## Matej Veselský, 'Structure and Simplicity in Leibniz'. Master's Thesis Opponent's Report

In the first part of this master's thesis, the author sets out to provide a systematic understanding of what he describes as 'structure'. This discussion could loosely be described as a contribution to analytical metaphysics, although it also has much to say about the semantics of structure. The author then proceeds to apply his understanding of structure to the monadology of Gottfried Leibniz, attempting to show that the monads constitute the simplest possible 'structure'. The genre of the thesis is not easy to classify. It is certainly not intended as a straightforward interpretation of Leibniz because it quite openly imports concepts and discussions from twentieth century philosophy to reconstruct and develop Leibniz's position. Nor is it a systematic, or purely 'philosophical', thesis as the theoretical work on structure is a prelude to author's reading of Leibniz. Perhaps the thesis is best understood as an attempt to provide an imaginative understanding of how we might make use of Leibniz's theoretical system of monads from today's perspective.

I consider the most successful part of this bachelor's thesis the discussion of the principle of the identity of indiscernibles (part 2, pp. 28-48) which contains close analysis of what exactly the principle means in relation to the 'salve vertitate' criterion and the indiscernibility of identicals. This part exhibits careful analysis of individual concepts contained in the principle, with an awareness of the broader philosophical context of these concepts. The author presents a fairly clear line of argument which he is ready to defend against other interpretations of the principle. He ultimately brings the principle into harmony with a monadological metaphysics for, 'the monad mirroring the entire universe is the fulfillment of the Principle of the Identity of Indiscernibles' (p. 47), with identity and difference being dependent on points of view. The author thus argues for there being a non-objectivist understanding of identity and difference latent within the principle. A good knowledge of the literature on the subject is displayed.

The third part entitled 'The Mirroring Relation’ is also a fairly successful attempt to interpret the Leibnizian system of monads, including the question of their infinite number. The interpretation certainly does not have the ambition of being historically faithful, and the author exploits later developments in the philosophy of mathematics to flesh out his account. As opponent, I would note that at least one feature of Leibniz's monadology does seem to be given insufficient weight (which is not to say that it goes completely without mention). This is the role of God. It would seem that God is, for the author, merely another 'point of view'. Perhaps such a view could be defended. But it is hardly compatible with Leibniz's belief in divine
omniscience as a part of God's infinite perfection, which would, in turn, seem to suppose that there is a complete and objective view of the universe open at least to Him, but infinitely surpassing the capacity of any finite mind. The author does briefly consider the possibility of God having perceptions of differences that are indiscernible to us, but considers such a view 'a completely arbitrary and superfluous hypothesis', arguing that these divinely discernible differences would be indiscernible to us (p. 41). This does sound circular.

I shall now turn to the first part of the thesis which I consider to be the least successful. The problem here is related to the language of the thesis. The choice of English is a reasonable step as the literature that the author considers is also in English. It is also a reasonable step because the author clearly has a good knowledge of the technical lexicon of his subject area. But important parts of the first part of the thesis are not fully intelligible to me. I can usually arrive at a conjecture about the author's meaning, by going back over the passage in question, and carefully considering possible idiosyncrasies of lexicon, punctuation, and grammar, but I am not always sure if I am indeed interpreting the thought correctly.

I will give two examples almost at random:
(i) The most parsimonious way to determine the elements would then be to let them determine directly by one another without any mediation of a superadded structure. This yields an infinite regress as well, but the regress is just one, self-similar and isomorphic to the default structure on every level.' (p. 11)
Among the problems for the reader here are: (i) the use of the verb 'to determine', which, as a transitive verb, is in need of an object, but it is not clear what object the verb takes in let them determine directly'; (ii) I do not understand what exactly the author is saying by characterizing an infinite regress as 'self-similar' (does he mean self-identical?)-a fuller discussion in part 3 occurs too late; (iii) nor do I understand what the author means by 'default structure'-he has used this term in previous paragraphs and seems to be referring to an idea that he finds unproblematic, but the reader is left in the dark as to the exact meaning of this phrase.
(ii) Then you refer to something extremely volatile, which disappears right after the referring, but nevertheless, the reference casts as if a shadow in virtuality, tracking the disappearance of its object, enliven [sic] either by an immediate reflection, or a shared presence.' (p. 26) I am not sure what this sentence means.
This first part of the thesis presents highly technical and abstract ideas, and therefore the precision and clarity of language is indispensable. Unfortunately, the level of precision of the English is not always adequate to the task. It should be noted
that the language in this first part is considerably weaker than in the two later parts, which is regrettable as the first part is the foundation of the whole project.

A further problem in the first part is that technical terms are often introduced without definition. There is, for example, a short discussion involving 'D-semantics' and 'I-semantics' (p 16), without these varieties of semantics being defined. Again, Rigid and non-rigid structure are referred to a number of times, but the best definition I can find of either of this pair of technical terms is the following characterization of non-rigid structure in parenthesis on page 12: 'having non-trivial automorphisms'. What are to count as 'non-trivial automorphisms' the reader is left to work out on their own. Again, there are repeated references to a 'phenomenalist' and a 'nominalist' reading of Leibniz, which are never properly characterized, thus leaving it unclear how the author understands these approaches, and also rendering distinctly mysterious his later claim that 'Leibniz's purported nominalism is nothing more and nothing less than his phenomenalism' (p.38). Without these and other definitions, the discussion is ungrounded and the reader is left to do much guess-work.

In addition to these linguistic limitations, the first part is also marred by a tendency to surge ahead with a discussion, oblivious of the reader. The very problem of structure needs considerably more introduction, with the use of examples from different fields. In addition, there are highly telegraphic asides that raise as many questions as they answer. Among these are the, for example, the rather cryptic reference to Kant's Transcendental Aesthetic concerning 'ordering ... conceptually preced[ing] all kinds of pluralities' (p. 16). The author also has a tendency to offer compressed and question-begging refutations of others' positions or opinions. For example, we find the bold claim that 'potential infinity is a false infinity' placed in brackets and supported by the observation: 'at every single step being only finite - if augmented with a prospect of further extension' (p.65). One problem with this 'argument' in parenthesis is that it is not clear what the word 'if' signifies, and whether 'albeit' might not be more appropriate; another is that it is not clear whether the author's own view is being expressed or that of Leibniz; a further problem is that it is not clear if more is being said than the banal observation that potential infinity is always only potential in character.

Overall, the thesis shows wide reading and offers a strong, imaginative, philosophical interpretation of Leibniz. The lack of clarity in the first part of the thesis, as outlined above, does, however, significantly diminish the success of the overall project.

Jednoznačně navrhuji práci k přijetí a doporučuji známku velmi dobře.
doc James Hill, v Praze, 03.09.2018

