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NON-EXISTENT OBJECTS AND EPISTEMOLOGICAL ONTOLOGY

William J. RAPAPORT

Department of Computer Science
State University of New York at Buffalo

1. Introduction

In this essay, I examine the role of non-existent objects in "epistemological ontology" — the study of the entities that make thinking possible. I review my earlier revision of Meinong's Theory of Objects, discuss Meinong's notions of Quasisein and Aussersein, and present a theory of Meinongian objects as "combinatorially possible" entities.

2. The Revised Meinongian Theory.

Let me begin by briefly reviewing the revised Meinongian theory initially presented in Rapaport 1976 and 1978. Meinong's act-content-object (ACO) theory of mental (or psychological) phenomena — according to which every psychological *act* is *directed* to an *object* (a so-called Meinongian object) by a *content* — was extended to an act-content-Meinongian-object-(actual-object) theory. The latter theory — denoted "ACO(O′)", below — requires two *types* of objects: some psychological acts may have, besides their direct Meinongian (or "M-") object, an indirect (and distinct) "actual" object, while others do not (hence the parentheses in my abbreviation). Properties are predicated of M-objects by the *constituency* mode of predication, denoted by 'c', and they are predicated of actual objects by the *exemplification* mode of predication, denoted by 'ex'.

An actual object, α, is a "Sein-correlate" of an M-object o iff α exemplifies all the properties constituting o. E.g., the actual object Mt. Everest exemplifies, *inter alia*, being tall, being a mountain, and being in Asia: it is a Sein-correlate (SC) of the M-object *the tallest mountain*: <being a mountain, being taller than any other moun-

tain>, which is constituted only by the two properties, being a mountain and being taller than any other mountain. To say that an M-object *o* "exists" is to say that it has a Sein-correlate.

Two kinds of M-objects will concern us here: an *objectum* is the M-object of an act such as thinking (e.g., when I think of Santa Claus, the M-objectum of my act of thinking is Santa Claus), and an *objective* is the M-object of an act (propositional attitude) such as believing (e.g., when I believe that Santa Claus is thin, the M-objective of my act of believing is (the proposition) that Santa Claus is thin). Note that obejcta need not exist and that objectives need not be true (or "have Sein", as Meinong would say). Finally, the properties that are constituents of an M-object are its *Sosein*.

3. DEGREES OF BEING.

3.1. Existence and Subsistence.

Meinong distinguished between two sorts of being or "Sein": existence and subsistence (1904: 486). For example, abstract objects, such as *Similarity* and *Difference*, "subsist", while a physical object, like Mt. Everest, "exists". This is a plausible distinction: one *could* say that Similarity *exists*, but surely it doesn't exist, say, in space and time just like some other existents. Whatever Meinong's reasons may have been for making this distinction between two modes of being (cf. Lambert 1973: 224), the only one evident in his 1904 essay, "On the Theory of Objects", is methodological or heuristic: to prepare the reader for the acceptance of his Thesis of Aussersein. But this suggests, erroneously, that Aussersein is also a degree of being.

3.2. Quasisein.

Meinong did, however, toy for a while with the notion of a third "degree" of Sein, weaker than the other two (cf. 1904: 492). He ultimately rejected it, replacing it with Aussersein. In this section, I will examine the argument for the third degree of Sein.

It should be noted that Quasisein is not to be confused with another of Meinong's notions: "pseudo-existence": objects of *actual* thoughts are said by Meinong to pseudo-exist, whether they have existence, subsistence, Quasisein, or Nichtsein (non-being). (See Meinong 1904: 497).

Meinong was led to his argument by a version of the paradox of negative existentials: Consider a proposition expressing that something does not exist — a Nichtsein-objective, which takes the general form *A lacks Sein* (equivalently, *A has Nichtsein*). If it is to be meaningful, "it is as if ... [*A*] must first have once been [*erst einmal sein müsste*], so that one could raise [*aufwerfen könne*] the question of its Sein or Nichtsein generally" (1904: 491). The paradox is that if *A* were to be, then one couldn't raise the question of its Nichtsein (hence the subjunctive "as if"-clause). Yet, Meinong maintains that Nichtsein-objectives are meaningful when he says "that a certain *A* is not, more briefly the Nichtsein of *A*, is ... quite just as good an objective as the Sein of *A*" (1904: 491; cf. Russell's treatment of the same paradox in 1903: 449).

The problem, stated more generally and less paradoxically, is that "every ... object is in a certain way given prior [*ist ... vorgegeben*, "pretended"] to our decision on its Sein or Nichtsein in a way also not prejudiced against Nichtsein" (Meinong 1904: 491; cf. 492), and that it is necessary to explain this "givenness". Meinong first explains it as a form of Sein and later by means of Aussersein.

The structure of the argument for a third degree of Sein is this: First, some principles are given from which a kind of Sein is derived. Second, the properties of this Sein are presented. In refutation, Meinong rejects both the principles and the properties. Here, then, is the argument:

(Q1) "[T]he objective, no matter whether Sein- or Nichtsein-objective, surely stands to its objectum, even if *cum grano salis*, analogously vis-à-vis [*ähnlich gegenüber*] the whole to the part." (1904: 491-92).

(Q2) "But if the whole is, so also must the part be ...." (1904: 492).

(Q3) Therefore, "[I]f the objective is, so also must the objectum belonging to [it] in some sense be ...." (By (Q1), (Q2); 1904: 492).

(Q4) *A* lacks Sein (in particular, *A* neither exists nor subsists). (Assumption).

(Q5) Therefore, *A lacks Sein* has Sein. (Q4); 1904: 491).

(Q6) *A lacks Sein* is a whole of which *A* is a part (By (Q1).

(Q7) Therefore, *A* has Sein. (By (Q3), (Q5), (Q6).

(Q8) Therefore, the Sein asserted of *A* in (Q7) — call it 'Quasisein'

(1904: 492) — is different from the Sein denied of *A* in (Q4). (Else, (Q4) contradicts (Q7); 1904: 492).

(Q9) Therefore, every object has Quasisein. (Since '*A*' can range over all objects: 1904: 492).

Thus, one property of Quasisein is that it is truly predicable of all objects.

But Meinong's argument is invalid: (Q9) does not follow, because '*A*' in fact ranges only over objects that lack Sein. Hence, objects that either exist or subsist might conceivably lack Quasisein. Yet the "givenness" (or capacity for it) that Quasisein is to explicate belongs to every object independently of the object's existence or subsistence. Without an argument for universal Quasisein, Quasisein fails in its assigned task.

The other major feature of Quasisein is that "a Nichtsein of the same kind ... may not be opposed to it" (1904: 492). There appear to be two reasons for this. First, since all objects are supposed to have Quasisein, none lack it; hence, none have its opposite. As we have just seen, however, Quasisein belongs at most to those objects that lack Sein, and thus it is not unopposed: for "Nichtquasisein" could be taken to be merely Sein itself! The second reason is that such a Nichtsein would lead to an infinite regress of weaker and weaker degrees of Sein by a repetition of the same argument (1904: 492). Note, incidently, that Nichtquasisein itself has Quasisein.

But Meinong faults Quasisein precisely on this feature of its lack of opposition. In essence, his claim is that any candidate for a degree of Sein must have a "running-mate" in the form of a corresponding Nichtsein (1904: 492). His other (and better) objection to it is its *ad hoc* nature: the avoidance of paradox — i.e., the explication of "givenness" — is the only situation that calls for a third degree of Sein (1904: 492).

Having rejected his conclusion, Meinong proceeds to criticize his assumptions. He first identifies (Q3) as the crucial premise leading to Quasisein ("that queer *Sein des Nichtseienden*", as he puts it in 1904: 492). While he does not say much about alternative possibilities, a few observations may be made.

An interesting objection to (Q3) has been raised by Reinhardt Grossmann (1974b: 113): The objective *A lacks Sein* at most subsists. If it does, then it consists of a part that less-than-subsists, which is

just as much in need of explanation as the original paradox. Moreover, Grossmann's point can be extended, for how can *A exists*, if it merely *subsists*, have a part that *more-than-subsists*? (Perhaps here lurks another argument against the existence/subsistence distinction.) More cautiously, perhaps, we might allow objectives with Sein to have objecta that lack Sein. But note that this does nothing towards resolving the paradox; rather, it denies the "givenness" outright and appears to be subject to Grossmann's objection (though Grossmann adopts this as a way out in the end).

Since (Q3) is the troublesome premise, Meinong next raises doubts about the principles that led to it, specifically "the analogy with the behavior of the part to the wholes" (1904: 493). It is interesting to note that he does not consider the possibility of existing wholes whose parts have no being but, rather, he rejects the assumption that objectives are wholes whose parts are objecta. (It should be noted here for the sake of completeness that Meinong has left open the possibility that the objective is indeed a whole, but merely one whose parts are not objecta).

Meinong next observes that

> Therefore, instead of deriving, on the basis of a questionable analogy, from the Sein of the objective a Sein of its objectum even in the case where that objective is a Nichtsein-objective, it is better to be advised by the facts that occupy us, that that analogy is not exactly valid for Nichtsein-objectives, viz., therefore, that the Sein of the objective is in no way generally dependent upon [*ist angewiesen auf*, "thrown back upon"] the Sein of its objectum. (1904: 493).

Two points need to be made. First, it now appears that the whole/part analogy may indeed have limited application in the realm of Sein-objectives. But then why employ it? Why (indeed, how) should one distinguish between these two kinds of objectives in this way?

Second, Meinong concludes this passage by saying that the Sein of the objective is not "*angewiesen auf*" the Sein of its objectum. This seems to be translatable in two ways: the objective's Sein is not (a) thrown back upon, or (b) dependent upon, the objectum's Sein. Now (a) seems to be a more reasonable conclusion for him to draw, for that has been the direction of his argument: deriving the Sein of the objectum from that of the objective. But (b) is another possible translation. It means that no matter whether the objectum has Sein or not, the objective can have Sein (or not). So it allows that the objectum lacks Sein while the objective has it, which is what Meinong wants to allow.

But (b) is even stronger: it is a denial of

(b1) the Sein of the objective depends upon the Sein of its objectum.

Did Meinong hold this? Is it true? Consider the objective *the round square is round.* This has Sein, and its Sein in no way depends on the Sein of its objectum. So (b1) is false, and Meinong must hold (b). Yet that should have been clear from a consideration of Sosein-objectives, as we have just seen. Hence, while true and a thesis of his Theory of Objects, (b) is not the sort of thing Meinong should have said after "viz., therefore".

I conclude that (a) is the *philosophically* proper translation and that Meinong held that the Sein of the objective is not inherited by the objectum. There is some evidence against (a): On that translation, we should say that the objective's Sein is not thrown back upon the objectum itself, rather than upon the objectum's Sein. But it should be noted that I am making a *philosophical* point here, not a philological one: while the problem indeed concerns the translation of '*ist angewiesen auf*' I am arguing that no matter what Meinong *did* say, he *should* have said (a).

4. THE STRUCTURE OF EXISTENCE.

4.1 The Meaningfulness of Existence.

According to one interpretation of Aussersein (Rapaport 1978: 157), existence is not predicable of objecta, but only of objectives. Is there, then, *any* sense in which we can meaningfully speak of an objectum's existence? We can, and shall, of course, say that an objectum, *o*, has Sein insofar as the objective *o has Sein* has Sein. Granted this, let us examine the nature of the existence (so understood) of objecta.

Logic ought to be metaphysically neutral. If it is to be so, it must provide us with the means to talk about *anything* and to meaningfully assert or deny the existence of anything. This can be done by having the terms of the formal language underlying one's logic refer to M-objects, i.e., objects of thought. For it is meaningful to ask of an

M-object whether it exists. In my revised theory, this means to ask whether something in the actual world corresponds to the object of our thought — whether the M-object has a Sein-correlate. Indeed, to say that there is always an object of thought (i.e., that every act has an object) but that sometimes the object does not exist (i.e., have Sein) is, to me, utterly meaningless unless we distinguish between two senses of 'exists', taking the second to mean "has a Sein-correlate". I shall return to this point shortly.

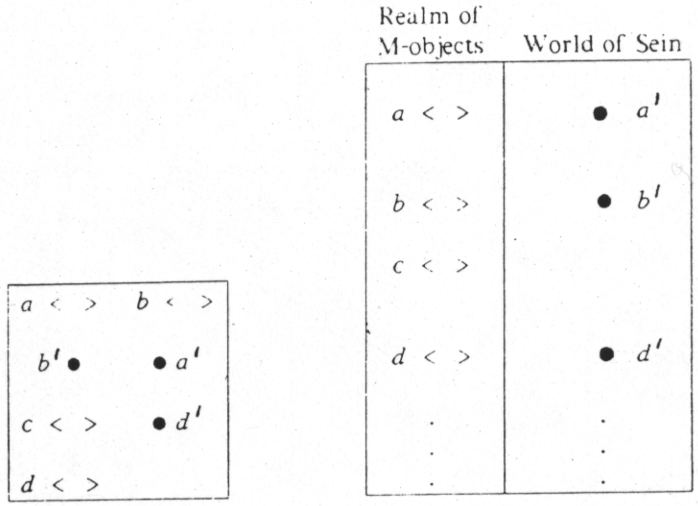
As for those actual objects capable of being, but not having, Sein-correlates, it *is* tautologous to affirm existence of them and self-contradictory to deny it — for they exist by definition, so to speak (cf. Russell 1905: 48, and Pears 1963). The type-distinction between actual objects and M-objects, then, provides an answer to the perennial philosophical problem of whether 'exists' is a predicate (or whether existence is a property): To say '*A* exists' is to say either (1) that the property of existence is a constituent of an M-object, *A* —which is meaningful; or (2) that an M-object, *A*, has a Sein-correlate — which is also meaningful; or (3) that an actual object, *A*, exemplifies existence — which is tautologous; or (4) that an actual object, *A*, has a Sein-correlate — which is meaningless (unless *A* is itself an M-object). Thus 'exists' is a meaningful predicate of M-objects (either as a one-place, constituting property or as a two-place relation), but it is not a meaningful predicate of actual objects.

4.2. The Structure of the Actual World.

Perhaps this can be clarified somewhat by the following technique. The actual world could be pictured in two ways (see Fig. 1). In picture (I), the world is considered to consist of actual objects, exemplifying certain properties and arranged in certain configurations (states of affairs); included among these objects are the M-objects. In picture (II), the world is considered to be partitioned in such a manner that the M-objects are distinguished from the (other) actual objects.[1]

In general, to say that M-object *a* has Sein is to describe picture (II) by saying that to *a* there corresponds an actual object *a'*. To say that

1. For an interestingly similiar theory in Artificial Intelligence, cf. McCarthy 1979.



(I) (II)

Figure 1. M-objects: *a, b, c, d*, . . .
Actual objects: *a', b', d'*, . . .

M-object *c* lacks Sein (or has Nichtsein) is again to describe (II) by saying that no actual object corresponds to *c*.

To ask whether M-objects exist, in the sense of whether the ACO-theory of mental phenomena is correct (cf. Rapaport 1978: 159), is meaningless when the world is pictured as in (II). However, it is a meaningful question about (I). The world as pictured in (I) is such that everything exists. Here, 'everything' is a quantifier ranging over M-objects *and* actual objects. In picture (II), not everything exists, where 'everything' ranges only over the realm of M-objects.

Picture (II), moreover, serves as a convenient device for representing Meinong's own interpretation of M-objects as standing "beyond Sein and Nichtsein" (1904: 494). For if the domain of actual objects is the world of Sein, then the realm of M-objects is here pictured as external to that world — literally ausserseiend. Picture (II) also enables us to absolve Meinong of charges of having an overpopulated ontology. For if ontology is understood as the study

of the categories of being, then it is, on the present view, the study of the world of Sein in picture (II). (I explain how Aussersein fits into this scheme, below). Charles Landesman's observation (1975: 452) that "a claim to the effect that a term names or refers to an entity that does not exist implies that that entity should not be incorporated into any ontology" comes down to saying that such a claim implies that that entity is not correlated with an entity in (or, is not part of) the metaphysical realm of actual objects.

On the other hand, to the charge that picture (I) is overpopulated, with redundant entities (e.g., both *a* and *a'*), there are several replies. First, these entities are not redundant — they are not even identical, *a'* having vastly more properties than *a*. On another account, *a'* and *a* are entirely different kinds of entities: *a'* might be, say, a certain person, and *a* merely an object of thought. Second, the charge is correct if its only aim is to "picture Meinong as an authentic 'entity multiplier'" (Orayen 1970: 331): For, psychological events do have objects; these objects exist in the sense that they themselves are actual. Recall that "every ... object is in a certain way given prior to our decision on its Sein" (Meinong 1904: 491); i.e., every object is actual, whether or not it is correlated with another actual object.

Two observations are in order. First, to say of an M-object that it exists is ambiguous in much the same way that the *utterance* "Paris has 5 letters" is. For just as in the latter case it is not clear whether we are using or mentioning 'Paris', so, in the former, it is not clear whether we are asking the question of the M-objects as such (in which case the answer is "yes") or asking it in the sense of whether it has a Sein-correlate.

Second, consider an analogy from mathematics. Suppose that some physical problem has a mathematical model (a curious turn of phrase!) such that the problem's solution depends upon finding the roots of a cubic equation. Suppose further that of the three roots, one is real while the others are complex (i.e., "imaginary"!). Then, while all roots "exist" (in one sense), it might be that only one "exists" in the sense that it is realizable — that it can be re-interpreted physically, i.e., that it has a Sein-correlate (cf. Rapaport 1982).

Finally, pictures (I) and (II) enable us to clarify the relation of so-called non-existent objects to "facts" about them. I shall only present a rough analysis here, but certain features are prominent.

Since

(1) The 9-million-roomed house does not exist

is true, there is a state of affairs corresponding to it; in fact, there are two (where '*9MR*' and '*H*' name the properties of having 9-million rooms and being a house):

(S1A) $\sim \exists x[x \text{ SC} \langle 9MR, H \rangle]$
(S1B) $\sim \exists x[x \text{ is actual } \& \ x \text{ ex } 9MR \ \& \ x \text{ ex } H]$

The former is a state of affairs in picture (I), and $\langle 9MR, H \rangle$ is a constituent of it. The latter is a state of affairs in the world of Sein —the right half of picture (II) — and $\langle 9MR, H \rangle$ is not a constituent of it.

Suppose

(2) John is thinking of the 9-million-roomed house

is true. This corresponds to only one state of affairs, whose structure is that of a relation between an actual person, viz., John, and an M-object:

(S2) Thinking (John, $\langle 9MR, H \rangle$).

This state of affairs is in picture (I) and contains $\langle 9MR, H \rangle$ as a constituent. Similar remarks hold for the pair

(3) The 9-million-roomed house is a house.

(S3) $H \text{ c} \langle 9MR, H \rangle$;

and, if we employ the Principle of Maximization of Truth (PMT) (Rapaport 1981) according to which statements are interpreted in such a manner as to avoid inconsistency or to make them true where possible, similar remarks hold also for the pair:

(4) The 9-million-roomed house exists (i.e., is actual).

(S4) $\exists x[x \text{ is actual } \& \ x \text{ SC } \langle 9MR, H \rangle]$.

Turning to M-objects with Sein, the 2-roomed house, $\langle 2R, H \rangle$, is a constituent of the state of affairs

(S5A) $\exists x[x \text{ SC} \langle 2R, H \rangle]$

in picture (I), where the objective is expressed by

(5) The 2-roomed house exists.

But it is not a constituent of another state of affairs corresponding to (5), namely,

(S5B) $\exists x[x \text{ is actual } \& \ x \text{ ex } 2R \ \& \ x \text{ ex } H]$.

Taken literally,

(6) The 2-roomed house has a living room

is false, since there is no state of affairs with the structure

(6A) $L \text{ c} \langle 2R, H \rangle$.

Rather, we have in picture (I),

(S6A) $L \not{c} \langle 2R, H \rangle$.

Employing PMT, we also have in picture (I)

(S6B) $\exists x[x \text{ SC} \langle 2R, H \rangle \ \& \ x \text{ SC } \langle L \rangle]$,

in which $\langle 2R, H \rangle$ is a constituent, and in picture (II)

(S6C) $\exists x[x \text{ is actual } \& \ x \text{ ex } 2R \ \& \ x \text{ ex } H \ \& \ x \text{ ex } L]$,

which does not have $\langle 2R, H \rangle$ as a constituent.

In general, then, M-objects are constituents of states of affairs when we picture the world as in (I) but not when we picture it as in (II). If, indeed, one of Meinong's main theses is "that non-existent things are constituents of certain facts" (Grossmann 1974a: 69), then this thesis *is* nonsense if "non-existent thing" refers to an actual thing that does not exist (there being none). But if "facts" refers to states of affairs and "non-existent objects" refers to M-objects that lack Sein, then it is perfectly acceptable.

Now, the point of the ACO(O′)-theory (cf. Rapaport 1978: 159) is that in fact the world can be pictured as in (II), so that there is no need to try to "reflect" all objectives of the sort expressed by (1) in (S1B)-style "extensional" language. The argument of extensionalists (e.g., Russell) is that the "reflection" can be carried through. My belief is that it cannot. The fact that it is chiefly *psychological* contexts that cause difficulties for extensionalists and the fact that M-objects are objects of psychological acts go hand in hand. Psychological contexts have resisted extensional paraphrase because, to succeed, one needs M-objects, and extensionalists deny or ignore them. *With* M-objects, of course, there is no *need* to extensionalize, and there is good reason *not* to (as I have argued in Rapaport 1976, Ch. I).

4.3 Epistemological Ontology.

One feature of our double picture of the world is that since M-objects are actual (i.e., since every psychological event does have an object), they appear in both partitions of picture (II). Indeed, the right half of picture (II) is simply picture (I). This is puzzling if we try to think of M-objects as items with which to build (a model of) the universe. A closer analysis reveals that this "double presence" is inevitable and actually indicative of the double *function* of M-objects, since I am trying to use them to build a model of the world *within* the world.

But a better account is that I am not so much using them in an *ontological* fashion to build the world as I am using them in an *epistemological* fashion to *describe* or *represent* the already-built world. One describes or represents the world in terms of certain items already in it, via the Sein-correlation mechanism. With what else *could* one describe it?

The M-object *the round square*, $\langle R,S\rangle$, is actual but has no Sein-correlate. How do we say that it is actual? One way, in picture (I), is after the fashion of (S4): $\exists\alpha[\alpha$ is actual & $\alpha = \langle R,S\rangle]$. Another, also in picture (I), is by considering the M-object whose sole constituting property is that of being the round square. This object, which may be represented by: $\langle$being $\langle R,S\rangle\rangle$, has $\langle R,S\rangle$ as Sein-correlate. That is, $\exists\alpha[\alpha$ ex being-constituted-by-the-properties-of-being-round-and-square], since $\langle R,S\rangle$ exemplifies this property (i.e., $\langle R,S\rangle$ is constituted by the properties of being round and square, since R, S c $\langle R,S\rangle$). But this argument can be generalized, and so all M-objects are actual. To repeat, this is not to say that all M-objects *exist* (= have Sein = have a Sein-correlate).

We must distinguish between the items we hold to be actual — the items encompassed in a *metaphysical* ontology — from those that enable us to have beliefs about the actual world. The latter are items needed for an *epistemological* ontology. That is, we must distinguish between what there is and what there must be in order for us to know what there is.[2] Epistemological ontology might also be called 'naive

2. On the relation of epistemological to metaphysical ontology, cf. the discussion of Quine's ontology/ideology distinction in Hintikka 1969, Sect. VIII, and of phenomenological ontology in Castañeda 1972, Sect. 8 and 1975d: 10-16.

There is, perhaps, a structural similarity between the postulation of entities, viz., M-objects (especially objectives), as the "carriers" of our beliefs and physicists' postulaion of entities (e.g., gluons, photons) as "carriers" of certain forces (e.g., the strong force, the electromagnetic force); cf. Glashow 1975: 45.

ontology' or 'folk ontology', in exactly the same sense in which cognitive scientists and AI researchers speak of 'naive physics' (Hayes 1985) or 'folk psychology' (Stich 1983) — i.e., as the ontology embedded in our ordinary language.

This, then, is the source of the two senses in which M-objects "exist". *All* M-objects exist in the sense of being actual; only *some* do in the sense of having Sein-correlates. But, further, both M-objects and their Sein-correlates exist together in one world, as pictured in (I). Moreover, M-objects are not mental entities, at least in the sense that they are independent of any *particular* mind. They are, however, necessary for thinking to be possible; without them there would be no minds (or no mental activity of the intellectual, as opposed to the purely biophysical, kind).

The present study may be viewed as a contribution to epistemological ontology. It is clear that the goals of metaphysics and epistemology must carefully be kept distinct. This is especially important here, for many distinctions can be made in an epistemological ontology that cannot be made from a metaphysical point of view. Indeed, epistemological distinctions do not, in general, entail corresponding metaphysical ones. That is, epistemological ontology is *intensional*, whereas metaphysical ontology is *extensional* (cf. Shapiro and Rapaport 1985).

Meinong was also aware of this, though he phrased it differently. John Findlay (1963: 54) tells us that he thought "that many distinctions which belong to the theory of objects are obscured if we insist on regarding logical equivalences as identities". On the present point of view, such "logical equivalences" must be relations obtaining among certain M-objects with Sein (intensional, epistemological entities) asserting that some (or all) of their Sein-correlates (extensional, metaphysical entities) are identical. For example, it is important to distinguish, from an epistemological point of view, between the morning star $\langle M, S\rangle$ and the evening star $\langle E, S\rangle$. Yet there is an equivalence between them, with respect to certain invarient features of states of affairs of which they are constituents; and there is a corresponding identity between their Sein-correlates (more precisely, the Sein-correlate of $\langle M, S\rangle$ is genuinely identical to that of $\langle E, S\rangle$).

Considering M-objects as epistemological, rather than merely metaphysical, entities also supports the type-distinction; for now we may distinguish between actual and M-objects in terms of their functions. The latter, being in general finite and hence directly and completely accessible to thought, are the means with which we succeed in our aim of apprehending (albeit indirectly and incompletely) the former.

Thus, picture (I) is reality and picture (II) is the way our minds, due to their very nature, partition reality in order to deal with it. We apprehend actual objects "through" M-objects. Without this type-distinction, we would be apprehending the former "through" themselves; while not logically odd, this explains nothing. On the other hand, we can explain how the mind directly grasps M-objects, because of their finiteness (in general). As Findlay puts it, we can be "acquainted" with finite M-objects but only know actual objects by "description" (1963: 162-63; cf. pp. 156, 170).

4.4. The Apprehension of Actual Objects.

I would like to examine further one line of thought discussed in the last section. It certainly seems, *prima facie*, that we think directly of actual objects rather than indirectly of them via some intermediary (cf., e.g., Grossmann 1974b: 194). But the object of our thought is finitely propertied. So an answer must be provided to the question of how an M-object helps in our apprehension of an actual object.

First, notice that there must be *some* answer. For minds are indeed related to actual objects: psychological events consist of acts and contents, which are directed to M-objects, some of which in turn are correlated with actual objects. If this chain can be broken at any point, worse, "if minds cannot be related to anything else, then we can never know that there is anything else" (Grossmann 1969: 21). But minds do and, hence, *can* have knowledge of the actual world. The issue at hand concerns the *nature* of that knowledge — whether it is "direct" or "indirect", and how it comes about. Note, also, that (1) the form of the knowledge depends on the mediating entities and, thus, on our conceptual schemes (which describe or represent the nature of objects) and that (2) it does not follow from the possiblity of knowledge that we can know that we do, or when we do, have knowledge.

Meinong's own solution, according to Findlay (1963: 245), was that "we can only refer to a concrete [i.e., actual] object by including

in our reference the assumption that the object to which we are referring is determinate in every respect". Thus, we refer to an actual object by substituting for a *direct* reference to *it*, a direct reference to an incomplete (indeed, finite) object with some such property as that of being actual, or being a consistent "completion" of the object. For instance, I can think (indirectly) of the actual morning star, i.e., Venus, by thinking (directly), not of <*M,S*>, but of, say, <being a consistent completion of <*M,S*>>. Indeed, that is what I have been doing throughout this section. For I have needed to talk "directly" about actual objects, but I have always and only been able to do so by referring to them as "Sein-correlates of (some given M-object) *o*".

The present theory is representationalist in the sense that M-objects intervene between our minds and actual objects. Indeed there frequently are M-objects but no actual objects before our minds. Yet we *can* have direct, non-mediated access to *some* among the elements of the actual world: viz., the M-objects. And it is via them that we have access, albeit indirectly, to the others. On the present view, "thinking is oriented toward the world, and often succeeds in hitting a real thing" (Castañeda 1972: 8). Indeed, it always succeeds, since all M-objects are actual; yet it never (except possibly in cases of demonstrative reference or perception) hits *non*-Meinongian actual objects: it can only be "oriented" in their direction.

Thus, while I view M-objects as intermediaries, I do not "sever the direct connection between the mind and its world" (Castañeda 1975b: 126). For, first, M-objects are actual, and we are in direct contact with *them*. Second, it might be the case that we are directly connected with other actual objects through the senses. Third, even if not, we can have knowledge of actual objects in a pragmatic fashion, to be outlined in Section 4.7. So, the present theory is only *quasi*-representationalist: it is *non*-representationalist with respect to M-objects (or at any rate, with respect to those M-objects that are potentially "pseudo-existent"); but it *is* representationalist with respect to non-Meinongian actual objects (and to infinite and "barely finite" M-objects).

Nor does the present theory fall prey to the "dualism" that plagues Fregean representationalist views:

> On that view a singular referring expression like 'Oedipus' father' refers when I use it in *oratio recta* to an ordinary infinitely-many

propertied object; but when I use it *in oratio obliqua* it refers to a sense .... (Castañeda 1975b: 126.)

In the present theory, such an expression refers to the M-object in both sorts of *oratio* (cf. Rapaport and Shapiro 1984, Rapaport 1984a.) Or, if it does refer to an actual object, it only does so in certain contexts, not in *all oratio recta* contexts. This is especially so since — as Kant pointed out (1787: B 131) — all contexts are *implicitly in oratio obliqua* (except possibly for certain artificial examples in philosophical or linguistic writings).

It may prove helpful to list here some contexts in which 'Oedipus's father' refers to an M-object (in most cases, let us say, to <being a father (F), being the father of Oedipus (O)>):

(C.0) When no context is given, 'Oedipus's father' refers to $\langle F, O\rangle$.

(C.1) John is thinking of Oedipus's father: Thinking-of (John, $\langle F, O\rangle$).

(C.2) John believes that Oedipus's father is a father:
- (a) Believes (John, $F \text{ c } \langle F, O\rangle$)
- or (b) Believes (John, $F \text{ c } \langle F, O, D\rangle$ (see (C.3b))
- or (c) Believes (John, $\exists\alpha[\alpha SC\langle F, O\rangle \ \& \ \alpha \text{ ex } F]$)

(C.3) John believes that Oedipus's father is dead:
- (a) Believes (John, $D \text{ c } \langle F, O\rangle$)
- or (b) Believes (John, $D \text{ c } \langle F, O, D\rangle$); here we assume that the context makes clear what must be John's minimal understanding of 'Oedipus's father' in order to yield maximum truth (cf. Rapaport 1981).
- or (c) Believes (John, $\exists\alpha[\alpha SC\langle F, O\rangle \ \& \ \alpha \text{ ex } D]$)

If (as argued in Rapaport 1981 and 1985a) all referring expressions always and only are to refer to M-objects, how can we talk about actual objects? One way is to loosen this requirement on such expressions. Another way is to employ other mechanisms of reference. Yet another is to introduce a second referential relation. The present theory adopts all three. Here, I shall only discuss the first two (cf. Rapaport 1976: 109ff for the third).

Consider (C.3c), above. To paraphrase Castañeda (1975b: 127), it is a statement in *oratio recta* about an M-object, but underlying it is a "tacit assumption" that that M-object is correlated with an actual object that, in turn, is thus "secondarily" referred to. The tacit assumption is brought out by our reference to actual objects via

quantification, and the secondary nature of this reference is brought out by the fact the actual object is referred to, not directly, as Oedipus's father is, but indirectly via quantification. Indeed, quantification is one of the alternative referential mechanisms we may employ to permit reference to actual objects (cf. Castañeda 1975b: 129; 1976b: 42, 72).

Yet there are other means. The definite description 'the present Queen of England' refers in a secondary way to the actual object who is the common Sein-correlate of the M-objects *the present Queen of England* and *the wife of the present Duke of Edinburgh.* For, that actual object exemplifies the property of being the present Queen of England. Which of the two items it refers to can only be determined by a consideration of the speaker, the time, and the context, and with an eye on minimizing ambiguity and maximizing truth (cf. Rapaport 1981). This is not an unusual extension of quantificational reference, for both are mechanisms of *reference by means of variable-binding operators.*

A special case of reference to actuals via definite descriptions occurs when *abbreviatory devices* are employed. The same sort of procedure is used in mathematics to deal with the actually infinite. No actual infinity is or can be exhibited, but only finite approximations thereto or parts thereof. We can "reach" an irrational number via a *name* (e.g., 'π'), a *description* (e.g., a rule for calculating a decimal expansion, or a ratio such as that of circumference to diameter),[3] or an *approximation* (e.g., 22/7); but each of these substitutes is finite.

One of the most common ways of referring to actual objects is by that special sort of abbreviation (though not (necessarily) a description !) known as a *proper name*. In general, I prefer to hold that proper names refer to M-objects, as do all singular referring expressions. Thus, depending on context, 'Oedipus' might refer to <being Oedipus>, <being named 'Oedipus'>, <being a character in Greek mythology who married his mother>, <being Greek, marrying his mother, killing his father, being a man>, etc.

However, there are circumstances in which proper names can be

3. Here, note that at least one of the members of ths ratio must itself be a finite representation of an irrational.

construed as referring to actual objects. Suppose that two of us have applied for a job at College F and that I introduce the name 'Guildenstern' for the M-object *the other job candidate at College F* and then explain that Guildenstern is (also) a job candidate at University I. Then 'Guildenstern' could refer to the original M-object, the M-object *the job candidate at University I,* the M-object *the job candidate at College F and University I*, or — and this the important case — to the actual object who is the Sein-correlate of all of these.

Thus, reference to actual objects may be had by means of *variable-binders* (such as quantifiers or definite-description operators), *abbreviatory devices*, and *proper names*. But it may be objected that in some cases, e.g., with ordinary perceptual objects, we *can* have *direct* access to the infinite actual object:

> if we conceive of the door ... as an individual thing which exemplifies numerous properties, but does not consist of them, then there is no strong reason to believe that we cannot perceive this individual thing (together with a few of its properties) in one act of perception. (Grossmann 1974b: 194.)

I do not want to get entangled in the difficult issue of the objects of perception, but it is important to pay attention to Grossmann's parenthetical remark. Perhaps we *can* perceive (have direct access to) the actual object — but not *as* infinite. We still must distinguish between the actual object that exemplifies an infinite number of properties and the finite object of our psychological act. We cannot see *all* of the properties exemplified by the actual object in one mental act (or any finite number of them).[4] If, in fact, I *do* see the actual object, then I am only seeing *one* thing, which exemplifies an infinite number of properties, although I am only aware of a finite subset of them. But I cannot think of an actual object *with* all of its properties.

4. Perhaps we can; but we don't perceive them all — i.e., we are not conscious of them all. From a neurophysiological point of view, our brains do not and cannot process all of the information our senses feed it. Indeed, this is almost logically impossible, else our senses would be transmitting "noise" rather than "information". Cf. McCulloch 1965: 74ff, 146f, 308f.

4.5. Sein-Correlation

> Even if it is ideas [*Vorstellungen*] that in the first instance "have" objects, what sort of a proper "having" is it, if that which the idea in question "has" can also at the same time quite well not exist? (Meinong 1910: 223-24.)

This is how Meinong stated the problem that the theory discussed here (and presented in more detail in Rapaport 1978) answers by saying that the "having" is a relation between a psychological event (in particular, its content) and an M-object, which itself always exists (i.e., is "had", is actual), but which may or may not be correlated with an(other) actual object.

Meinong did not provide a solution to this problem in his 1904 essay. However, Grossmann's solution (1974b: 109), which he attributes to Twardowski, appears to be such that the Meinong of 1904 would have found it acceptable. It is this: the relation (call it "intentionality") between psychological event and object is such that it can obtain even if one of its terms does not exist.

The two solutions, my modified Meinongian one (MM) and the Meinong-Twardowski-Grossmann solution (MTG), may be represented graphically as in Figure 2. In situation I, a psychological event "intends" an object that has Sein, and in II, it intends an object that lacks Sein. For MTG, '*x* intends *y*' is such that it can be true even if *y* does not exist; for MM, '*x* intends *y*' is such that if it is true, there may or may not be a *further* relation between *y* and some *z*. Put otherwise, if *y* does exist, then x intends$_{MGT}$ y iff x intends$_{MM}$ y & $\exists z(zSCy)$; and if *y* does not exist, then x intends$_{MGT}$ y iff x intends$_{MM}$ y & $\sim\exists z(zSCy)$.

That is, the mysterious holding of a relation with a term that may or may not exist can be explicated by means of *two* relations, one of which always holds and one of which sometimes does not. It is true that this theory requires two sorts of objects (Meinongian and actual) and two relations (albeit neither is "mysterious"), whereas the MGT-theory only requires one of each. Nevertheless, the MGT theory requires two *sorts* of relations, in general: "normal" ones, whose terms exist, and "mysterious" ones, whose terms need not exist. The MGT-object does too many things — its functions are not adequately separated for analysis (which is an *epistemological* task). Indeed, in the realm of epistemological ontology, one maxim ought to be to

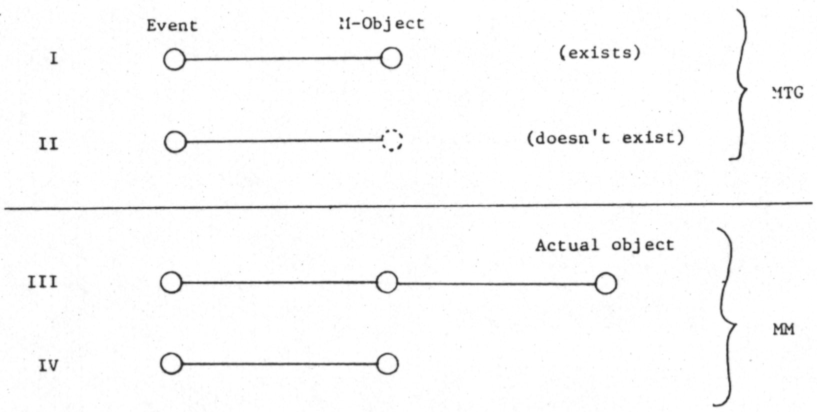


Figure 2. Modified Meinongian theory (MM)
vs.
Meinong-Twardowski-Grossmann theory (MTG)

provide one (epistemological, i.e., Meinongian) object per function. (This may be called the Principle of Luxury (or Plato's Beard), as opposed to the Principle of Poverty, viz., Ockham's Razor).

Is, though, the MGT-relation so mysterious? It might be argued that it is not different from a relation whose terms can lack, say, redness. But it *is* thus different, since a proponent of the MGT-therory does *not* claim that existence is a simple, first-order property like redness.

It might also be argued there are other such relations, e.g.,

(RI) The ghost *is the father of* Hamlet.
(RII) Shakespeare *is the creator of* Hamlet.
(RIII) p *or* not-p

But (RI) is odd, since the ghost isn't *actually* Hamlet's father: the relation of being-the-father-of is not exemplified. Similarly, a better account of (RII) can be given in the present theory, taking 'Hamlet', here, to name an M-object, say <being named 'Hamlet', being Prince of Denmark, being indecisive>, and interpreting (RII) along the lines of 'Shakespeare wrote a play about Hamlet'.

As for (RIII), which is Grossmann's example, I would prefer to interpret 'p' as either a proposition, a sentence, or — best — an objective, all of which exist, rather than as a state of affairs. (There are, of course, other alternatives: denying that 'or' is a relation, denying that it is a proposition-forming relation, claiming that the relation is "or-not", etc.) In general, then, the reply to this sort of argument is that each such relation is either best understood in terms of the two modes of predication or reducible to the "double-relation" technique.

Since the relation of Sein-correlation (SC) is at the core of this technique, let us examine it further. Because of the type-distinction, SC is irreflexive (this would be true even if actual objects formed a proper subset of infinite M-objects). Note that in general nothing follows from x_1SCy and x_2SCy when $x_1 \neq x_2$ (except that x_1 and x_2 exemplify some common property). However, if $x_1 = x_2$ (i.e., if the converse of SC is a function), then $\{x : x\mathrm{SC}y\}$ is a singleton. Suppose in that case that $y = \langle F \rangle$; then we may call the x such that xSCy "the F". Note that there is an ambiguity in 'the F'; for it may also be used to name an M-object, in which case failure of unique reference may be avoided by taking $\langle F \rangle$ as *the F* (e.g., the round square is <being round, being square>).[5]

On the other hand, if xSCy_1 and xSCy_2(where $y_1 \neq y_2$), then y_1 and y_2 may be said to have a common Sein-correlate: y_1 CSC y_2. CSC is reflexive within the realm of the M-objects with Sein, and it is symmetric. However, it is not transitive: For consider B = <being blue, being not-yellow>, R = <being rectangular>, and Y = <being yellow, being not-blue>. Now suppose I have on my desk two rectangular index cards, one entirely blue and the other entirely yellow. Then B(CSC)R and R(CSC)Y, but B(CSC)Y is necessarily false. It will not suffice to require the "extreme" terms to have logically compatible properties. For, let x = <having one horn>, y = <being an animal>, and z = <being equine>; then a narwhal is a common Sein-correlate of x and y, and a horse is a common Sein-correlate of y and z, but $\sim x$CSCz, there being no unicorns. The transitivity comes about when all Sein-correlates of the "middle" term are Sein-correlates of one of the "extremes":

$$\forall\alpha[\alpha\mathrm{SC}y \rightarrow \alpha\mathrm{SC}x] \rightarrow (x\mathrm{CSC}y \;\&\; y\mathrm{CSC}z \rightarrow .\ x\mathrm{CSC}z).$$

Finally, SC is a "material mode" counterpart of the "formal mode" relation of having a referent (*Bedeutung*): the word 'x' has an

5. I shall be more explicit on this ambiguity in Section 4.2.

actual object α as indirect referent iff the direct referent of 'x' viz., some M-object x, has α as Sein-correlate, i.e., iff x exists (has Sein).

4.6. Orayen's Argument.

I conclude this section by replying to an attempted refutation of Meinong in Orayen 1970.[6] I shall clarify some features of my theory by showing that Orayen's argument fails when interpreted in it.

First, Orayen claims (1970: 337) that Meinong's theory contains as a thesis,

(T_1') Every non-contradictory definite description denotes an object.

This is also valid for my theory. Next, (T_1') entails

(Lem 1) If 'F' and 'G' are predicates such that (a) the propositional function 'x is F' is consistent and (b) 'x is F' logically implies 'x is G', then 'the F is G' is true. (1970: 338)

But the acceptability of this depends on what 'the F' refers to. If it refers to a Sein-correlate of $\langle F \rangle$, and if 'is' is the "is" of exemplification, then (Lem 1) is all right. If it refers to $\langle F \rangle$, and if 'is' is the "is" of constituency, then either 'F' means "G and ...", in which case (Lem 1) holds, or else (b) is false and (Lem 1) meaningless. In any event, let us accept (Lem 1) and proceed.

Orayen next assumes (1970: 339)

(LL*) $\forall x \forall y[x = y \leftrightarrow \forall F[Fx \leftrightarrow Fy]]$,

which is acceptable in my theory for *both* modes of predication. Finally, (LL*) grounds the validity of

(RS) $a = b, Fa \,/\, \therefore Fb$. (1970: 339)

This is also all right.

Now comes the heart of his argument (1970: Let 'b' and 'F' be linguistic expressions such that (I) 'b' is a non-contradictory description, (II) 'F' is a predicate, and (III) 'b is F' is not self-contradictory. Therefore, '$\iota x[Fx \,\&\, x = b]$' is a non-contradictory definite description,

6. My reply follows the lines of a reply sent to Orayen by Castañeda; but since my two modes of predication differ from Castañeda's (see Rapaport 1978), the details of our replies are also different. See the postscript in the revised English translation of Orayen 1970.

as is '$\iota x[\bar{F}x \,\&\, x = b]$' (where '$\bar{F}$' names the property of being not-F). Hence, by (Lem 1) and (RS), we have the following seemingly valid arguments:

(1) $\iota x[Fx \,\&\, x = b] = b$, (2) $F\,\iota x[Fx \,\&\, x = b] \,/\, \therefore$ (3) Fb.
(α) $\iota x[\bar{F}x \,\&\, x = b] = b$, ($\beta$) $\bar{F}\,\iota x[\bar{F}x \,\&\, x = b] \,/\, \therefore$ (γ) $\bar{F}b$.

But (3) and (γ) yield

(δ) $Fb \,\&\, \bar{F}b$.

which appears to be a contradiction, thus refuting (T_1') and ultimately Meinong's theory.

Now, in my theory, (1)-(3) can be intrepreted in any of the following ways (for convenience, let 'B' name the property of being identical to b, and 'σ' the only Sein-correlate of $\langle F,B \rangle$ if there is one):

(1.1) $\langle F,B \rangle = b$		
(1.2) $B \text{ c } \langle F,B \rangle$	(2.2) $F \text{ c } \langle F,B \rangle$	(3.2) $F \text{ c } b$
(1.3) $\sigma \text{ ex } b$	(2.3) $\sigma \text{ ex } F$	(3.3) $b \text{ ex } F$
(1.4) $\sigma = b$.		

There are, then, only the following valid arguments corresponding to (1)-(3):

(A1) $\langle F,B \rangle = b,\ F \text{ c } \langle F,B \rangle \,/\, \therefore F \text{ c } b$
(A2) $\langle F,B \rangle = b,\ \sigma \text{ ex } F \,/\, \therefore F \text{ c } b$
(A3) $\sigma = b,\ F \text{ c } \langle F,B \rangle \,/\, \therefore b \text{ ex } F$
(A4) $\sigma = b,\ \sigma \text{ ex } F \,/\, \therefore b \text{ ex } F$.

In (A2), the conclusion follows directly from the first premise; in (A3), it follows from the definition of σ plus the first premise.

Corresponding to (α)-(γ), there are eight interpretations analogous to (1.1)-(3.3) with '$\bar{F}$' substituted for 'F', and four valid arguments ((B1)-(B4)) analogous to (A1)-(A4).

Corresponding to (δ), then, we have

(δAB1-2) $F \text{ c } b \,\&\, \bar{F} \text{ c } b$
(δAB3-4) $b \text{ ex } F \,\&\, b \text{ ex } \bar{F}$.

However, in each of these, there is an equivocation on 'b'. For (δAB1-2) is really:

$F \text{ c } \langle F,B \rangle \,\&\, \bar{F} \text{ c } \langle \bar{F},B \rangle$;

and in (δAB3-4), the first occurrence of 'b' names the Sein-correlate of $\langle F,B \rangle$, whereas the second occurrence names the only Sein-correlate of $\langle \bar{F},B \rangle$. In both cases, there is no contradiction. Moreover, (δ) itself is not a contradiction in my theory, for I could take $b = \langle F,\bar{F} \rangle$.

Thus, Orayen's objection fails, ultimately because of his failure to distinguish between the two modes of predication and the corresponding two types of objects.

4.7. Coherence and Pragmatism.

In the previous sections, I have presented what is essentially a correspondence theory of truth (in the guise of a correspondence theory of Sein). Distinguishing as I have between the actual world and the realm of Aussersein, it may be asked how one can know whether an M-object has a Sein-correlate if one only has direct "access" to the former. The question is especially pressing when it is formulated as a problem of false belief: How do we determine whether an objective has Sein (i.e., whether a judgment is true) without already having determined that a Sein-correlate exists (i.e., that the objective has Sein)?

To answer these questions, I suggest that an explanation of how and when thought is directed to that which exists is *not* an explanation of how thought "hits" a real thing as its target (cf. Castañeda 1972: 8). The target is *never* hit; but we can (to continue the metaphor) aim in the right direction, asymptotically approaching the bull's-eye.

In a Kantian sense, our beliefs about the actual world are filtered through the "rose-colored glasses" of M-objects. We use M-objects to construct a finite "model" of the infinite, actual world. At best, the world as we believe it to be is isomorphic to the actual world, and the nature of this isomorphism is embodied in the principle that if an M-object o has a Sein-correlate α, then F c o iff α ex F. But it is important to realize that the success of our theories about the actual world depends on the "left-to-right" direction of the equivalence (the other direction is trivial): We can have knowledge of the actual object, if the M-object has Sein; but it does not follow that we would know that we had such knowledge.[7]

Our knowledge about an actual object α can increase, or at least

7. A psychological act "as it were, looks 'through' the model", e.g., an objective, indirectly at the actual objects, e.g., states of affairs (Popovich 1962: 23). True belief is looking "through" an objective that is "isomorphic" to a state of affairs; false belief is looking "through" an objective that is not thus isomorphic and not realizing the difference.

our beliefs can become more and more "accurate", as we continually replace some M-object correlated with α by another one with more properties. We thus approach as a limit the complete and consistent M-object correlated with α (cf. Lindenfeld 1980: 162f). Our knowledge of states of affairs increases as we replace one objective by another. The former objective is, until replaced, our belief, which we act upon as if it had Sein. It is a hypothesis, which we replace when refuted, in good pragmatic fashion.

Thus, the problem of false belief is answered negatively: we *cannot* employ the correspondence theory of Sein as a means of *deciding* the existence of an objective. How, then, can we decide which objectives to believe? The answer is that we (should) believe those that "cohere" best with others — those that, e.g., are maximally consistent with others and have withstood refutation the longest. The correspondence theory is a *metaphysical* criterion of Sein; the coherence theory (or some version of one) is the *epistemological* criterion (cf. Grossmann 1974b: 138, and Grossmann 1976).

5. THE STRUCTURE OF MEINONGIAN OBJECTS.

5.1. Combinatorial Possibility.

Let us turn at last to an examination of the nature of M-objects and their relationship to their constituent properties. To this end, I introduce a concept that will serve at once as a ground for the notions of Aussersein and of the actuality of M-objects, and that also will be of help in the discussion of constituency.

Meinong (1904: 511) suggested that the mathematical theory of combinations could be placed "in the service of the theory of objects". To see how this might be done, let us consider a very weak sort of possiblity.

Recall the problem of Nichtsein-objectives: an objective such as *the round square lacks Sein* "suggests" or "implies" that there "is" a round square of which to deny existence. We may say, instead, that it makes the round square "plausible" or that the objective *the round square has Sein* is "plausible" (or "colorable"[8]). This notion of

8. "Seemingly valid or genuine"; *Webster's Ninth New Collegiate Dictionary* (Springfield, MA: Merriam-Webster, 1983): 261.

plausibility appears in other places, most notably when one is trying to prove a theorem: It sometimes happens that a problem that arises in the search for a proof is an "abstract" or "prima facie" (or "academic"; cf. Findlay 1963: 208) possibility, which needs to be examined and ruled out (as not being *logically* possible). Also, in animated films and trick photography, the situation in which, say, a cartoon character runs off a ledge yet doesn't fall has been termed "the plausible impossible". Related notions of possibility include Grossmann's "ontological" possibility, according to which "it is ... ontologically possible that [this pencil] ... is both red and not red" (1974b: 31); "conceptual" possibility (Rapaport 1976: 170); and Hintikka's "apparent" possibility (1969: 44 n.10). All of these notions are independent of logical possibility and, hence, have an intimate relation with the realm of M-objects, or possible objects of thought.

Each of these sorts of possibilities stems from an incomplete (or finite) description. Thus, for example, it is plausible that one can run off a ledge without falling, if one omits the law of gravity from one's description of the world. Similarly, "being round and square" or "being red and not red" may be considered as finite descriptions, each of which is, *qua description, logically* possible.

The point may be put differently: To give a description, one must employ names of properties. Given the totality of properties, one can speak of various combinations of them. These various *combinations* are all logically possible, and so we may say that any set of them is *combinatorially possible* (cf. Cohen 1966: 3 and Lewis 1972: 203). Since {being round, being square} is a combinatorially possible (c-possible) set of properties, we may treat it as an imcomplete description.

The strategy should now be obvious: I claim that M-objects are all c-possible. But without an embedding theory, such as the ACO(O′) theory, c-possibility is an empty concept. It is the skeleton — but also the essential structure — of a solution, not a solution proper.

5.2. C-Possibility, Aussersein, and M-Objects.

One might wish to characterize actual objects incompletely described as being none other than incomplete M-objects. Incomplete descriptions are c-possible; i.e., any set of properties is c-possible. It follows that all Soseins are c-possible, and, since there corresponds an M-object for

every Sosein (cf. Rapaport 1978, 1985a, and forthcoming), we see that all M-objects are c-possible. This includes the "impossible" ones (cf. Grossmann 1974b: 250 n.23) and the logically possible but non-existent ones such as ghosts (cf. Findlay 1963: 55). However, not all c-possible objects are possible objects of thought, for infinite M-objects are among the c-possibilia, yet are not "thinkable".

Nevertheless, since all objects of thought are M-objects, c-possibility can serve as the ground of the psychological possibility involved in being a possible object of thought. In particular, the possible objects of thought are precisely the finite c-possibilia. This allows the following crucial move: Since Meinong (1904: 492) identified being a possible object of thought with "givenness", the latter can be explicated in terms of c-possibility, thus providing an alternative way out of the problem that led to Quasisein (cf. 1904: 492).

With this confluence of givenness, being a possible object of thought, and c-possibility, we can move swiftly to encompass Aussersein, too. The independence of c-possibility from logical possibility places c-possibilia (i.e., M-objects) far "beyond Sein and Nichtsein" and, hence, in the realm of Aussersein (cf. Grossmann 1974b: 167). We have now the fundamental interpretation of Aussersein — as the domain of c-possibilia (and, hence, of M-objects).[9] Moreover, we can allow the non-committal quantifiers to range over this domain.[10]

Further, the identification just made of the possible objects of thought with the finite c-possibilia is none other than the Principle of Freedom of Assumption (cf. Rapaport 1978, 1985a, and forthcoming). According to this principle, we can choose from the realm of

9. M-objectives are also ausserseiend. Indeed, they are combinations of M-objects with properties and are, hence, all c-possible. Aussersein can now be thought of as a "space" of "points", each of which represents some c-possible M-objectum or objective, and some of which are "occupied" by actual objects or states of affairs. Cf. Findlay 1963: 112.

10. Of course, we need either, in addition, a quantifier to range over actual objects, or else a quantifier which ranges indiscriminately over the union of the domains of Sein and Aussersein; the latter is (also) non-committal. Cf. Rapaport 1976 ("Appendix: Towards a Logic of M-objects").

Aussersein (i.e., of c-possibilia) an M-object that has any given property. Among the various choice-functions is one we may call '*the*'. The existence of such functions is guaranteed by the following non-trivial identity criterion for M-objects (which supplies what Lambert 1974: 313 claimed did not exist; cf. Routley 1976):

$$o_1 = o_2 \text{ iff } \forall F[F \text{ c } o_1 \leftrightarrow F \text{ c } o_2].$$

Noting that *the golden mountain* = <being golden, being a mountain>, we may define *the* as the function from the class, S, of all c-possible Soseins (i.e., sets of properties) to the realm A of Aussersein (i.e., all M-objects) such that for every $s \in S$, there is a unique $o \in S$, such that $o = the(s)$. In particular, where $s = \{F,G,H\}$, $the(s) =$ $<F,G,H>$. For example, *the* ({being round, being square}) = <being round, being square> = the round square. (Note that *the* is an isomorphism.)

There is, of course, another use of 'the' in English, corresponding to a function from sets of properties to *actual* objects. This function, call it *the**, is only a *partial* function; e.g., *the** ({being a present King of France}) is undefined. *The** is not especially important from the epistemological point of view (although of course it is *metaphysically* important), since it is isomorphic to *the* when its domain is restricted to the set of all Soseins whose M-objects have Sein.[11]

The present interpretation suggests that nothing is c-impossible (cf. the discussion of Nichtquasisein, Sect. 3.2, above). That is, no combination of properties is such that we cannot think about M-objects having them. To say otherwise would be to put a limitation on the nature of thought. There may be objects that we are incapable of thinking about, either for physical reasons or because we do not yet have the required properties. Nevertheless, such properties exist, and therefore they can enter into possible combinations. Again, a c-impossible object would have to be constituted by properties not combinable in thought. Nevertheless, even if there were such properties that cognitive agents *could* not think about, they would still be c-possible in the mathematical sense and, hence, ausserseiend.

11. Castañeda (1975a: 139) and Parsons (1980: 111-20) have similar machinery; cf. Rapaport 1978, 1985b. Another mechanism for choice is the 1-many relation $a(n)$, with the same domain and range as *the*. Here, $a(n)(s) \in \{o \in A : (\forall F \in s)[F \text{c} o]\}$. Thus, to revert to the English reading, <round, square, pink> is a round square.

5.3. The Structure of Constituency.

Figure 3 represents the relationships obtaining among actual and M-objects. Exemplification connects actual objects (and M-objects *qua* actual) with properties. Thus, while it is the case that if John thinks of the golden mountain, then $<G,M>$ ex being-thought-of-by-John, in general <being the Calder stabile in Bloomington> (= $<C>$) does not exemplify being red (R), even though the (actual) Calder stabile in Bloomington is red. On the present view, there is an actual object Sein-correlated with $<C>$, and *it* exemplifies R. There is no direct relationship between $<C>$ and R,[12] only an *indirect* one. M-objects can be related to properties either *directly* via constituency or *indirectly* via SC together with ex. This "togetherness" is not reducible to constituency, since the truth of '$\exists\alpha(\alpha \text{SC} <C> \,\&\, \alpha \text{ ex } R)$' does not entail that R c $<C>$. Also, the fact that in *some* cases (e.g., 'the tallest mountain is tall') the composition of the converse of SC with ex *is* equivalent to c does not entail that c is redundant, since there are also cases of c that are *not* cases of the composition of SC-converse with ex (e.g., 'the golden mountain is golden').

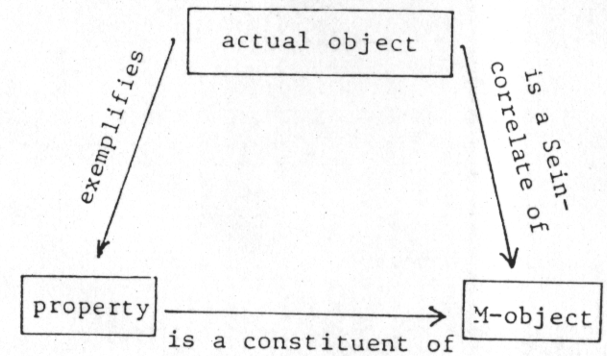


Figure 3: The relationships among actual objects, M-objects, and properties

12. This is as it should be. Since M-objects are not parts of their actual-object correlates (if any), but are, rather, "projections" of thoughts (into the world), it follows that a reasonable materialistic interpretation of them is as "brain states", sequences of neuron firings, or the like. And these are, in general, not (e.g.) red. Cf. Rapaport 1979: 79.

We have knowledge about actual objects and the properties they exemplify by means of M-objects and the properties that constitute them. Whether or not exemplification is merely constituency, we in fact only think of actual objects *as* complexes of properties, because we think of them *via* M-objects that *are* such complexes. This section examines the nature of this complex.

There is one central criterion to which any analysis of the structure of objecta must be adequate. This is the fundamental distinction between a property, say F, and that which has the property (i.e., the subject of which the property is predicated), say $<F>$. In general, this is more of a distinction in function than in kind, since on many metaphysical views properties may themselves be treated as subjects of predication.

When presented with several properties, a mind can have either an idea of a single entity (an individual, if you will) or several ideas, one of each property. In the first case, the object of the idea is an objectum constituted by all of those properties; it is, in a sense, their joint instantiation (with respect to the constituency mode of predication). This illustrates the ability of the mind to "objectify" or "entify" a collection of properties — to be able to refer by means of noun phrases. Any attempt to exhibit the structure of an M-object is an attempt to represent this basic mental operation. Let us look at several such theories.

The question for which we seek an answer is this: Given a set of properties, i.e., a Sosein, what is the structure of the objectum constituted by those properties, i.e., having Sosein? The first possibility that offers itself is based on the fact that an object is determined by all of its subsisting Sosein-objectives (cf. Findlay 1963: 102). A natural interpretion of this is that an object, x, is the set of all subsisting Sosein-objectives that are about x. The difficulty with this is its apparent circularity, together with the fact that it does not provide an effective method for describing the object.

A somewhat more helpful answer is to view the act-component, A, of a psychological experience as a function from the content-element, C, to an object, O; consequently, O could be defined as $\iota x[A^{-1}(x) = C]$. That is, the object of a psychological experience with content C is the unique item to which C is directed. This is reminiscent of the techinques for introducing mathematical entities by "unique description", as, e.g., in the case of -1 defined as $\iota x[x + 1 = 0]$, i.e., as the

unique item satisfying a certain property. (Compare, too, Duns Scotus's description of haecceity as the unique thing that must have certain properties stemming from its role as individuator, but that is not otherwise characterized — or clarified). We may, thus, consider the round square as $\iota x[x$ is round and x is square], which I have chosen to represent as $<R,S>$ (cf. Orayen 1970: 334). In general, then, given the Sosein-objective *o is F*, we abstract from it the objectum $\iota x[x$ is $F]$ (or $\iota x[F \text{ c } x]$), written $<F>$; given Sosein objectives *o is* F_1,..., *o is* F_n, we abstract $\iota x[x$ is F_1 and ... and x is $F_n]$, or $<F_1,..., F_n>$.

This appears to be essentially the solution proposed by Meinong's student Ernst Mally.[13] Mally spoke of "determinations" (*Bestimmungen*), similar to Russell's propositional functions, each of which determines an object, but only some of which are "fulfillable" (*erfüllbar*) (cf. Findlay 1963: 111, 183; and Weingartner 1972: 133-34). The difficulty with his theory is, first, that Mally rejects the Principle of Independence of Sosein from Sein (cf. Findlay 1963: 110; Lambert 1984; Rapaport 1984b), and second, it (like Scotus's haecceity) leaves unanswered the question of what *is* that x that satisfies x is F? What sort of entity is it?

A plausible solution is that an object is the fusion, Fu, of the set of its properties, i.e., of its Sosein, in the sense of Leonard and Goodman 1940. Thus, we might take the object $<F_1,..., F_n>$ to be $F_1 + ... + F_n$.[14] There are, unfortunately, several problems wih this approach. First, since the sum of individuals is again an individual, there is the possibility that a sum of properties is another property, rather than an object. This in turn raises the question of the relation of a complex property such as red-and-round (if there are such things) to the sum, red + round. Most seriously, however, is the fact that Fu$\{ F \} = F$, which violates the requirement that $<F> \neq F$. Nevertheless, it might turn out that those theses of the calculus of individuals that depend upon the identification of F with Fu$\{F\}$ are not crucial to Meinongian theories; or, less happily, it might be possible

13. Cf., too, Castañeda's theory (1975a: 139).

14. A similar technique is developed in Goodman 1973: 49-57 and Yoes 1974. The fusion operator, Fu, also appears capable of being an interpretation of the concretizing operator, c, of Castañeda 1972: 11.

to revise the calculus so as to provide some new individual, distinct from F, to serve as Fu$\{F\}$. I leave these last two conjectures for future investigation.[15]

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