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The Perspectival Nature of Leibnizian Relations

RESEARCH

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ABSTRACT

This paper offers a fresh interpretation of Leibniz's theory of relations. I argue that we should take seriously Leibniz's idea of non-ideal relations inhering in one subject. Such single-inhering relations should not be understood in terms of non-relational, absolute properties, but in terms of perspectival relations. Through the notion of perspective, we can understand how a relation between two relata inheres in only one of those relata. For example, my perception of you involves my point of view. Therefore, it is individual to me. My perception of you is not equal to your perception of me. However, it does relate me to you. Perspective can thus explain how relations only inhere in one subject while nevertheless really relating one thing to another. This leads to a novel understanding of the rejection of purely extrinsic denominations and the supposed isolation of substances.

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INTRODUCTION

After a fierce debate on Leibniz's theory of relations,[1] scholarship seems to have settled on the conceptualist reading, which is most prominently voiced by Massimo Mugnai.[2] According to this interpretation, relations are conceptual entities. Nevertheless, relations are thus understood to be objective and real as they have their reality in divine understanding.

In a forthcoming article, I discuss several issues with Mugnai's conceptualist reading. One of these issues is that Mugnai downplays Leibniz's distinction between relations common to multiple subjects and relations individual to one subject. Leibniz only says of the former type of relations that they are ideal. As accidents cannot inhere in multiple subjects, such relations common to multiple subjects cannot be real. But what about the latter type, that is, relational accidents inhering in one subject? One of the issues that Mugnai and others have raised concerning such an idea is that it is hard to understand how an accident can be relational (and thus connect multiple things) without also inhering in multiple subjects. However, it is here that the notion of perspective is crucial. As I argue, concrete relations can be accidents inhering in one subject, because they always involve a unique point of view. Therefore, a relation from one thing to another never inheres in both relata. Just like perception, for example, a concrete relation always involves a point of view. However, this perspectival nature does not prevent them from being proper relations. My perception of you involves a unique point of view and is therefore not equal to your perception of me. Nevertheless, it does relate me to you. In the following, I further examine this perspectival nature of relations.[3] As we will see, it leads to a novel understanding of Leibniz's rejection of purely extrinsic denominations and the famous isolation of substances.

1. ASYMMETRY AND PERSPECTIVE

As I have said, I make a big deal of Leibniz's distinction between two types of relations:

> The ratio or proportion between two lines *L* and *M* may be conceived three several ways: as a ratio of the greater *L* to the lesser *M*, as a ratio of the lesser *M* to the greater *L*, and, lastly, as something abstracted from both that is, the ratio between *L* and *M* without considering which is the antecedent or which the consequent, which the subject and which the object. And thus it is that proportions are considered in music. In the first way of considering them, *L* the greater, in the second, *M* the lesser, is the subject of that accident which philosophers call 'relation'. But which of them will be the subject in the third way of considering them? It cannot be said that both of them, *L* and *M* together, are the subject of such an accident; for, if so, we should have an accident in two subjects, with one leg in one and the other in the other, which is contrary to the notion of accidents. Therefore we must say that this relation, in this third way of considering it, is indeed out of the subjects [*hors des sujets*]; but being neither a substance nor an accident, it must be a mere ideal thing, the consideration of which is nevertheless useful. (To Clarke, GP VII.401/L 704)

> For since no modification can subsist by itself, but essentially requires a substantial subject, those bonds will have what reality they have in the modification of any monad and in the harmony or agreement of the monads with each other. For I believe you will

1 For an overview of this debate see Jauernig (2010) and Arthur (2021: app. 2).

2 Early versions of the conceptualist reading can be found in Gueroult (1946) and D'Agostino (1981: 128–29). However, this interpretation is fully developed for the first time by Mugnai (1992; see also 1990; 2012; 2018). Many contemporary authors have followed Mugnai in his conceptualist understanding of Leibniz's theory of relations: E.g., Nachtomy (2007: 91–93; 2016: 31–33), Lærke (2016: 132–34), Di Bella (2002; 2005: 341–43), and Arthur (2021: app. 2).

3 On many points my reading agrees with the anti-reductionist interpretation by Hintikka (1972), Ishiguro (1972a: chap. 6, 1972b), Clatterbaugh (1973: chap. 3), Kulstad (1980), McCullough (1977; 1996: 172–79), and Plaisted (2002). All of these authors argue that relations exist as either accidents or properties inhering in one subject. However, none of them explain this individuality in terms of the perspectival nature of relations. As I argue here, this is a crucial element to understand Leibniz's theory of relations.

> not admit an accident that is in two subjects at the same time. And so I believe about relations that paternity in David is one entity, filiation in Solomon is another entity, but the relation common to each of these relations is a merely mental thing, the foundation of which would be the modifications of singulars. (To Des Bosses, GP II.486/McCullough 1996: 174)[4]

Leibniz distinguishes relations as accidents and relations *hors des sujets*. The latter are relations abstracted from their subjects and posited as something common to multiple subjects. Given Leibniz's doctrine of individual accidents, which states that accidents can only inhere in one subject, such relations common to multiple subjects cannot be real accidents.[5] Therefore, they are ideal. However, Leibniz tells us that the former type of relations only inheres in one subject. Hence, they can perfectly well be real accidents. This legitimizes Leibniz's claim, in these passages, that the ratio of *L* to *M* is an accident of which *L* is the subject, and paternity is an accident of David. This is consistent with his description of situational relation as an 'individual affection,' which we will discuss shortly (GP VII.400–401/L 704). Similarly, in the *Principles of Nature and Grace* he describes relations as the 'modifications' of a substance: 'For the simplicity of substance does not prevent a multiplicity of modifications, which must be found together in the same simple substance, and which must consist in the variety of its relations to external things' (GP VI.598/AG 207). One of the reasons why Mugnai effectively abolishes the distinction between ideal and non-ideal relations is that he does not believe that relations can be accidents inhering in one subject (see, for example, 1992: 117).[6] He assumes that, for Leibniz, contrary to what Leibniz tells us here, a relation is

4 McCullough argues that his translation, reading 'common to each of these relations' is more adequate than the usual translation, reading 'common to both' (L 28; LDB 327), which obscures the fact that filiation and paternity are relations (1996: 174).

5 Leibniz writes: 'An accident, however, needs not only some substance in general but that very one in which it inheres, so that it cannot change it' (GP IV.364/L 389–90). For an extensive study of Leibniz's doctrine of individual accidents see Clatterbaugh (1973).

6 Another argument that Mugnai invokes against the idea of relational accidents is Bradley's infinite-regress argument (2010; 2012: 186–87; 2018: 32). Bradley's argument amounts the following: If a relation is a real entity distinct from its relata, there needs to be a second relation in order to relate the relation to its subject. But this means that a third relation is required to link the subject to the second relation, etc. As Mugnai discovered, Leibniz uses such an argument in an early text (dated 1676) to argue that relations are mere 'imaginary and have nothing corresponding to them in reality' (A VI iii.399/Mugnai 2010: 1). Mugnai then argues that the argument also applies to relational accidents:

> We may note, however, that the argument applies not only to relations 'out of the subjects,' but even to what I have called 'relational accidents.' As we have seen, according to the prevailing scholastic doctrine, a relational accident *inheres* in a subject through a 'foundation': thus, if the relational accident has a reality independent of the reality of the foundation, it has to be linked to the latter by means of a substantial link. But then it is precisely at this point that Bradley's argument applies. (2012: 187; see also 2010: 3)

However, as Mugnai himself explains in his 2010 article, the infinite-regress argument does not only apply to relations or relational accidents but to accidents in general (note that Bradley himself took the argument this far): 'Moreover, even the foundation [he is talking about the scholastic notion of an absolute foundation of a relation] and, in general, any non-relational, absolute property, like, for instance, "white" or "philosopher" maintains, according to Leibniz, a link of "inherence" with the individual substance which is white or a philosopher. In this case too, Bradley's argument has its force' (2010: 4). Mugnai then continues by showing how this probably pushed Leibniz to reconsider accidents and inherence. Citing some interesting texts, he argues that Leibniz reconceives the inherence of an accident in terms of it being a *constituent*, a *part* and a *requisite* of its substance. This saves the idea of accidents inhering in a substance from infinite-regress. As Mugnai explains:

> Leibniz, instead of attempting to explain in terms of a relation between individual substance and a quality a link which connects a given subject to an accidental property, interprets the link in terms of 'constitution.' An accidental property, as, for instance, being white, is not something added or connected in some mysterious way to a substance, for instance, Socrates; it is something which *constitutes* the subject Socrates and which maintains with it a link of part-whole. (2010: 7–8)

However, when we understand accidents as such, relational accidents too are hedged against the regress argument. Relational accidents are not added on to a substance by some mysterious connection. Instead, they are constituents of the substance. As we will see, this fits my discussion of how relations pertain to the individual nature of substance in Section 3.

necessarily in two subjects and, therefore, necessarily ideal.[7] However, I believe we should take seriously Leibniz's idea that a relation between two things can be in one subject only. There are several different elements in these passages that can help us understand how a relation can *relate* multiple things without *inhering* in multiple subjects.

One aspect of concrete relations that Leibniz emphasizes is their *asymmetry*. Leibniz tells us that in the abstract ratio between *L* and *M*, we do not consider 'which is the antecedent or which the consequent, which the subject and which the object' (GP VII.401/L 704). In other words, conceived abstractly, we do not consider the direction of the relation. Concrete relations inhere in a subject and are directed *towards* an object (or multiple objects). They are asymmetrical in the sense that subject and object cannot be swapped. In other words, the relation of *L* to *M* is not equal to the relation of *M* to *L*. A genealogical relation between father and son is asymmetrical in the same sense. In other words, 'paternity in David is one thing, filiation in Solomon another' (To Des Bosses, GP II.486/LDB 327). David's relation to Solomon is not equal to Solomon's relation to David.

Now, when the relation of *L* to *M* is asymmetrical this means that *L* is the subject of this relation and not *M*. In other words, a concrete relation is not the accident of both relata but of only one of them. As Leibniz explains, a relation involves multiple things, but it involves them differently:

> From these definitions it can be shown that the same subject can have several attributes, even contradictory ones, that is, that it can change. It must be shown, however, that there cannot be several subjects of the same attribute. Therefore, it appears that something must be added to the definition, namely, that while it can happen that some attribute, for example, a relation, involves in its essence the existence of several things, it involves the one differently from the way it involves the other; thus paternity involves the two individuals David and Solomon, but differently in the two cases. (Grua 539/Mates 1986: 223–4)

In other words, David's relation to Solomon only involves the latter as an object, not as a subject. Thus understood, relations do not conflict with the doctrine of individual accidents—here formulated in terms of attributes as 'there cannot be several subjects of the same attribute.' Relations can thus *relate* multiple things without *inhering* in multiple subjects.

However, the asymmetry of a relation is not sufficient to guarantee its individuality. The asymmetry of Solomon's relation to David implies that David cannot also be the subject of this relation. But it does not necessarily mean that Solomon is the sole subject of it. Solomon's relation of filiation to David could very well be seen as shared with other children of David. Therefore, a relation can be asymmetrical but still be *hors des sujets*, that is abstracted from their subject and conceived as an accident common to multiple subjects. So, strictly speaking, asymmetry is not sufficient for distinguishing concrete relations from abstract relations.

What really makes a relation concrete and individual is its *perspectival* nature. The asymmetry of concrete relations can itself be better understood through their perspectival character. Each concrete relation has an asymmetrical direction because it involves a certain point of view: 'Each individual substance expresses the whole universe entirely in its way and according to a certain relation, or, so to speak, in accordance with the point of view from which it regards it' (To Arnauld,

7 Mugnai argues that insofar as a relation really relates multiple things, it necessarily inheres in multiple subjects. Since the latter is impossible, relations cannot be real accidents. This comes down to the scholastic puzzle of how a relation can be both *esse-id* and *esse-ad*. As Mark Henninger writes in his seminal study of medieval conceptions of relation: 'much tension springs from the need to do justice to a relation's alleged reality as an Aristotelian accident (*esse-in*) and its peculiar character of involving somehow more than the subject [*esse-ad*]' (Henninger 1989: 5–6). Mugnai is convinced that insofar as a relation is a true inter-substantial relation, and thus 'reaches out' to another thing, it is always in multiple subjects: 'a characteristic property of relation is their "multiple inherence"' (1992: 47), 'relations in effect inhere in more than one subject' (1992: 32; see also Cover and O'Leary-Hawthorne 1999: 73). In short, since, according to Mugnai, every relation is necessarily polyadic and inherence is necessarily monadic, the scholastic puzzle concerning relations as accidents is a downright contradiction. On his reading, Leibniz's solution to the scholastic puzzle of relational accidents is more or less Aquino's solution (Mugnai 1992: 44–45): Only the absolute foundation of a relation is an inhering accident, and the relational accident is nothing but a 'conceptual entity.' For an extensive and detailed critique of Mugnai's reading of Leibniz's theory of relations, see (Vermeiren, Forthcoming).

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A II ii.80/L 337). In other words, David's relation to Solomon maintains a different perspective than Solomon's relation to David. Therefore, they are different relations. Furthermore, the unique perspective that is involved in Solomon's relation to David implies that the relation is not shared with other children of David. Each child of David relates to him from its own unique perspective. When we abstract from these perspectival relations to an ideal relation common to multiple subjects, we abstract from the perspectival nature of each relation to a non-perspectival relation.

Leibniz's distinction between two types of relations can be understood in analogy with his distinction between the world existing in an infinity of different monadic perspectives and the world as a ground plan in divine understanding. As Mugnai has shown, although abstract relations are ideal, they have objective reality in divine understanding. Likewise, the non-perspectival ground plan of the world is an ideal entity that has reality in divine understanding:

> And the difference between the appearance of bodies with respect to us and their appearance with respect to God is in some way like the difference between a drawing in perspective and a ground plan. For whereas drawings in perspective differ according to the position of the viewer, a ground plan or geometrical representation is unique. (To Des Bosses, GP II.438/LDB 233)

At the level of concrete substances, the world exists in perspectives. Likewise, concrete relations are always perspectival. But in divine understanding, these relations are captured in an abstract manner without perspective. In other words, the 'ratio of the greater *L* to the lesser *M*' and the 'ratio of the lesser *M* to the greater *L*' are understood by God as 'ratio in the absolute sense of the geometricians' (GP VII.401/L 704). This is in accordance with how the world, existing in perspectival representations, is understood by God through a non-perspectival 'geometrical representation.' Both this geometrical ground plan and the abstract ratio between *L* and *M* are conceptual entities. However, because they have reality in divine understanding, they are objective and therefore, as Leibniz tells us, 'useful to consider' (GP VII.401/L 704).

In sum, a non-ideal relation of a substance is always individual to that substance because it involves its unique point of view. Relations are bound to that point of view, as they are accidents bound to their substance having this point of view. For example, Caesar's famous relation to the Rubicon should not be detached from Caesar's point of view towards the rest of the world and the rest of world history. Caesar's relation to the Rubicon is of such importance because of this unique position that he takes up in the world. His relation to the Rubicon is not equal to my relation to the Rubicon because of the unique position from which he relates to the river. If I cross the Rubicon tomorrow, this will not be a major historical event because my relation to the river starts from a different point of view than Caesar's relation. In other words, because of Caesar's unique point of view, his relation to the Rubicon is an individual accident that does not and cannot inhere in any other subject.

2. POINT OF VIEW AS THE CLUSTER OF RELATIONS

As concrete relations are always perspectival, they involve a certain point of view. But how should we understand this point of view? Intuitively we understand it in a spatial manner. We think of a camera, for example, taking a picture from a certain location in space and directed towards its object with a certain angle. However, on Leibniz's account, this spatial position and this angle are relations. It thus seems that a point of view is itself a relation.

I believe this can be best understood through what Leibniz tells us about *situation*. Leibniz's characterization of a point of view often coincides with how he characterizes situation.[8] Sometimes it even seems as if those two notions are equivalent: 'Each substance expresses the whole universe according to its own situation and point of view, inasmuch as everything else is related to it' (A VI iv.1618/LC 309). However, to be precise, situation is for Leibniz solely a relation of coexistence, that is, a *spatial* relation. Situation can thus only be understood as a spatial point

8 See Arthur (2021: 166–67). Jen Nguyen argues extensively that 'to have a Leibnizian place is to have a point of view' (2018: 43). However, she understands point of view in a non-relational way.

of view. In other words, it is a *species* of point of view. Nevertheless, situation offers a great help to understand what constitutes a point of view in general. In the famous fifth letter to Clarke, Leibniz explains that the situation of a body is its relation to the infinity of other bodies. It is the 'relation of the coexistence of B with C, E, F, G, etc.' (GP VII.400–401/AG 338). An individual's point of view in general can then be understood to consist of *all* relations that individuals have to the rest of the world: 'each individual substance expresses the whole universe entirely in its way and according to a certain relation, or, so to speak, in accordance with the point of view from which it regards it' (To Arnauld, A II ii.80/L 337). In other words, the 'certain relation' according to which each substance expresses the whole universe *is* its point of view.[9]

If a substance's point of view consists of all its relations to the rest of the world, the fact that concrete relations always involve a certain point of view can thus be understood as the fact that concrete relations always involve all other relations to the rest of the universe. Caesar's relation to the Rubicon is a unique and individual relation because it involves his unique point of view on the universe. And Caesar's unique point of view on the universe is constituted by Caesar's unique set of relations to the rest of the universe. Therefore, Caesar's relation to the Rubicon involves his relation to the Roman empire, his relation to Gaul, his relation to Brutus, etc. Caesar's crossing of the Rubicon is something totally different from my crossing of the Rubicon because of all the relations which are involved in Caesar's crossing and which constitute Caesar's unique point of view. My crossing of the river is less important because I am not the statesman of an empire nor the general of an army.

3. RELATIONS INDIVIDUALIZE

A substance's relation to other substances not only constitutes its unique point of view, but it also constitutes the individuality of that substance. Substances are individualized by their relations. Leibniz often says that an individual substance is only 'sufficiently determined as an individual' if it 'involves relations to the whole series of things' ('Remarks on Arnauld's Letter,' A II ii.44/AG 69). In fact, a substance's relations with the rest of the world simply constitutes its principle of individuation:

> The most important point in this is that individuality involves infinity, and only someone who is capable of grasping the infinite could know the principle of individuation of a given thing. This arises from the influence properly understood—that all the things in the universe have on one another. (*New Essays,* A VI vi.289–90/NE 289–90)

Relations are therefore indispensable in Leibniz's metaphysics of individuality.[10] In another passage of the *New Essays*, he explains how there is 'no substance which does not have something which distinguishes it from every other' (A VI vi.110/NE 110). What distinguishes substances from one another, he continues to explain, is their unique relation to the world: 'Every substantial thing, be it soul or body, has its own unique relationship to every other, and the one must differ from the other by intrinsic denominations' (A VI vi.110/NE 110). Leibniz tells us here that this unique

9 A possible objection is that I here intermingle talk about bodies with talk about substances. However, according to my reading, bodies are substances. In general, I endorse the body-realist reading (see Loptson and Arthur 2006). Until the very end of his life, Leibniz took bodies, unified by a monad, to be 'composite substances' (see, for example, the correspondence with Des Bosses and *Principles of Nature and Grace*). When I speak of relations between 'substances' this applies to both simple substances (monads) and corporeal substances (bodies). Therefore, according to my reading Leibniz's theory of relations does not rely on a distinction between bodies and simple substance. For example, I do not hold the popular opinion that only bodies have situation and substances are only situated through their bodies (see, for example Nguyen 2018; Slowik 2016: 104–7; Arthur 2021: 141, 355). Substances need situation to provide the foundation for the extension of bodies. Leibniz writes to Des Bosses: 'That is, a simple substance, even though it does not have extension in itself, nonetheless has position, which is the foundation of extension, since extension is the simultaneous continuous repetition of position' (GP II.339/LDB 99). But if a substance's 'position'—which is the more general term for 'relation of order' of which situation is a specification (see C 540–41)—would be the situation that monads have through their body, it would be both foundational for and derivative from extension. Therefore, I believe simple substances need situational relation (that is, a 'position' of coexistence) to found the extension of bodies. Furthermore, as monads co-exist with each other, it seems only evident that they have relations of co-existence, i.e., situations.

10 For such an argument see McCullough (1996: 176) and Hintikka (1972: 265).

relationship proper to each substance is an 'intrinsic denomination.' As we will see, Leibniz defines '*extrinsic* denominations' as those that 'can arise and disappear without a change in the subject' ('Definitions,' A VI iv.308/Mates 1986: 225). Therefore, when Leibniz says that the unique relationship of each substance is an '*intrinsic* denomination', this means that it *cannot* change without changing the substance's inner nature. Given the fact that, as Leibniz says, the principle of individuation of a substance 'arises from the influence properly understood—that all the things in the universe have on one another' (A VI vi.289–90/NE 289–90), a change in a substance's relationship to the rest of the world, implies a change in the substance's individuality. In other words, a substance's distinguishing relationship to the world pertains to its inner nature. Leibniz speaks of a substance's '*essential* relationship to all the other things in the world' (GP IV.562/L 579, my emphasis).

This individualizing character of a substance's infinity of relations returns in Leibniz's discussion of situation. Leibniz explains to Clarke that situation, in contrast to 'place,' is an unrepeatable 'individual affection':

> For the place of *A* and *B* is the same, whereas the relation of *A* to fixed bodies is not precisely and individually the same as the relation which *B* (that comes into its place) will have to the same fixed bodies; but these relations only agree. For two different subjects, as *A* and *B*, cannot have precisely the same individual affection, it being impossible that the same individual accident should be in two subjects or pass from one subject to another. But the mind, not contented with an agreement, looks for an identity, for something that should be truly the same, and conceives it as being extrinsic to the subjects [*hors des ces sujets*]; and this is what we here call *place* and *space*. But this can only be an ideal thing, containing a certain order, wherein the mind conceives the application of relations. (GP VII.400–401/L 704)

Leibniz explains that *A*'s situation is not a public location that can be left open for others to occupy. *B* can never occupy *A*'s situation because 'the relation of *A* to fixed bodies is not precisely and individually the same as the relation which *B* (that comes into its place) will have to the same fixed bodies.' Therefore, situation cannot 'pass from one subject to another.' Situation is thus strictly individual because it cannot be repeated by another individual. Just after explaining the individual nature of situation, Leibniz compares situation to genealogical position. Just as a change in position in your family tree would imply the 'fiction of metempsychosis,' as Leibniz says, a thing cannot change its situation without becoming another thing.[11]

In short, each individual substance is individuated by its unique relationship to the rest of the world. This 'essential relationship' constitutes its individuality. It is thus by being related to the rest of the world, that a substance occupies a unique point of view on the world. It is because of Caesar's relation to Brutus, Sulla, Gaul, and every other thing in the universe, that he enjoys individuality in the form of a unique point of view on the world. It is thus because of the connection of Caesar to every other thing in the world that his crossing of the Rubicon is individual to him.

4. THERE ARE NO PURELY EXTRINSIC DENOMINATIONS BECAUSE OF UNIVERSAL CONNECTION

This individualizing characteristic of relations can help us understand Leibniz's principle which states that there are no purely extrinsic denominations (henceforth, 'NPED'), and more particularly his argumentation thereof. In (Vermeiren, Forthcoming), I criticize how this principle is usually

11 The just cited passage on 'place' continues as follows:

> In like manner as the mind can fancy to itself an order made up of genealogical lines whose bigness would consist only in the number of generations wherein every person would have his place; and if to this one should add the fiction of a metempsychosis and bring in the same human souls again, the persons in those lines might change place; he who was a father or a grandfather might become a son or a grandson, etc. And yet those genealogical places, lines, and spaces, though they should express real truths, would only be ideal things. (GP VII. 401/L 704)

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understood as the idea that relations are reducible to absolute properties. Let me here summarize why such an interpretation is problematic. This reading of NPED is based on the idea that the notion of 'extrinsic denomination' coincides with the notion of relation.[12] However, Leibniz defines 'extrinsic denomination' in a different way. He defines them as denominations 'which arise and disappear without any change in the subject itself' ('Definitions,' A VI iv.308/Mates 1986: 225). This definition, together with Leibniz's use of NPED, proves that he considers some relations to be intrinsic denominations. Moreover, the usual reading of NPED makes Leibniz's argumentation for NPED counterintuitive. Leibniz's argument for NPED is based on the universal connection of all things. He repeatedly argues that 'in metaphysical strictness there is no wholly extrinsic denomination, *because of the real connections amongst all things*' (*New Essays*, A VI vi.227/NE 227, my emphasis).[13] If NPED is read as a rejection of relations, the argument becomes something like this: 'There are no relations because of the real connections amongst all things.' This does not sound very convincing.[14]

When we follow Leibniz's own definition of extrinsic denominations, his argument becomes something like this: 'There are no denominations which change without the subject changing, because of the real connections amongst all things.' This makes a lot of sense if we bear in mind the individualizing character of relations. Let us try to understand this by taking the notions of place and situation as examples. In his correspondence with Clarke, Leibniz writes that the usual conception of spatial location, for which he uses the French word '*place*,' is an accident that can be 'left off like clothes' (GP VII.398/L 702). In other words, it can 'arise and disappear without any change in the subject itself' and is therefore, given Leibniz's definition, an extrinsic denomination. However, rightly conceived, Leibniz tells us, 'to be in a location [*loco*] is not a bare extrinsic denomination' (To De Volder, GP II.240/LDV 239). A thing cannot leave off his location like clothes because each thing 'must express location [*locum*] in itself' (C 9; PW 133). For this correct conception of spatial location, Leibniz uses the term 'situation'. Situation is, Leibniz tells us, 'a relation which must necessarily be expressed by every individual' (GP II.277–78/AG 183). As we have seen, he says situation is an 'individual affection' (GP VII.400–401/L 704). Hence, it is clear that it cannot 'arise and disappear without any change in the subject itself.' Therefore, following Leibniz's definition, it is not an extrinsic denomination but an intrinsic one.[15]

The example of situation and place can help us understand Leibniz's argumentation for NPED. His reasoning then goes, 'there is no such thing as place because of the real connection of all things.' Given the fact that the individuality of something, as we have seen, 'arises from the influence properly understood—that all the things in the universe have on one another' (A VI vi.289–90/NE 289–90), we can understand why two bodies cannot have precisely the same relation to the coexisting universe. As *A*'s relation to all co-existing bodies individualizes *A*, it is part of its individual nature, and therefore an 'individual affection' which cannot be 'left off like clothes' for others to pick up. In other words, because of the universal connection of all things, there is, in actual existence, no such thing as *place*, but only *situation*.

Let us translate this back to our example: Caesar's relation to the Rubicon is not an extrinsic denomination because of the universal connection of all things. As Caesar reflects in himself all other things, he has an individual point of view on the world. Hence, Caesar's relation to the Rubicon is very different from, for example, the Rubicon's relation to Caesar. Therefore, because of the universal connection of all things, all of Caesar's relations (and other accidents) pertain to his individual nature, that is, they cannot change without changing Caesar. In short, because of Caesar's connection to all things, all his denominations are intrinsic to him.

12 For example, Mates (1986: 218), Cover and O'Leary-Hawthorne (1999: 70), Parkinson (1965: 45, 147–50), Mugnai (2012: 191), Arthur (2021: 355).

13 He regularly repeats this line of reasoning (see A VI iv.1503/L 365; A VI iv.308/Mates 1986; C 8/PW 133).

14 Of course, this 'real connection' is then usually read in terms of ideal universal harmony between absolute monadic states (see, for example, Mugnai 1992, chap. 3; Rutherford 1995: 145–46). However, as I argue in (Vermeiren, Forthcoming) such a reduction of the real connection to an ideal connection runs into other issues.

15 See (Vermeiren, Forthcoming) for a more extensive analysis of how the distinction between place and situation can be understood in terms of the distinction between extrinsic and intrinsic denominations, respectively.

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5. A FRESH LOOK AT THE ALLEGED ISOLATION OF SUBSTANCES

We have until now argued for three main things: (i) not all relations are ideal, but only relations that are common to multiple subjects, (ii) the perspectival nature of concrete relations explains why they are individual to one and only one subject, and (iii) every individual is individualized by its connection to all other things. When taking all those elements together we can find a different way to reconcile two seemingly contradicting claims of Leibniz:

On the one hand, as we have already seen, Leibniz often emphasizes the universal connection of all substances. He says that 'all substances are co-requisites for each other' (A VI iv.1800/LC 281) and that 'all things conspire' (C 15/PW 176). There are many more examples of such statements:

> Each individual substance expresses the whole universe of which it is a part according to a certain relationship, through the connection which it has to all things. (To Arnauld, A II ii.73–74/L 333–34)
>
> Every substantial thing, be it soul or body, has its own unique relationship to every other, and the one must differ from the other by intrinsic denominations. (*New Essays*, A VI vi.110/NE 110)
>
> All existing things have this intercourse with each other. (A VI iv.1503/L 365)

On the other hand, he famously writes that 'monads have no windows through which something can enter or leave' (*Monadology*, GP VI.607/AG 214) and that 'each substance is like a world apart, independent of everything outside of itself except God' (*Discourse on Metaphysics*, A VI iv.1550/L 312).

The popular conceptualist interpretation of Leibniz's theory of relations explains this seeming contradiction by taking universal connection to be purely conceptual. As Di Bella puts it, 'ontological autonomy and conceptual holism are two inseparable sides of the same coin' (2005: 346). In other words, relations are purely conceptual. Existing substances lack relations. This solution is not without its problems. One of the issues is that the very notion of an actual world and the idea of substances existing together require relations. According to Mugnai, relations supervene on absolute properties of substances, that is, they 'are conceptual entities which merely result from the *simultaneous existence* of "substances-with-modification"' (Mugnai 1992: 120, my emphasis). For example, the conceptual relation between Solomon and David, Mugnai tells us, results from the fact that 'Solomon *exists together* with David' (1992: 121, my emphasis). However, this 'simultaneous existence,' this 'existing together,' is a *relation*. Leibniz clearly states that coexistence is a relation of connection (or 'concurrence') (A VI vi.358/NE 358, see also A VI vi.142/NE 142). Hegel already noted that the very idea of a multiplicity of substances existing together relies on a relation between those substances (Hegel [1840] 1955: 342). Russell too noted this: 'But this assumption of a plurality of substances made the denial of relations peculiarly difficult' (Russell [1900] 1955: 18). The very idea of substances existing together relies on relations between those substances.

Therefore, there are two important reasons why this coexistence cannot be a conceptual relation. First, if this coexistence would be conceptual, the actual world would be reduced to a conceptual world. God's actualization of a possible world cannot be explained without some form of non-conceptual relation of coexistence, that is, a coexistence *out there in the world* and not in God's mind. In other words, the real difference between a conceptual world and an actualized world cannot be explained without a non-conceptual form of coexistence. Second, since Mugnai takes all relations to be conceptual entities that 'come about from the simple *coexistence* of foundations which are not relative' (1990: 76–77), the relation of coexistence is already presupposed in order to explain how conceptual relations supervene on absolute properties. Therefore, this relation of co-existence cannot itself be construed as a conceptual relation without running in circles. However, I save the full critique of the nominalist-conceptualist reading of Leibniz's theory of relations for (Vermeiren, Forthcoming).

Here, I want to offer an alternative explanation of how Leibniz can claim both that substances are 'worlds apart' and that substances are 'co-requisites.' I believe these two claims are reconcilable

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if we keep in mind the perspectival and individual nature of relations. The alleged isolation of substances should not be understood in terms of an absence of relations, but in terms of their individual and perspectival nature.

I start with the *perspectival* nature of relations. By overlooking the role of perspective, perception is often read in terms of solitary representations of isolated substances.[16] This is, of course, associated with the reductionist reading of Leibniz's theory of relations. As substances are unrelated, the perceptions of a monad are not understood as relations to other monads but as solitary representations independent from the rest of the world. However, as Leibniz explains, each substance is 'like a complete world' in the sense that it is a unique perspective on the world that is not shared by any other monad:

> Every substance is like an entire world, and like a mirror of God or of the whole universe which it expresses, each in its own manner, about as the same city is represented differently depending on the different positions from which it is regarded. (*Discourse on Metaphysics*, A VI iv.1542/L 308)

Substances are therefore not *really* different universes. Instead, the difference between their worlds is only *perspectival*:

> Just as the *same* city viewed from different sides appears to be different and to be, as it were, multiplied in perspectives, so the infinite multitude of simple substances, which *seem* to be so many different universes, *are nevertheless only the perspectives of a single universe according to the different points of view of each monad*. (*Monadology*, GP VI.610/L 648, my emphasis)

As Leibniz writes here, substances only *seem* to be different universes but are actually merely different perspectives on the same universe. My perceptions thus connect me to other substances. Otherwise, Leibniz tells us, God would not have created a world, but a multitude of worlds:

> God could give to each substance its own phenomena independent of those of others, but in this way he would have made as many worlds without connection, so to speak, as there are substances, almost as we say that when we dream, we are in a world apart and that we enter into the common world when we wake up. (First Reply to Bayle, GP VI.519/L 493)

The perceptions of substances are not dreams but perspectives.[17] Their reality 'is indicated by their interconnections, something that distinguishes them from dreams' (GP VI.590/AG 265). Perspectives are connected to both other perspectives and their shared object. Perception is therefore a relation. We are related to other substances through our perceptions. In fact, Leibniz tells us that without perception 'monads would have no relation to the rest of the world' (GP III.575/L 663). The only way in which monads are 'isolated', is by the unique perspective through which they perceive others and are related to others.

The individuality of relations can also help us understand how substances are like worlds apart without being disconnected. As we have seen in Section 1, substances only have individual relations. David has his own individual relation to Solomon and Solomon has his own relation to David.

16 See, for example, Furth (1967), Adams (1994: part 3) and Cover and O'Leary-Hawthorne (1999: 74–76).

17 However, on rare occasions, Leibniz seems to straightforwardly deny the relationality of substances in a way that cannot be read in terms of perspectival or individual relationality: 'The perceptions or expressions of external things reach the soul at the proper time by virtue of its own laws, as in a world apart, and as if there existed nothing but God and itself (to make use of the expression of a person of exalted mind and renowned piety)' (*New System of Nature*, GP IV.484/L 457). However, taking this as proof for the ontological isolation of substances is problematic for a number of reasons. First, Leibniz here qualifies his statement. As Hintikka argues, Leibniz writes that substances are 'like' a world apart 'as if' there existed nothing but God and itself (1972: 270). We have seen that Leibniz himself explains in the *Monadology* that this *seeming* fact should be explained in terms of 'perspectives of a single universe according to the different points of view of each monad' (GP VI.610/L 648, my emphasis). Second, one could also argue that Leibniz's use of the phrase 'as if there existed nothing but God and itself' does not really reflect his own viewpoint but should be read as an attempt to seek approval of religious authorities by associating his ideas with the 'exalted mind and renowned piety' of Saint Theresa of Avila to whom he implicitly refers.

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This means that each individual substance is, so to speak, in its own world of individual relations. David and Solomon do not share a relation. They both have their individual relation towards the other. By extension, David does not share a relation with anything. He is, as it were, locked up in his own universe of individual relations. In that sense, substances are isolated in their individuality although they are related.

If we understand the independence of substances in terms of their individuality we can better understand why, as Leibniz says, 'this independence does not prevent the intercourse of substances with each other' (To Arnauld, A II ii.81/L 337). As we have seen in Section 3, it is because of the universal connection of all things that each thing is individualized into a unique position in the world. Therefore, it is because of the universal intercourse of all things that each thing enjoys independence in the form of the individuality of its relations. In other words, not only is the universal connection of all things reconcilable with their independence, but this independence actually follows from universal intercourse:

> Since everything is connected because of the plenitude of the world, [...] it follows that each monad is a living mirror of the universe or a mirror endowed with internal action, which represents the universe from its own point of view and is as ordered as the universe itself. (GP VI.599/AG 207)

Every monad is endowed with internal action *because* each substance is endowed with an individual position in the world constituted by its individual relations to all other things. As each of a monad's relations to others is individual to the monad, there is no real 'foreign' influence. Hence, every action is an internal action, that is, it follows from the inner nature of the substance. A substance is thus causally isolated through the individuality of all its accidents, including its relations.

We can also understand this in terms of freedom and determinacy. As Leibniz explains to Arnauld, my actions can be certain, in the sense that they are included in my concept, and yet be free if 'there is nothing whatever in me that can be conceived *sub ratione generalitatis seu essentiae seu notionis specificae sive incompletae* [under the principle of generality or essence, or of a specific or incomplete concept], from which one can draw the conclusion that I shall make it necessarily' (A II ii.74/L 334). What Leibniz here says is crucial: If the certainty of my actions belongs to my individual nature and its individual laws, and not to any general law or principle, my actions are free. In short, rather than necessity, it is *generality* that threatens freedom. Rather than indeterminacy, it is *individuality* that constitutes freedom. As long as my accidents are individual to me, I enjoy freedom.

In close analogy with this, we could say that rather than relationality, it is generality (or commonality) that threatens my independence. This is also how monads are 'without windows' and 'like a world apart.' There is no interaction with an outside world because everything is individual. There is no commonality that could mediate an interaction between substances. The idea of interaction between things relies on the idea of a common space or medium in which the interaction can take place. We can take this back to the ideality of empty space and place. As Leibniz explains to Clarke, our idea of absolute space results from the idea of empty place that can be occupied by multiple bodies (GP VII.400–401/L 703–4). The space that consists of these empty places is thus a public and shared space. But such a space is only ideal. In actuality, the spatial location of each body is an individual affection. Each body has its unique situation that cannot be passed on to other bodies. Therefore, in actual nature there is no public space which could mediate intercourse. In this sense, substances are isolated. But, again, they are only isolated because their situational relations to other things are individual.

Finally, the doctrine of individual accidents itself can also help us understand why substances are 'worlds apart' without lacking relations. In a more qualitative conception of influence or intercourse we usually rely on common qualities that can be passed on from one thing to the next. When I say that a fire heats a volume of water, I imagine some common quality 'heat' to be transmitted from the fire to the water. But Leibniz's metaphysics does not allow any common qualities.

Therefore, nothing can be passed on from one substance to another. As Leibniz says, monads do not have windows because 'accidents cannot be detached from substances and march outside of substances' (*Monadology,* GP VI.607–8/L 643). Monads lack windows because 'it is impossible to conceive of material particles or of species or immaterial qualities which can pass from one of these substances into the other' (GP IV.498–99/L 460). A substance cannot pass on its accidents to another substance because each accident is strictly individual. Again, it is individuality which is the true reason why nothing can be transmitted from one substance to the next.[18] But, as we have seen, this individuality is constituted by an individual's unique relation to the rest of the universe.

In sum, this independence of substances should only be understood as the isolation of perspective, or the isolation of having individual relations. Again, my perception of you is not your perception of me. Each of our perceptions involves a unique perspective. My perception of you is individual to me and your perception of me is individual to you. In that sense, I am a world apart from you. However, our perceptions relate us to each other. We are only locked up into our own perspective, or, if you will, our own individual relation to the world.

CONCLUSION

Non-ideal relations are accidents individual to one subject. Their individuality can best be understood in terms of their asymmetry and perspectival nature. Each substance relates to others from a unique point of view. This point of view is itself constituted by the unique set of relations that a substance has to all others. The inseparability of each relation from the substance's point of view can thus be understood as its inseparability from all other relations of that substance. To use our example, Caesar relates to the Rubicon from his unique point of view, which is constituted by his unique set of relations to the rest of the universe. This unique relation to the rest of the universe is the principle of individuation of the substance. The universal connection of things thus individualizes each thing. In other words, the universal connection of all things constitutes the individual and the perspectival nature of each substance and its relations. This allows us to better understand Leibniz's argumentation for NPED based on the connection of all things. Every accident of a substance is intrinsic to it because it involves the substance's unique point of view. And each substance has such a unique point of view because of its connection to all other things. Finally, this offers a fresh look at the alleged isolation of substances. Leibniz explains that substances are like 'worlds apart' because they each maintain a different perspective on the world. The isolation of substances is thus only perspectival. Furthermore, given the individualizing character of relations, this perspectival nature of a substance's perception of the world results from its connection to all things. This explains how Leibniz often derives the isolation of substances from the universal connection of all things.

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The author has no competing interests to declare.

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18 In addition to the cited passage of the *Monadology*, many other passages present this argument (e.g, GP IV.498–99/L 460). For a similar analysis of the no-windows thesis, see McCullough (1977: 35–38).

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