



Den hebräischen Text aus Sefer_Yetzirah_Kaplan.pdf, (Seite 8 von 25 (2:6))
kopieren, aber die letzte Zeile des hebr. Textes dort weglassen

Hier auf **hebräisch**: Sefer ha-Yetzirah

*He formed substance out of chaos
and made nonexistence into existence*

*He carved great pillars from air
that cannot be grasped.*

This is a sign

[Alef with them all, and all of them with Alef]

*He foresees, transforms and makes
all that is formed and all that is spoken:
one Name.*

Sefer ha-Yetzirah*

* Cf. Sefer Yetzirah – The Book of Creation, (ed. Aryeh Kaplan), York Beach ME, Boston MA, 1997, p 131; the English translation is by Aryeh Kaplan.

Names and Objects

Outlines of an Essentialist Nominalism

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(version: draft, 24.08.2013)

'What's in a name?'^{1 2}

Sing. Terms: Fire, Red etc.

Gen. Terms : Atom, Table, Flower etc.

*To be the value of a bound variable, or not to be:
that is not the question.*³

¹ William Shakespeare, Romeo and Juliet, Act 2, Scene 2

² Due to our nominalist and also Meinongian convictions we use the term 'name' here for singular terms, mass terms, general terms and of course proper names of individuals as well.

³ Cf. Willard Van Orman Quine, On What There Is, in: Willard Van Orman Quine, From a Logical Point of View, pp 1-19, 13/14 ff, New York, Hagerstown, San Francisco, London 1963; see also: http://en.wikisource.org/wiki/On_What_There_Is. Cf. also William Shakespeare, Hamlet, Act 3, Scene 1.

Quine's settling of ontology in logic became its popular expression in the – albeit not original, but later condensed formulated – famous line: "To be is to be the value of a bound variable", which correctly paraphrases the main proposition of his essay "On What There Is". This proposition however is also quite a sophisticated and refined version of the Platonist (over)charge of logic, which dates back to the less subtle attempts of Frege.

1 Introduction: The myth of a link between logical extension and existence – baseless

In this paper I will try to show, that the philosophy of the 20th century took a wrong turn, when – following the lead of Frege, Russell, the Wittgenstein of the ‘Tractatus’, Carnap, Quine and all their collaborators and followers – it became the predominant conviction that (– in particular – formal) language and modern (extensional) logic would prescribe the formal Aufbau or structure of any meaningful ontology or world. An essential prerequisite for that view was the supposed extensional setup of logic, which inevitably came at the expense of having to imply a – how watered down ever – sort of Realism or Platonism with respect to the extension of general terms. The foundation of this was laid in Frege’s concept of *Bedeutung* (reference), which supposed that language and logic somehow mysteriously would relate to extra linguistic facts and objects. I hold this view by no means for being warranted. Language and logic rather are ways and instruments of communication and social interaction in general than being blueprints or structures of allegedly implied ontologies.

The right turn philosophy should have taken instead, would have – in my view – been to follow Meinong’s achievement in laying the foundation of any ontology in his ‘Theory of Objects’.⁴ Within this essentially intensional approach all the puzzles of what reference could be, if anything at all, become naturally *bedeutungslos*.

Thus I will try to show, that the significance of Meinong’s ‘Theory of Objects’ or ‘Objectology’, as I will refer to it in the following, has a much wider scope than the usually mentioned bizarre nonexistent objects like the Golden Mountain, unicorns or the square circle. It rather relates to all general terms, singular terms, mass terms,

I disagree totally with that triple bind of language, logic and ontology and hold that Wittgenstein in his ‘Philosophical Investigations’ successfully decoupled language from the others and that Meinong showed a way of successfully analyzing ontology as a special case of the ‘Theory of Objects’ starting by distinguishing nonexistent and existent objects.

Btw. I am well aware, that Quine wasn’t a Platonist at heart at all. Quite on the contrary he – for a long time – strived to come to a nominalist position, in particular in collaboration with Nelson Goodman. But in the end Quine was too much an elaborated logician to withstand the seductive ingredients of Set Theory and modern logical, i.e. Fregean, semantics. Naturalizing epistemology and a somewhat halfhearted constructivism however provide no remedy for the spectres induced by the sweet poison of ‘Platonism in technical disguise’.

⁴ With some reservation also Husserl’s somewhat comparable endeavour in his ‘Logische Untersuchungen’ and ‘Einleitung in die Phänomenologie ...’ has to be mentioned in that context.

i.e. to probably all terms, which can function as a noun, with only some specialities with respect to certain proper names (of individuals). And in particular it relates to theoretical terms or scientific concepts.

The myth of extensionalism – baseless

The set theoretically based formal logic as the still prevailing basis for formalized languages should better be replaced by mereology, i.e. a mereological calculus, perhaps in an appropriate combination with a Free Logic, at least if one still would hold up the claim that such languages should carry any ontological significance and therefore allow the introduction of an explicit strong predicate of existence. Yet it is indeed questionable, if one should make such a claim at all, since a short look into the history of science proves, that ontological commitment never had been anything else than the other side of the coin of ontological opportunism. The worlds of theories anyway become as impetuously repudiated and abandoned as they become created.

Actually existing objects, i.e. individuals, cannot be members or elements of an abstract object, like for example a set. To claim the opposite is not just – albeit abundant and regular practice – obviously nonsense, but also technically a categorial fallacy.

2 Haecceic Essence

To illustrate the use of the term ‘essence’ in this paper it might be helpful to go back in the history of philosophy to an era, when this notion had been in full flourish.

In scholastic philosophy essence (or in Latin: *essentia*) had been just another word for quiddity (or in Latin: *quidditas*), i.e. the ‘whatness’ of a thing or a person or – in

general – an object. Essence or quiddity then relates to the question: ‘what is the special feature (*differentia specifica*) of that kind of things or objects, to which the respective thing or object belongs, compared with other kinds of things or objects, to which the respective thing or object does not belong’.

In modern phrases this could be described as the specification or allocation of an object within a comprehensive classificatory ontological scheme. Therefore quiddity immediately entails some unwelcome ontological presuppositions.

The classificatory scheme, in which the various quiddities are embedded, and which serves as a means for somehow ‘triangulating’ the respective single ones, is represented by (mostly a hierarchy of) general terms.

And thus it also represents a hierarchy of the living-dead abstractions of Platonist provenience, which includes all the predecessors of the ‘nonexistent yet nevertheless preexisting’ abstract objects⁵ based on set theoretical metaphysics. The more humble general terms of ordinary language then – supported by that applied set theory called ‘semantics’ – obfuscate the world with linguistically bred zombies, and cannot tell the difference, if they exist or not.

Once upon a time they called such overdetermined semantic quibble ‘quidditas’.

But then another tale will always be there to be told.

In sharpest contrast to the notion of quiddity stood the notion of haecceity (or in Latin: *haecceitas*) introduced by Duns Scotus, i.e. the ‘thisness’ of a thing or a person or – in general – an object. Haecceity then relates to the individuality or particularity of an individual thing or object.

Haecceity is also sometimes referred to as ‘essence’, yet how meaningful that ever may have been in the context of scholastic philosophy it – at least – necessitates a distinctively different meaning of ‘essence’ compared with ‘essence’ as another term for quiddity.

In particular can haecceity possibly be seen as the most fine-grained resolution of the quiddities of things or objects. Moreover ‘haecceity’ was a central combat term of medieval nominalists (like William of Ockham), where the central argument of them eventually was, that there wasn’t anything like (a substantial) quiddity or essence.

“In contrast to more modern accounts of the problem of individuation, Scotus holds that the haecceity explains more than just the distinction of one substance from another. According to Scotus, the fact that individual substances cannot be instantiated also requires explaining.

At issue is something like this: what explains the fact that (e.g) a clone of me is not an instance of me, but an instance of human nature? Haecceities, in addition to explaining distinction, also explain non-instantiability.”⁶

⁵ Cf. for a concise introduction in this topic Edward N. Zalta, *Abstract Objects*, Dordrecht/Boston/Lancaster 1983

⁶ *Medieval Theories of Haecceity* (pdf version) from the Fall 2010 Edition of the Stanford

Unfortunately the question, if and perhaps how haecceity might explain the non-instantiability of individual things, persons or – in general – objects rather obfuscates the relevance and meaning of haecceity as essence than to elucidate it. Quite on the contrary to the above cited argument an appropriate analysis will not only find, that haecceity is a perfect concept to explain instantiability and how it is to be understood, but also, why and how haecceity is the proper notion of essence. Let me now show the shortcomings in the above cited presentation of the argument of Duns Scotus concerning haecceity and non-instantiability.

Firstly it seems to tacitly imply that the individuals in question are exclusively existent or spatio-temporal objects. That is, in my view, utterly unwarranted. Haecceity relates to all objects, existent ones as well as nonexistent ones. Secondly, and more important, is the fact, that the question, if a double of me (or any other person or object) is an instantiation of me (or the respective other persons or objects), is clearly put in the wrong way, since there simply are no individuals, which would or could be instantiations of another individual.

Me and all possible proper doubles of me in all possible worlds (with all relative states of them) and also any existent or nonexistent object and all its proper doubles in all possible worlds (with all relative states of them) are solely instantiations of the respectively one and the same or identical haecceic essence evoked and designated by its name(s). I.e. haecceity can only meaningful be read as ‘essence’ in a strictly nominalistic context, and here it designates the individuality of an individual by its identity in all its instantiations.

This identity is commonly known as transworld identity. This ‘essence by (transworld) identity’ becomes in particular graphic in the case of individuals, which are existent objects.⁷ Here haecceity marks – with respect to the individuality of a respective individual – the only possible difference to its designation by the particularization of its spatio-temporal existence. In other words: haecceity provides a designation of the ‘thisness’ of an (existent) individual, without having to resort to (the characteristics of) its existence.

Ruth Barcan Marcus, Kripke possible worlds relative states, vulgo (and in my view misleadingly aka) ‘Many Worlds’ interpretation of quantum mechanics

Encyclopedia of Philosophy <http://plato.stanford.edu/archives/fall2010/entries/medieval-haecceity/>, p 1

⁷ To avoid misunderstandings: all existent objects are individuals, but by no means all individuals are existent objects.

That the scholastic philosophers couldn't bring forth such an idea of haecceic essence is certainly forgivable for historical reasons, since history, including the history of thoughts, tends to take – at least – some time.

Thus the concept of (haecceic) essence is – sit venia verbo – essential in fending off the naturalistic limitations of mereological nihilism, and, by this, it is as well essential for the entire project of information monism.

As a resume of this terminological excursion I propose, that haecceic essence entirely substitutes, what usually had been seen to be explained by quiddity and thus makes everything obsolete once associated with quiddity – including its modern descendants.

3 Names of mereological sums instead of abstraction-loaded semantics or 'general terms'

gegen Quine 'WaO' pp176 ff – 190; trying to argue for just the opposite, namely the substitution of general terms by names not with platonist presumptions but with nominalist rigour and a corresponding foundation in mathematics.

There are two different kinds of mereological sums which play slightly different roles in the substitution of general terms.

At first it should be clear that all mereological sums by their very nature to be sums or collections are strictly nonexistent objects for the reason that one cannot directly or indirectly interact with sums or collections, notwithstanding the fact that it may make a difference if one has to struggle with only one or many individuals of whatever kind. The interaction however will always be with the various single individuals, never with their sum.

But then there still are two different kinds of mereological sums and even when both of them are nonexistent objects one has a spatio-temporal extension. These are the ones of which we justifiedly can assume that their proper parts, i.e. the individuals they are made of, are actually existing objects. Then these mereological sums obviously have a spatio-temporal extension, i.e. they come up and vanish, due and in accordance to that of their actually existing parts. Despite them having spatio-temporal extensions these mereological sums themselves are no actually existing objects, since one cannot interact with them.

Then there are of course also arbitrarily many mereological sums which consists of individuals, which themselves are nonexistent objects (e.g. unicorns, centaurs,

Rutherfordian atoms, particles of the Phlogiston, perhaps Higgs bosons, but the latter may turn out different, and so on). And therefore these mereological sums have no more of spatio-temporal extensions than their nonexistent parts, namely none.

General terms have to be parsed and substituted for names, where 'names' are meant to be the names of mereological sums. And – as names in general – the names of mereological sums are very much alike singular terms. The respective individuals, which add up to these mereological sums then are their proper parts. The mereological sums, which themselves are Meinongian nonexistent objects, then are designated or called by their respective names. If someone may wonder how actually existing individuals can be proper parts of a nonexistent object as a mereological sum one should look at such examples as 'ensembles' in many sciences or 'population' as a special case of an ensemble in biology. Ensembles and populations are nonexistent objects in the same sense as mereological sums, of which they anyway are only special cases. Ensembles and populations or any other concrete collection then are as any mereological sum made up by a certain amount or number of actually existing individuals and when these individuals eventually all should vanish then the respective concrete collections or mereological sums will happen to 'vanish' as well. Speaking of 'vanish' here means that concrete collections or mereological sums of actually existing objects have – in sharp contrast to abstract objects as sets – spatio-temporal extensions, yet still they are no actually existing objects themselves since one cannot actually interact with them – even if an opposite view of that fact is frequently hold.

our approach arguing for the substitution of general terms by names could be, yet not too correctly, paraphrased as something similar to a causal theory of reference albeit without causality and without reference. But what our view has in common with the latter is the supposed rigidity with which names designate or signify the respective objects, they are names of. But then again our concept of an object couldn't more differ than to that, what the proponents of a causal theory of

reference once had in mind. The objects we have in mind would in no sense be of a whatever diluted empiric making, not being real things out there nor even exist at all. The objects we have in mind are Meinongian nonexistent objects and we hold that what normally is referred to as 'general terms' are in fact names of such Meinongian nonexistent objects.

But now, after that barrage of differences to the original causal theory of reference, somehow inevitably the one point we have in common comes to light: the names of the nonexistent objects, which are usually seen to be concepts and general terms anyway are names of an invariant, intrinsic and signifying nature, which then signifies respective occurrences as being instantiations of that nature or object. Traditionally such invariant, intrinsic and signifying nature goes as the essence of an object. We however hold that the nonexistent objects themselves *are* the essences, with respect to which related individuals become just this: instantiations of those objects.

In particular in science theoretical concepts are names of nonexistent, somehow abstract-iconic objects, objects which are paradigmatic of or embodying the quintessence of (a set of) respective instantiations.

The only existing objects are individuals, i.e. objects, with which one can possibly actually interact, and individuals cannot be and thus are no objects of proper (i.e. axiomatic and preferably formalized) science at all.

(Physical space and time do not exist independently of individuals, and that even in a twofold sense. On the one hand physical space and time are supervenient (in the sense of Leibniz relational concepts of space and time) on individuals, which are appropriate pregeometric entities and on the other hand they are immanent of another kind of individuals, which are called universes. These various individuals themselves are of course instantiations or actualizations of respective nonexistent objects of science)

Es gibt keine Einzeldinge, instantiationen, die wissenschaftliche Objekte wären. Die theoretischen Begriffe relate exclusively to the abstract-iconic essence of nonexistent objects.

We are able to apprehend individuals as being (possible) instantiations or actualizations of a nonexistent object, the name of which then is the designation of an assumed essence of that apprehended individual, but not a name of that individual.

in ordinary language general terms play – already grammatically – a role seemingly implying informal or rough ontologies, but in fact neither a proper ontology nor objectology can be founded in or based on ordinary language
hier mit Wittgenstein II gegen Quine

In the case of some singular terms, as for example ‘fire’, and in particular in the case of mass terms like ‘water’, ‘sugar’ etc. we find the interesting fact, that here the name(s) of the particular occurrences or instances of such existing objects and the name of that existing object as such, i.e. ‘all (or the entirety) of fire in the world (or the whole universe)’ or ‘all (or the entirety) of water in the world (or the whole universe)’ are essentially the same name, only distinct with respect to different spatio-temporal determinations (or in case of the respective entirety no particular determination at all).

In the case of mass terms the particular occurrences of existing objects like for example water are even – in a mereological (or any other) perspective – *proper parts* of the entire existing object of (all) water in the world (or the universe or even the multiverse – provided it exists).

That is not in the same sense the case with respect to abstract singular terms like for example ‘length’, ‘color’, ‘redness’ etc.

Water occurrences and water at all are – at least supposed to be – of the same stuff.

Length instances and colour instances are not of the same stuff as length as such or colour as such and that not at least for the reason that none of them are stuff at all anyway.

Now, if, as we’ve seen, the single water occurrences are existing objects as well as the entirety of all water, where ever it may exist, is an existing object, and a nice example of a meaningful mereological composition as well, what’s then about a nonexistent object, somehow related to all these existing ones? Is there any at all? Now, H₂O as an object correlated to a theoretical physico-chemical concept is such a nonexistent object, for the simple reason, that we cannot and do not interact with such objects, which are just correlations of scientific concepts, neither with

electrons, nor atoms nor with molecules as H₂O and also not with planets, galaxies and so on. Of course we can and do interact with individuals, which we regard as being instantiations of such nonexisting objects of science, i.e. which we regard as being existing objects.

Yet then there is still a problem left, namely that the existing objects of the entirety of all water as well as all the single water occurrences simply do not consist of some amount of individuals, which again we regard to be instantiations of H₂O-molecules. We just suppose that in most cases existing objects which are such individuals (namely instantiations of H₂O-molecules) make up the largest part of the existing water objects. But that's not a necessary condition, just a reasonable supposition. The existing water objects with which can and do interact are not determined by having to be composed of such individual instantiations of H₂O-molecules, water could be composed of an entirely different stuff as long as we would regard it as being water, perhaps for being equivalent to water in appearance, usefulness and any other functions within our interactions with that stuff. Should we then find out about that difference we simply would have two kinds of water which still together would be parts of that existing object which is the entirety of water, with which we potentially interact.

If in experiments it is said that someone observes a hydrogen atom H – or in a perhaps more spectacular case – an anti-hydrogen atom in an appropriate trap of electric and magnetic fields (Penningfalle !!) and then makes the intended tests and experiments and also documents this by various pictures it seems there is no doubt that the physicists which performed these experiments interacted most intensively with a proper object of science. And for all practical purposes perfectly justified these physicist themselves will be convinced that they actually did exactly this: interacted with an object of science. Yet this was not the case. The point which matters here with respect to objectologically correct semantics is the 'a' in 'a hydrogen atom'. That is to say, it is not (a nonexisting scientific object, namely) *the* hydrogen atom, with which the observer, experimentalists, technicians and physicists interact, but it is a particular (existing object, namely an) individual called 'hydrogen atom', with which they interact.

This may sound a bit (or a lot) far-fetched at first, but it becomes much easier to comprehend, when one sees, that it is exactly the same as in the case, where we have a dog named 'Dog'. The only difference between the case where a hydrogen atom becomes called 'hydrogen atom' and the case where a dog becomes called 'Dog' lies in the fact that probably all hydrogen atoms are usually called 'hydrogen atom', when they become designated in a particular, e.g. experimental, situation and certainly most dogs are not called 'Dog' – some however are.

Our stance with regard to the principle of free (or indefinite) mereological composability:

There are ??? kinds of objects:

Naturally generated objects (toposic, mereotopological etc.)

Locally contiguous objects (like heaps, mountains or artefacts) and/or

Locally functional integrated objects (like systems)

Locally contiguous objects can be proper parts of locally functional integrated objects and vice versa. This possible as well as usual mutual inclusion of locally contiguous and locally functional integrated objects is characteristic for internally hierarchical-layered objects as for example organisms.

4 Mereology and Mistakes

Mereological wholes are mereological sums where all parts of the respective mereological sum are either directly contiguous to each other or continuously, i.e. uninterruptedly connected by subsequences of directly contiguous parts.

mereological nihilism, mereological essentialism and mereological 4-dimensionality have a severe lack of understanding in common of what makes up an object, which is either a mereological sum in general or the particular form of a mereological sum, which is a mereological whole. The reason for that lack of understanding is that in these approaches objects are mistaken for things.

But objects are no things.

In the case of mereology mistaking objects, like mereological sums or mereological wholes, for things may be due to seeming concreteness of these individuals and the not less concrete robustness or solidity of its conceptually fundamental part-whole relation. But taking these individual parts or wholes for things is an unwarranted mistaking of a nominalistic feature for a naturalistic one.

And any naturalistic account of an individual will necessarily fail. It will fail because an individual is signified or rigidly designated by relating to its essence and not by any asserted definite description.

The reason for this is that a naturalistic description of an individual inevitably leads to an overdetermination of the individual in question, since any aspect of any aspect, any variation of any partial description of any partial aspect of that individual matters not less than any other aspect or description and not less than any variation or change in any of these aspects.

This overdetermination, which becomes apparent as the emptiness and ineffectiveness of any such attempt of a naturalistic description of an individual, only reveals the underdetermination of the theories of nature, which provide the means for such attempts. The result of any such attempt then only can be a complete dissolution of the individual in question in more and more general environments and more and more insignificant particularities. Instead of grasping the individuality of some things it turns them into becoming anything, i.e. instead of giving an image of the individual a naturalistic description of it never produces anything else than a blur.

Objects on the contrary always necessarily relate to the essence of the individuals they stand for, i.e. the invariant aspect of the generic identity of the individuals in question, i.e. their characteristic individual signification. This characteristic individual signification relates to the invariant generic identity of the entire object, i.e. any existent object has a beginning and an end in time, and for the entire duration of their existence existent objects are, due to their invariant generic identity, continuously one and the same object regardless of the changing composition and the varying expression of the formation of the things these objects are associated with. But existent objects neither are things nor are they abstractions of things. They rather are the objectifications of the immanent essences of the things they are associated with. This becomes apparent and evident by the congruence of the generic identity of an existent object with its transworld identity in a possible world semantics or appropriate relative quantum information state ansatz.

And all three positions, mereological nihilism, mereological essentialism and mereological 4-dimensionality, also try to dissolve the mereological objects into an

allegedly more encompassing underlying ‘environment’, namely into a more (mereological nihilism) or less (mereological essentialism, mereological 4-dimensionality) fundamental process.

But no process ever can be a fundamental or primordial reality with respect to objects, since there simply cannot ever be a process, which is not a process of altering, changing, moving or varying objects or things.

Mereological 4-dimensionality: a 4d-Socrates is the mereological sum of all 3d-Socrates-instants along the space-time line of the 4d-Socrates, and it is the contiguity or the contiguous nexus of all of these 3d-Socrates-instants, which makes up not only the genidentity of Socrates, but also provides the base and matrix for (identifying the) essence of Socrates. Essentially – so to speak – the essence of any (formerly or actually) existing objects is that, what remains invariant in the course of their respective space-time lines. All the different 3d-Socrates-instants are not just realizations of crude facts, but they are actualizations of possible real Socrates-(instants), i.e. a selection of one single actualized instant from all possible worlds with 3d-Socrates-instants as proper parts.

294) Bis der Schöpfer die Welt erschuf, war Sein Name darin verborgen, und Er und Sein Name, der darin verborgen ist, waren eins. Sein Name ist Malchut, die – vor der Schöpfung – in Ejn Sof eingeschlossen und verborgen war, ohne irgendeine Enthüllung oder Erkenntnis. Zu dieser Zeit waren Er und Sein Name, der darin verborgen ist, eins. Nichts wurde enthüllt, bis Er wünschte

~~die Welt zu erschaffen. Er schrieb und bildete Welten, aber sie waren nicht (aufrecht) zu erhalten und wurden zerstört. Das heißt, die Welten, die zu der Zeit von Zimzum Alef aus Malchut hervorkamen – genannt „Welten von Tohu,“ in denen der Zerbruch der Gefäße war, was die Zerstörung dieser Welten ist.~~

~~Wir lernen über sie, dass am Anfang die Welt in Midat ha Din erschaffen wurde, Malchut de Zimzum Alef, welche Midat ha Din genannt wird. Er sah, dass die Welt nicht existierte – dass sie zerstört wurden – Er verband mit ihr Midat ha Rachamim. Das heißt, der Schöpfer, Bina, wurde in eine Umhüllung von Licht gehüllt und erschuf die Welt, das heißt erhöhte Malchut zu ihr. Deswegen verminderte sich ihr Licht zu WaK, „umhülltes Licht“ genannt, denn dann wurde Midat ha Din, Malchut, mit Midat ha Rachamim, Bina, verbunden, wodurch die Welt existierte.~~

Quelle: <http://www.kabbalah.info/de/der-sohar/sohar-texte>
(ger_sohar_bereshit_232_bis_313.doc)

‘Before the Creator created the world, His name had been concealed within it, and the names of all creatures and all the things in and above the worlds had been concealed. And He and His name, which had been concealed therein, were one (and the same).

His name is Malkhut, which – before the creation – had been concealed and hidden within Ein Sof, devoid of any revelation or realization. Thus He and His name then had been one.

Nothing was revealed before He wished to create the world. He wrote and made the worlds, yet the worlds could not be sustained and became destroyed.

And he saw, that the worlds did not exist – that they became destroyed. Thence he dimmed their light to ‘veiled light’, whereby the worlds came into actual existence.’⁸

⁸ Cf. Michael Laitman, *The Zohar: Annotations to the Ashlag Commentary*, Toronto (Canada) 2007, 91-100, 119-122; (“*Malchut* is the central part of creation and its purpose. She is the only creation and includes all the worlds with all that inhabits them, us included. Depending on its states, parts of *Malchut* or *Malchut* herself (which is one and the same) have different properties designated by the different letter combinations. For this reason, *Malchut*’s parts receive various “codes” (combinations) of letters (properties) or names.

All the words in the world originate here, in *Malchut*. There is not a single property in the world that is not included in *Malchut*. Each property of *Malchut*, each of the creatures (for all creatures are her parts) is designated by the property that distinguishes it from the others, by the unique set of letters-properties that forms its name.” Ibid. 119/120).

Cf. also Fischel Lachower, Isaiah Tishby, *The Wisdom of the Zohar*, vols. I –III, vol. II, Oxford, Portland (Oregon) 2002, 549-586

5 More ado about nonexisting objects

'Atom' name of a seemingly uninteresting nonexisting object, because a simple generalisation of particular atoms as H (hydrogen) or He (helium) etc.. But that in fact 'atom' isn't just a simple generalisation but a striking example of a highly interesting nonexisting object (or perhaps a bunch of various nonexisting objects) since atoms had been conceived just as that, namely nonexisting objects long before the first 'real' atom of modern times physics had been 'discovered' or rather some individuals had been identified as being hold as doubles of the elements (of the table of elements). It doesn't matter, if or if not the atoms of Democritus, Leucippus and Lucretius are the same or similar to those of Gassendi or Newton or Boltzmann or even to those, the existence of which Ernst Mach so fervently denied.

In that context it may be worth mentioning that in particular these objects, the existence of which is denied, are at least paradigms if not chosen paragons for what makes up a nonexisting object. For denying something's existence one has clearly to designate that something, and that is to acknowledge that there is this, what is said not to exist. That is by no means a logical contradiction but an application of the Meinongian semantical distinction between 'being there' and 'exist'.

Most of the above mentioned atoms had been conceived without any knowledge of the table of elements let alone Rutherford's or Bohr's models of atoms. So an atom is a nonexisting object (or some of them) by it's own right, and thus far more than a futile generalisation of the particular atoms of the table of elements.

square circle :

the runtime of a program is determined by a) the length of the program, and b) the capacity of computer. From this follows, that a sufficiently large (preferably parallel computing) quantum computer can bring any runtime close to infinitely small.

Therefore in the context of information monism, where literally everything is information and thus even a whole universe could be seen as a kind of computing space (FN Zuse), a programm is perfectly conceivable, which (perhaps iteratively)

transforms a square in a polygon with Ω -infinitely vertices (with $\Omega \gg \omega$, and $x \in \{1, \dots, i, \dots, \omega\}$ with x, i , and $\omega \in \mathbf{N}$) and vice versa in an infinitely small amount of time, let's say nearly as small as a single time quantum. Btw. the question about the nature of the circumference, i.e. if it is of a continuous nature or not, doesn't matter for that task of squaring the circle.⁹ And since 'polygon with infinitely many vertices' is an admissible definition of 'circle', we eventually will get a square circle. That square circle, though still being a nonexistent object, would however be no more nonexistent than any ordinary square or any ordinary circle is a nonexistent object anyway.

In contrast to D.Lewis', modal realism (which presupposes a Many World Interpretation of QM and / or at least a prolific Multiverse (cosmo-)ontology) and also against Kripke's seemingly ontological neutral (or perhaps just indifferent) essentialism argumentieren, dass wg. Gegenstandstheorie

- a) neither any epistemological realism nor – with respect to its immanent account of (the existence and – if any – the nature) of universals any ontological realism
- b) keine Auszeichnung von proper names, sondern vielmehr essence and identity subsists in the substance of the either existent or non-existent objects.

⁹ Obviously the same holds for the question if the boundary lines of the respective square are continuous or not.

6 Transworld identity as information content identity¹⁰

7 Essentialist nominalism

The essence of an object is the paragon of that object, it is not the idea of that object, in particular it is not alike any Platonic version of an idea, i.e. it is not a deceitfully masked reified abstraction (of e.g. a particular bunch of objects). In other words: the essence of an object is not (embodied in) an allegedly preexisting abstract object.

Instead the essence of an object is the particular configuration or formation of the one and only substance (of all objects, non-existing as well as existing ones, and of anything anyway), where this particular configuration or formation is – except in general for their individuality and in the special case of actually existing objects for their *actual* individuality, also known as haecceitas – the distinguishing characteristics of the particular object(s) in question.

7.1 Names and logic: term logic mereologified

Socrates is part of humanity instead is a human being (which is in the extensionalist interpretation the same is element of the class of human beings)

¹⁰ ‘Information content identity’ or ‘essence identity’ here are seen as a sort of pattern identity of the information equivalents of the respective objects. It is however important to always keep in mind that the ‘information content’ is not in any sense encoded or inscribed in the respective object, and therefore in whatever sense different to the object. Yet on the contrary the object is just an equivalent instantiation of its information content and indeed the object itself is identical up to isomorphism with its ‘information equivalent’.

Now mereologification will not make the dead horse of term logic ever become a racing winner, but it showed us a – more or less tacit – precursor of the solution we will propose for overcoming the extensionalist dogma.

7.2 Parts of programs

7.2.1 λ -calculus with mereological aspect

s. Polkowski et.al. ‘Rough mereology’, rough sets

7.2.2 From a Topos with mereological aspect ...

7.2.3 To a topos with mereotopological aspect

s. also John C. Baez, Action as a Functor

*‘And as imagination bodies forth
The forms of things unknown, ..and
thereupon..
Turns them to shapes and gives to airy
nothing
A local habitation and a name.’¹¹*

8 Toposic Foundations: Meinongian Objects in Toposes as Bases for Nominalism in Mathematics

¹¹ Slightly altered version of: William Shakepeare, A Midsummer Night's Dream, ActV, Scene1.

Local Toposes as frameworks for (respectively local) foundations of Mathematics

Lit.: J.L.Bell, From absolute to local mathematics.pdf

JOHN L. BELL, foundations of mathematics.pdf

Geoffrey Hellman and John L. Bell, Pluralism and the Foundations of Mathematics.pdf

G.Hellman–Foundational_Frameworks.pdf

Geoffrey Hellman, FoundationalFrameworks.pdf

Barry Smith, Kevin Mulligan, Framework for Formal Ontology.pdf

Mathematical ‘individuals’ then are the various occurrences in operations (e.g. calculations, computations, derivations, proofs etc.), definitions and theories, which are proper models of the respective objects in the particular toposes.

Our purpose here is to try to give the notion of a mathematical object a proper sense yet strictly without having to retreat to any Platonic or Fregean hypostases of whatever sort of intelligible or abstract *existence* of those objects. . I.e. we will instead try to make the Meinongian notion of *nonexistent* objects efficacious in that seemingly unsuitable field. The Meinongian concept of object seems to be unsuitable for mathematical objects for the very reason that in the case of mathematical objects the instantiations (or ‘referents’) of the respective notions seem not to differ in their – abstractive – nature from these notions themselves.

Mathematical objects (or nonexistent (abstract) objects) are only given internally i.e. within a framework or universe of mathematics in which at least a very large part of mathematics can be performed. The most convincing paradigm of such a mathematical universe is a topos. Like nonexistent objects in the sense of Meinong’s theory of objects can in appropriate cases be possibly related to respective existentials, the nonexistent mathematical objects can be related to respective incidences if and when these incidences occur in operations and utilizations as applications of the respective objects (in the topos(es)) thereby the objects serving as the nonexistent (!) quasi-universals and the incidences as the very best approximation to an individual in non-mathematical ontologies. As such or for themselves i.e. *not* within a comparably comprehensive and powerful universe there are no mathematical objects but just mathematical concepts given.

‘I have called you by your name.

*You are mine.*¹²

8.1 Foundations of – some – Mathematics in a nutshell: toposes

Toposes as universes i.e. as universal background spaces for mathematics. That is the notion of ‘mathematical object’ becomes nominalistically treatable as ‘object in a topos’. Such objects in a topos then can be rigidly designated by their respective. The concepts related to the respective structures or theories can then be treated as tropes of the respective objects. And even the respective particular topos itself can again be treated as a general object.

8.1.1 From Mereologies in toposes ...

8.1.2 ... to mereologies of toposes and more...

8.1.3 ... and the ‘higher’ topos(es) of these

Lit.: J.Luria, Higher Topos theory

The idea: a topos with mereologies as objects and toposes as morphisms

~~8.2 Towards nominalist neologicism~~

R.Urbaniak, nominalist neologicism

Bob Hale

Crispin Wright

G.Boolos, Logic, Logic and Logic, pp. 73-87, Nominalist Platonism

¹² World English Bible, Isaiah 43:1

s. also Jean–Pierre Marquis, category–theory (Stanford Encyclopedia of Philosophy) pp.24–26;

Steve Awodey, From Sets to Types to Categories to Sets

*‘And, which was strange, the one so like the other,
as could not be distinguish'd but by names.’¹³*

9 Names and Programs

Cf. cat of automata, planet math

9.1 Names and programs

s. Luca Paolini, Simonetta Ronchi DellaRocca, The Parametric Lambda Calculus: A Meta-Model for Computation

Therefore the theory of objects provides already in its intrinsic ontological neutrality and/or the corresponding principle of independence the very basis of an immanent ansatz for a foundation of mathematics. This approach could then easily be called the objectivist foundation of mathematics and that would indeed not be an unjustified claim. But the so to say operational point of such an approach to a foudation of mathematics would probably better be grasped by the expression ‘semi-constructive hyper recursivism’.

¹³ William Shakespeare, The Comedy of Errors, Act1, Scene1. (That also relates surprisingly well to the *immediately* following.)

9.2 *Essence and Substance*

The (One) Great Program = one substance

Subprograms = modes

Variation of subprograms
(up to individuals) = modes of modes

Essentialist nominalism and information monism

Due to its uncompromising nominalist setting essentialist nominalism isn't either any sort of Aristotelian essentialism nor is it – due to its not less uncompromising essentialist setting – any kind of Quine-Goodmanian or similar radical nominalism, i.e. a nominalism which only knows individual entities with properties and attributes attached to them by purely semantic means. Yet such a proposed essentialist nominalism surely seems at first a fusion of incompatible ingredients if not a self-contradictory claim. And indeed for not being such a mere farce essentialist nominalism requires a very particular footing, namely a neutral substance monism into which's substance the various *essentiae* as well as *existentiae* thoroughly dissolve to reveal their very nature as being something of one and the same kind. (*ausführen! begründen!*)

A new substance for a renewed essentialism: informationmonism

'essence identity' (as a kind of pattern identity of the underlying information) instead of ordinary transworld identity in the sense of Kripke

Appendix

Two dogmas of Linguizism

A) the dogma of a linguistic discrimination of existent and nonexistent objects

B) the dogma of (the possibility of) reference

B) is the main reason for A)

Thanks go to Vera for her patience , to Vitaly , who as strictly as sympathetically helped me to do a bit more than the required minimum to maintain my health.

Thanks also goes to the voice of Maria Callas, which was a regular companion in the nights, when I meditated on the subject of this paper and eventually wrote down some of the outcomes. Then she sometimes sang:

“Tacete! Tacete! Cessate! Cesatte!

Manca solo a compire il delitto
.....”

That blended with a leitmotivic ‘si tacuisses ...’ to something ‘wovon man nicht sprechen kann, ...’.

But, beyond the linguistic turn, that spell eventually became broken – in the end.