Plato and Parmenides on ideal truth, invariant meaning, and participation

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1. OVERCOMING THE LIMITS OF PRESENCE

1. There is a standard picture of Plato's philosophy as a kind of Pythagoreanism. The well known centre of such a ‘Platonism’, as it seems to be expounded in the *Phaedo*, is the theory of ideas or forms as a transcendent theory of Real Being and Absolute Truth with capital letters. In this theory, Real Being is situated behind the scene of mere phenomena. Appearances are explained or even produced by the Real Reality of Forms. Only our soul, the immortal part of us, has contact to this eternal world of Real Being and Real Truth. Therefore, it is not the mortal body, but the immortal soul that we should care for most.\(^1\)

In this reading, we find at least some ambiguities and open questions that deserve our attention – especially if we take account of the general fact that 'metaphysics' always is an unhappy blend of conceptual insights and some misunderstandings of the language by which we try to articulate these insights. What, exactly, is the soul, or psyche, we should care for? Does the distinction between the mortal body and the immortal soul, perhaps together with the idea of an all knowing god, really endorse religious belief, as most later readings of Plato by Neoplatonists and Christians have it? The last question gets more urgent if we consider the possibility that Plato's talk about a god uses a mythological metaphor in order to make the complex conceptual structure of knowledge and truth

\(^1\) This is even a background for the *Parmenides*. Cf. M. H. Miller, Plato's Parmenides: The Conversion of the Soul, Princeton 1986.
explicit. Already Parmenides had used it in order to present his idea of Absolute, unlimited, Knowledge and Truth.

2. The most important limitation of human experience and cognition is related to time. One aspect of it is the limitation of personal recollection and intersubjective memory. This already was a topic in the odes of Pindar, as Theunissen's great book reminds us. There is no 'past', or rather, no knowledge of the past, if not by means of the songs of poets, by re-presentation of the past in verses that can be remembered, stories that can be retold or written texts that can be read. What we know best is the immediate but ever-changing situation here and now. However, if we are content with immediate experience, life becomes ephemeral. As an ephemera or 'Tagwesen' (Theunissen) I live in or under the day, without knowledge of yesterday and tomorrow. In immediate presence, the future in the sense of unforeseen and uncontrolled change hangs over me like a cloud.

3. For Parmenides, representation 'by the mind', by memory, or 'to the mind', by words, is the basic method of overcoming the cognitive limits of sheer presence. Parmenides defends the peculiar role of presence and claims that it is conceptually the same to say that something is real and that it can be known: Existing (einai) and being the object of possible knowledge (noein) are the same. But he seems to work with a double meaning of "noiein": The core meaning is to notice or to realise something in a present situation. Hence, there is an obvious need to 'enlarge' the concept of knowing from the narrow sense of immediate 'realisation' to general knowledge and, by the same token, of the parochial concept of actual being here to universal reality. By this move, the concept of immediate knowledge, i. e. perception, widens to possible knowledge. Truth and reality is what can be known. It is not defined by what actually is known or, even worse, what only seems to be known. But how do we conceptually proceed from what can be realised here and now to what can or could be known?

4. The question leads to the not too surprising insight that time and space play peculiar roles with respect to the limitation of human knowledge and with respect to the question how we can overcome at least some of these limitations. Even if there already is a practice of representing what has happened at other places and at other times or what will or may happen later, real knowledge always is, and always will be, in some way or other time- and situation-bound. On the other hand, already our everyday concept of knowledge precludes any too parochial claim or judgment or experience. It rules out mere 'subjective'

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3 It is not clear how Parmenides, fragment 4,1 must be translated, perhaps both readings are right.
opinion. The very idea of knowledge or episteme consists in the attempt to transcend the cognitive limitation of sheer presence. Or rather, it is an attempt to turn mere presence into something that can be addressed and talked about independently from the present situation I am in. It is, therefore, the very project of science which forces us to distinguish with Martin Heidegger between the concept of being an object of possible knowledge and being here, in the world. The place where I dwell and the time we live in are the centres of our knowledge just because they define what can count as 'here' and 'now', as presence. An already extended 'phenomenological presence' is the basis of knowledge and, hence, of the concept of objectivity, not the elusive 'sense data' of the empiricists and their formalistic, hence idealistic, concept of a point-like moment 'right now and right here'. This concept of presence and the presupposed subjects stand in the centre of Heidegger's account of the constitution of objectivity via the constitution of episteme: What I perceive and know is already distinguished from what I myself am as the 'subject' of perception and knowledge. What may confuse us here is this: My ear, for example, or my eye, or my body or my whole life can be a part of me and, at the same 'time', an object of our investigation and knowledge, even if perhaps not in the same 'perspective'.

5. There is a sense, now, in which episteme 'contradicts' change. It is fixed knowledge expressed by 'standing' sentences. Such sentences can be learned 'by heart'. These sentences are, so to speak, the carrier of mneme, of memory. They bring time to a standstill. They are true, if they are true, independently of the time or place they are uttered or of the person by whom they are endorsed. But the concept of episteme or fixed knowledge not only presupposes the possibility of representing non-present situations by spoken or written language (by the logos or, if we wish to refer to particular expressions, by logoi). It presupposes, moreover, the possibility of representing change by standing sentences. Therefore, it is not just a matter of nice logical paradoxes, if Parmenides and Zeno ask how change can 'exist'. The problem is how we can talk about change in a timeless way. What we can know in the sense of episteme should exist at least in some way independently from the situation it is presented or represented. So what can we know about change? This is the deepest question of any science that wants to represent the dynamics of change and movement. It presupposes at least a representation of spatial forms. The most developed, ideal, representation of spatial forms are given in mathematical geometry and stereometry. But how can we represent forms of movements in mathematized kinematics? And how can we represent forms of acceleration in physical
dynamics? The first problem already is a topic of Plato’s rather deep and dark *Timaeus.* The second one has not been sufficiently dealt with before the times of Newton.

### 2. Uniqueness and Invariance of Meaning

1. The possibility of reliable representation is a precondition of the enterprise or idea of standing knowledge or science. If we want to express something safely by words and sentences $S$, we need sufficiently unique and invariant ‘meanings’. That is, we need some common understanding of what is said, including some common understanding of what follows from what is said and what may support it as true – at least in the sense that the inferences which come with the claim of $S$ are sufficiently reliable. We do not have to go into details about this common understanding in order to see that for any representation of a state of affairs then and there we need a fixed method of change of perspective, or, what amounts to the same, of a common perspective. Only by such a method we can say here and now something about things over there; without it, it would not be clear what is represented. Notice the multiple reading of this expression "what is represented". It can refer to the *representation*, the *logos*, presented *here*. And it can refer to *what* is represented in the sense of a ‘content’, a form or structure. And it can refer to *what* is represented in the sense of what is present *there* and what is 'of the (same) form' expressed by the representation or *logos* here. We arrive at a relational meaning of *being true to a fact*: What can be called "true" is the representation, the *logos* here and now. It is true with respect to a presence over there. This presence over there presupposes the idea of a possible observer. The relational idea of truth presupposes the idea of a possible joint control of what it means to be a ‘true’ representation here and now, for me, of a presence then and there, for you. At least it presupposes a concept of what it means that the fact over there is of the same form or structure as the one expressed by the *logos* here. This shows how the problem of participation of ideas and phenomena and the problem of truth and falsity amount more or less to the same.\(^4\)

Some of these considerations seem to be the background for Plato’s dialogue *Parmenides*, where he asks what we do presuppose if we assume that given names have unique meaning.\(^5\) It is important to see that the Greek language uses the definite article in order to turn any expression we wish into a name. By this linguistic operation, sentences

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or predicates turn into expressions that designate something like a 'state of affair' or a 'proposition' or 'the meaning of the expression' or an 'idea' or 'form' or 'concept' or its 'intension' and 'extension'. The context decides which of these disambiguating translations are fitting. The ambiguity of this linguistic operation seems to be the deep reason for the ambiguities in Plato's concept of eidos or idea.

Now, Socrates and Parmenides, agree that unique meaning is a precondition for the use of the 'names' (words) in meaningful discourse. It is a precondition for any non-parochial, doxa-transcendent, concept or ideal of knowledge and truth. But even if we grant this, the questions abound. What does the uniqueness of meaning, of abstract intensions or forms, consist in? How do we have access to them? How do we know if a name or word or logos refers to this concept or form rather than to that one? And how do these abstract forms refer to real things? Are they in themselves the real things? But how do they relate, then, to the phenomena that can be experienced?

2. The main problem is the relation between the presupposed uniqueness and sameness of a singular form or a situation-independent idea or a meaning or a concept – it does not make sense, as I said, to make a general decision between these possible translations of "eidos" – and its many, particular, different and situation-bound applications. One aspect of this problem is the problem of predication in a present situation. The question is this. What does it mean to say that this singular case, let us call it a, falls under the concept C, but not that other one, let us call it b? And how is the concept C determined? It should depend on it 'name' N_C =N(C) and its explanation or logos L(C). It should not just depend on the contingent fact that I or you or we arbitrarily decide or accept that here and now the a in question belongs to C or that it is arbitrarily called "N_C".

Other questions emerge. Is there only participation between forms and phenomena? Or is there participation between forms, too? In fact, there are two kinds of predication. The first one is of the form "what is present here falls under the concept C" or "this is an N_C". (It is difficult, but not too important, to decide where to replace C by N_C). The second kind of participation is of the form: "the concept C_1 falls under the concept C_2" where the expression "the concept C_1" stands for a name of a form or of a concept or an 'idea'. An example would be: "The One is identical with itself". The peculiar difficulty of sentences like this, as they result from the Greek way of using the definite article, are discussed in the second part of the Parmenides: Does the expression "the One" ("to hen") mean the same as "the concept of being one" or "the property of being one" or "oneness" or "the
number one”? In fact, all these expression disambiguate the possible use of an expression like "the one" in the vague sense of the expression "the meaning of the word "one". The rather complex and context-dependent use of such an expression shows why not only Plato has considerable problems in giving an account of the identity and uniqueness of the meaning of a name-like expression.

3. A first possible answer to the problem is this: We may try to identify a concept C with its extension \( E_C \) i.e. with all the a’s that fall under C. But how should such an extension be given or determined? Just by enumerating some first examples in a sequence? But how do we continue the sequences? Just by making individual decisions? The result would not be an 'invariant' concept. The 'extension' would be relative to speakers and situations; it would not be invariant at all. Therefore, we should rather follow Plato’s Socrates who asks us to look at these things from the other way round: Any extension or set which is not just a (short) list of finite things must by defined by a concept or common form or eidos, expressed by a logos or definition. Our notation \( E_C=E(C) \) already expresses this dependency. But, notice, that the notations N(C) and L(C) look, in a certain sense, from a wrong perspective on the role of names and explanations. We rather should write C=C(N,L), because the very concept C is defined by the use of its name according to its explanation or logos. It is this latter dependency Plato is looking for in his later dialogues.

But with respect to the dependency of extensions E from 'intensions' or 'concepts', Plato is as clear and right as Frege later shall be, too: The example of finite lists is no good paradigm for defining sets or extensions in general. In general, sets are defined by complex predicates or concepts or properties or eide – whatever these things are – or rather, whatever we talk about, if we talk about them. But what are such concepts or forms? And how are they determined in their identity and unity? How are they defined? And how can they be made explicit?

4. We should separate two questions now. The first one asks if there is a real need to assume invariant and unique concepts or meanings or forms. But the answer is a clear yes! If we want to know how sets or extensions are defined, we must presuppose the meaning of predicative expressions, or rather, we must be able to use them in a sufficiently common and stable way. The second question asks how we can grasp these concepts. How is the right use of the corresponding predicative expressions determined at all? Plato answers these questions in the end thus: After we have mastered a set of elementary predicates, we can define complex predicates by a list of conditions or criteria.
A defining *logos* is just such a list. In a reconstructive analysis of what we implicitly mean by the predicative word “sophist” we may say, for example, that a sophist is a person that fishes for followers, compliments and agreement. He catches people by deceiving arguments and by his rhetoric. We can add some further ‘conceptual’ truths about the sophist (i. e. about the concept of a sophist) and make a choice which one should suffice as defining properties. Plato’s famous *dihairesis* is an answer to our questions how to determine a concept C by a concept-word N together with an ‘explanation’ L, a list of defining criteria. If the word N already has a use, its reconstructive definition is an ‘analysis’ of ‘implicit’ criteria which need assent. Therefore we need the method of *epagoge*, of showing that a reconstruction of a *logos* that makes an implicit form or usage explicit is appropriate or, at least, that it is good enough for a certain purpose. Aristotle adds further formal aspects to this procedure when he distinguishes between a *genus proximum*, a predefined realm of beings (like, for example, the animals), and a *differentia specifica* (like having the competence to master the *logos*).

5. But there is a long way Plato has to go to reach this result. One most important step on this way is developed in the dialogue dedicated to Parmenides. Here, Parmenides convinces a seemingly all too young Socrates, why an abstract assumption of meanings or concepts or ideas or forms neither in a divine *hinterwelt* (of so called Platonism) nor in my mind (as a particular and private *noema*) can solve our problem. The question was how the assumption of *meanings* (or *common forms*) can determine correct predication, adequate understanding and possible errors or falsehoods – e. g. in a dialogical argumentation about some alleged knowledge or real truth. Does not the very possibility of a dispute rest on prefixed meanings or ideal forms (*eide*)? (In fact, this does not hold for *all* disputes. It holds only in the realm of *episteme* proper.)

In the dialogue *Parmenides*, Plato shows at least this: This question cannot be answered without solving the problem of how to apply a form in real predication with respect to phenomenal things in real, human, experience. The problem is how to judge in singular cases if a 'partakes' in or falls under a form C or is a presentation of the general form C. This is the very problem of *methexis* of C and a.

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6 The Greek word "*logos*" means basically "what is put together" like in a "complex syntactic form" such that it we can 'read' it (*legein*). This core meaning is still alive in Plato’s writing as can be seen in the beginning section of the *Philebus*. Mastering the "*logos*" or *logic* is a kind of formal or syntactic or schematic or mathematical competence. In the case of formal rules we have a level of invariance available which surpasses by far the vagueness of an imperative like "continue the same way as you have seen!" or "and so forth!" used in cases where individual judgement and experience is still needed and stable and safe agreement in our judgements about correctness of form is difficult to achieve. Mathematics is formal. Therefore its rules and sentences are the prototype of situation-invariant and controllable Truth. Mathematics is, as the Greek-word says, what can be *learned* – in a similar way as we can learn to reproduce poems and, with the help of writing, any verbal text.
3. **Ideal Knowledge and Real Competence**

1. The reason why Plato obviously gives credits to the historical Parmenides is this. Parmenides had already seen the importance of keeping different concepts of reality, knowledge and truth apart, or rather, he had noticed different levels of *talking about* being, truth, and knowledge. In Parmenides' poem, we find the main character on a road that leads out of the house of ignorance. The road is the way of truth. The person is driven by a (female) *daimon*, an inner force or implicit idea. After some time, he meets a goddess, who appears just to be the *daimon* herself. This, obviously, is a metaphor for the process of reflection. The interesting thing now is that the goddess does not look on the real road on which the person was travelling. She rather talks about its general form, from an ideal perspective of Absolute Truth.

2. Only the goddess knows what Real Truth is. She herself says so. Only she can teach us in full retrospect about the way or method that leads into the right direction. The perspective of the goddess is that of reflection on the formal conditions that must be fulfilled in order to talk of stable, therefore situation invariant, Truth – far above mere immediate and subjective, locally bound perception and sensation. Real, i. e. ideal, Truth is timeless, non-changing, eternal. But any real, i. e. actual, human knowledge is fallible, situation dependent, changing; in short: not ideal. Hence, *any human knowledge-claim* is different from ideal Truth and ideal Knowledge. On the other hand, real, i. e. actual, knowledge can only be the best possible knowledge of one's own time. In a search for actual knowledge, the only question is if a claim or explanation equals or surpasses any actually possible knowledge, if it is as good or better than anything what others claim to know or claim to explain. In the translation of Kirk, Raven and Schofield the relevant lines of the fragments of Parmenides' poem read:

   "Henceforward learn the belief of mortal men, listening to the deceitful ordering of my words."⁷

The possibility of "deceit" is judged, here, from the *ideal* point of view: A goddess 'knows' more than *any* mortal. But she cannot tell it in other terms than those that are appropriate for the limited understanding of mortals.

The topic at the beginning of the second, almost totally lost, part of Parmenides' book 'On Nature' is not ideal Knowledge but real knowledge about the real world. Therefore it is no contradiction if the goddess adds:

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"The whole ordering of these (things) I tell you as it seems fitting, for so no thought of mortal men shall ever outstrip you."

Parmenides’ account of the cosmological order of things is indeed unsurpassed in some respects. For he (or rather: his goddess) says: Light and darkness are no substantive forms. They must be explained in their ‘relation’ to a perceiver as immediate ‘objects of perceptions’. Light is a ‘product’ of substantive bodies, the sun and the stars and their ‘fire’, whereas the moon gets the light from the sun. The bodies exist ‘really’, they are substances that do not change – whereas their ‘properties’, especially their relation to different perceivers, do change. The basic idea is well known: The bodies ‘produce’ or ‘cause’ perceptions.

4. THE PROBLEM OF PARTICIPATION AND PREDICATION

1. In the Parmenides, Plato distinguishes also between two concepts of knowledge, ideal or divine or infinite Knowledge, and ‘real’ or human or finite knowledge. As finite beings we do not know what a god might know. But the god also does not know what we know. The first part of the claim is the usual one. The concept of divine Knowledge is not of a kind that we can achieve it. We cannot fulfil the ideal conditions. Nevertheless we can talk about the ideal, just as we can talk about ideal forms – even if we cannot fulfil the ideal conditions in the real world. Meta-level and reflective talk about forms and about ideal Meaning, Truth, and Knowledge is to be distinguished from (object-level and practical) attempts to achieve and improve real (actual) knowledge. But what does it mean that god does not know what we know?

2. In the following, I quote the crucial and famous passage in which Parmenides criticises the theory of forms and participation of the young Socrates, i.e. of the earlier Plato. In the Parmenides 134 c, d, the old teacher says (in the translation of Mary-Louise Gill & Paul Ryan):

"Here’s something even more shocking ... "

"What’s that?"

"Surely you would say that if in fact there is knowledge – a kind itself – it is much more precise than is knowledge that belong to us. And the same goes for beauty and all the others."(...)"

"Tell me, will god, having knowledge itself, then be able to know things that belong to our world?"

"Yes, why not?"

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"Because we have agreed, Socrates," Parmenides said, "that the forms do not have their power in relation to things in our world, and things in our world do not have theirs in relation to forms, but that things in each group have their power in relation to themselves."

"Yes..."

"Well then, if this most precise mastery and this most precise knowledge belong to the divine, then gods' mastery could never master us, nor could their knowledge know us or anything that belongs to us. No, just as we do not govern them by our governance and know nothing of the divine by our knowledge, so they in turn are, for the same reason, neither our masters nor, being gods, do they know human affairs."

"If god is to be stripped of knowing" he said, "our argument may be getting too bizarre".

"And yet, Socrates", said Parmenides, "the forms inevitably involve these objections ..."

Later, both, Parmenides and Socrates, agree in this: We need fixed concepts, invariant meanings, hence forms and ideas, or else there is no stable truth and knowledge that can be expressed. Hence, our discourse leads to a deep aporia or dead end that needs new training in logic. I do not go into the question here what this training means in detail even if I am convinced that Plato wants to show the ambiguities in the use of expressions of the form "the concept C" or their shorter versions as in "the One" or "Identity". Here, I am satisfied with the exposition.

3. But what was going on in the passage above? I think, Plato sees the following: If we would know all True sentences or 'ideal truths' expressing ideal properties or ideal relations of ideal forms (think, for example, of all true sentences of Euclidean geometry), we still would not know how the ideal 'structure' described by these sentences participates with perceptible objects and things of experience. If we only had 'ideal' or 'conceptual' predication between two forms saying that the one partakes in the other, and no 'real' predication, saying that a present phenomena is of a certain form, we still could not talk about the actual world. We do not know what 'real', i. e. actual, truth and knowledge is, if we only know the formal criteria of Truth by which some sentences S are formally classified as True and others as False. The relation of ideal Truth to actual experience is of a peculiar kind and 'form'.

The basic question asks for an understanding of the relation of participation, of methexis between the ideal meanings of words an sentences and actual, possible present, situations. It is the question how sentences relate to the world of experience and practice, or, to put it the other way around, how real empirical truth relates to formal or ideal or verbal Truth.
4. There are different answers to the question how this relation between ideal Truth and real truth is to be understood. Things get especially complicated because ideal Truth often is seen as 'real' truth and what is called "real truth" here – for the lack of appropriate words – is often seen as mere belief or doxa. But there is a conceptual difference between Doxa or Opinion and Episteme or Knowledge with capital letters as well as between opinion and knowledge. And the relation between knowledge and Knowledge is not the same as the relation between mere opinion and Truth.

If we realise all this, we see that the usual picture of Parmenides and Plato as Platonists, as alleged believers in some transcendent Reality and Truth behind the scene of experience, must be modified already now, to say the least. Parmenides and Plato want to understand the complex relations between mere subjective appearance, opinion, real truth and ideal Truth. They realise that these distinctions are already used in ordinary language and ordinary criticism of certain errors, fallacies and deceptions. Both are already sceptics in the sense that they agree in this: humans do not possess Knowledge. There is even a conceptual impossibility to arrive at 'real', i. e. ideal, Truth. At least there is no certainty.

5. A further problem complicates matters considerably. It is the difference between formal, 'mathematical', truth and Absolute Truth. Formal truth can be learnt by heart or deduced from some set of axioms. Exact rules of inference hold only in the theoretical, mathematical realm of formal (ideal or pure) meaning or forms, of formal ideas. But Truth is not only formal. Rather, Truth is a system of formal sentences that express the forms of real matters of facts in a good enough way.

But then the question still is how a theory or model relates to the real world of possible presence. A most important observation is that this relation cannot be a mathematical, theoretical, ideal, 'divine' relation. It must be a 'human' relation, a practical one. It must take place in the world of real judgment and control. Good judgment and self-control as a competence to take part in a joint project and knowing the limitations of one's own perspective is addressed by Plato under the general title "sophrosyne" ("temperance"), for example in the Charmides. If subjective good judgment is 'objectively' confirmed or corroborated, it turns into dikaiosyne, especially in the context of moral and law.

The relation between forms and the real world is a projective relation. Any such projection of participation needs good judgment. If we would try to represent the projection between ideal forms and real phenomena as an internal relation in a mathematical model (or even
in a totally transcendent divine world), we would not have solved the problem of participation or *methexis* at all. This seems to be the insight of the famous 'third-man-argument'. The argument is exemplified in the *Parmenides* with respect to the concept of being large. It proceeds like this: Let us assume that there were an ideal entity that is called "the man (or the large) as such" or "the meaning of the word "man"". And let us assume that the relation of predication between, let us say, the large man as such and the man as such were of the same kind as the relation between this real large man here and the form of man. Then, the large man here would have to be an ideal form. If not, we still would need some knowledge about the 'similarity relation' between the real person here and the ideal form of being a large man.

Self-predication like "the large is large" sounds only strange to modern ears. Today we think that the expression "the large" is a name of a property which is, as such, not large at all. But in the intended reading, self-predication is just a traditional way to express the tautology that any large thing is large.

The problem gets even clearer if we ask how to apply the one place predicate "is a man" or "is large" correctly. The immediate answer is: if N names an object (or a 'subject', the terminology is confused by historical reasons), N is a man if and only if N stands in the right similarity-relation of participation to the form or idea or meaning called "the man" or, perhaps, "being a man as such". But then a next question arises: If the right application of a predicate is governed by the form as such, this must be true for the predicate "x stands in the right similarity-relation of participation with the man as such". Let us call the corresponding form or meaning (or 'intension') "the man as such$_1$". Then N is a man if and only if N stands in the right similarity-relation to the man as such$_2$. It is obvious now how the infinite regress proceeds: We define the form 'the man as such$_3$' as the form that corresponds to the predicate "x stands in the right similarity-relation of participation with the man as such$_2$".

6. Parmenides' arguments show that the assumption of the earlier Socratic dialogues does not lead us anywhere. The assumption is that there must exist a given and unique 'intension' or meaning of any meaningful word and that we must be able to appeal to it and to a relation of participation or similarity if we want to justify that a particular object falls under a certain predicate, expressed by the word. As a result of the argument, which

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9 The distinction mirrors the distinction between a mathematician and a dialectical philosopher in the 6. Book of the *Republic.*
reappears in Aristotle's discussions of the 'third man'\textsuperscript{11}, the assumption of meanings or intensions or forms in separation from the criteria of a correct use of the words \textit{do not explain anything} and cannot be used at all when we try to evaluate a proposed predication as true or false.

This shows that we still do not have an answer to the following questions: How is a predicate determined? How is the truth of a predicative sentence defined? How can a word have a unique meaning? How can we appeal to a meaning as an abstract object in order to justify or refute a claim of the form "N has the property C"? How do different forms or meanings relate to each other? The last question presupposes that forms partake in forms. The corresponding version of predication reflects what we know as 'conceptual judgments'.

The problem is that the mere assumption of an abstract concept of man, an intension of "man", does not explain what we do when we classify some beings as man. Rather, to 'understand the intension' and to acquire the competence of classification in homology to others should be one and the same thing. I. e. knowledge of methexis or participation is a kind of knowing how, not of knowing that. It is irreducibly dependent on real judgments, on joint human practice. Only in the realm of ideal reflection on the form of our practice we talk about intensions. We do so, as if they were given objects to talk about. By doing so, we assume a certain implicit and ideal relation of intensional equivalence. The problems that arise here are discussed in the second part of Plato's dialogue. We should not be surprised that Plato cannot solve them.\textsuperscript{12}

5. THE PROBLEM OF FORMAL DEDUCTION

1. The basic question behind the distinction between a realm of forms (meanings, properties, concepts or other ideal objects) and a realm of phenomena is this: How do conceptual, ideal, inferences like those or formal logic or those in mathematical theories apply to the real world? Formal inferences as such are 'verbal' inferences. Formal properties as such are verbal properties. We learn them \textit{by heart}. That is, we reproduce them automatically. We control their correctness schematically. \textit{Therefore} we can call them \textit{formal} (sometimes even analytical or conceptual) inferences (or properties). This concept


\textsuperscript{11} Cf. Aristotle's \textit{Metaphysics}, 1059b with 1039a and 1079a.

\textsuperscript{12} In Plato's \textit{Sophist}, we find examples for the basic syntactical and semantical distinction between a 'singular' noun phrase or name and a verb phrase or 'predicate'. Semantically well formed names refer to what is, to an object. By a predicate, we express a property of the object (at a certain time) or say how it relates to other objects, for example to an observer. If we
of formality does not presuppose that there is no empirical foundation for what is formally taught. It rather says that from the perspective of the teachers and learners a sentence carries the formal value True. It counts as a part of formal knowledge or episteme. It may be a sentence in some encyclopedia. Here, in the realm of formal knowledge, we must assume the principle of non-contradiction or consistency. I.e., it is impossible that a form F can have a property P and, at the same time the property non-P. If we assume that some system of knowledge implies that we can deduce true sentences from true sentences by using certain deduction rules (the valid ones), then the true sentences form a (hopefully consistent) system. It is closed under deduction with respect to the rules or schemes of deductions that are accepted or presupposed as valid. The rules or schemes of deductions can be seen as parts of the teaching machinery by which we learn or rehearse or to produce or to control the true sentences (or the true consequences of true sentences) of the formal system of knowledge.

But even if we assume that we can learn some formally true sentences of such a system of knowledge by heart (e.g. as axioms) and produce some others by valid deductions, the problem is this: Whereas formal, ideal and mathematical knowledge is closed under formal deduction, real knowledge about the real world of experience usually is not. Real knowledge is not in the same way 'consistent' as ideal knowledge. What does this mean?

2. For knowledge about the real world, the rules of reasonable inferences are far from prefixed and 'eternal'. There is always a filter of good judgment and relevant projection involved. This is the reason why Plato criticises the idea that 'written' knowledge is enough. In the Phaedrus, he not only stresses the importance of oral teaching, but of good judgment and of the competence to answer new questions in actual situations that goes far beyond the rehearsal of fixed texts. We can sharpen this insight with respect to formal theories. Even if you know all formal consequences of an axiomatic system, say, of geometry or mathematical physics, you might not know anything about the real world, just as Plato's god does not. The reason is that you do not know the filter of reasonable application. You must know this too, if you use geometrical truths in describing spatial relations in the real world.13

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13 The following is an important example: 'Real', empirical, space or space-time as such is neither non-euclidean nor euclidean. Being euclidean or non-euclidean is a property of a mathematical, in the meantime arithmetical, structure or 'model'. The question then is this: Which arithmetical model fits best to represent possible arithmetical results of possible measurements of angles and distances, of durations of processes (by clocks) and movements (like the expansion of light or other electrodynamic 'rays') and to calculate with these numbers in the context of explaining future events in physics.
There is a tendency to underestimate the problem of *methexis*, of participation, of projections, of filters for reasonable applications of formal truths, valid rules and conceptual inferences. And there is a tendency to misunderstand the role of eternal truths about structures or ideal models in our project of articulating experience, making it explicit for the use of others. We need these *two* realms, the verbal and formal and ideal and the phenomenal and empirical. Without the ideal truths there is no *situation-independent way of representing structures or forms or ideas as such*. Knowledge expressed in mathematical language can be taught by learning. We learn to reproduce the formally true sentences of a theory correctly. Such a theory 'describes' a possible realm of abstract entities and properties known today as a mathematical model. Axiomatic system can be seen as a technical means to produce the theorems of such a theory. To master logical deduction is to master this technique. Logical errors are, in a sense, technical errors with respect to a technique of correct production and reproduction of formally true sentences of a theory.

But any mathematical theory or model, for example in physics, would be empirically void without a projection on experience by measurement or observation. Any such projection is a human one. We define the projection in our use of the theory or model. The projection as such is not *available* to a mere *mathematical mind*. It is not an *exact* projective relation. The relation between words and objects of experience cannot be represented without loss of information by a relation between words. The problem of projection of mathematical models onto the real world of experience cannot be described in full by a formal theory. Even if we define, for example, in mathematical geometry an exact relation of 'similarity' between forms of different 'sizes' (and, hence, a certain internal concept of form-identity) this relation is categorically different from the practical 'relation' of similarity between representing figures (pictures). Both relations, the similarity of abstract forms and the similarity of real figures, must be distinguished from the 'projective' relation between a representing figure (*eidolon*) and a represented geometrical form (*eidos*).

A mathematical god would have access only to the first kind of relation. This would make the *application* of mathematics to the real world impossible for him. Hence, the problem of *methexis* is in the end the problem of any applied science. Any real science *must* have some application to the realm of experience. We must leave the neat and clear and exact and invariant realm of mathematical ideas behind and come back to the dark and vague and imprecise cave of experienced and successful judgment. It is difficult, indeed, to turn theoretical 'knowledge' about abstract structures into practical knowledge. The bright light
and pure air of mathematical knowledge is by far not enough. But it is even more difficult, as we learn in the dramatic simile of the cave in the seventh book of the *Republic*, to show that a formal theory is true, that it can or should be accepted as a new 'theoria' of things, as a new and *better* way of looking at things. Notice that it is the question of relevance that leads Plato to the insight that the idea of the Good is 'higher' than the form of Truth.

6. A TWOFOLD CONCEPT OF KNOWLEDGE

1. In the dialogue *Theaetetus*, Socrates asks for a definition of the concept of knowledge in a similar way as we may ask for a characterisation of the integers with rational roots, namely in the form of a sufficient list of necessary properties. But it turns out – and Plato seems to realise this – that *there is no* sufficient list of criteria by which we can define real knowledge in distinction to mere belief or fantasy, at least if we wish to control the criteria effectively. The fact that no such list exists, is, however, no argument in favour of a sceptic. It is no proof that there is no knowledge. It is rather a sign that a certain format of definition is not sufficient. I shall try to show what this means.

The dialogue *Theaetetus* ends with the suggestion that knowledge is true belief with an explanation or justification. The belief must be supported and corroborated by good reasons. I am convinced that the most important question is underestimated in most interpretations. The question is if the 'logos' Socrates asks for is just some good justification or if it is rather an *explicit list of defining criteria that are effectively controlled as fulfilled*. In the latter case, the 'logos' would be a proof of the claimed truth – just as a *logos* in geometry is an explicit description of the form or proportion which is named by the expression. If we have a sufficient proof that certain truth-conditions are fulfilled, there is no problem with Plato's definition: Only existing forms can be named in the right way. Only true claims have a *logos*, a proof. But this is not the usual understanding of the *Theaetetus*, or rather, there is a deep ambiguity in the concept of "logos". A short discussion of a Gettier-type paradox shows on what grounds Plato himself may have doubts about his definition of knowledge in the *Theaetetus*.

2. The situation is this: I am driving through a ghost town and stop in front of a façade. You ask me, what it is and I say: "I know what it is. It is a saloon". By chance, the saloon is the only real building around. It is used as a kind of bar for the actors after filming. Hence, my belief turns out to be true. Moreover, I had, as it seems, *good reasons* for it. But I did not *know* that it was a saloon. My belief was reasonably justified and true. But it was not true by necessity, *only by chance*. My reasons were not good enough for the claim that I
knew that we were standing in front of a saloon. Obviously, there is an ambiguity in the claim "this is a (real) saloon."

There are counterexamples of this kind for any formal definition of knowledge given by a set of predicative criteria. The reason is this: Any such definition is an ideal one. It must 'abstract' from the concrete difficulties of 'right applications' in particular and actual cases. For these, we have to take the whole structure of possible discourse and its dramatis personae into account, even if these different roles are often played by the same persons: There are the speakers who claim something. We do not deal here with an implicit knowing how, but only with explicit and sufficiently defined episteme. But speakers can only express their beliefs, their subjective knowledge claims. As such, what they say are only attempts to articulate knowledge. The question is what conditions have to be fulfilled if such an attempt succeeds. Plato names two necessary conditions, the (objective, transsubjective) truth of the claimed proposition and the right (sufficient!) reasons, i. e. the ability to present a (hopefully satisfying) argument in favour of the statement. But we know quite well that the reasons for the judgment in the Potemkin Village was no sufficient proof, if the statement or belief is taken as an entitlement to conclude: I can go into the saloon and have a drink. It was not shown that this satisfaction-condition for the belief expressed by the judgement "this is a saloon" is fulfilled.

3. We can see now how the very content of a claim depends on the consequences we feel entitled to draw. The 'logos', the justification of the claim, has to be adjusted accordingly. If we get more demanding, it always can happen that our 'beliefs' turn out wrong. We always can turn the screw of our conditions, raise our expectations of invariance and reliability, go further on the way from obvious knowledge about present things to more or less certain knowledge about distant things and from there to Absolute Knowledge which transcends human knowledge by its very definition. This is the reason why not only any belief but even any knowledge with small letters can turn out wrong: It is contentful only if the inferences we feel entitled to are not too trivial.

I could have defended my judgment by saying: "When I said that this is a saloon, I did not say more than this: It is a façade of saloon in distinction of other façades of barns or churches or what not. Therefore we may expect that it is a saloon. My argument certainly was not good enough for being 'certain' that we can have a beer inside. With respect to such expectations, my knowledge was imperfect. But who needs perfect knowledge and certainty if we know that there is none? On the other hand, only after it is shown that my
knowledge is not of the sort of sufficiently corroborated knowledge with respect to the best orientations we humans can get, it is right to say that it is mere subjective belief."

We do not only have a speaker and his intentions and beliefs but an addressee as well. The addressee asks for reliable information and truth. He is asked to join my belief, to accept my claim and my reasons for it. The content of the claim is, in a sense, the set of consequences the addressee is entitled to draw. But what does it mean to say that he is entitled to infer this, not that? For an answer, we should distinguish between the speaker's and the addressee's and the joint responsibility for figuring out the consequences the speaker is committed to. What is it that the speaker 'claims' to be reliable? The answer to this question is not given in all eternity. There might be a difference between how an addressee really takes an utterance and how he should take it. What this "should" means is not fully pre-determined by what was said, nor by the 'intention' of the speaker – whatever this is. There is a process of co-operation involved. There must be dialogical co-operation when we want to figure out if a speaker had 'sufficient' reason to claim X, or if the hearer had the 'right' to assume not only the 'reliability' of the claim, but that the speaker had the 'right' reasons for it. Even if I and You agree and both of us accept the reasons as good enough, we both can turn out to be wrong, for example if some third person or fourth party, a kind of jury, or a jury that evaluates juries, knows things better than we do or those who are evaluated.

4. If no man has better knowledge about a problem Y than the person P we may say that P knows about Y what can be actually known about Y. This is certainly less than what can be known 'in principle'. From a counterfactual and ideal perspective, that of a god, for whom there is no cognitive limitation, P's knowledge still might be called 'deceitful', as the goddess in Parmenides' poems says about her own teaching, insofar as human knowledge is concerned (fr. 8, 51-52, 60-61). In the future, men may arrive at better knowledge. Insofar it is trivial that our knowledge today is not the last word. This is just a 'tautological' consequence of the relation between real knowledge and ideal Knowledge with capital K. Real knowledge might turn out wrong in this or that respect, with respect to this or that inference or expectation. In this sense, there always are things nobody knows today. This is no transcendent claim. It just reminds us of the fact that there are always 'temporal' and 'local' bounds of the concept of real (i.e. actual) knowledge.

5. If this picture is right, some myths about Plato's Platonism have to be 'deconstructed' and there is a need of re-reading Plato's forerunners, Parmenides and Heraclitus, too: For
Parmenides, 'scientific' statements have to be situation- and perspective-invariant. But under a God's eye view of ideal situation-invariance, time collapses into eternal presence such that under this point of view there is no change and movement. Heraclitus stresses that any real object of any real knowledge lies in the realm of an ever-changing presence, i.e. of time, or 'becoming'. Heraclitus claims that real reality always must be 'present experience'. As such it 'is' change. In a sense, Parmenides does not disagree at all. Subjective opinions or appearances always change. But if we say of something that it changes we do not talk about it in the form needed for true and stable knowledge. What we talk about should not change, or else it is not clear what we talk about. We need stable 'objects' or 'referents' of expressions or representations that can be 'passed' from one person or perspective to another. Knowledge does not just refer to what I or you see or feel or what we only seem to experience. The difficult question is this: How is situation-, hence time-invariant knowledge about an ever-changing the world possible?

The two positions of Heraclitus and Parmenides do not really contradict each other. They rather are two horns of a dilemma which results from two concept of real reality. Until today we use the words "reality" or "that which really exists" — which might be an appropriate translation of Aristotle's expression "ontos on" — sometimes in the 'empirical' sense of Heraclitus, sometimes in the 'theoretical' sense of Parmenides. In the latter case it refers to what 'explains' experience and change in a situation-independent way.

According to Heraclitus, any claim which is not founded in the world of becoming or experience refers to fool's paradise. This might be the reasons for Heraclitus' almost rude attacks against the 'polymath' and 'deceiver' Pythagoras and his "kakotechnia"14 — which might astonish us at first sight. The Pythagoreans have neglected experience, says Heraclitus. They remain in pure theory, mathematics, as some philosophers of physics today, too.

Parmenides' reflection on what there is also begins with presence and perception: The maidens that lead the chariot in the proem of the poem unveil their eyes. But Parmenides does not stop here. Instead, the goddess of reflection on the method of knowledge presents the idea of situation-independent knowledge. We can see here some understanding of the counterfactual constitution of such an idea or ideal form. The 'substantial beings' of the goddess are already forms, not phenomena. Episteme is knowledge about forms, but not merely as formal knowledge, but as knowledge about the forms of a

14 Cf Heraclitus, fragments 129, 40, 41, 81
common world of possible experience. Therefore, real knowledge remains founded in present experience, in Heidegger's *a-letheia* or non-concealment ('*Unverborgenheit*'), i. e. in direct experience of what is present.

By its very definition, the ideal conditions of invariant knowledge cannot be fulfilled by humans. Nevertheless, the ideal way of truth, as it is described in the poem of Parmenides, leads us into the right direction, to a better understanding of Knowledge, of the *form of knowledge*. It allows us to see that we always have to 'measure' the sufficiency of a particular knowledge claim or to evaluate the distance to the ideal form in any particular knowledge claim. In a certain sense, Parmenides' poem is a first reflection on the basic conditions of written science and on the basic problems of the idea of time-invariant and situation- or change-independent truth.

7. **References**