

“WHAT IS?” QUESTIONS

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ABSTRACT

This article aims at showing how “what is?” questions may open the way to move from our everyday acquaintance with *what-is* questions to a discussion of perennial philosophical issues, such as the relation between what is universal and individual, the relation between *essence* and *appearance*, as well as that between *constancy* and *change*. Add to this the initial prominence of thing concepts in Greek philosophy (embodied in the substance concept) and the eventual dominance of relational concepts (function concepts). This will be done by contrasting the distinctions employed with the impasse entailed in one-sided *ismic* orientations. Such an undertaking will have to account for both uniqueness and coherence. In addition, the distinction between conceptual knowledge and concept-transcending knowledge will serve the purpose of highlighting the limits of rational understanding as expressed in *what-is* questions as well as the unavoidability of the use of primitive terms. This, in turn, will require a brief account of the unavoidability of indefinability. It will be argued that what is needed is an integral and encompassing idea of the universe in its unity (coherence/relatedness) and diversity (uniqueness/irreducibility). The conclusion reached will underscore the necessity to avoid reductionism and to affirm both sides of above-mentioned coin: uniqueness and coherence. Therefore, to accomplish this goal such an encompassing perspective will have to deepen *what-is* questions by contemplating *what-is-the-meaning-of?* questions. Clearly, *what-is?* questions open an entrance to the basic distinctions implicit in philosophy as well as within the various academic disciplines – including the natural sciences and the humanities.

Keywords: *what-is* questions; *what-is the-meaning-of* questions; concept and word; universality and what is individual; uniqueness and coherence; conceptual knowledge and concept-transcending knowledge; primitive terms; indefinability

1. OUR EVERYDAY ORIENTATION IN THE WORLD

Asking *what-is* questions presupposes a certain *conceptual* and *lingual* competency. A large part of the philosophical legacy of the West argue for the foundational position of conceptual knowledge, but since the beginning of the twentieth century the general shift to language as

new dimension (as Heidegger called it), resulted in giving primacy to language as the new horizon. Consider for a moment how we enhanced our understanding of the world through “what is?” questions.

Initially it may be directed at things within our field of vision, such as stones, flowers, animals and a variety of cultural objects within the life-world of growing children. Interestingly these concrete entities are not merely taken as something purely individual, for *what-is* questions are undergirded by the uniquely human ability to acquire *concepts*. For example, after having asked what a dove is, a young child the next day notices a different bird saying: “look, there is another *dove*”! The lacking lingual competence of the child is immediately evident, for at this stage her vocabulary does not include the word *bird*. But the child is nonetheless already able to obtain the *concept* bird (lingually incorrectly designated by using the *word* dove). This “mistake” undeniably shows that the conceptual ability of the young child at this early stage in life is not only foundational to but also more advanced than her comparable lingual competency. After all, understanding the concept *bird* presupposes the human analytical ability to *abstract*, that is, to *lift out* what is *similar* and to *disregard* what is *different*. In this instance *similarities* are found in the fact that all birds have wings, beaks and feathers, whereas *differences* may concern features like size, colour and shape.

Although initially tied to *what-is* questions, children are soon getting used to the switch from *what-is* questions which generate “this is a ...” answers (statements). Looking down the street no longer results in “this is a tree, this is another tree, ...” and so on, for the concept tree is already prominent in identifying all of them as *trees*. The next step is simple, for the little girl is soon capable to express her understanding in collective terms: “Look at all the trees/children/cars” and so on.

The hidden starting-point of our reflection on *what-is* questions is given in the fact that although *what-is* questions are *object*-directed, this object-directedness presupposes the inter-subjective interaction between the little girl asking questions and the adult answering them. This shows that both subject-subject and subject-object relations are present. The former, the presence of subject-subject relations, manifest themselves not merely in an incidental inter-individual relation, because it at once embodies the family as an organized community, distinct from other societal collectivities, communities and coordinational relationships (such as being friends or neighbours). Surely, *what-is* questions are embedded in all facets of our concrete *everyday orientation in the world*.

2. SOME PHILOSOPHICAL IMPLICATIONS

Let us commence by exploring some further implications of *what-is* questions. The dove example already touched upon the difference between *concept* and *word*, while at the same time highlighting the nature of *abstraction* in relation to *concepts*. The crucial issue is found in the relation between what is universal and what is individual. While formulating two *what-is* questions Goethe shed light on the unbreakable coherence between what is *universal* and what is *individual*.

Goethe asked the question:

Was ist das Allgemeine?
Der einzelne Fall

Was ist das Besondere?
Millionen Fälle

Translated:
“What is universal?
The individual instance.

What is particular?
Millions of instances”

(Quoted by Von Weizsäcker 2002:212).

Sometimes this relation is also designated as that between *universality* and *individuality*. The important insight conveyed in the formulation of Goethe is that concrete entities, each one of them and all of them, at once have both a *universal* side and an *individual* side. At this point the *what-is* question intersects with the perennial philosophical problem of what is *universal* and what is *individual*.

The transcendent static ontic forms located in Plato’s supra-sensory realm of eternal ideas were *universal*, while Aristotle transposed them to be the universal substantial forms inherent in entities (Aristotle’s secondary substance).

Moreover, this distinction is embedded within the world orientation of every normal human being. Humans randomly toggle between universality and what is individual, for example when a person says *this* horse is *a* horse, *this* atom is *an* atom, and so on. The articles “this” and “a” respectively highlight the individual and universal sides of entities.

Another assumption underlying *what-is* questions is given in the wonder and awe we have for what there *is* out there in the vast material world of physical existence.

3. ENSUING HIGHER LEVEL QUESTIONS

This may prompt us to ask a higher level *what-is* question, namely, “*what is matter?*” Early Greek thought related this question to the connection between *thought* and *being*. The “*what is matter?*” question could then be further specified by asking: *what is the essence of matter?* Remember that Parmenides identified *thought* and *being*, because in his third B Fragment he claims that thought and being are *the same* (Diels-Kranz I, 231; Parmenides, B. Fragm. 3).

Reflection on this issue generated two additional philosophical problems, namely the relation between *essence* and *appearance*, and that between *constancy* (persistence) and *change*.

The issue of *being* and *essence* relates to the *substance concept* (including questions about what matter is), which, in turn, involves the mentioned difference between *universality* and what is *individual* and the problem of thought and being.

Plato pursued this path further, but it was Hegel who kept it alive insofar as he believes that logic and dialectic are supposed to embrace knowledge of reality in its fullness and totality. Cassirer remarks that only at this point does it seem as if the circle of philosophy is closed by reaching its aim in the identity of reality and reason – this is the point where Hegel believes his “Science of Logic” stands (Cassirer 1957:10).

Although Aristotle attempts to bridge the strict Platonic separation between idea and sensory thing with his view of substance as the combination of form and matter, he maintains an essential Platonic moment in his view that a concept (*logos*) does not come into being or pass away (*Metaph.* 1039 b 22-26). The primary substance is *unknowable* for Aristotle – knowledge is only possible of the *universal essence of things*, the so-called secondary substance, the *to ti en einai* (*De Anima*, 412 b 16; cf. 414 a 9-11; *Categoria*, 2b 6-10).

According to Aristotle true knowledge is therefore in principle (universal) *form* knowledge. From this position, it follows naturally that *matter* (*hul*) stands in opposition to concept formation. In the third Chapter of the seventh Book of his *Metaphysics*, Aristotle elaborates this implication in a negative sense, by subtracting all determinations of being, thus making matter as such unknowable. All positive determinations of being and their negation are denied in respect of matter (*Metaph.*, 1029 a 27-28). From the fact that the absolute formless matter functions as the *boundary point* of all negative designations one may here discern a genuine *via negativa* as it is later on found in the *negative theology* of the medieval era.

This shows that Greek philosophy since its inception not only wrestled with the limits of *what-is* questions, for it also contemplated the *limits* of concept formation. It is striking that the initial phases of Greek and Medieval philosophy gave priority to entities (substances) whereas modern philosophy, since the Renaissance, increasingly pursued the opposite path by subordinating the concept of a substance and a thing to *relation concepts*.

4. FROM THE WHAT TO THE HOW

This development transformed the *what-is* questions into *how* questions. Yet, in the case of *monistic isms*, “how” answers may be shaped in a “what is” form, particularly when they commence with the word “everything.” For example, the Pythagoreans believed that “everything is number”; Heraclitus held the view that “everything changes”; classical vitalism holds that “everything is alive”; Goethe claimed “feeling is everything” [Gefühl ist alles]; Dilthey claimed that everything is historical. Or look at the opposing views of Descartes and Hume. Descartes holds:

At all events it is certain that I seem to see light, hear a noise, and feel heat; this cannot be false, and this is what in me is properly called perceiving (*sentire*), which is nothing else than thinking (Meditation II.)

Hume, in contrast, reduces everything to *perception* as basic denominator:

To hate, to love, to think, to feel, to see; all this is nothing but to perceive (*A Treatise of Human Nature*, 1,2,6).

More recently the philosopher Paul Ziff remarked that he is not certain why he is a *materialist*: “It’s not because of the arguments. I guess I’d just have to say that reality looks irresistibly physical to me” (Clouser 2005:38). A self-confessed atheist, the immunologist George Klein, holds that his atheism is his ultimate *faith commitment* for he categorically states that his “atheism is not based on science, but is an a priori faith commitment.” He is also not an agnostic, for he says: “I am not an agnostic. I am an atheist. My attitude is not based on science, but rather on faith... The absence of a Creator, the non-existence of God is my childhood faith, my adult belief, unshakable and holy” (Klein 1990:203; see Lennox 2007:34).

The limitations of *what-is* questions are particularly seen in the way in which the Greek-Medieval substance concept was increasingly replaced by the function concept since the Renaissance.

Modern physics did realize that it cannot tell us *what* fills its functional schema $x, y, z, (ct)$ – it can merely inform us *how* it is filled.

The history of the concept of matter demonstrates the fact that theoretical reflection struggled with different *modes of explanation*. After number and space dominated the Greek-Medieval scene, the classical mechanistic world view explored *motion* as a new mode of explanation: *the world as particles in motion*. This view lasted until Heinrich Herz before physicists at the beginning of the 20th century realised that the core meaning of the physical aspect is found in *energy-operation*.

However, the question, *what is matter?* still eludes the grasp of modern physics. According to Stegmüller contemporary “matter experts” are not wiser than those first thinkers who attempted to provide a speculative foundation for matter more than 2000 years ago (Stegmüller 1987:91).

Stegmüller states that the problems attached to the question “what is matter?” concern the *atomistic conception* and the *continuity conception*. Laugwitz also refers to the split between *continuity* and *discreteness*. Another physicist who characterizes classical physics as “a multitudinist worldview” is d’Espagnat, for to his mind physics favours an understanding of nature in which physical reality is built upon a “myriad simple elements – essentially localized ‘atoms’ or ‘particles’.” He proceeds with the claim that general “quantum field theory is radically at variance with it” while exploring its alternative “notion of a wholeness of some sort.” He states: “But theoretical as well as experimental advances gradually made people realize that it [namely *wholeness*] constitutes an inherent part of the very quantum formalism and has quite specific experimental consequences” (d’Espagnat 2006:17).

These views are intimately related to the question whether or not matter is *infinitely divisible*. An answer to this problem has to account for the difference between *physical space* and *mathematical space*. This distinction between *atomism* and *continuity* [holism] is derived from mutually excluding one-sided emphases on number and space, elevated to be the two most basic modes explaining reality.

The history of the question, *what is matter?* reveals a dependence upon more unique modes of explanation. Stegmüller mentions the apparent indestructibility of matter, and the apparent or real limitless transformability of matter (Stegmüller 1987:91).

When these two problems are assessed in their coherence, it is immediately clear that they depend upon the third and fourth ontic modes of explanation in reality, namely the meaning of kinematic persistence (“immutability”) and physical changefulness (‘transformability’). The physicist Rollwagen holds the view that the “dualism” of wave and particle introduced a new dimension, namely the “possibility of the ... mutual transformation of elementary energy structures” (Rollwagen 1962:10). (We shall expand on this issue in section 7 below.)

5. THE COHERENCE OF WHAT IS IRREDUCIBLE

At this point we may mention that Kurt Gödel, arguably the most prominent logician of the 20th century, is convinced that there must be “primitives” that are unique and capable of being “intuited” – and they must also cohere. The acknowledgment of “primitive terms” highlights another perennial problem, namely how “*what is irreducible*” mutually “cohere” (see Yourgrau 2005:169).

What ought to be acknowledged is that the “thing-ness” of material entities exceeds the limited nature of the unique angles of approach – modes of existence or modes of explanation – that served our understanding of matter. Things function at once within in different modes but their existence is never *exhausted* by any one of these functional aspects. It appears that the mystery surrounding material entities derives from this multi-aspectual but-at-once more-than-merely aspectual nature of such entities.

The Dutch philosopher, Herman Dooyeweerd, underscores the structural identity of entities by recognizing the multi-aspectual nature of individual wholes as a foundational (transcendental) idea of their existence:

The philosophy of the cosmomic Idea does not first break up a thing’s unity into modal law-spheres, and then, in retrospect, seek unity in a thing. The transcendental Idea of the individual whole precedes the theoretical analysis of its modal functions. It is its pre-supposition, its cosmological a-priori (Dooyeweerd 2016:65).

It is precisely this more-than-merely-aspectual-nature of material things that highlights the fundamental shortcoming shared by all monistic isms as well as the absurdity of the aim to develop a “theory of everything.” Pythaorean arithmeticism flows from the conviction that “everything is number.” Yet, if this was true everything else would have been reducible to number. The question: “What is Number?” only has *meaning* if everything is not number.

If we take the difference between thing concepts and modal (functional) concepts serious, then it becomes equally important to handle “What is the meaning of?” questions. In opposition to monistic isms this new avenue opens up multiple options. Just consider questions such as, *what is the meaning of number?* – *what is the meaning of life?* – *what is the meaning of love?* – *what is the meaning of law?* – and so on.

First of all, we have to note that the physical aspect coheres with those aspects that are foundational to this aspect, namely the aspects of number, space, and movement. Consider for example how Greene, in his search after a theory of everything, refers to a “seamless whole” as well as his use of the quantitative meaning of a “single” theory, i.e. *one* theory (as well as

the numerical term “all”). The core meaning of space (i.e. continuous extension) underlies our awareness of wholeness and coherence (*seamless*).

Naturally uniqueness and irreducibility entail indefinability. Modern mathematics was threatened by the inconsistency of Cantor’s naïve set theory (enabling the contemplation of a set of all sets which is a member of itself if and only if it is not a member of itself). The ensuing axiomatization of set theory had to accept as primitive and undefinable the notion of a *set* itself (or the primitive membership relation). For example, within the Zermelo-Fraenkel set theory, “member of” is introduced as a primitive term – and Gödel once remarked that as yet we do not have a satisfactory non-circular definition of the term “set.”

The operation ‘set of x’s’ (where the variable ‘x’ ranges over some given kind of objects) cannot be defined satisfactorily (at least not in the present state of knowledge), but can only be paraphrased by other expressions involving again the concept of set, such as: ‘multitude of x’s’, ‘combination of any number of x’s’, ‘part of the totality of x’s’, where a ‘multitude’ (‘combination’, ‘part’) is conceived as something that exists in itself, no matter whether we can define it in a finite number of words (so that random sets are not excluded) (Gödel 1964:262).

Whenever an answer to a “*what-is* question” attempts to define what is undefinable, a circular position is assumed. In his logicistic approach to mathematics Russell highlights this problem for he claims that his class concept is supposed to be *purely logical* in nature. He does not recognize the circularity entailed in his argumentation:

1 + 1 is the number of a class *w* which is the logical sum of two classes *u* and *v* which have no common terms and have each only one term. The chief point to be observed is, that logical addition of numbers is the fundamental notion, while arithmetical addition of numbers is wholly subsequent (Russell 1956:119).

Strikingly Russell speaks of the sum of “two” classes, where each of them contains “one” element. This shows that an insight into the quantitative meaning of the numbers “1” and “2” is *presupposed!* Therefore, the number “2”, which had to appear as the result of “logical addition,” is presupposed by it. In the *Introduction* to this work, Russell says that Hilbert’s formalism (by leaving the integers undefined, only having those properties enumerated in the axioms) “have forgotten that numbers are needed, not only for doing sums, but for counting” (Russell 1956:v-vi). On page 119, it seems as if he himself “has forgotten” what he accused formalism of having “forgotten.”

Semantics, as a sub-discipline of general linguistics, had to accept “meaning” as such a primitive term. For example, when the distinction made by Immanuel Kant between analytic and synthetic propositions (cf. Kant 1787:10 ff.) is pursued, one may try to define a typical semantic phenomenon such as synonymy in terms of *analyticity*. Two sentences have the same meaning only if each one of them entails the other one in an analytic sense. Yet Quine highlighted the circularity of such an attempt. Analyticity is defined in terms of meaning (a sentence is supposed to be analytically true if it is true only on the basis of its meaning), whereas meaning (in this case: similarity of meaning = synonymy) is defined in terms of

analyticity. Fodor holds that “there is no meaning-independent way of characterizing either analyticity or meaning (Fodor 1977:43).

We may conclude that the meaning of an aspect only comes to expression in its indissoluble coherence with other aspects. Therefore, the undeniable interconnectedness of all aspects of reality precludes every claim to “purity” – i.e. considering an aspect stripped of its coherence with other aspects.

This shows that we may indeed extend the meaning of “what is” questions in order to account for the different unique aspects of reality by specifying this question as follows: What is the meaning of number? Or: What is the meaning of space? Or: What is the meaning of movement? Or: What is the meaning of the physical. Consider the last two mentioned aspects.

6. WHAT IS THE MEANING OF PERSISTENCE AND CHANGE?

These distinctions also bear upon the difference between the kinematic and the physical (energetic) aspects, which is fairly commonly acknowledged by physicists. Max Planck, for example, sharply and correctly distinguishes between a “mechanical” and an “energetical” view of nature (Planck 1973:65). In a different context, Janich also draws a clear distinction between phoronomic and dynamic statements (Janich 1975:68-69).

The discovery of the irreducibility of the kinematic function of reality is implicit in Plato’s intellectual struggle with the relationship between constancy and change. The early Greek philosopher Heraclitus has already challenged the awareness of the persistence of entities – the fact that entities endure over time – by arguing that the sensory world of becoming is in constant flux (see Diels-Kranz B Fr.90).

The question, what is the meaning of persistence? or what is the meaning of change? also pertains to the relation between a law and what is governed by such a law. Avey explores this insight for the problem of *relativism*:

There is, however, another aspect of Heraclitan philosophy which should not be ignored, and which relativist theory does not always find it convenient to emphasize. The law of change does not itself undergo change in the manner of the changing particulars (Avey 1929:521).

A younger contemporary of Socrates, Cratylus, paved the way for Plato to understand the one-sided views of Heraclitus even in a more radical way. He understood Heraclitus as saying that all perceivable things are in a process of flux and that therefore they are *unknowable*. In his dialogue named *Cratylus* the focus includes the opposite of a *what-is* question, for here Plato argues that we cannot say *what-is-not?* – which makes it impossible to say what is *false*. Clearly, Cratylus positioned change in such a radical way that he even questioned references to what is the “same.” Compare the alleged view of Heraclitus that one cannot step into the same river twice. Cratylus actually claimed that one cannot even *once* step into the same river (see Freeman 1949:285). Without something enduring or persistent identity would be impossible, and this will at once uproot any and all *what-is* questions.

These views impacted the earlier mentioned school of Parmenides which argued that multiplicity and movement are illusionary. In fact, the claim that thought and being are the same entails the implication that the answer to the question, *what is motion?* derails into a rejection: *motion is impossible*. So instead of answering the question: “what is motion?” the reality of movement is denied.

This negative answer is substantiated by Parmenides in his well-known antinomies regarding Achilles and the Tortoise, the flying arrow, the bisection paradox, and so on. This development simply explores the basic position assumed by Parmenides in his claim that thought and being are the same. Thought can only think what is, because it cannot contemplate what does not exist. According to Veling Parmenides encouraged later philosophers to find “true reality” amid a changeful world (Veling 2000:29).

As noted earlier Plato secured the possibility of knowledge by postulating persistent essential ontic forms supposedly not subject to change (*Cratylus* 439 c – 440 a). Without an awareness of endurance (persistence), the very notion of change becomes problematic, for then the recurring difficult question is: “what is it” that *changes*? While we may distance ourselves from the speculative (metaphysical) construction of transcendent ideal forms (static essences), we still have to account for the brilliant insight that change rests on constancy. A similar orientation is found in Frege’s view that there are limits to historical change. He explicitly refers to something eternally persistent: “If in the continuous flow of everything nothing firm and eternal persists, the knowability of the world would cease to be and everything will collapse into confusion.”¹

7. FROM “WHAT IS” TO RELATIONS

Perhaps the switch from “what-is” questions to questions about *relations* is the most significant development during and after the Renaissance, as we briefly pointed out earlier. The Greek-Medieval legacy of asserting the independence of things, understood as “substances,” amounts to the hypostatisation of such entities. But the subsequent turn towards function concepts since the Renaissance pursued the opposite alternative, namely the attempt to reduce entities to aspects or functions of reality. In general, this approach is *functionalistic*. Functionalism reifies (aspectual) relations, thus elevating one or another mode of reality to assume a central explanatory role in our understanding of the universe. When Descartes characterises material things (and the human body), he claims that essentially, they are *extended* – a spatial property. Likewise, he considers *thinking* to be the essence of the human soul or mind. In both instances, entities (or body and mind) are characterised in terms of one aspect or function only, which is typical of *functionalism*.

Regarding material things Descartes states: “That the nature of body consists not in weight, hardness, colour, and the like, but in extension alone” (Descartes 1965a: 200 – Part I, IV). Kant (1781/1787-B: 35) expanded on this understanding in his account of material bodies, for he holds that when our understanding leaves aside everything accompanying their representation, such as substance, force, divisibility, etc., and likewise also separates that which belong to

¹ “Wenn in dem beständigen Flusse aller Dinge nichts Festes, Ewiges beharrte, würde die Erkennbarkeit der Welt aufhören und alles in Verwirrung stürzen” (Frege 1884:VII – *Einleitung*).

sensation, such as impenetrability, hardness, colour, etc., then this empirical intuition leaves something else, namely *extension* and *shape* (just like with Descartes *spatial* properties).

Yet Kant does not understand space in its original (mathematical) sense, but as the *form* of our (sensory) intuition through which we represent objects outside us (alongside time as that which determines the relation of representations in our inner condition) (Kant 1787-B: 37, 50). According to Kant (1787-B: 89-90), *human understanding* must be understood in complete isolation, not merely from what is *empirical*, but also from every form of *sensibility*. It is a self-enduring and self-sufficient unity that cannot be increased by any additions from without. Although this mode of expression still reflects an element of the old substance concept, it is at the same time presented in a fully functionalistic way. Sensibility and understanding are opposed to each other, similar to Descartes' *res extensa* and the *res cogitans*. The transcendental motive in Kant's *Critique of Pure Reason* (CPR) aims at uncovering the *a priori* conditions making possible our experience of phenomena. It is fitted into the mould of two basic functions of reality, the sensitive and the logical-analytical. The former of these two absorbed within itself the spatial denominator of extension, which Kant continued in following the view of Descartes. As noted, material things, according to Descartes, are essentially extended.

The switch to a moving body in the thought of Hobbes reflects the influence of Galileo's new mechanics. Prior to Galileo, the belief was held that a moving body requires a dynamic force in order to continue its motion. Galileo, however, claimed that once a body is in motion, it will continue its motion endlessly. Only when there is some impediment will it change its course of motion (Galileo 1638).

In the development of the natural sciences, in particular, there is the tendency to focus on the functional relationships between things without attempting to explain the *what* of these entities in their relations. No one less than the just-mentioned influential Enlightenment philosopher Immanuel Kant demonstrates this development more clearly. In addition to positioning space, as the essential characteristic of material bodies, within the context of sensibility (intuition), Kant also surrendered fully to the restriction of knowledge to our *concepts of relations*. Not things-in-themselves, but their appearances are reduced to relations. The conditions of intuition solely concern appearances: "What we can know of matter are nothing but relationships (that which, what we call the inner determinations of matter, is only inner comparativity" – Kant 1787-B: 341).

From an overall perspective, the most significant effect of giving primacy to *relationships* and *relation concepts* is evident in the emergence of the earlier mentioned monistic isms, practically found within all the natural sciences and humanities during the past millennia. In fact, every monistic orientation elevates one mode of explanation to be the exclusive gateway to an understanding of all of reality.

Just consider trends such as physicalism, vitalism, moralism, and historicism. All of them are presenting a negative answer to the problem of unity and diversity. We have designated this problem also as that of the *coherence of irreducibles*. Bertrand Russell relates this to Hegel in respect of the difference between a so-called "continuous magnitude" (wholeness) and a "discrete magnitude" as "different" instances of the "class-concept". He then proceeds to state

that he “strongly” holds “that this opposition of identity and diversity in a collection constitutes a fundamental problem of logic – perhaps even the fundamental problem of philosophy” (Russell 1956: 346).

Although an understanding of the world may benefit from avoiding any attempt at reducing what is irreducible, thus affirming the uniqueness and irreducibility of the diverse aspects of reality, the actual history of the various scholarly disciplines appears to display constant attempts to reduce what is irreducible. Rickert points out that the logical ideal of the natural sciences should aim at eliminating all thing concepts by turning them into relation concepts:

Whatever the role the category of a thing may fulfil in a theory of the thing world, envisaged as closed, at bottom there is no doubt that the natural sciences have to strive to resolve the rigid and fixed things increasingly, [...] and this means nothing else but transforming as far as possible all thing concepts into relation concepts. [...] Our theory is valid for the logical ideal of natural scientific concepts, because this ideal solely concerns relation concepts (Rickert 1913: 68-70).

This widespread view is also found in Dilthey’s *Introduction* to the humanities, where he highlights the fact that the modern natural sciences gradually replaced the metaphysical substance concept (Dilthey 1933: 360).

When the term ‘diversity’ is understood in the unspecified sense of a multiplicity of functional relationships, no mention is made of the specific way in which different types of entities function within the relational aspects of reality. Such an account enters the domain of the second primitive mentioned by Dewey, designated by him as “specificity.” Since Kant, those thinkers who wrestled with this problem distinguished between thing concepts and *pure concepts of law*. The latter are meant to designate universal and unspecified modal relational laws. Consider the work of Cassirer on substance concept and function concept in this regard. In his analysis of the concepts of chemistry he remarks that physics is not really directed at thing concepts but rather focused **on** *pure concepts of law*. Rudolph Berlinger highlights this view of Cassirer in his characterisation of the epistemological orientation of the Marburg school:

The Marburg school eliminates from Kant’s transcendental idealism the things-in-themselves as realities existing independently of consciousness. The thing concept is replaced by the law concept (Berlinger 1969: 2).

According to Dewey there is a “growing recognition that scientific objects are purely relational and have nothing to do with the intrinsic qualities of individual things and nothing to say about them.” He holds that mass is inertia-momentum and that these are “strictly measures and relations”. Even the long-standing distinction between primary and secondary qualities has to surrender to the relational perspective:

Using the older language, it was seen that so-called primary qualities are no more inherent properties of ultimate objects than are so-called secondary qualities of odors, sounds, and colors, since the former are also strictly relational; or, as Locke

stated in his moments of clear insight, are ‘retainers’ of objects in their connections with other things (Dewey 1960: 233).

His general position is given in defending the view that “the subject matter of scientific findings is *relational*, not individual” (my emphasis –Dewey 1960: 234). To which he adds that the relational view constitutes the “very method of physical science.”

This requires an acknowledgement that the “primary standard units of mass, space, and time”, which are “concerned with measurement of relations of change, not with individuals as such” (Dewey 1960: 233).

8. CONCLUDING REMARK

Summarising we may conclude that “what is?” questions indeed opened the way to move from our everyday acquaintance with *what-is* questions to a discussion of perennial philosophical issues – from things and the substance concept up to the eventual dominance of relational concepts (function concepts). At the same time, it helped us to avoid the impasse of one-sided *ismic* orientations by acknowledging both uniqueness and coherence. The distinction between conceptual knowledge and concept-transcending knowledge served the purpose of highlighting the limits of rational understanding and the unavoidability of primitive terms and indefinability.

What is needed is an integral and encompassing idea of the universe in its unity (coherence/relatedness) and diversity (uniqueness/irreducibility) which has to affirm both sides of the coin – uniqueness and coherence. We have argued that such an encompassing perspective deepens *what-is* questions to the level of *what-is-the-meaning-of questions*.

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