

Leibniz on Relations

Ephraim Glick

MIT

June 14, 2007

Leibniz denied that relations were real. My aim here is to make sense of this claim and to evaluate what motivation can be given to it within Leibniz's framework. An initial puzzle that provides a starting point for our discussion concerns Leibniz's position on accidents and other abstracta. I defend Mates' claim that Leibniz was a nominalist, and then ask whether Leibniz's nominalism offered him a simple motivation for rejecting relations. I conclude that it did not, since relations are supposed to be unreal in a stronger sense than abstracta more generally. En route to this conclusion, I give some detail to the argument usually cited as Leibniz's line of opposition to relations, make use of some medieval notions pertaining to accidents, and make a suggestion about the "fundamentals" that Leibniz sees as the supervenience base for relations.

Before beginning in earnest, there is one terminological matter to clarify. Though Leibniz is not entirely consistent, 'denomination' and 'predicate' usually refer to linguistic items, and 'accident', 'modification', and 'relation', if

they denote at all, are supposed to denote proper elements of reality. Thus the thesis that relations are unreal is not the same as the thesis that there are no purely extrinsic denominations, though there is obviously some connection between them. I will not discuss this connection, as my main focus will be on a metaphysical question: Does the world contain relations in addition to, e.g., substances?

The main line of thought behind Leibniz's rejection of relations is usually identified (e.g. by Benson Mates (1986: 210) and Jonathan Bennett (2001: 338)) as the following: If relations existed, "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". A number of questions arise immediately. First, what is an accident? And why cannot an accident be in two subjects? Furthermore, what is a relation? And why would the existence of relations entail the existence of an accident in two subjects? I will try to sketch Leibniz's answers to these questions in the following sections, beginning with his notion of accidents.

An accident, Leibniz says, is "that which depends upon a substance as ultimate subject", it is "a modification of something entirely other" (1969: 605). These characterizations are far from clear. Rather than getting into the notion of dependence now, we might prefer to try to identify our subject matter without already building in theoretical commitments, instead explaining accidents by example. Consider the inept Inspector Clouseau. There is Clouseau, and then there is his ineptitude. The latter is an accident of the former. Similarly,

Clouseau's clumsiness is an accident of Clouseau, though the inspector himself is not an accident, but a substance.

Now, the need for a distinction like that between substances and accidents is not very controversial. While there may be no contemporary notion exactly corresponding to Leibniz's notion of substance, we do set apart particulars from properties or universals; Ineptitude is a property that is instantiated by many particulars, including Clouseau. But one can say little more about the distinction without introducing substantive philosophical commitments, and it is difficult to tell what Leibniz's commitments were on the topic.

Several authors, including Mates, who cites Clatterbaugh (1973), have argued that Leibniz took accidents to be unique to the substances they modified. This would be one substantive thesis about accidents that maps fairly clearly onto contemporary discussion. Someone with the view in question rejects the notion of an accident as a universal — something that is instantiated by multiple objects, or a single form in which multiple objects participate. Instead, like trope theorists, he sees accidents as individual in the sense that, while A and B may be perfect duplicates, the accidents of A are not identical to the accidents of B. E.g., while Milo and Ajax may be equally strong, the strength of Milo is not identical to the strength of Ajax. (See (Bennett 2001: 337) and (Mates 1986: 65, 192).)

But Mates also argues that Leibniz was a nominalist.

He does not believe in numbers, geometric figures, or other mathematical entities, nor does he accept abstractions like heat, light,

justice, goodness, beauty, space or time, nor again does he allow any reality to metaphysical paraphernalia such as concepts, propositions, properties, possible objects, and so on. The only entities in his ontology are individuals-cum-accidents, and sometimes he even has his doubts about the accidents. (1986: 173)

It is unclear how one could hold some substantive thesis about accidents being individual while at the same time denying that there were any accidents. The former claim would have to be translated into something more nominalistically acceptable. But regardless, the evidence in favor of Leibniz's nominalism seems strong. Mates cites Leibniz's approving comments in his copies of nominalistic texts, passages in which Leibniz complains about the use of abstract terms in philosophy, claiming that such practice leads only to obfuscation, numerous examples in which Leibniz attempts to rephrase sentences containing abstract nouns into more ontologically parsimonious sentences, and the following key passage:

Up to now I see no other way of avoiding these difficulties than by considering abstracta not as real things but as abbreviated ways of talking — so that when I use the name *heat* it is not required that I should be making mention of some vague subject but rather that I should be saying that something is hot — and to that extent I am a nominalist, at least provisionally. [...] There is no need to raise the issue whether there are various realities in a substance that are the fundamentals of its various predicates (though, indeed, if it *is* raised, adjudication is difficult). It suffices to posit only substances as real things and to assert truths about these. Geometricians, too, do not use definitions of abstracta but reduce them to concreta; thus Euclid does not use his own definition of *ratio* but rather that in which he states when two quantities are said to have the same, greater or lesser ratio. (1948: 547)

This passage is not beyond doubt. It could be argued that we should not take the nominalist claim too seriously, since Leibniz does not explicitly deny the existence of abstracta, or accidents in particular. He says, first, that he sees no way to avoid facing certain difficulties without doing so. From that claim alone, we cannot rule out that Leibniz believed in accidents anyway, and was prepared to face the difficulties due to benefits accrued. And second, Leibniz only endorses nominalism to some extent, “provisionally”, saying that using abstract terminology does not *require* abstract objects, and that there is *no need* to raise the issue of whether fundamentals of an object’s predicates (i.e., accidents, I presume) are real. It *suffices* to posit only substances, and further adjudication of the nominalist question is difficult. The latter comment would be a bit puzzling if Leibniz were really endorsing nominalism in the above passage. Instead, Leibniz seems merely to be saying that there is no need to answer the question.

The above line of resistance to reading Leibniz as a nominalist is not wholly implausible, but I think the other evidence Mates cites is sufficient to overturn such skepticism. Consider, for instance:

It appears certain that the passion for devising abstract words has almost entirely obfuscated philosophy for us; we can well enough dispense completely with this procedure in our philosophizing. For concreta are really things [*vere res sunt*]; abstractions are not things but modes of things. (Leibniz 1969: 126)

It might now be objected that Leibniz here explicitly hypostasizes modes of things: Abstractions are modes of things. So there are modes of things.

And if accidents are abstractions, then there are accidents. So accidents really exist. The only sense in which Leibniz can consistently say that accidents are not things is by using some restricted sense of ‘thing’ — presumably, meaning something like ‘concrete thing’. And that would not make him a nominalist.

I think the mistake in this reaction is that it relies on the thought that if one says ‘Fs are Gs’, then one is committed to thinking that there are Gs. Leibniz could intend ‘abstractions are modes of things’ itself to be a *compendium loquendi* — an abbreviated way of talking. And this seems a more plausible interpretation of the quotation. Leibniz seems to be saying that all that really exists is substances, and those substances are modified. If he wanted to reify modifications, then why would he complain that abstract terms obfuscate philosophy? That he denies reality to abstractions is further supported by the numerous instances in which Leibniz tries to cash out various *compendia loquendi*. Two examples cited by Mates: Leibniz says that ‘The heat of x has been doubled’ means that x is twice as hot as it was, and that ‘The duration of x is eternal’ means that x lasts eternally (1969: 705).

So the weight of the evidence is in favor of a reading of Leibniz as holding that the only real things are variously modified substances. While Ajax may be strong, this is not a matter of there existing two things (in any accurate sense of ‘thing’), Ajax and his strength. This is not to say that we should never use terms like ‘accident’ or ‘modification’ that appear to refer to abstracta, only that we must recognize these locutions to be mere conveniences with nothing to teach us about the fundamental nature of reality. We have no need for

accidents in our ontology. Merely describing a substance, Leibniz seems to think, does not require abstracta.

Turning now to relations, recall that a relation is supposed to be an accident in several subjects. Given that Leibniz does not accept the existence of accidents in any robust ontological sense, a question arises about his view about relations. Is the claim that there are no accidents that are in two subjects (and hence no relations) trivial given Leibniz's background ontological views? It seems that the answer should be "no", given Leibniz's use of the argument cited by Mates and Bennett. We can sketch that argument as follows:

Argument A

1. A relation would be an accident in more than one substance.
2. It is contrary to the notion of accidents to be in more than one substance.
3. Therefore, relations are not real.

This argument appeals to what is "contrary to the notion of accidents", rather than to the claim that there are no accidents. If relations were unreal in the same sense as accidents, it would seem unnecessary to appeal to what is contrary to the notion of an accident — if there are no accidents, there are no accidents that are in two subjects. Leibniz could have just given the following argument:

Argument B

1. Accidents are not real.
2. So accidents in more than one substance are not real.
3. A relation would be an accident in more than one substance.
4. So if relations are real, so are accidents in more than one substance.
5. Therefore, relations are not real.

But he did not give such an argument. Why? I see two possibilities to consider. (A) Leibniz thought that relations were unreal in a different sense than accidents. If this were true, we could see why Leibniz would not want to appeal to the unreality of accidents to establish the unreality of relations. In Argument B, the sense of ‘real’ in premises (1) and (2) would differ from the sense in (5), so that (4) or the move from (4) to (5) might be problematic. The other interpretive possibility is the following. (B) Leibniz accepted Argument B, but thought that Argument A was better, perhaps because the former relied on a more controversial premise — nominalism about accidents.

To try to identify whether position (A) or position (B) is accurate, we should look more closely at how Leibniz put his claims about relations. The first thing to note is an ambiguity in ‘relation’ that appears in the following passages.

The ratio or proportion between two lines L and M may be conceived in three 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...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; but being neither a substance nor an accident, it must be a mere ideal thing, the consideration of which is nevertheless useful. (1969: 704)

Thus I hold, as regards relations, that paternity in David is one thing, and filiation in Solomon is another, but the relation common to both is a merely mental thing, of which the modifications of singulars are the foundation. (1969: 609)

Leibniz has no objection to David's paternity or to the greater L's ratio to the lesser M. These "relations" are really just harmless accidents. When Leibniz objects to relations, he is objecting to, e.g., the father-son relation and the greater-lesser relation considered in some other way. To identify this other sense of relation, consider the following additional quotations.

The relations which connect two monads are not in either the one or the other, but equally in both at once; and therefore, properly speaking, in neither but only in the mind. (1965: 517)¹

[...] While it can happen that some attribute, for example, a relation, involves in its essence the existence of several things, it

¹Throughout, I use the translations from Mates.

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, and it involves David more closely, since from it he is denominated Father. (1969: 539)

In the former passage, I want to draw attention to the point that a relation (of the objectionable sort) would not just be in two objects, but would be in them *equally*. The latter passage seems to be an elaboration of this point. Leibniz is writing about relations in the philosophers' sense (where a relation is just an unobjectionable sort of accident — a relational accident, we might say), and obscurely explaining the sense in which an accident can be in two things. An accident in two subjects seems to be a problem only if the accident is in the two subjects in exactly the same way. Involving two subjects is not a problem per se, as Leibniz indicates by saying that paternity can involve in its essence both David and Solomon.

To understand what it means for an accident to be in two subjects in the same or different ways, we ought to try to get clearer on what it is for an accident to be in a subject. One reasonable initial assumption would be that for A to be in x is nothing more than for A to modify x,² which Leibniz would explain in terms of x being F, where 'F' is the adjectival form of 'A'. This would be congenial to Leibniz's nominalism, since he could say that for strength to be in Ajax is simply for Ajax to be strong. However, I doubt that this easy answer is correct. For there must be some idea hidden in the following obscure passages.

²Cf. (Parkinson 1965: 30).

A relation of connection is either of subject and adjunct, or adjunct and adjunct, or subject and subject. [...] The connection of subject and adjunct is expressed by *in*, as in “Learning in a man is praiseworthy.” (1961: 434)

Relations divide into those of comparison and those of concurrence. The former concern agreement and disagreement (using these terms in a narrower sense), and include resemblance, equality, inequality, and so forth. The latter involve some connection, such as that of cause and effect, whole and parts, positions and order, and so forth. (1981: 6.6.146)

A relation of comparison arises between A and B from the fact that A occurs in one proposition and B in another proposition; a relation of connection arises from the fact that A and B are in one and the same proposition which cannot be resolved into a relation of comparison. For otherwise a relation of comparison may be a relation of connection, for it is possible for one proposition containing A and B to be formed, namely, A is similar to B. But that is resolved at length into two, of which one concerns B separately, and the other concerns A separately. For example, A is red and B is red, and therefore A is similar (in this respect) to B. (1961: 17)

I am unable to make sense of Leibniz’s train of thought here. The relation between subject and adjunct appears to be the relation between an object and one of its accidents. And this relation, Leibniz says, is one of connection — a proposition expressing it cannot be resolved into two propositions concerning the *relata* separately. But this seems incompatible with Leibniz’s nominalism. Given the nominalism, Leibniz should think that there are no relations of connection between subject and adjunct, since the relevant propositions can all be rephrased without the use of abstract terms. The proposition that ratio *r* holds between L and M, Leibniz would say, can be resolved into the

propositions that, e.g., L is 6 feet long and M is 4 feet long (Mates 1986: 217, 174). So how could “Learning in a man is praiseworthy” express a relation of connection unless Leibniz was wrong about the dispensability of abstract terms? A further question about the above passage: How is the “in” relation of an object to its accident supposed to be like the relations of cause and effect and whole and parts, but not like the relation of similarity? I cannot resolve these questions, but they seem important enough to be worth pointing out. Hopefully, we can make do with looking directly at Leibniz’s claims about accidents in two subjects. In the process we may gain additional insight on the “in” relation.

Now, to understand what it would be for an accident to be in two subjects, a discussion by Cover and Hawthorne is helpful. They draw attention to the treatment of relations in the scholastic tradition, and make clear how Leibniz’s views reflect that tradition.

Following Aristotle, the scholastics certainly treated it as a step in the right explanatory direction to analyze a relational statement of the form ‘aRb’ into two subject-predicate statements, one attributing a relational predicate to a, the other attributing a different relational predicate to b. But the project of giving relations an analysis in terms of accidents hardly came to a halt at that point. In particular, a distinction was standardly made between two aspects of any such relational accident — an aspect of inherence in the subject (the *esse-in*) and the aspect of pointing towards a different subject (the *esse-ad*). (1999: 67)

Citing Mark Henninger (1989), Cover and Hawthorne explain that the scholastics were exercised by trying to find a place for relational accidents as

genuine accidents, inhering in their subjects, but still somehow having the aspect of *esse-ad*. This very much seems like the project Leibniz was engaged in. As Mates, Cover and Hawthorne, and Langton (1999) all agree, Leibniz's view that relations are "mere results" appears to be a sort of supervenience or reduction thesis. He writes of "resolving" relational propositions, as above, and elsewhere says that relations "need a fundament", and "the fundament is in that which is found in each of the singular substances separately" (1981: 6.6.146). A relation "never comes into being or disappears unless some change is made in its fundament" (1965: 547). Nevertheless, Leibnizian fundaments are not what you might expect of a supervenience base — they retain an *esse-ad*, somehow involving the other object of the relation.

If we supposed that Leibniz was trying to show that relations supervened on intrinsic properties of one or both of the relata, we would likely view the project as an obvious failure. For paternity is certainly not an intrinsic property of David, nor does David's paternity supervene on intrinsic properties of David and Solomon taken together. Such a worry should be rejected for several reasons. First, there is no convincing textual evidence that Leibniz's reduction base was supposed to consist of intrinsic accidents. Second, the problem is obvious enough that charity suggests we look for another interpretation of what Leibniz was attempting. And the text more than invites such an alternative, since we are explicitly told that an accident can involve in its essence more than one object. This is naturally read as the claim that some accidents could not be had by lonely objects, or are not intrinsic properties.

Recognizing this, I think, dissolves some of the tension readers may feel about Leibniz's reduction. There may be a reduction of relations to accidents, but since the latter retain as aspect of relationality, we need to keep in mind that relations do not need to be grounded by intrinsic accidents.

We are now faced with the problem of how to say what it was about accidents that vexed Leibniz. If he accepted relational accidents, what did he oppose? I cannot hope to make the notions of *esse-in* and *esse-ad* clear, but I think if we take Leibniz to be tacitly working with these medieval notions in the background, we may be able to see a bit more of the structure of his claims. We can distinguish several senses in which an accident A could be in two objects x and y.

- (1) A modifies x and y, and A has no *esse-ad*.
- (2) A modifies x and y, with its *esse-in* involving x and its *esse-ad* involving y.

Sense (1) would be realized if accidents were universals; If Ajax's strength were identical to Milo's strength, we would then have one and the same accident in each of Ajax and Milo. Suppose that Clatterbaugh, Mates, and company are right to attribute a trope theory to Leibniz. Then the accident of strength in Ajax is necessarily distinct from the accident of strength in Milo or anyone else. So Leibniz would have ruled (1) out in this way.

Mates (1986: 209) sees something like the above as Leibniz's argument against relations:

As we have seen, his nominalistic metaphysics provides no place in the real world for anything other than individual substances-with-accidents. These accidents themselves are said to be individual, in the sense that the same accident cannot be in more than one substance, whether simultaneously or at different times, for such an accident would be a kind of universal. Consequently relations, considered as accidents of multiple substances, are not real.

I agree that the individuality of accidents can plausibly be seen as the basis for the rejection of relations, but I do not approve of the way Mates states the argument. He does not explain why relations would be universals. An accident in two subjects in sense (1) would be a universal, but, one might naturally think, if there were relations, they would not be like that. They would have “one leg in one [subject] and another leg in the other”, not both legs in one subject and both legs in the other. Something close to (2), not (1), seems to have been the target of Leibniz’s criticism in his discussions of relations.

Sense (2) would have A in x and y, but, as we might say, not wholly in either — it would have to modify the two objects *jointly*, as one aspect of the accident pertains to x and a different aspect to y. This looks like a natural way to think about relations. The relation of *being five feet from* is not wholly instantiated by either x or y when x is five feet from y. Rather, x and y together instantiate that relation. But note that (2) would have A modify x and y asymmetrically. Its *esse-ad* involves y, but its *esse-in* involves x. The latter is what it is for the accident to inhere in x. (We must distinguish an accident being in x and y — modifying x and y — from an accident inhering in x and y.) So unlike the contemporary notion of a relation, (2) would give relations a primary location,

so to speak. Accident A inheres in x and points to y, rather than the other way around.

So (2) is closer to (1) than what Leibniz rejects as contrary to the notion of an accident. But recall that Leibniz accepts that an accident can involve “in its essence the existence of several things”, so long as those things are involved differently in the accident. What he forbids is an accident that is in two objects equally. I am not confident that I understand what sort of equality is at issue, but the notions of *esse-in* and *esse-ad* allow us one plausible interpretation.

(3) A modifies x and y, and its *esse-in* is identical to its *esse-ad*.

Put in the terms from Cover and Hawthorne’s discussion, (3) claims that the aspect of the accident which inheres in x is identical to the aspect that points to y. This allows us to offer two arguments on Leibniz’s behalf. Neither is entirely clear, and I can find no explicit statement of either in Leibniz’s works, but they seem to be the best possibilities for accomodating everything Leibniz says while explaining the rejection of relations.

The first is as follows. Let our accident A be L’s ratio to the lesser M. If A modifies x and y, but its *esse-in* is the same as its *esse-ad*, then what makes our accident be L’s ratio to the lesser M rather than M’s ratio to the greater L? There must be something that makes the accident inhere in x and point to y rather than the other way around. If there were no fact of the matter on this point, we would have to say that A was not really inhering in either x or

y. And that would be contrary to the notion of an accident — there cannot be accidents that do not inhere in some substance. Thus relations would be neither substances nor accidents, and hence not real at all.

The second argument is similar. Consider the same accident. If A modifies x and y, but its *esse-in* is the same as its *esse-ad*, then what makes our accident be L's ratio to the lesser M rather than M's ratio to the greater L? There must be something that makes the accident inhere in x and point to y rather than the other way around. If there were no fact of the matter on this point, we would have to say that A was inhering in both x and y. And that would be contrary to the notion of an accident — there cannot be accidents whose *esse-in* is in multiple substances. Thus relations are not accidents, and not being substances either, they are not real at all.

It is possible that Leibniz had a combination of these arguments in mind. Accident A would have to be in neither subject or in both. Either case would be contrary to the notion of an accident. Assuming that this interpretation is right, we have the following restatement of Argument A.

Argument A (Revised)

1. A relation would be an accident A that modified two subjects, x and y, and whose *esse-in* was identical to its *esse-ad*.
2. If A's *esse-in* were identical to its *esse-ad*, there would be no fact of the matter about whether A inhered in x rather than y, or vice versa.

3. So A either inheres in both x and y, or neither x nor y.
4. It is contrary to the notion of an accident for it to inhere in both of the subjects it modifies.
5. It is contrary to the notion of an accident for it to inhere in neither of the subjects it modifies.
6. So there is no accident that modifies two subjects and whose *esse-in* is identical to its *esse-ad*.
7. Therefore, relations are not real.

Now recall our positions (A) and (B) from earlier. (A) held that Leibniz would not have accepted Argument B, since relations are unreal in a different sense than accidents. Position (B) held that Leibniz would have accepted both Argument A and Argument B, but did not state the latter due to its more controversial premises. I will set aside the question of how to rephrase the premises of Argument A to make them acceptable to a nominalist, and assume that Leibniz would have had some way to do this. As to the question of positions (A) and (B), I think the former is correct. The first indication of this comes from the fact that, while Leibniz rarely addresses the question of whether accidents are real, and even says at one point that “there is no need to raise the issue whether there are various realities in a substance that are the fundamentals of its various predicates”, he obviously *does* feel the need to raise the issue of whether there are various realities that are the fundamentals of relations. We have already considered numerous passages in which Leibniz

comments on these fundamentals. Since there is some genuine question for Leibniz about whether relations are “founded” on something else, while there is no need to ask the parallel question of accidents, there seems to be some evidence here that accidents are unreal in a different sense than relations.

In addition to the general consideration just cited, there are several passages that allow us to contrast Leibniz’s positions on accidents and relations more directly. First, consider the following, in which it is made clear that accidents enjoy a different status than relations.

Besides substances, or ultimate subjects, there are the modifications of substances, which can be produced and destroyed per se; and further there are relations, which are not produced per se but result when other things are produced....(1966: IV, viii, 6or)

The notions of production and result are key here. One way to grasp these (a way that, I think, Leibniz would have considered more than metaphorical) is to consider God’s task in creating the universe. In order to bring some things about, God had some work to do. Other things simply came along for free. God had to produce Ajax, and had to make him a certain strength. Similarly with Milo. But there was no extra work to be done to make Ajax and Milo equally strong. That relation was a mere result of what God had already done.

It may seem as though the passage above places accidents on the same ontological level as substances, contrary to the nominalist position attributed to Leibniz above. But I think what Leibniz is getting at is perfectly compatible with his nominalism. He thinks that accidents are produced in the sense that

for Ajax to go from being weak to being strong is a genuine change, whereas for Ajax to go from being weaker than Milo to stronger than Milo is only a result of genuine changes in Ajax and Milo.

[...] Place and position, quantity (number, proportion) are only relations, resulting from other things which per se constitute or terminate change....Considering the matter more accurately, I saw that they are only mere results. (1961: 9)

Such a view about change does not require Leibniz to think that accidents are entities.

Writing earlier about Argument B, I suggested that an ambiguity in 'real' might compromise the argument. We can take a closer look at that argument now to see the problem. We have two notions of reality in play. Accidents are unreal in the sense that accidents are not entities. There are only modified substances. Let us say that accidents lack reality₁. Though accidents are unreal₁, when we speak of x having accident A, we are getting at something true. We mean that x is F. And it is not a mere result that x is F. That is the sense in which accidents are real, and it is a sense of reality not enjoyed by relations. The ratio of L to M is a mere result of L's being this long and M being that long. Say that mere results lack reality₂.

I believe Leibniz would have said that nothing is an entity if it is a mere result. Thus unreality₂ entails unreality₁. But something can be produced without being an entity, as accidents are, so the converse does not hold. So unreality₁ does not entail unreality₂. Putting these two notions to work in Argument B, the most obvious ways to fill in the premises are the following.

Argument B (Revised Version 1)

1. Accidents are not entities.
2. So accidents in more than one substance are not entities.
3. A relation would be an accident in more than one substance.
4. So if relations are entities, so are accidents in more than one substance.
5. Therefore, relations are not entities.

Leibniz would have accepted this argument, but he could not have used it to establish his thesis about relations, since that thesis was stronger than the above conclusion. What he wanted was the conclusion of the following argument.

Argument B (Revised Version 2)

1. Accidents are mere results.
2. So accidents in more than one substance are mere results.
3. A relation would be an accident in more than one substance.
4. So if relations are produced (are not mere results), so are accidents in more than one substance.
5. Therefore, relations are mere results.

Unfortunately, this argument is inadequate as well, since Leibniz rejected the premise about accidents. If we try to include a satisfactory premise about

the status of accidents as well as a sufficiently strong conclusion about relations, we are left with an invalid argument. The fourth premise no longer follows from the second and third.

Argument B (Revised Version 3)

1. Accidents are not entities.
2. So accidents in more than one substance are not entities.
3. A relation would be an accident in more than one substance.
4. So if relations are produced (are not mere results), accidents in more than one substance are entities.
5. Therefore, relations are mere results.

If it had turned out that accidents were unreal in a stronger sense than relations, we would still have had a valid argument. As things stand, we have a reasonable explanation of how Leibniz could have been a nominalist about accidents and yet not given the simple Argument B, since his view about relations differed from his view about accidents.

It has been one goal of my discussion to clarify the relationship between Leibniz's nominalism and his thesis about the unreality of relations. To accomplish this, we drew out two notions of reality, showing why Leibniz could not have appealed to the unreality of accidents to support the unreality of relations. We have accomplished several other things. We have filled in the argument, Argument A, that is usually cited as Leibniz's reason for rejecting

relations. We used the medieval notions of *esse-in* and *esse-ad* to do that, and in the process suggested that the sense in which relations are mere results of accidents of relata is weaker than one might naturally think. Evidence suggests that the accidents that are the fundamentals of relations can themselves be relational, so long as they genuinely inhere in one of the relata.

References

- Bennett, Jonathan. 2001. *Learning from six philosophers*, volume 1. Oxford: Oxford University Press.
- Bodemann, E. 1966. *Die leibniz-handschriften der königlichen öffentlichen bibliothek zu hannover*. Hildesheim.
- Clatterbaugh, K. 1973. *Leibniz's doctrine of individual accidents*. Number Sonderheft 4 in *Studia Leibnitiana*. Weisbaden.
- Cover, J.A., and John O'Leary-Hawthorne. 1999. *Substance and individuation in leibniz*. Cambridge, UK: Cambridge University Press.
- Henninger, Mark G. 1989. *Relations: Medieval theories*. Oxford: Clarendon Press.
- Langton, Rae. 1999. *Kantian humility*. Oxford: Oxford University Press.
- Leibniz, Gottfried Wilhelm. 1948. *Textes inédits d'après de la bibliothèque provinciale de hanovre*. Paris.
- Leibniz, Gottfried Wilhelm. 1961. *Opuscles et fragments inédits de leibniz: Extraits des manuscrits de la bibliothèque royale de hanovre*. Hildesheim.
- Leibniz, Gottfried Wilhelm. 1965. *Die philosophischen schriften*. Hildesheim.
- Leibniz, Gottfried Wilhelm. 1969. *Philosophical papers and letters*. Dordrecht, second edition.

- Leibniz, Gottfried Wilhelm. 1981. *New essays on human understanding*. Cambridge, UK.
- Mates, Benson. 1986. *The philosophy of leibniz: Metaphysics and language*. Oxford University Press.
- Parkinson, G.H.R. 1965. *Logic and reality in leibniz's metaphysics*. Oxford: Clarendon Press.