On What Is Not There. Quine, Meinong, and the Indispensability Argument

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ABSTRACT

Using the theory of definite descriptions, Russell and, following him, Quine masterfully challenged Meinong's Theory of Objects (TO). In this paper, firstly I try to show that although the Russell-Quine's interpretation of TO has been taken seriously even by many notable Neo-Meinongians and first-rate scholars, yet it is not the ultimately convincing reading of the Theory, at least not when we boil down the theory to Meinong's primary motives and his essential arguments. Moreover, I show that a form of the indispensability argument is the backbone of Meinong's theory. The argument is surprisingly akin to what Quine proposed for his realism with regard to the existence of mathematical entities. Consequently, I argue that mathematics plays an important role in Meinong's argument and hence his overall theory. I believe that in this way the debate between Meinongian and Quinean can be directed to more compromising and fruitful grounds.

1. Introduction: a Never-Ending Debate

In their review of different approaches to the existence of the fictional entities, Fontaine and Rahman (2011) took Russell and Quine to be irrealists who reacted against what Fontaine and Rahman counted as the Meinongian realism:

> From the point of view of the semantics of non-existence two standard main rivals, namely irrealists and realists, deal with the ontological features of fictions. The irrealists, mostly based on the classical tradition of Frege, Russell

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> and Quine, see fictions as pure signs. More precisely, fictions can be named or predicated away but they refer to no object of the domain. The other rival position, considers that fictions are some precise subset of the domain: fictions are entities. They subdivide in "Neo-Meinongnians" and "artifactualists". (Fontaine & Rahman, 2011, §35)

According to Fontaine and Rahman, for Meinong unreal entities such as the golden mountain and the round square have some footing in reality. Actually what Meinong said was that objects such as the round square dwell in the sphere of extra-being (*Aussersein*), and, as we will see in the following sections, he plainly declared that Theory of Objects is distinguished by its singularity of making room for the *unreal* and nonexistent objects such as the round square or the golden mountain, without any attempt to foist them as real things. Therefore I assume that Fountaine and Rahman, like many others, followed Russell and Quine in twisting Meinong's view to a rather inconsistent realism (saying that unreal objects are real). Actually Russell and Quine's reading of the case is even more radical; Meinong is accused of being guilty of contradicting himself (by saying that nonexistent things exist), and of being afflicted by an unviable sense of reality (claiming that unreal things are real, and introducing them into his logic).

But the important question is, can Meinong's Theory of Objects (hereafter TO) be defended against these charges? Boiling down Meinong's TO to its essential argument, I argue that his theory deserves to be defended in surer footing than, say, by merely claiming that it is consistent with the way of our speaking about the nonexistent things in the natural language and semantic intuitions.

While Linsky and Zalta (1995) – both known to be notable neo-Meinongians – proposed a potentially promising alternative line of defense by showing that the Platonic tenet about the existence of the abstract and mathematical objects is (via indispensability argument) consistent with the naturalistic standards of ontology, knowledge and reference (Linsky & Zalta, 1995, p. 525, 527–528), they did not talk directly about the status of Meinong's theory, and barely mentioned his views in their definition of what they called the naturalized Platonism or in their articulation of the Platonized naturalism (actually they mentioned him only once in the opening pages). I, on the other hand, shall try to show that Meinong's TO is consistent with the aforementioned naturalistic standards. I shall argue that Meinong's view about the existential status of the mathematical entities and a form of the indispensability argument are the backbone of his TO. I shall elaborate, and I begin from some platitudes.

In his 1905 works, "On Denoting" and "Review of Meinong's Theory of Objects", after a few years of hesitation, Russell finally voiced his doubts and objections about Meinong's TO. This is Russell's official account of Meinong's thought and, at the same time, the expression of his dissatisfaction with it:

> [Meinong's] theory regards any grammatically correct denoting phrase as standing for an object. Thus 'the present King of France', 'the round square', etc., are supposed to be genuine objects. It is admitted that such objects do not subsist, but nevertheless they are supposed to be objects. (Russell, 1905, p. 45)

After primarily bewitching Russell for a few years, the view fell from his favour, not only because it was a difficult view in itself, but also because it infringed the Law of (non-)Contradiction in logic. By showing that "[t]he Law of Noncontradiction was meant to apply to actuals and possibles, not to impossible objects" (Meinong GA V, p. 222; Farrell Smith, 1985, p. 312), the Meinongian could shirk this objection. But, from the Russellian point of view, even if the inherent inconsistency of the theory could be somehow amended, there are still other essential difficulties attached to the view. Russell cannot accept the Meinongian distinction between being and existence, for one thing, and he "returns again and again to the idea that anything we can think or talk about must have being (or 'Being') in some sense."(Jacquette, 2009, p. 171).[1] As Russell himself put his view in a letter to Meinong "I have always believed until now that every object must in some sense have *being*, and I find it difficult to admit unreal objects" (Russell, 1904, in Lackey, 1973, p. 16). In this way, the very distinction between existence, subsistence and extra-existence (or extra-being) was questioned by Russell.

Backing up Russell in the debate, Quine tried to make the debate short by claiming that: "The only way I know of coping with this obfuscation of issues is to give Wyman [Meinongian] the word 'exist'. I'll try not to use it again; I still have 'is'." (Quine, 1948, p. 3). But at a deeper level, this disagreement about

[1] The following explanation may be useful at this point: for Meinong, there existed existent objects, objects like chairs and pineapples; there were subsisting objects like abstract entities, numbers and geometrical shapes; and yet the objecthood of objects was deemed to be free from any bond to existence or subsistence, and hence there is the third category of pure objects. Troublesome objects like round square could shun any form of existence or subsistence, and still they could assume their objecthood (Meinong 1904, p. 82).

different uses of the term 'exist' does not need to be a crucial impediment to the Meinongian:

> At least with regard to the distinction between being and existence, then, Meinong's view is only terminologically different from the Quinean view. For the Quinean can distinguish between concrete and abstract objects, just as the Meinongian can distinguish between existing and subsisting objects. Each of them will agree that there are such objects, but the Quinean will say that the abstract objects exist as much as the concrete ones do. The Quinean and the Meinongian can agree about what has being, they just disagree about how to use the word 'exist'. (Crane, 2011, pp. 52–53)

Crane is quite right about Meinong's distinction between existence and subsistence, and Quine's reluctance to make any difference between existence of abstract and concrete objects (see Quine, 1948, p. 3 and later 1960, pp. 131 and 242). I do not think he is right, or even means, to claim that between Meinong and Quine there is an all-inclusive agreement about what has being (as I will discuss in the final section). Yet I cannot be in more agreement with Crane, if we take him to mean that the main debate between Quine and Meinong appears to be about the ontological status of the domain of the problematic objects. Among the problematic objects, I am mainly interested in the abstract (mathematical) objects, and I claim that they possess a decisive place in Meinong's ontological view as well as in Quine's. Moreover, I intend to show that Quine and Meinong more or less share the same strategy for the establishment of the ontological status of the domain of mathematical objects that they introduce to their ontological plan, although, as I will discuss in the final section, I can readily grant that they do not need to be in complete agreement about the instances of the mathematical objects whose being (or extra-being) is to be fixed. But before going to that point, I should offer a more detailed account of Quine's view about the ontological status of the nonexistent objects.

2. Quine on Pegasus

Following Russell's views in "on Denoting" (1905), Quine endeavored to get rid of the ontological commitment to the non-existent objects by analyzing away their names in terms of *definite descriptions*. As Quine taught us, the noun "Pegasus" can be transformed into a derivative predicate, and identified with the description "the thing that Pegasizes", then it can be subjected to

Russell's theory of description and its vague existential presuppositions can be cleared away (Quine, 1948, p. 8). Consequently, Quine declared that assigning existence to Pegasus is the result of being confused about the difference between naming and denoting; if "Pegasus does not exist" is meaningful, 'Pegasus' should refer to something:

> This is the old Platonic riddle of nonbeing. Nonbeing must in some sense be, otherwise what is it that there is not? ...The notion that Pegasus must be, because it would otherwise be nonsense to say even that Pegasus is not, has been seen to lead McX into an elementary confusion. (Quine, 1948, 1-2)

Quine was not the only philosopher who took this kind of Platonic confusion for Meinong's main path to TO. Even some philosophers who share some Meinongian inclinations (like Findaly, 1963; Routely, 1980; Lambert, 1983; Fine, 1984; Crane, 2011) fostered this reading and developed it (of course without avowing that there is any confusion at work here). Lambert, for example, held that:

> [Meinong] took the statements 'The round square is round' and 'The perpetuum mobile is nonexistent' to express attributions. It was quite natural for Meinong to conclude that 'the round square' and 'the perpetuum mobile' stand for objects. For how otherwise could the truth of the statements above be accounted for? (Lambert, 1983, p. 37)

At any rate, in order to avoid an inconclusive terminological debate, let us follow Crane's lead (2011) and be curious about what has being. For Quine, Pegasus does not have any share in being. In this sense, as Fontaine and Rahman remarked, Quine is an antirealist about fictional entities. He was not eager to make ontological commitment to the existence of Pegasus, because Pegasus is not to be found in space-time regions. Therefore Pegasus does not exist. "If Pegasus existed he would indeed be in space and time" (1948, p.3). Meinong would agree that Pegasus does not exist in space and time, ant yet he wants to assign some sort of extra-being (*Aussersein*) to him. For a faithful follower of Russell and Quine, however, every object must in some sense be, and the differentiation between existence, subsistence and extra-being is a mere reflection of the "obfuscation" of the different uses of the simple verb "is". The recurring terminological disagreement.

3. Quine's Indispensability Argument

There are more fruitful grounds, however, for coming to an agreement. For example, Quine can comply with the claim that *there are* things that are the referents of the terms which do not refer to anything in space and time, i.e., terms which allegedly refer to mathematical objects, numbers and sets (in this sentence I used "referring" very loosely). Therefore, for Quine, the absence of spatio-temporally located referents does not *per se* prevent things from existing. The cube root of 27 is not a spatio-temporal entity, and yet Quine shows no reservation in affirming that the cube root of 27 exists. Still there is no such thing as Pegasus because if he existed, he would have existed in space and time. But it is simply because the word "Pegasus" has spatio-temporal connotations that the absence of its spatio-temporally located referents makes such a referent nonexistent (Quine, 1948, p. 3). Therefore unlike the Meinongian twilight half entities, the cube root of 27 can quite easily be placed in Quine's ontological plan. Apparently Quine kept this view about the existence of the mathematical entities and sets during greatest part of his philosophical career. Quine's "indispensability argument", which appeared with regard to the existence of the mathematical entities, was Quine's main path to his limited mathematical realism.

As matter of fact, Quine used the indispensability argument in quite different places in his philosophy, to speak of the indispensability of the propositional attitudes and the relational statements of belief in reports of one's mental states (Quine, 1956), the indispensability of appealing to the theoretical entities in scientific practice (Quine, 1960; 1981a) and the indispensability of the mentalist predications in the explanation of human actions (Quine, 1990). His indispensability argument for realism about the existence of the mathematical entities (Quine 1960; 1976a; 1981a; 1981b) is what we are closely attending to in here.

Some handy formulation, borrowed from Colyvan (2011) may present the argument thus:

P1) we ought to have ontological commitment to all and only the entities that are indispensable to our best scientific theories;
P2) mathematical entities are indispensable to our best scientific theories;
C) we ought to have ontological commitment to mathematical entities.

A more meticulous account of Quine's position is offered by Linsky and Zalta:

> W.V. Quine suggested, however, that some abstract objects (namely, sets and those mathematical entities thought to be reducible to sets) are on a par with the theoretical entities of natural science, for our best scientific theories quantify over both. He formulated a limited and nontraditional kind of Platonism by proposing that set theory and logic are continuous with scientific theories, and that the theoretical framework as a whole is subject to empirical confirmation. (Linsky & Zalta, 1995, p. 526)

In this way Linsky & Zalta (1995, pp. 527–530) endeavored to show that some sort of indispensability argument can be used as the justification for a certain form of Platonism. Quine might be called Platonist in this limited sense, but it does not mean that Quine's mathematical ontology can be reconciled with the standard Meinongianism. The explanation is simple enough: for Quine the source of our ontological commitment to sets and certain mathematical entities is not essentially different from the source of our commitment to electrons and protons, and if there is any difference, it should not be taken to mean that 'exists' has a sense in "numbers exist" which is different from its sense in "electrons exist". Quite on the contrary, he assumed that numbers and sets exist on the equal footing with electrons and protons (Quine, 1960, p. 242).[2] Hence I think that, even when Quine saved room for abstract and mathematical entities in his ontology, he is still in disagreement with Meinong, at least at the terminological level of the use of the term 'exist'. This persistent terminological disagreement notwithstanding, I am going to highlight somewhat overlooked point about Quine and Meinong's partial agreement about the ontology of mathematical entities. Although, as we will see in the final section, more than a shred of dissidence persists even in their view, Quine and Meinong's general methods for making room for the mathematical entities in their ontologies are significantly alike: an indispensability argument with regard to the existence of the mathematical entities, is at work even in Meinong's presentation of his Theory of Objects. If I can make a satisfactory argument for this case in the following sections, then the Quinean, who believes in validity of the indispensability argument with

[2] In the footnote he remarked, though, that "but the familiar vague notion that the assumption of abstract entities is somehow a purely formal expedient, as against the more factual character of the assumption of physical objects, may still not be wholly beyond making sense of" (ibid, footnote 4).

regard to the being of some mathematical entities, would lose the ground for lingering on her dismissive behavior toward Meinong's tenet.

4. The General Organization of Knowledge and TO

Let the validity and soundness of the Quinean indispensability argument be granted, not only for the sake of the argument, but because assuming holism and naturalism, the argument *is* sound and valid. Now, assessing parts of *Theory of Objects,* I shall try to show that something very similar to the indispensability argument is at work in Meinong's presentation of his ontological proposal.

Of course it does not seem that Meinong had had any interest in adopting any naturalistic approach toward TO:

> One should be scandalized to find the objects of philosophy turning out to be a hodgepodge of leftovers from the natural sciences, unless one believed that philosophy should generally be characterized by reference to whatever the natural sciences happened to leave over. On such a view the function remaining for philosophy could hardly be called worthy. (Meinong, 1904/1960, p. 112)

And yet, although Meinong did not favor a philosophy which is taking leftovers from the scientific table, it cannot be denied that his initial motivation for construction of TO was rooted in his familiarity (I go further, in his close engagement) with scientific enterprise:

> For years – indeed for decades- my scientific endeavors have been under the influence of interests pertaining to the theory of objects without any suspicion of the true nature of these interests having occurred to me. The fact that their nature at first burst in upon me with complete autonomy in practice, and later – I could scarcely say exactly when myself- in theory, presents me with a new argument for the validity of the claims which have been made above in the name of the theory of objects. (This is clearly not a formally rigorous argument, but its force is nonetheless not to be underestimated). (Meinong, 1904/1960, p. 114)

Well, how should we read these lines? Meinong's scientific endeavors were not only his invocation for construction of the theory, but his interests in TO were practically directing his scientific endeavors, and he counted this as an argument for the validity of the theory. True, the argument is not clearly articulated. But the scientific enterprise plays more than just a provocative role in the formation of TO, and is more than the source of a vaguely formulated argument for it. The very theory has something to do with the scientific investigation about objects. To be more precise, it "concerns the proper place for the scientific investigation of the Object (*Gegenstand*) taken as such and in general" (Meinong, 1904/1960, pp. 77–78).

Of course this meager piece of evidence does not indicate that Meinong's theory could be reconciled with the mainstream naturalism. A scientific investigation of the Objects, taken as such and in general, sounds vague enough to puzzle the naturalist who used to speak about our best scientific theories (because in our best scientific theories we are seldom concerned with the objects as such and in general). But fortunately not everything that Meinong said about scientific enterprise is smeared with this esoteric and mystical color.

First of all, Meinong presents and criticizes what he took to be the standard conception of the general organization of sciences:

> [T]he organization of all knowledge into the science of nature and the science of mind (*Natur- und Geisteswissenschaft*), appearing to be an exhaustive disjunction, really takes into account only the sort of knowledge which has to do with reality (*Wirklichkeit*). (Meinong, 1904/1960, p. 81)

The question, obviously, is about the existential status of the objects of the science(s) which do(es) not deal (exclusively) with reality. There is no place for these science(s) in the general organization which takes into account only the science of nature and the science of mind. But what could those sciences be which deal with unreal objects?

Meinong's TO, as a scientific theory, a scientific investigation which goes beyond accounting for what is merely real (or factual) and deals with the question of the object as such and in general, is indeed a remarkable candidate for a science of unreal objects. But as I remarked before, this definition, if it can be taken as a definition of Meinong's lost part of the exhaustive classification of sciences at all, is more obscure and mysterious than what we need for a description or instantiation of a scientific discipline. This general definition needs to be refined, or at least, to settle the matter as simply as possible, more recognizable instances of such sciences have to be put forward. Before that the relation of TO to scientific enterprises would remain incomprehensible. Obviously, giving examples of round squares and golden mountains would barely be pertinent to this question, and a more substantive answer needs to be provided.

Now, to give a substantial turn to the course of the argument, I will show that while articulating the TO, Meinong actually proposed an instance of a science which deals with unreal objects, and thus went further than sketching a vague and general outline of a general science which has to do with the unreal. The proposed instance is indeed a clear and precise one, to the extent that it even may pass for the clearest and most precise science ever known. In my reading of TO, Meinong was genuinely concerned with the ontological status of the mathematical objects, and mathematics is his first candidate (and as far as we can see in *The Theory of Objects*, his only mentioned instance) for a theory of objects (as a specialized branch of TO). To present Meinong's view in a nutshell, it seems that taking the mathematical objects as unreal is the only way for making room for mathematics in the general classification of sciences. To see the point, let us proceed to the detailed examination of Meinong's indispensability argument in his *Theory of Objects*.

5. Meinong's Indispensability Argument

It may have occurred to the reader too, that in Meinong's report of the allegedly exhaustive classification of sciences (taking into account the science of nature vs. the science of mind), mathematics was amiss. Delimitation of the exact borders of mathematics and definition of its relation to the world of experience had always been a problem for philosophers, but it never resulted in the complete removal of mathematics from the domain of sciences. So, how is it that mathematics was missing from the above-mentioned general organization of knowledge?

Of course we may legitimately assume that the quoted phrase does not reflect Mienong's own view about the organization of sciences, and he was just reporting an unsuitable received classification that he meant to criticize (the historical accuracy of Meinong's claim is not at issue here). In introducing his own position, on the other hand, Meinong reserved a very peculiar status for mathematics, and at the same time used his views about mathematics as a foothold for boosting TO, to show that TO is inevitable for contriving a suitable place for mathematics in the organization of knowledge. A more detailed account is necessary.

There were only two classes of sciences (the natural sciences and the psychological sciences) taken into account by the members of the prejudiced party. Where does the domain of mathematics lay in this exhaustive classification? Well, the factualist, who says in his heart "there are no unreal objects", finds himself in a blighted situation with regard to the existential status of the mathematical objects: "the prejudice in favor of reality that I have repeatedly called to attention leads here to a dilemma which seems to be quite illuminating and which is, nevertheless, basically very singular…[that is,] either the Object to which cognition is directed exists in reality or it exists solely 'in my idea'" (Meinong, 1904/1960, p. 95). The mathematical objects could of course be counted to be amongst the objects of cognition, and the dilemma works perfectly accurately with regard to them. The factualist could either regard the objects of mathematics as concrete objects (existing somewhere in the actual world), or he could assign a subjective kind of existence to them. Taking it either way, adopting realism or psychologism with regard to mathematical objects, the view would be (at least in Meinong's report of the situation) so untenable that it would make the factualist to remove mathematics from the map of the scientific knowledge altogether. Mathematics, unlike the natural sciences, is an *a priori* science, and unlike what is mental, hosts mind-independent concepts and relations.

Meinong (1904/1960, p. 99), on the other hand, agreeably proclaimed that mathematics is a science in its own right, and in order to avoid the factualist's dilemma, he declared that "[M]athematics, and particularly geometry, deals with the nonreal" (1904/1960, p. 95). In other words, mathematics is a science in its own right and the mathematical objects are cognitively identifiable, but they are neither concrete nor mental objects. Hence the need for TO as a device which legitimize the sciences which deal with the unreal objects. As far as our study of *Theory of Objects* (1904) takes us, the peculiar view about the significant status of mathematical unreal objects within the general system of sciences can only be understood under the light of Meinong's proposed Theory of Objects:

> I have referred before to the fact that a suitable place for mathematics could never be found in the system of sciences. If I am not mistaken, the anomalous position of mathematics had its basis in the fact that the concept of a theory of objects had not yet been formed. Mathematics is, in its essential features, a part of the theory of objects. (Meinong, 1904/1960, p. 98)

And if I am not mistaken, saying that "a suitable place for mathematics could never be found before formation of TO", sounds like a sort of indispensability argument for TO. The argument is very simple and to the point:

P1) giving a suitable place to mathematics is indispensable to an exhaustive and viable organization of sciences;
P2) if TO had not been formed, a suitable place for mathematics could never be found in the organization of sciences;
C) therefore TO is indispensable to an exhaustive and viable organization of sciences and saving mathematics a suitable room therein.

Of course we want to have a viable organization of sciences. Mathematics is indispensable to our scientific endeavors. Meinong took this for granted, but a *first-order*[3] *indispensability argument* would not be unwelcomed in settling the matter. After that it can be claimed mathematics is obviously an autonomous and significant scientific discipline, and it should have a suitable place in this organization. And for that propose TO is indispensable. This makes the argument *a second-order indispensability argument*, because the indispensability of the unreal objects of mathematics in scientific endeavors has been taken for granted in the first place (through what I called the first-order indispensability argument). As I said, Meinong did not give any account of why mathematics should be given a suitable place within the organization of sciences, he simply took it for granted, and constructing upon that foundation he used this higher-order indispensability argument to claim that TO is indispensable to a viable organization of knowledge.

That much being said, I should confess that Meinong was not in any way scrupulous about giving a detailed account of the relation between mathematics and TO. Although he clearly held that TO supposed to take after mathematics in acquiring the highest standards of scientific precision, but the unique role of mathematics in the construction of TO must not obscure the fact that TO is more than mathematics, and as a whole has its own justifications. TO includes mathematics as a special branch (Meinong, 1904/1960, p. 99). Meinong's explanation about this relation emerged as somewhat general hints about the relation of a not yet totally articulated theory to its particular instance.[4]

[3] The first-order indispensability argument, is an argument which is primarily aimed at proving that the mathematical entities are indispensable to our best scientific theories. In my view, Meinong presuppose this argument to show that if mathematics is indispensable to our best scientific theories, TO is indispensable in saving a room for mathematics in the general organization of knowledge.
[4] I shall remark that Metaphysics (along mathematics) had also been mentioned as an ingredient in the modeling of the theory of objects (for example in *Selbstdarstellung*, part II, section B), but TO is also more than metaphysics which strives to encompass the totality of all reality, because TO also includes the unreal in its sphere.

Be that as it may, we can reasonably assume that when it comes to presenting a positive and convincing argument for the plausibility of TO, this second-order indispensability argument seems to be the most suitable candidate for what is really at stake. In other words, we can rest assured that it is a more suitable – and in the book *The Theory of Objects,* a more underpinned – candidate than the vague semantic platonic intuition which has been the cynosure of the attention of both critics and advocates for nearly more than a century. And it is not only in the 1904 book that the point is underpinned. The point about the relation between the origins of TO and the necessity of finding a place for mathematics in the organization of knowledge emphasized by Meinong once more, years after the cultivation of his theory, through praising K. Zindler's *Beiträge zur Theorie der mathematischen Erkenntnis* as the only monograph which underlines the point that the concept of TO emerged in answer to some needs which were essentially of mathematical origins (*Selbstdarstellung*, GA VII, p. 54).[5]

Mathematics, as the articulated scientific branch is not only much clearer than the vaguely sketched general Theory of Objects, but, as I said before, it happens to be the only conspicuous instance singled out by Meinong among the other possible specialized branches which constitute the general theory:

> It is clear that mathematics, insofar as it is a specialized theory of objects, could be accompanied by still other specialized theories of Objects, their number scarcely to be determined. However, these areas are at present so incompletely known to us that in studying them there is not yet any need to specialize. (Meinong, 1904/1960, p. 111)

But being masked and incompletely known does not prevent other specialized branches of TO from endeavoring to reach out toward the antitype of exactness and preciseness, or in other words, to become "*more mathematico*" (Meinong, 1904/1960, p. 101).

[5] Referring to the work of his former pupil K. Zindler, Meinong said that: "K. Zindler ... hat in seinen scharfsinnigen "*Beiträge zur Theorie der mathematischen Erkenntnis*" (Wien 1889) wohl die einzige Monographie über apriorisches Erkennen geliefert, die einen Einblick in die nächsten Bedürfnisse gestattet, aus denen die Konzeption der Gegensttandstheorie hervorgegangen ist." (GA VII, p. 54)

6. Some Afterthoughts[6]

To my scholarly shame, I am to admit that I still do not know what TO is. I do not know whether it could be finally exhausted in terms of specialized theories of objects or not any more than I know whether these specialized theories of objects, swimming fishily between being and not being, are anything like the sciences of physics, chemistry, biology etc., or not. I was interested, however, in showing that Meinong's most significant and constructive argument for the plausibility of TO emerged in terms of an indispensability argument which maintains that without the formation of TO a suitable place for mathematics cannot be found within the organization of sciences, and the most immediate needs for construction of the theory are of mathematical origins. In spite of its vague points, the argument is unmistakably akin to Quine's indispensability argument with regard to the existence of the mathematical entities; and mathematics, as the only known instance of TO (i.e., as the only recognized specialized branch of it and the antitype of other yet incomplete branches) has a very significant role in Meinong's theory and his argument for its plausibility.

As I hinted before, some points of disagreement about the being of some of the mathematical entities persist; Meinong and Quine both agree that there is the cube root of 27, but when it comes to more controversial examples, like the highest prime number (which according to Euler's analytical proof cannot exist, and is not among the mathematical notions in use by the natural scientists), there is a division of the opinions. Quine, who refuses to accept that such a non-existent twilight half-entity "is", would claim that there is simply the non-denoting description "the highest prime number". Meinong, on the other hand, would consent to the extra-existence of the highest prime number residing in the limbo of pure objects, and lets the number find its way to the first and second-order indispensability arguments respectively. However, Quine and Meinong's disagreement about the span of the ontological sphere of mathematical entities, does not contradict the claim that they both are deeply concerned about the ontological status of mathematical entities, nor has it any damaging bearing on my claim about the role of what I formulated as Meinong's second-order indispensability argument in the construction of TO. The necessity of giving to mathematics a suitable place within the organization

[6] In this section, I present some important points, an objection and its answer included, which were too singular to be placed within the context of the discussion in the previous sections, and too significant to be treated lightly in the footnotes or an appendix.

of sciences lies at the core of the argument, and while the first-order indispensability argument is presupposed in the presentation of the second-order version, the argument is free from any commitment to the *specific* kinds and instances of the mathematical entities which are disposed at the ontological plan. "Which mathematical entities?" is still an important question, but I endeavored to show that the quest for finding the answer can be pursued independently of the terminological ado. Here is the final explanation.

To follow Crane's lead still further, and to avoid the futile feud about different uses of the term "exist", I am willing to see the question of "which mathematical objects?" in terms of an expert disagreement about delimitation of the exact borders of the realm of mathematical entities. Here, instead of being involved in the web of controversial existential questions, we can maintain that the primary problem is a framework problem: Why, for Quine, the borders of the realm should be defined in this foundational way? Why should the prestigious role of the foundational system of mathematics be granted to the first-order set theory, instead of alternative theories which assumed to be more general and less restrictive, say, the category theory, topos theory, or second-order logic? Why should the privilege of being lodged in the domain of the legitimate mathematical objects be bestowed to the commonplace set-members which are directly exploited by the natural scientists, and be denied to their other higher-order relatives who, in spite of being the legitimate members of the same family, are too proud to be fondled by the experts of the more down-to-earth branches of sciences. These are all questions that can be used to challenge the Quinean's biased point of view, without confusing her about the different uses of the word 'exist'. The Quinean may insist that any further existential commitments, beyond what we make to existence of first-order sets, is unreasonable, and engagement in the second-order logic or anything of that kind is simply doing set theory with misleading notation, but the Meinongian does not need to leave the ground to the Quinean without any further argument, especially as she (the Meinongian) has the upper hand when it comes to the criteria of parsimony and comprehensiveness of the ontological system.

Even after seeing the affinity between Meinong and Quine's methods of philosophizing under the light that we shed to the field, the naturalist can still stay untouched by this line of argument for the plausibility of TO. Having a suitable place within the general organization of knowledge may not mean much to the naturalist, because she may not take any interest in the general organization of knowledge, or in anything that goes further than the local and particular interests of expert scientists who work in the hedged areas on minute problems of their fields. For such naturalist the scope of philosophy would not go any further than the bulks of the leftovers from the scientists' table. I believe, however, that in spite of his strictness in examining arguments and point of views, and in spite of his urge for staying away from traditional epistemology, Quine, as the naturalist who represents the trend in this paper, was very eager about delimitation of the general structure of knowledge in his philosophy.[7] Moreover, the second-order indispensability argument for TO could very well be a consequence of the first-order indispensability argument: if mathematics and its objects are indispensable to our scientific enterprises, mathematics should occupy a suitable place within the general organization of sciences as well.

This would lead to a rather noteworthy conclusion in the area of the Meinong studies. It may urge the Quinean to go for a straightforward consent to TO, but after establishment of this amount of affinity between Meinong's TO and Quine's ontology of mathematics, the debate between the advocates of these two philosophers could be wrapped up in more fruitful terms. Instead of arguing about the different uses of the term 'exist', or even instead of being involved in discussions about the viability of Meinong's semantical intuition about the being or extra-being of "round square" and "golden mountain" (which to me seem as introductory examples for presenting the theory to the unprepared audience), the debate could be directed toward the Meinongian stance with regard to existence (or rather non-existence) of mathematical entities, and the role of TO in establishment of that stance. Whether this move would lead to the stanching of the feud and the final perpetuation of amity between the Meinongian and the Quinean, is something that remains to be seen.

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[7] Look at his *Word and Object* (1960), *Ontological Relativity and Other Essays*, (1969), *Whither Physical Objects?* (1976b), and some of his other major works

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