

Philosophy in the context of our time – IV: The perennial question concerning “(metaphysical) categories”

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Abstract

In response to the contribution of Heinrich Alt to my Festschrift (see Alt, 2006), this article focuses on the human ability to discern. This ability generated all kinds of classificatory schemes throughout the history of philosophy. The different categories introduced by philosophers such as Aristotle, the transcendentia of Thomas Aquinas, Kant and Hartmann provide examples of “metaphysical” schemes, that is to say, schemes without sufficient ontic foundations. After some immanent-critical remarks an alternative approach is articulated, the transcendental-empirical method. This method enables an analysis of those conditions making possible what we can experience. The two ontic dimensions implied in applying this transcendental-empirical method, namely those of aspects and entities, first of all need an established terminology. At the same time an account is required of the difference between (unspecified) modal laws and (specified) type-laws (the latter was not accepted by Vollenhoven). Ten criteria, applicable in discerning different modal aspects of reality, are articulated in support of the transcendental-empirical thrust underlying this theory of modal law-spheres, a theory that is indeed unique in the history of philosophy.

A number of issues surface the moment a philosopher starts to contemplate different ways to design categories aimed at an understanding of the universe in which we live. Executing such a task inevitably runs into a number of related issues. Some of the most important ones are analyzed in the contribution of Heinrich Alt to my Festschrift – under the title “The problem of universals” (see Alt, 2006). He pays attention to the distinction between tokens and types, between attributes and the class of entities exemplifying them, resemblance, the idea of a substance underlying attributes (properties) as opposed to the notion of a bundle and the relation between the subject, the distinction between and predicate of a statement and that of universality and individuality.

Opsomming

In reaksie op die bydrae van Heinrich Alt tot die Festschrift wat in 2006 aan my opgedra is (sien Alt, 2006), fokus hierdie artikel op die menslike vermoë om te kan onderskei. Hierdie vermoë het talle soorte van klassifiserende skemas dwarsdeur die geskiedenis van die filosofie na vore gebring. Die verskillende kategorieë wat ingevoer is deur filosowe soos Aristoteles, die transendentalia van Thomas Aquinas, Kant and Hartmann verskaf aan ons voorbeelde van “metafisiese” skemas, dit wil sê skemas sonder toereikende ontiese grondslae. Nadat ’n aantal immanent-kritiese opmerkings gemaak word, word ’n alternatiewe benadering aan die orde gestel, met name die transendentiaal-empiriese metode. Hierdie metode stel ons in staat om dié kondisies wat ons ervaring eers moontlik maak te ontleed. Die twee ontiese dimensies wat in die toepassing van die transendentiaal-empiriese metode geïmpliseer is, naamlik die dimensies van aspekte en entiteite, verg in die eerste plek ’n gevestigde terminologie. Tegelyk is dit nodig om rekenskap te gee van die verskil tussen (ongespesifiseerde) modale wette en (gespesifiseerde) tipe-wette (laasgenoemde is nie deur Vollenhoven aanvaar nie). Tien maatstawwe met behulp waarvan modale aspekte onderskei kan word is uitgelig ter ondersteuning van die transendentiaal-empiriese metode wat ten grondslag lê aan die teorie van modale aspekte, ’n teorie wat inderdaad uniek is in die geskiedenis van die filosofie.

Sodra 'n filosoof begin nadink oor die verskillende wyses waarop kategorieë ontwerp kan word kom 'n aantal kwessies na vore wat daarop gerig is om die heelal waarin ons leef te verstaan. Wanneer hierdie taak ten uitvoer gebring word word onvermydelik gestuit op 'n aantal verwante temas. Sommige van die belangrikste hiervan is ontleed in die bydrae van Heinrich Alt in sy bydrae tot die bogenelde Festschrift – onder die titel “The problem of Universals” (sien Alt, 2006). Hy skenk aandag aan die onderskeiding tussen “tokens” en “types”, tussen eienskappe en die klas entiteite wat dit vertoon, lyk-na, die substansie-idee onderliggend aan eienskappe (“properties”) gestel teenoor die siening van 'n “bundel”, die onderskeiding tussen die subjek en predikaat van 'n proposisie, en die onderskeiding tussen universaliteit en individualiteit.

1. Examples from the history of philosophy

Traditionally these issues were discussed in what is still known as *metaphysics*. The first metaphysical response to these problems is normally found in the idea of *categories*, although a more complex context is needed, since the mere idea of categories leaves open alternative options. In terms of the developments within modern (post-Renaissance) philosophy the question is whether or not these categories are given in an ontic sense, i.e., if they belong to reality itself. If not, they may be mere *constructions of the human mind*. Descartes opted for the view that number and all universals are mere modes of thought (*Principles of Philosophy*, Part I, LVII).

Behind all of this we may *discern* the human ability to *discern*! Humans appear to have the capacity to *distinguish* and to *classify*. One way of capturing this ability is to refer to human endeavours of *catogorization*. It appears that we are all used to categorize the things of everyday experience, such as material entities (physical things), grass, flowers, cats, dogs, birds, spider webs, bird nests, dwelling places (houses), books, chairs, statues, clothes, families, states, church denominations and ethnic communities. We may categorize grass and flowers as *plants*, cats, dogs and birds as *animals*, spider webs and bird nests as *sensory objects*, statues and clothes and the like as *cultural objects*, and entities such as families, states, religious denominations and ethnic communities as *social entities*.

The idea of entities occupies a fairly central position for the greater part of the history of scholarly reflection. The well-known dual teleological order found in the thought of Aristotle proceeded from the succession of matter, plants, animals and human beings. Within this teleological order one finds the primacy of the Greek form motive, with the depreciated matter motive as its dialectical correlate (see Dooyeweerd, 1997-III:9-15).

Already on this level, where an acquaintance with the (natural and cultural) things of our experience is manifested, philosophers and special scientists tend to move apart in their assessment of what is at stake. Further differences of opinion surface as soon as the classification of different kinds of entities is positioned within the context of a second kind of classification or categorization, namely one in which the focus is not any longer on entities but on properties or attributes of entities. If we once more first revert to our pre-scientific everyday experience of reality it is equally clear that humans have a proper awareness of properties or attributes.

Before Aristotle developed his views, certain properties entered the scene of philosophical reflection. The Pythagoreans recognized the importance of number. Suddenly this opened up a cross-cutting perspective, since if we have a number of dogs and cats on a farm, the identification of this number by counting them does not focus on *what* they are, but merely pays attention to *how many* of them there are. The category of cats or dogs is primarily concerned with a *specific kind* of entities and only secondarily interested in *how many* of them there may be. After the Pythagoreans extended their appreciation of number to the elevated and encompassing claim that (the essence of) everything *is* number, Greek mathematics discovered numbers that cannot be expressed merely by viewing them as fractions (i.e., as the *ratio* between natural numbers). This discovery of irrational numbers caused a switch to a new *category*, namely *space*. The over-extension of this category resulted in the claim that only being can be thought of and that what *is not* cannot be contemplated. The unity of being is equated with thought: “For it is neither expressible nor thinkable that [what-is] is not” (Diels-Kranz I, 236; 28). [*Parmenides*, B. Fragm. 8.8-9: *οὐ γὰρ φάτων οὐδὲ νοητόν ἔστιν ὅπως οὐκ ἔστι*]; “For thinking and being are the same” (Diels-Kranz I, 231; *Parmenides*, B. Fragm. 3: *τὸ γὰρ αὐτὸ νοεῖν ἐστίν τε καὶ εἶναι*).]

The result of this development left philosophy with two very basic categories, *unity* and *truth*. Socrates later on mediated the role of two further *categories*, namely the *good* and *beauty*. Plato assigned a privileged role to the (Idea of the) good, but these four predicates eventually provided

medieval thinking with what became known as the four *transcendental determinations of being*, namely *unity, truth, beauty* and the *good*. Within medieval anthropological conceptions the capacities of the soul reflect three of these determinations, known as the faculties of *the soul: thought, will* and *desire*. Interestingly, a contemporary thinker of the stature of Habermas continues to use the categories of *truth, beauty* and the *good* in his social-philosophical writings.

We may for a moment return to Aristotle, because he went further by introducing a number of categories. He distinguishes between the classes of predicates and then mentions the following ten categories: “Essence, Quantity, Quality, Relation, Place, Time, Position, State, Activity, Passivity” (Aristotle, 2001:195; *Topics*, Book I, Chapter 8, 103b21-24). Whereas these categories still had an *ontic* status, the Enlightenment philosopher, Immanuel Kant, introduced *thought-categories* in his *Critique of pure Reason* (CPR). Kant’s “Table of Categories” consists of four kinds, namely those of *Quantity* [Unity, Plurality, Totality], *Quality* [Reality, Negation, Limitation], *Relation* [Inherence and Subsistence (substantia et accidens), Causality and Dependence (cause and effect), Community (reciprocity between the active and the passive)], and *Modality* [Possibility – Impossibility; Existence – Non-existence; Necessity – Contingency] (Kant, 1781-A:80; 1787-B:106).

From the 20th century we may add the pretty encompassing scheme of categories found in the thought of Nicolai Hartmann. He introduces basic categories that are supposedly valid for all spheres and all levels of being. Hartmann distinguishes 24 principles of being, arranged in pairs: principle – concretum; structure – mode; form – matter; inner – outer; determination – dependence; quality – quantity; unity – multiplicity; unanimity – conflict; antithesis – dimension; discreteness – continuity; substrate – relation; element – system (see Stegmüller, 1969:237).

The difficulty is how to assess the “status” of these alternative category schemes.

2. Is there a way to evaluate alternative classes of categories?

Both Aristotle and Kant identify a category of *quantity*. According to Aristotle we have to make a subdivision within the category of quantity by distinguishing between a *discrete quantity* and a *continuous quantity*. “Quantity is either discrete, or continuous” (*Categoriae*, 4 b 20). “Number, ... is a discrete quantity” (Cat., 4 b 31). The parts of a discrete quantity have no

common limit, while it is possible in the case of a line (as a continuous quantity) to find a common limit to its parts time and again (Cat., 4b 25ff., 5 a 1ff.) (see Aristotle, 2001:14).

This view is intimately linked to the switch within Greek mathematics from number to space, because after this shift spatial continuity was considered to be more basic than our numerical awareness – they thought that being given at once (any continuum) is more basic than succession. Regarding the situation within Greek mathematics Laugwitz remarks: “The relation of numbers allows for a geometrical representation, but not every relation between lines can be represented in an arithmetical way. [“Zahlenverhältnis läßt sich geometrisch darstellen, aber nicht jedes Streckenverhältnis arithmetisch. Das begründet einen Vorrang der Geometrie vor der Arithmetik, und die Konsequenz sind die Bücher des Euklid: Die Theorie der Zahlen ist ein Teil der Geometrie” (Laugwitz, 1986:9; also compare his more recent article, Laugwitz, 1997).]

Interestingly Frege, in his last phase, returned to this view and a mere decade ago the French mathematician, René Thom, also defends the view that continuity *precedes* discreteness: “For him, as for many mathematicians of the continuum, ‘the Continuum precedes ontologically the discrete’, for the latter is merely an ‘accident coming out of the continuum background’, ‘a broken line’ ” (explained by Longo, 2001:6). Further on in this article Longo combines Thom’s views with those of Leibniz: “By contrast Leibniz and Thom considers the continuum as the original giving, central to all mathematical construction, while the discrete is only represented as a singularity, as a catastrophe” (Longo, 2001:19).

The after-effect of this spatial orientation is indeed still evident in the thought of Descartes (1596-1650) and even Immanuel Kant (1724-1804). In their understanding of nature, both philosophers assign a decisive role to *spatial extension*. For Descartes, *extension* serves as the essential characteristic of material bodies – *res extensa*, for he writes: “That the nature of body consists not in weight, hardness, colour, and the like, but in extension alone” (Descartes, 1965:200 – Part I, IV). Kant’s characterization of material bodies is also oriented toward space. “When our understanding leaves aside everything accompanying their representation, such as substance, force, divisibility, etc., and likewise also separates that which belong to sensation, such as impenetrability, hardness, color, etc., then this empirical intuition leaves something else, namely extension and shape.” [“So, wenn ich von der Vorstellung eines Körpers das, was der Verstand davon denkt, als Substanz, Kraft, Teilbarkeit usw., imgleichen,

was davon zur Empfindung gehört, als Undurchdringlichkeit, Härte, Farbe usw. absondere, so bleibt mir aus dieser empirischen Anschauung noch etwas übrig, nämlich Ausdehnung und Gestalt” (Kant, 1781/1787-B:35).]

Whereas Aristotle collapsed the numerical and spatial aspects of reality (merely distinguishing between two kinds of quantity – the one *discrete* and the other *continuous*), Kant’s idea of “Ausdehnung und Gestalt” (extension and shape) actually separates space from number because it excludes the feature of *divisibility* – and divisibility represents the meaning of numerical succession as reflected within space, for the divisibility of every spatial continuum can be extended indefinitely, in the sense of an infinite succession (the *successive infinite*). Yet within his first category, namely quantity, Kant implicitly does account for the coherence between number and space. This is obvious from the three categories specified within this category: *unity*, *multiplicity*, and *totality*. The latter term, namely *totality*, is synonymous with the spatial whole-parts relation (which is characteristic of spatial continuity). Therefore the idea of a *quantitative totality* accounts for a connection or intrinsic relation between *number* and *space*. Likewise, when mathematicians are speaking of *integers* (“whole” numbers) and *fractions* (“broken” numbers), this practice illustrates an intimate connection between the meaning of number and space.

Our preceding remarks show that the use of terms such as *discrete*, *continuous*, *divisibility*, *multiplicity*, and *totality* calls for a *systematic account* of the nature and coherence of *number* and *space*. The mere distinction between quantity and quality is questionable, because having four legs is a *numerical quality* (property, feature) of a chair, that is, a *quantitative quality*! Therefore the entire legacy of distinguishing between *quantity* and *quality* is misdirected.

Moreover, many other properties or features can be “placed” within the category of *quality* or the category of *relation*, not only *quantitative properties*. The term *relation* indicates *relatedness*, the fact that things are *connected*, that there is an existing *coherence* between them. All these terms still have spatial connotations. However, once Kant proceeds to give content to this *category of relation*, he falls back to *physical* categories, for he then introduces the categories of *causality* (cause and effect) and *interaction* (between what is active and what is passive). Of course the meaning of the term “relation” can be extended beyond *functional relations*, as is seen from the fact that Kant included the relation between substance (essence) and what is accidental (appearance) (*substantia et accidens*) in it as well.

Lurking on the background of these ontological schemes of categories supra-theoretical orientations hide themselves. For example, without an understanding of the relation between matter and form in the thought of Aristotle (with the primacy given to form), it is impossible to realize why Thomas of Aquinas simply continues this primacy in his own way. Amongst the substances, Thomas says, the matter is there for the sake of the form (*Summa Contra Gentilis Libri Quattuor*, Volume Three, Part 1, Book III, Chapter 75 – page 325: “in substantiis vero material est propter formam”).

According to Loux pre-Kantian metaphysics (metaphysical realism) aimed at an account of the *world itself*, whereas Kant introduced something different, an “inquiry into the structure of human thought” itself (Loux, 2002:8). Within the context of metaphysical realism relations are *polyadic* or *many-place* universals (Loux, 2002:23), while, according to some adherents of this view (such as Russell), universals do not have any location at all even though the particulars exemplifying them may have spatial location (see Loux, 2002:56). In terms of the Copernican revolution accomplished by Kant’s CPR, the categories of human understanding are actually promoted to become *a priori* instruments in the hands of human understanding as the formal law-giver of nature (see Strauss, 2009:73, 91, 175, 185, 346, 446, 497).

Since Kant the question was whether there is just *one* (*a priori*) categorical framework or *many different* schemes dependent upon the contingency of cultural-historical circumstances. Let us once again look at the categories proposed by Hartmann and see if we can discern underlying patterns amongst them: (i) principle – concretum; (ii) structure – mode; (iii) form – matter; (iv) inner – outer; (v) determination – dependence; (vi) quality – quantity; (vii) unity – multiplicity; (viii) unanimity – conflict; (ix) antithesis – dimension; (x) discreteness – continuity; (xi) substrate – relation; (xii) element – system.

Suppose we take a law or a principle to be universal and add that it is supposed to hold for those particulars that are subject to it. Such a law is believed to delimit and determine what is correlated with it. The first opposition found in Hartmann’s list is principle – concretum, that is to say it captures the relation between a principle (law) and what is concretely subjected to it. The third opposition, that between form and matter, closely imitates the first one, as does the fifth, determination and dependence. Opposition five is merely spatial (inner-outer) and relates to opposition twelve which implicitly refers to the spatial whole-parts relation (system-element), just as opposition seven is wholly numerical (unity-multiplicity).

Opposition six represents a long-standing (untenable) legacy, mentioned earlier. Opposition two – structure-mode – may be interpreted as the equivalent of *entity* and *properties* (“substance and accidents” – compare also opposition eleven – substrate-relation). Opposition eight is once again *intra-aspectual* in nature, because it pre-supposes the problem of *consensus* and *conflict* as it appears within the logical-analytical mode of reality (see Strauss, 2006:207-216). Opposition ten, that of discreteness and continuity, is not a genuine opposition, a mistake also made by Lakoff and Núñez who are convinced that continuity and discreteness are opposites (Lakoff & Núñez, 2000:324). These authors did not realize that the terms discreteness and continuity refer to mutually cohering but distinct ontic functions of reality, namely number and space. Amongst the prominent mathematicians of the 20th century it was in particular the co-worker of David Hilbert, namely Paul Bernays, who deviated from the popular misunderstanding of this issue. He does not accept the general view that the distinction between our *arithmetical* and *geometrical* intuitions must be categorized in terms of space and time. The alternative proposed by him is to draw a distinction between what is discrete and what is continuous. [“Es empfiehlt sich, die Unterscheidung von ‘arithmetischer’ und ‘geometrischer’ Anschauung nicht nach den Momenten des Räumlichen und Zeitlichen, sondern im Hinblick auf den Unterschied des Diskreten und Kontinuierlichen vorzunehmen” (Bernays, 1976:81).]

3. A new approach: the transcendental-empirical method

The proposals from Aristotle, Kant and Hartmann all suffer from systematic clarity and uniformity. To a certain extent they all appear to be chosen fairly arbitrarily, without conducting a systematically coherent frame of reference that can serve as an *anchoring principle*. The challenge is to find something between the *realist view*, holding on to a mind-independent world “out there”, and the *nominalist approach*, ultimately elevating human understanding to be the sole source of conceptual schemes (albeit that the supposition is that there is one, universal, apriori scheme – a la Kant, or that there are multiple historically changefull schemes – a la postmodernism).

Such an alternative has been developed within reformational philosophy and it is known as the *transcendental-empirical method*. To show that elements of this method were acknowledged by scholars coming from different orientations, we may mention that the methodology developed by Parsons did recognize the relationship between what is *constant* and

universal on the one hand and the dynamically changing experiential phenomena on the other. Johnson, Dandeker and Asworth explains his position as follows: “Rather he suggests that while these concepts do represent universal, constant features of human action, the particular values or contents they have vary historically, and are problems of empirical research” (Johnson, *et al.*, 1984:72).

This is exactly what the transcendental-empirical method aims at – it endeavours to find those underlying conditions which make possible what we can experience in the world. The “making possible” part represents the “transcendental” element, and the varying experiences the “empirical” part of the transcendental-empirical method. When this stance is phrased in terms of our *ultimate commitment*, then the overarching perspective is that the transcendental conditions are nothing but the God-given *law for* creatures. This position is neither realistic nor nominalistic. We do not advocate the idea of a static, eternal, timeless order (law) because with such a view it is impossible to explain the connection between this a-temporal law and the temporal creatures subjected to it. Loux explains this problem entailed in the realistic (Platonistic) position: “Furthermore, it is highly problematic how beings like ourselves who belong firmly to the spatiotemporal world of concrete particulars could even have cognitive access to the nonspatial, nontemporal beings that Platonists tell us properties, kinds and relations are” (Loux, 2002:48).

The transcendental-empirical method holds that there is a strict correlation between the laws that hold for reality and what is subjected to these laws. Without a determining and delimiting law there would be no subjects and without subjects there is nothing for which the law can hold.

This position also radically differs from the all-pervasive influence of nominalism, which claims that things are constantly historically changing. This historicistic position, which radicalized modern relativism, plays an important role within “postmodern” circles where the emphasis is placed upon “new vocabulary” which cannot ask about the “essence”, the “nature” of things or what is universal (see Rorty, 1989: 8-9). However, in this context it should be noted that a prominent thinker such as Habermas as well as the well-known John Rawls (in an interview in 1994) still opts for the acknowledgement of something *universal* in all values (see Van Peursen, 1994:69).

To give one example of this (nominalistic) position *preceding* the argument of Rorty, we mention the following words of Herbert Blumer. He claims that we do not have to attribute any intrinsic meaning to social realities, since

they are mere “constructs, and not self-existing entities with intrinsic natures” (Blumer, 1966:539).

Although informed by the biblical perspective that creation is subjected to God’s Law-Word for creation, this starting point does not provide philosophy or any special science with a (detailed) analysis of the structural principle of any aspect of creation or of any societal collectivity. This also explains why the transcendental-empirical method inherently displays a *dynamic openness*:

- (i) All human (including transcendental-empirical) insights are provisional, fallible and improvable. Structurally seen this is caused, amongst other factors, by the historical context (as seen by historicism), the linguistic framework (as seen by postmodernism) and the societal background (as seen by the sociology of knowledge and by Kuhn) conditioning scientific knowledge. Directionally seen, this is due to the radical effects of sin – directing our scientific analysis towards the many one-sided idols (isms) operative in the history and present dispensation of scholarship.
- (ii) The nuancefulness of our human experience, perpetually enriching and deepening scientific investigations, constantly uncovers new phenomena and reinterpret our knowledge of known phenomena. In this ongoing process scientific theories and theoretical paradigms are continually questioned, replaced and superseded. Add to this the indefinability of the nuclear meanings of the different modal aspects of reality as they are employed in the elementary basic concepts of the disciplines, and we realize that scientific concept formation proceeds by using terms which are ultimately transcending the grasp of concepts (See Strauss, 2006:119).

The “subjective meaning” attached to positive societal forms by social subjects presupposes the *constancy* of the foundational normative conditions for society – conditions making the so-called “meaning-giving” acts of social subjects possible in the first place.

4. The emergence of recognizing a distinct dimension of reality

Our experience of reality is characterized by an awareness of (natural and societal) entities and processes. We have seen that, as far as entities are concerned, we may distinguish between subjective and objective things within nature and normatively stamped subjects and objects. Traditionally

three realms of entities are distinguished within nature, namely material things, plants and animals. The inability of current biological scholarship to clearly distinguish between biotically qualified features and sensory features – underlying the distinction between the realms of plants and animals, appears primarily to testify to our lack of criteria and not to the basic and limited options provided by two irreducible modal functions available for serving as qualifying functions of distinct realms of entities – plants and animals (see Strauss, 2009:476-479).

The unique contribution of Dooyeweerd and Vollenhoven in this regard is found in the way in which they succeeded to identify and categorize the various functions or aspects of reality. Their first challenge was to develop a sufficiently clear terminology. Tol recently points out that the 19th century logicist, Ch. Sigwart, used the expression *modal relation* and from it Dooyeweerd and Vollenhoven took over the term “modal”. In addition they used the term *modality* as synonym for an expression employed by Emile Lask, “region category” (see Tol, 2010:409, note 49). Verburg also refers to these early terminological experiments. He points out that Dooyeweerd initially experimented with expressions such as “domain-category” (“gebiedskategorie”), “field of view” (“gezichtsveld”) (see Verburg, 1989:67) and “modal categories” (“modale kategorieën”) (see Verburg, 1989:56). Some of these metaphorical explorations almost collapse into duplications, since the two elements of the expression “domain-category” are both derived from the aspect of space.

In 1931, when Dooyeweerd published his work on the *Crisis within Humanistic Political Theory* (see Dooyeweerd, 2010), he consistently avoided any other term and solely used the term “function” for an *aspect* or *modality* (or for a *modal aspect*). Before this and afterwards he did not hesitate to use multiple expressions, including modality, aspect and meaning-side (“zin-zijde”). The Latin root of the expression *modal aspect*, frequently referred to by Hommes when he wanted to explain Dooyeweerd’s theory of the modal law-spheres, is *modus quo*. We are still accustomed to use expressions like *modus vivendi* and *modus operandi*. The more general meaning of a *modality* is captured when it is seen (i) as a *mode of existence* (that is, as a *mode of being*), (ii) as a *mode of explanation* and (iii) as a *mode of relatedness*.

The first expression, namely (i), contains the insight that whatever there is cannot escape from having either a subject-function or an object-function within all modal aspects. From the perspective of the modal aspects this

state of affairs highlights their *modal universality*, the fact that their scope encompasses all possible kinds or types of entities. The second expression, namely (ii), accentuates the active role of the “knowing subject”, because in order to obtain knowledge of some or another kind of entity we have to identify and distinguish some or another *mode of explanation*. The modal structure of any aspect can serve this purpose of delimiting a *field of investigation*. This is possible by the grace of the fact that different kinds of entities function within the same modal aspects, and through this functioning reveal their *ontic relatedness*.

Yet, whatever field of investigation or mode of explanation is chosen, such a modal perspective will always be insufficient to grasp the many-sidedness, the multi-aspectual nature of any natural or societal entity. The idea of a multi-modal entity always exceeds the explanatory power of one single modal aspect.

For this reason the *types* or *kinds* of entities we know are always *typically different*, i.e., there is no highest, all-encompassing *type* that embraces all kinds of entities. Only the modal aspects, as modes of being or existence, embrace all kinds of entities in an *unspecified* way – their *modal universality*. Whenever our attention switches from modal aspects to entities, we have to account for *categories of entities*, for the way in which such entities are *specified* by their respective *type-laws* (Vollenhoven did not accept the idea of type-laws). In a specified sense universality is still present, because any type-law holds universally for all the things belonging to that kind or type. That this universality is specified is immediately seen from the fact that no type-law at once embraces entities belonging to different types. The structural principle (law) holding for an elementary particle, for a molecule, for a horse, or for a state, is *universal* insofar as it holds for *all* elementary particles, for *all* molecules, for *all* horses, or for *all* states. But each one is at once *specified*, because it *only* holds for elementary particles, for molecules, for horses, or for states – and not for any or every other *type* (or *kind*) as well.

Once the terminology was established, and a systematic analysis of the universe could proceed by employing words and phrases such as *modes*, *modalities*, *aspects*, *functions*, *ways of existence*, *modes of being*, *modes of existence*, *modes of explanation*, and so on, a systematic understanding of the various kinds of entities acquired an indispensable means in service of an effective *categorization* of the diversity within reality. What is important in this regard is that the mature conception of Dooyeweerd and Vollenhoven articulated fifteen unique modal aspects, from the numerical

up to the certitudinal.

From the brief comparative examples discussed earlier it is clear that one can easily arrive at a position where different issues are confused. The aim to avoid idle, metaphysical speculation requires a method that can “touch ground” with the universe in which we live. For this reason we introduced the alter of the transcendental-empirical method. In respect of the provisionally distinguished aspects we must therefore be able to specify the (transcendental-empirical) criteria employed in identifying and distinguishing between these aspects.

The following criteria took shape within the legacy of reformational philosophy (see Strauss, 2009:77-78):

- (1) Throughout its entire history, Western philosophy always had to account for a given diversity within reality. This awareness is an indirect indication of the existence of distinct aspects.
- (2) Also, in our non-scientific (so-called “naive”) experience, we find this diversity – as reflected in the shared human analytical awareness of this diversity.
- (3) The great variety of isms in philosophy and the special sciences reflects the modal diversity within reality. At least in the case of monistic isms a different aspect of reality is elevated to provide the all-encompassing theoretical perspective towards an understanding of the universe, also indirectly implies distinct aspects of reality.
- (4) Reflection on the various realms in nature (material things, plants and animals), as well as on the various human societal collectivities (such as the state, church, sports club, school, cultural society, theater group, marriage, business firm or language association) directs us towards the various modalities (aspects) that provide access to the modal function uniquely characterizing those social entities. An analysis of these characteristic (or: qualifying) functions may be helpful in the search for unique aspects.
- (5) The occurrence of antinomies in theoretical thought is an indication that certain aspects of reality are confused. Introducing the appropriate modal distinctions should then be able to resolve the antinomies concerned.
- (6) The development of independent special sciences, delimited in their area of study by a particular aspect of reality, indicates the variety of aspects of reality.
- (7) Another aid in the identification of a particular aspect is given in the appeal to our immediate intuition (experiential insight), when refe-

- rence is made to the meaning of any distinct aspect.
- (8) All the special sciences use typical entity concepts (such as: atom, molecule, plant, animal, tool, book, money, painting, murder weapon, engagement ring, church building), as well as functional concepts unmistakably appealing to the modal aspects of reality (such as mass, volume, life, feeling, control, meaning, exchange, beauty, lawfulness, love, trust, faith).
 - (9) An indirect method of analysis, such as the indication of an analogical structural element in the modal structure of an aspect, can lead to the identification of the original, non-analogical nature of a particular aspect. The fact that something like jural agreement and disagreement – legitimacy and illegitimacy – exist, refers to the logical aspect in which agreement and disagreement first appear.
 - (10) In the case of the normative aspects of reality, a negative indication, or even the negation of a negative indication, can sometimes help to express our insight into the nature of a core of meaning. The core of meaning of the economic aspect can be captured as an “avoidance of excess”. Economic normativity requires non-excessive actions. The negation of this negative formulation highlights that it refers to a manner of having enough (and how many large businesses, with their incredible striving for excessive profits, do not know when they have earned enough). Without sensitivity to the modal demand of having enough, a person may simply ignore the responsibility for economic stewardship.

In its own way each one of these criteria highlights the fruitfulness and non-speculative character of the transcendental-empirical approach. The entire history of philosophy does not know a more articulate and well-thought through analysis of modal categories and entitary categories than what we inherited from Dooyeweerd and Vollenhoven. The further development and articulation of this legacy, currently already within the third and forthcoming fourth generation cannot be divorced from the brilliant contribution of these two Dutch philosophers.

Because the various modal aspects are not creations of speculative philosophical fantasies, but are founded in the ontic order of reality, the philosophical theory developed by Dooyeweerd and Vollenhoven aimed at explaining this dimension of law-spheres turned out to have significant and fruitful implications for every single special science (showing this is the main aim of Strauss, 2009). Dooyeweerd first demonstrated these fruitful implications by applying them to his own field of specialization, the science

of law. After he elaborated the elementary, compound and typical basic concepts of this discipline he moved on to formulate his general philosophical approach which reached its peak in the publication of his *magnum opus*, *A New Critique of Theoretical Thought* (4 Vols.) (see Dooyeweerd, 1997).

5. Concluding remark

At the beginning of this article I started with a reference to the contribution of Heinrich Alt to my *Festschrift – on universals*. In retrospect we can now see that this is a very basic issue both in philosophy and within the special sciences. Perhaps the feature of modal universality constitutes the most important link between the various modal aspects and the concrete diversity of entities within the universe. Therefore, I want to thank Heinrich for his continued interest in this trait, keeping in mind that in 1995 he obtained the Degree of Doctor in Philosophy on the basis of a dissertation dedicated to the problem of *modal universality*!

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