briefly what the three principles alluded to are exactly. Unfortunately, Leibniz did not arrive at a singular and definitive formulation of any of them (it is even dubious that he regarded them as strictly different principles), although he discussed the matter in several places. However, there are key features in each of them, which enable us to distinguish a formulation from another. In Leibniz' own words the principles can be stated as follow:

[6] Ibid. p. 118

(i) "Those are the same of which one can be substituted for the other without loss of truth, such as triangle and trilateral, quadrangle and quadrilateral."

This is what has been called 'Leibniz' law', or the principle of Indiscernibility of Identicals. It says that If *A* and *B* are identical then everything that is true of *A* is true of *B*, or in a more formal way that: $(A = B) \rightarrow (\varphi)(\varphi A = \varphi B)$

(ii) "Those terms of which one can be substituted for the other without affecting truth are identical."

This corresponds to PII. It can be stated by saying that: If everything that is true of *A* is true of *B*, and *vice versa*, and hence if there is no discernible difference between *A* and *B*, then *A* is identical with *B*: $(\varphi)(\varphi A \equiv \varphi B) \rightarrow (A = B)$.

(iii) "Two terms are the *same* if one can be substituted for the other without altering the truth of any statement. If we have A and B and A enters into some true proposition, and the substitutions of B for A wherever it appears, results in a new proposition which is likewise true, and if this can be done for every such proposition, then A and B are said to be the same; and conversely, if A and B are the *same*, they can be substituted for one another as I have said."[7]

This is what is properly called 'the Principle of Substitutivity' or 'the *Salva Veritate* Principle'. Notice that (ii) is the converse of (i), and that slightly different formulations of both (i) and (ii) can be found in or derived from (iii). On the other hand, many have contended that the three formulations are infected by a confusion of use/mention. What can be substituted for one another is words, not things as Leibniz seems to suggest, and what can be true or false are the propositions expressed by the sentences in which those words figure.

For our present purposes it is sufficient with a good understanding of PII that can be illuminating for the arguments advanced in the Leibniz-Clarke debate. Notice, however, that the definition in (ii) uses syntactic and semantic properties that license certain moves to justify inferences about identity of terms whereas in the correspondence the stress falls upon ontological aspects of things. Similarly, in "First truths" Leibniz writes: "it follows also that there are no two individual things in

[7] The first two formulations come from Leibniz' Logical Papers (pages, 84 and 52), as quoted by Hide Ishiguro in her book: *Leibniz's Philosophy of Logic and Language*. New York: Cornell University Press, 1990. p. 19. The third formulation comes from Richard Cartwright's paper: "Identity and Substitutivity." In: *Identity and Individuation*. Ed. by Milton K. Munitz: NYU Press, 1971.

nature which differ only numerically. For surely it must be possible to give a reason why they are different, and this must be sought in some differences within themselves."[8] And in his *Noveaux Essais* he holds the doctrine that there cannot be "two individuals perfectly similar, equal and *indistinguishable* in themselves", since this would contradict the principle of individuation. He goes even farther and argues that in absence of the principle of individuation, there would be no individual distinctness nor separate individuals.[9] On the other hand, in the exchange with Clarke, Leibniz will show that just as there are no two numerically distinct objects which are identical, there are no two different physical states indistinguishable.

As suggested before, (i) and (ii) are converse formulations of a more general principle, and perhaps Leibniz considered them as alternative ways to convey self-identity insofar as this concept is predicable of real objects and linguistic or logical entities. He carefully ruled out the possibility that two numerically distinct things could be identical, that is, that they might become one. His doctrine of the Monads gives enough support to this claim. In fact, he suggests in the *Monadology* that no two Monads (and *a fortiori* no two things which are all aggregates of Monads) can be exactly the same: no thing can be only numerically different from another. The Monads are essentially non-quantitative, and number by itself is merely a measure of quantity. The Monads differ from one another in quality or intension alone, so that two Monads not differing in quality are impossible.[10]

Does PSR entail PII?

Many scholars have offered an affirmative answer to this question. However, before turning on to the second-

[8] "First Truths" (ca. 1680-1684), Loemker, (vol. I), pp. 413-4. A similar formulation of PII appears in *L* IV.6: "There are no two indiscernible individuals (...) To suppose two indiscernible things is to suppose the same thing under two names."

[9] G. W. Leibniz. *New Essays on Human Understanding*. Book II, Ch. XXVII 230. London: Cambridge University Press, 1982. In the same place, Leibniz defines the *Principle of Individuation* in the following terms: "What is called the *principle of individuation* is existence itself, which determines a being to a particular time and place, incompatible to two beings of the same kind. (...) The 'principle of individuation' reduces, in the case of individuals, to the principle of distinction of which I have just been speaking."

[10] «Indeed, each Monad must be different from every other. For in nature there are never two beings which are perfectly alike and in which it is not possible to find an internal difference, or at least a difference founded upon an intrinsic quality [denomination]». (My italics) Leibniz. Monadology. Section 9. In: The Monadology and other philosophical writings. London: Oxford University Press, 1925. p. 223

ary literature, let us try to see for ourselves how Leibniz' arguments in the correspondence support this logical relation. Recall the discussion about God's will. Leibniz is pressing the issue that God's actions accord to PSR, and remains unimpressed by Clarke's allegations that divine will by itself provides enough grounds to substantiate any claim of action in terms of sufficient reason (*C* II.1). In the rejection of absolute space analyzed above, Leibniz has made use of PII to make his point on God's lack of reason to choose between two alternate but indistinguishable states of affairs, suggesting in his reply to Clarke that the mere will to act cannot be properly called a reason. On the other hand, the temptation of finding ontological differences in symmetric arrangements of things in space is based on our "chimerical supposition" of the reality of absolute space, but in fact there are no differences between W_1 (the actual order of things in space) and W_2 (the quite contrary order) "and consequently there is no room to enquire after a reason of the preference of the one to the other." Apparently, this should suffice to show that the relational theory does not conflict with PSR in the way the substantival theory does.

Clarke reacts to these arguments in *C* II.2 and *C* III.5. He refuses to accept the view that God's will is subject to any constraints, and especially that PSR applies to divine decrees. He also insists that W_1 and W_2 are different worlds, since switching the place presently occupied by the earth wit the one of a distant star would move the former to a genuinely different position, and this change cannot be accounted for by the relationist theory. In his answer to this rejoinder, Leibniz offers a plain deduction of PII from PSR (*L* IV.1, p. 22)

1. In absolute indifferent things there is [no foundation for] choice, and consequently no election or will, since choice must be founded on some reason or principle.
2. A simple will without any motive is a fiction, not only contrary to God's perfection, but also chimerical and contradictory; inconsistent with the definition of the will, and sufficiently refuted in my *Theodicy*.
3. It is an indifferent thing to place three bodies, equal and perfectly alike, in any order whatsoever, and consequently they will never be placed in any order by him who does nothing without wisdom But then he being the author of things, no such things will be produced by him at all, and consequently there are no such things.

4. '. . There are no such things as two individuals indiscernible from each other.

The above argument makes the following points: (a) a will, by definition, requires a motive in order to act (and there are no exceptions[11]); (b) no motive can be invoked to order sets of indiscernible individuals in some way, rather than in some other; (c) God does not order indiscernible individuals in any way; (d) God, the author of nature, does not create indiscernible individuals; (e) no indiscernible individuals exist in nature. As one can see the argument leads smoothly from PSR to PII. However, Leibniz gives a shorter and more open deduction of the latter from the former at *L* V.21 (p. 40): "I infer from that principle [PSR], among other consequences, that there are not in nature two real, absolute beings, indiscernible from each other; because if there were, God and nature would act without reason, in ordering the one otherwise than the other; and that therefore God does not produce two pieces of matter perfectly equal and alike." In other words, the supposition of two indiscernible objects, that can be safely entertained in imagination or perhaps applied to abstract terms, is neither consistent "with the order of things, nor with the divine wisdom by which nothing is admitted without reason."[12]

I think it is not hasty to conclude that, on Leibniz' view, the two principles are intertwined in such a way that their logical relation becomes utterly obvious. Furthermore, in his fourth reply where Leibniz states the absolute panarchy of PSR (no action without choice, no choice without determining motive, no motive without a difference between the conflicting possibilities), he also affirms that no two identical objects or equivalent situations are real or even possible in the world, establishing by this means the logical link between the two principles. On the

[11] "The Leibnizian God is, at the same time –once more in contradistinction to the Newtonian one- the supremely rational Being, the principle of sufficient reason personified, and for this very reason, He can act only according to this principle, that is, only in order to produce the greatest perfection and plenitude." Alexandre Koyré. "The Work-Day God and the God of the Sabath." In: *From the closed world to the infinite universe.* New York: Harper Torchbooks, 1957. p. 241

[12] Incidentally, this remark shows that Kant's famous rebuttal of PII is untenable. Leibniz does not deny the conceivability of identical indiscernibles "[w]hen I deny that there are two drops of water perfectly alike, or any two other bodies indiscernible from each other; I do not say, it is absolutely impossible to suppose them" (*L* V.25); he contends that there are no two *actual* indiscernible objects. Hacking has convincingly argued that all spatiotemporal counterexamples to PII are inconclusive (because they are underdetermined). On his opinion, possible spatiotemporal worlds cannot refute or establish this principle, although the pursuit of logical questions may settle the issue. Cf: Ian Hacking. "The Identity of Indiscernibles." *The Journal of Philosophy,* Vol. 72, No. 9, (1975)

other hand, there seems to be agreement in the secondary literature concerning the fact that Leibniz intended his two principles to be understood as related precisely in this way. Some recent works support this conclusion about the relationship between PSR and PII.[13]

Is PII a necessary or a contingent principle?

PII appears no less frequently than PSR in the Leibniz-Clarke polemic, yet we are far from having a consensus as to what is the logical status of PII. To begin with, let me clarify a bit the meaning of this question. Leibniz distinguishes carefully several senses of the word "necessary" in his philosophy. In particular, he tells apart metaphysical from physical necessity, logical from moral necessity, and absolute from hypothetical necessity. Leibniz holds that a principle like "God wills only what is the best" is *morally* necessary but it is not *logically* necessary, since its denial is not self-contradictory. The question can be restated by asking, in what sense, if any, is PII a necessary proposition? One can find here varied answers. Russell, for example, thought that PII was analytical, and so did Ayer and Vinci. On the other hand, Strawson considered it theological (thus, contingent) on the grounds that God would not create a world in which the principle is refuted, albeit such a world is not unconceivable.[14] It is not clear that Leibniz himself bestowed analyticity upon PII. However, one can pin point passages in the correspondence to support these conflicting views, and the passages deal with whether or not it is possible to conceive of a world in which PII is false.

An instance of this case can be identified in *L* III.5, the fragment (discussed above) in which Leibniz deduces PII from PSR. According to the role played by the former principle in the whole argument we are dealing with a logical proposition. There, Leibniz appeals to symmetrical worlds W_1 (the way things are ordered in space now) and W_2 (the contrary way) and denies that it is even possible to conceive that W_1

[13] Thus, for example, Belot. By the end of his paper on this topic he acknowledges the entailment relation and says: "enforcing PSR (in my sense) implies PII (in Hacking's sense), since if one wants a nonsingular reduced phase space, one must exclude symmetric arrangements of matter from one's original space of physical possibilities. And this seems neat and right, since Leibniz often proclaimed that his entire philosophy, including lesser principles such as PII, rested ultimately upon the Principles of Noncontradiction and Sufficient Reason." Gordon Belot. "The principle of sufficient reason." *The Journal of Philosophy,* Vol. XCVIII, No. 2 (2001) p. 74.

[14] Hacking gives a similar report of this disagreement among commentators. He suggests that we can have a better grasp of PII by interpreting it as a meta-principle about possible descriptions, (a metaphysical principle in the sense claimed by Leibniz) which is true *about* all possible worlds.

$\neq W_2$. In this argument, PII establishes the identity between W_1 and W_2. Since the material world is the same in both states, except for the order of things in space, the things that are really identical are points of spatial relations (ideal entities). But any pair of ideal identities that can be conceived as distinct are surely distinct, therefore we need to understand PII as denying the possibility of conceiving that these two sets of spatial relations are distinct.

In the second deduction of PII (*L* IV.3-4) we are confronted with a different situation. Leibniz starts by asserting that it is indifferent to place two or more indiscernible individuals in any order whatsoever. Then he says that wisdom could not give God a reason to order several indiscernible individuals in some way, rather than in another. Since God does nothing without wisdom it follows that (a) He does not order indiscernible individuals in any way; (b) He, the creator of nature, does not produce indiscernible individuals; therefore (c) there are no indiscernible individuals in nature. Notice that this argument tells us nothing about logic, nor about what it is possible to conceive. It only states that there are no two indiscernible individuals in the actual world. Moreover, several premises used in this deduction are not necessary truths, as can be inferred from Leibniz' recognition of God's freedom to actualize any possible world. Hence, PII does not have a logical status here.[15]

Consider one application of PII. In *L* IV.6 Leibniz uses a conceivability argument to stress the logical character of his principle. He rules out the possibility (is an impossible fiction) of thinking that the world "could have had at first another position of time and place, than that which it actually had, and yet that all the parts of the universe should have had the same situation among themselves, as that which they actually had ..." The question that seems to lurk here is: (i) could the entire material world have occupied a different region of space than the one it actually occupies? It is worth to contrast this with another question implicit in the correspondence: (ii) could the entire material world be moved from one region of space to another? The difference between (i) and (ii) can be accounted for by using the notion of possible worlds. In (i) we are dealing with two alternate states that, if realized, must comprise parts of *separate* possible worlds. In (2) we only contrast two possible states that,

[15] For helpful discussion of this topic see: Fred Chernoff. "Leibniz's Principle of the Identity of Indiscernibles." *Philosophical Quarterly*, Vol. 31, No. 123. (1981)

even being different, form part of the *same* possible world.

The distinction is important because it helps to clarify the logical status of PII. In the argument of *L* IV.6 Leibniz is asking question (i). Since any possible world created by God can be indexed at the most to a point of time, the alternate states considered here need to be related to different possible worlds. If this is the case, the argument does not tell us what we should expect to find in the actual world, but rather how a conceptual principle (PII) precludes one's conceiving that there are differences between those possible worlds. Hence, it seems that the version of PII employed here treats the principle as a necessary proposition. By contrast, is rather difficult to decide which version of PII is operating in *L* IV.13, where Leibniz asks whether there might be any reason to motivate God's action when His power moves the entire universe in a straight line without introducing any other change in it. The question here is (ii) and as one may anticipate the answer is negative. This is another "chimerical supposition" since introducing that type of change (with no further alteration) is like doing a "change without any change", there is neither "rhyme nor reason in it", but God does nothing without reason.

If we concentrate our attention on the answer to (ii) it seems that a construal of PII as a contingent proposition is sufficient. The argument only tells us that God does not produce two indiscernible states of the world. But if we do not rule out the possibility of conceiving that these two states of the universe (the one as it is now, the other with everything shifted one mile to the right) constitute genuine alternatives from which God could choose (making them discernible identicals), then we would be in trouble. Hence, a construal of PII as a necessary proposition is required to solve this problem.

I do not have to mention that the Newtonians were ready to deny both versions of PII, but this adds little to the matter under discussion. Going over all the details of the Leibniz-Clarke debate regarding the issue of divine will and its consequences for the philosophy of space time exceeds my objectives here, and I will leave this for another occasion. I want to finish this paper by making one closing remark. One can say that, on Leibniz' metaphysics, the two great principles PSR and PII stand or fall together. If the entailment relation holds, then they seem safe enough, since we have not been able to find knock-down refutations of PII yet. But, what if the entailment relation does not hold? In any reconstruction under which PSR and PII

are independent principles one could accept one without necessarily committing to both of them. Someone of my persuasion, might think that PII is true but deny PSR simply because the only work this principle seems to do is either closing the gap between the availability of "sufficient reasons" and the actual choices made by rational agents or giving a palatable account of causality. However, one either may ascertain that, in fact, many acts (intentional and non-intentional) lack a reason in Leibniz' sense or one might deny that a perfect Being need be subject to this principle.

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