

# Systematic considerations within the *Philosophy of the Cosmonomic Idea*

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Stafleu has distinguished himself with ground-breaking work on the theoretical foundations of physics. Subsequently he has broadened his scope and entered the field of general philosophy – including reflections on artefacts and technology. In his assessment of what I have done in my 2009 work on *Philosophy: Discipline of the disciplines* he raises a number of issues to which I respond in what follows below. In some instances it appears that we opt for different designations of the same states of affairs, but different understandings do surface in some other cases. Stafleu's objection to the expression 'sphere sovereignty' because 'no modal aspect is ruled by a sovereign' reveals a misunderstanding of metaphorical language, which prompts a brief discussion of analogies and metaphors. The complicated challenge to find an appropriate designation of the core meaning of the physical aspect receives some attention as well as the distinction between modal laws and type laws. The nature of the transcendental-empirical method is briefly highlighted. In the past it has prompted me to pay attention to the meaning of both the social and the cultural-historical aspects of reality and to consider some implications for the nature of technology and tools. Stafleu does advance a new and insightful discussion of particular human skills characterised by different modal aspects.

**Sistematiese oorwegings in die *Wysbegeerte van die Wetsidee*.** Stafleu het homself onderskei met baanbrekerswerk op die gebied van die teoretiese grondslae van die fisika. Hy het mettertyd sy blikveld verbreed en ook die terrein van die algemene filosofie betree – insluitende nadenke oor artefakte en tegnologie. In sy waardering van wat ek in my 2009 werk oor filosofie as wetenskap van die wetenskappe gedoen het, het hy 'n aantal sake uitgelig waarop ek reageer in wat hieronder volg. In sommige gevalle blyk dit dat ons daarna streef om dieselfde stand van sake op verskillende maniere aan te dui, hoewel daar in ander gevalle egte uiteenlopende sienings na vore tree. Stafleu se beswaar teen die uitdrukking 'soewereiniteit-in-eie-kring', naamlik dat geen modale aspek deur 'n soewerein geregeer word nie, openbaar 'n misverstand rakende metaforiese taalgebruik, wat gevolglik aanleiding gee tot 'n kernagtige bespreking van analogieë en metafore. Die gekompliseerde uitdaging om 'n toepaslike aanduiding van die kern-sin van die fisiese aspek te vind ontvang ook aandag, sowel as die onderskeiding tussen modale wette en tipe-wette. Die aard van die transendentiaal-empiriese metode word saaklik toegelig. In die verlede het dit daartoe aanleiding gegee dat ek ook aandag aan beide die sosiale en kultuur-historiese aspekte van die werklikheid sou gee en om sommige implikasies daarvan vir die aard van tegnologie en gereedskap aan die orde te stel. Stafleu bring inderdaad 'n nuwe en insigvolle diskussie oor besondere menslike vaardigheid na vore – wat telkens deur uiteenlopende modale aspekte gekarakteriseer word.

## Background observations

In his recent article on 'Nuances in the Philosophy of the Cosmonomic Idea' Marinus Dirk Stafleu gives a critical appraisal of the differences between his own approach and the views of Dooyeweerd and myself (Stafleu 2014). He notes that we all share the same ultimate commitment, namely that God created everything according to God-ordained invariable laws. Stafleu furthermore holds that partial knowledge of God's laws can be achieved by studying the law-conformity of creation. In particular he aims at discussing the relevance of *artefacts* to the future development of the *Philosophy of the Cosmonomic Idea* (PCI).

## Introductory remarks

Firstly, I want to express my appreciation and gratitude towards Stafleu for engaging in such a constructive way with the views articulated in my work *Philosophy: Discipline of the disciplines* ([PDD] Strauss 2009).

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Secondly, I have to mention that during my undergraduate studies I was already influenced by his significant published articles on the foundations of physics, notably his impressive 1966 article on 'Quantum physics and the philosophy of the Cosmomic Idea' (Stafleu 1966) and also other articles published by him (Stafleu 1968; 1970a; 1970b).

Thirdly, it should be mentioned that I was privileged to be instrumental in the publication of his penetrating systematic book [*Time and again*] on the foundations of physics which appeared as a joint venture of SACUM, Bloemfontein and Wedge Publishing Foundation, Toronto, Canada in 1980. Twenty-six years later I read: 'I shall never forget his invaluable help in publishing my *Time and again*' (Stafleu 2006:173). This was indeed a pleasant reminder of his appreciation of the mediating role I had played in this regard.

Fourthly, it will turn out that many of the 'disagreements' highlighted by Stafleu are merely alternative emphases on ontic states of affairs owing to the inherent ambiguity of the language in which these realities are described.

Fifthly, in some instances straightforward misunderstandings create the appearance of disagreements. Of particular importance in this regard is the nature of scientific language and the role and place of concepts and metaphors within it. It is frequently stated by (natural and social) scientists that scholars ought to be *precise* in their choice of a subject-specific terminology. Behind this quest one sometimes finds concealed an *atomistic* semantics, embodied in the assumption that a given word has only one ('primary') meaning. And often this postulated authentic meaning is identified with the etymology of the word.

However, in our actual language, scientific language included, practically all the basic terms employed allow for multiple meaning nuances. This reality opened up the way towards an acknowledgement of the *semantic domain* of words which Geckeler, Coseriu and Trier explored in their *Wortfeldt* theory (literally: *Wortfeld* = word field) oriented to the use of Venn diagrams (see Coseriu [1966] 1978; Trier 1973). These developments have a bearing on some of the critical remarks formulated by Stafleu. Let us start our response by looking at what he said about *sovereignty* and *analogies*.

## Sphere sovereignty and analogical interconnections

Stafleu (2014) considers it unfortunate that I do not criticise the term 'sphere sovereignty'. He points out that Dooyeweerd and I call the 'mutual irreducibility of the modal aspects "sphere sovereignty", as if there were a sovereign residing in each aspect' (Stafleu refers to Strauss 2009:456 and also to *A new critique of theoretical thought* (*New critique*) – Dooyeweerd 1997, I:101–102). According to Stafleu, the principle of sphere sovereignty is in the first place a 'political principle', applying 'to all associations'. He states that 'Herman Dooyeweerd interprets the political view of sphere sovereignty as the ontological principle of

creational diversity'. And when Dooyeweerd applies the term 'sphere sovereignty' to the mutual irreducibility of the modal aspects Stafleu is of the opinion that he is 'ignoring the fact that no modal aspect is ruled by a sovereign' (Stafleu 2014).

This remark shows that the criticism raised against Dooyeweerd's use of the principle of sphere sovereignty does not properly account for the mode of speech manifest in this expression, as applied both to the modal aspects and to the various type laws (individuality structures) holding for (natural and societal) entities. According to Dooyeweerd (1997), the uniqueness of every modal aspect is guaranteed by its indefinable meaning nucleus, which at once secures its irreducibility. Within each aspect, 'points of connection' with other modal aspects are found, known as (retroicipatory and/or anticipatory) *analogies*.

However, within the context of a theory of human society it should be realised that state absolutistic theories of sovereignty (commencing with Jean Bodin) have permeated modern theories of the state and law (just consider expressions such as *state sovereignty*, the *sovereignty of law*, and so on). Since such theories in principle extended governmental authority over all areas of life, it is understandable that within the context of legal and political discourse a slogan such as 'sphere sovereignty' would be quite significant. Yet one should not conclude that the scope of the phrase 'sphere sovereignty' has to be restricted to its employment within a societal context.

### What are modal analogies?

But what are analogies? Stafleu remarks that it is correct to define analogical concepts 'as having similarities and differences'. To this he adds that an *analogy* is a 'logical relationship' and then declares that 'the relationships between the modal aspects are first of all *ontological*, not logical'.

Surely the issue concerns ontic (not ontological!) relationships between modal aspects. But it is mistaken to hold that 'analogical concepts' are intended, because having similarities and differences is a trait of modal aspects, not of the *analogical concepts* capturing them. Consider an example which I found quite instructive in order to explain the nature of a *modal analogy*: the proximity of a President and his or her bodyguard is obvious. This proximity is an instance of *spatial distance*. Yet in terms of their respective positions within society they are *far apart* (social distance). The moment of similarity is given in *distance* but in this moment of similarity the difference is shown: spatial distance has an original spatial meaning whereas social distance analogically reflects the coherence between the spatial and social aspects. This inter-connection between these two modal aspects is more than merely logical, for it reveals an inter-modal ontic relatedness. The only 'logical' contribution entailed in the nature of an *analogy* is that the concept we have of it explores an understanding of this ontic relatedness through the gateway of the logical-analytical aspect. In other words, we acquire analogical

concepts by identifying and distinguishing similarities and differences and they could be logical or non-logical. Since modal analogies concern at least *two* aspects, they can never be purely logical in nature. The similarity and difference captured in an analogical concept is more than logical in nature, whereas the angle of approach of such an analogical concept explores the logical aspect as point of entry.

## Analogies and metaphors

From our example it is clear that an analogy is encountered when two aspects are similar in that respect in which they differ. We can expand this formulation by including all the ontic possibilities of embodying similarities and differences. Stafleu has already remarked that characters (individuality structures or natural and societal entities) display similarities and differences. Yet there are two other ontic possibilities: the analogical connections between aspects and entities and the analogical connections between entities and aspects. In PDD I have discussed all four possibilities (Strauss 2009:152–157). The important distinction advanced at this point is that modal analogies are unique in comparison to the other three, because they could only be ‘synonymised’ but never replaced, as is the case with the other three. In the case of the other three, preferably designated as *metaphors*, it is always possible to replace one metaphor by using a different (and sometimes totally unrelated) one.

The account of (modal) analogies and three types of metaphors just mentioned explains why there is such a remarkable interconnection in play when it comes to the way in which we choose to describe aspects and entities. Consider for example the terms frequently employed by Van Riessen in his ‘Werkcolleges’ (Seminars) to explain that the modal functions of reality may also serve as ‘*toegangspoorten*’ to reality (as points of entry to reality). In this case similarities and differences between modal aspects and entities (aspects as ‘gateways’) are explored. In contrast, once an entity has been identified, it turns out to be possible to use modal terms to talk about it. If one has identified a chair (its ‘whatness’), its different modes of being could be explored, for example by discerning its function within the quantitative aspect (how many chairs are there?), within the physical aspect (how strong is it?), within the economic aspect (how expensive is it?), and so on.

Moreover, in PDD I argued that both modal terms and metaphors could be used in a conceptual way or in a concept-transcending way. When the Bible says that God is one, that God is life or that God is love, these modal terms (derived from the numerical, physical, biotical and moral aspects) are extended beyond their conceptual use (which is restricted to referring to realities merely present within the boundaries of a specific aspect).

The abovementioned distinctions suggest multiple options regarding the way in which one can designate the aspects of reality. Initially Dooyeweerd contemplated the expression ‘domain categories’ (*‘gebiedscategorieën’*). Later on he coined

expressions such as ‘aspects’, ‘law spheres’, ‘modal spheres’, ‘modal functions’ and ‘functions’. In a work published in 1931, Dooyeweerd exclusively employed the term ‘function’ for modal aspects – in spite of the fact that before and after that he did use and continued to use the other expressions mentioned.

In 2002 Stafleu introduced his preferential designation by introducing the phrase ‘relation frames’. Whereas Dooyeweerd’s term ‘sphere’ has a spatial connotation, most of the meaning nuances of the term ‘frame’ have an entitary connotation – such as *framework*, *structure* or *scaffold*. Such an approach is similar to calling aspects ‘gateways’ (*‘toegangspoorten’*). Also note that the term *relation* is derived from the meaning of the spatial aspect where we encounter continuous extension that is synonymous with a whole where all the parts are related in the sense of being connected, of cohering with each other. The continuity of cohering parts does not have any ‘gaps’. The term *sphere* has a spatial connotation, similar to the term *relation*, which is also derived from the meaning of space.

Jean Bodin (1981:222) introduced the term *sovereignty* into modern political science in order to capture the power of the state. This power could be understood in two ways: (1) as the competence over which an office-bearer dispose (such as a president or a king) or (2) it could be seen as the core meaning of the cultural–historical aspect of reality – in the sense of control, rule, mastery or cultural power.

Similarly to the way in which Stafleu (2002:17ff.) combined a spatial term (*relation*) and an entitary term (*frame*) in his designation of aspects as ‘relation frames’, Dooyeweerd (1997, I:102) combined a spatial term (*sphere*) with an entitary term (*sovereignty*) in his expression *sphere sovereignty*.

Combinations such as these, namely *sphere sovereignty* and *relation frame*, explore one of the possible domains of analogies, namely that of metaphors which designate analogical links between modal aspects and entities (A–E in terms of Strauss 2009:156). It conforms to the fact that metaphors could be exchanged, unlike modal analogies which could merely be ‘synonymised’, but never replaced. Given the freedom entailed in the creation of metaphors, it is therefore perfectly legitimate to use phrases such as *sphere sovereignty* and *relation frame*.

Let us investigate what actually happens when modal aspects are metaphorically designated as being *sphere sovereign* (sovereign within their own sphere). Identifying an aspect as *sphere sovereign* raises the question: What kind of metaphorical language use is at stake here? No purely logical meaning could be intended, because a modal aspect certainly is not ‘a sovereign’ nor does it have ‘a sovereign ruler’ as Stafleu, under the spell of a literal interpretation, remarks. Understood in a strictly logical sense the expression *sphere sovereignty* must contain an illogical element – comparable to a literal (logically stringent) understanding of the metaphor the ‘Lion of Western Transvaal’ – a human being,

such as General De la Rey, is certainly not an animal. Stafleu may want to contemplate the following remark of Max Black regarding the apparent ‘mystery’ of a metaphor. The question is what kind of ‘identification’ takes place in metaphorical language use? If it is understood in a strictly logical sense, the inevitable conclusion would be that something *illogical* is involved. Black (1979) discerns something similar in a metaphorical statement:

So perhaps the ‘mystery’ is simply that, taken as literal, a metaphorical statement appears to be perversely asserting something to be what it is plainly known not to be. (p. 21)

Whenever a metaphor is ‘taken as literal’, the impossible is asserted. This happens when metaphorical language, such as designating modal aspects as sphere sovereign, is understood literally, that is, in a strictly logical sense. Once the freedom of metaphorical language use is acknowledged, multiple metaphors may be constructed. Recently a programme on TV reported on developments within large cities where the roofs of large buildings are now used for food production. This is an important development because expanding cities worldwide increasingly diminishes the land available for agricultural purposes. The universal need for food production is captured by the presenter, who used the metaphor ‘food sovereignty’! And it should not surprise us that the well-known French philosopher of *power*, Michel Foucault, in his later development explored, in an account of race, the compound expression ‘bio-power’ (see the remarks of Michael Monahan [2013:286] in his review of Paul Taylor’s [2013] work, *Race: A philosophical introduction*).

Consider another example: When the mathematician Detlef Laugwitz (1986) discusses Cantor’s concept of a set in his work on ‘Infinitesimal Mathematics’, he highlights the presence of properly distinct elements and then concludes that in Cantor’s definition discreteness is dominant, and that it governs/rules:

*Der Mengenbegriff ist von vornherein so angelegt worden, daß sich das Kontinuierliche seinem Zugriff entzieht, denn es soll sich nach Cantor bei einer Menge ja handeln um eine ‘Zusammenfassung’ wohlunterschiedener Dinge ... – das Diskrete herrscht.* [‘From the outset, the set concept is constructed in such a way that what is continuous escapes from its grasp, for according to Cantor a set concerns the “bringing together” of properly distinct objects ... – the discrete governs/rules.’] (p. 10)

Food is *sovereign* and the discrete *reigns* – two meaningful metaphors. A slightly different use of the ‘rule’ metaphor is found in a remark by E.T. Bell on Pythagorean mathematics: ‘If “Number rules the universe” as Pythagoras asserted, Number is merely our delegate to the throne, for we rule Number’ (Bell 1965:16). In addition to a conceptual and concept-transcending use of modal terms, metaphors may also be employed to refer to realities transcending conceptual knowledge, as briefly mentioned earlier. Within the domain of the philosophy of science mention is sometimes made of *root metaphors*. Biblical expressions are also occasionally used to refer to God metaphorically, for example when the Bible speaks of God as *Father* or God as *King* (*Sovereign*).

In all these reflections it should be kept in mind that we are involved in conducting a transcendental–empirical investigation. It simply means that we are, in the light of our experience of the universe, aiming at finding out what underlies our actual experience in the sense of *making it possible*. But it never means that insights thus gained are not always provisional, improvable and fallible. The knowledge we obtain, as Stafleu correctly emphasises, is always ‘tentatively formulated’. Therefore, when Van Eikema Hommes (1972:7, 17, 66, 104) and I advocate a transcendental–empirical research method, no Kantian urge for ‘certain knowledge’ is intended and we also do not accept a split between what is *transcendental* and what is *empirical* – as Stafleu (2014) suggests with his remark: ‘However, this does not mean that there is a transcendental way to achieve knowledge of the laws (either natural or normative). These can only be *discovered* in an empirical way’.

We experience things and events in their (dis-)orderliness which point at God’s creation-order making possible whatever we experience.

Interestingly, Stafleu (2014) defines ‘science and the humanities as activities (theoretical or otherwise) directed at achieving knowledge about laws’, which immediately raises the question regarding the epistemic status of the science of history!

## The meaning of the physical aspect

Stafleu (2014) and Sikkema (2005:20) give preference respectively to *activity* and *action* as core meaning of the physical aspect. Stafleu (2014) notes that he ‘always objected’ to designate this meaning nucleus as energy operation. However, in his abovementioned article on ‘Quantum physics and the philosophy of the Cosmological Idea’ (1966) he does state that a physicist may be satisfied with Dooyeweerd’s choice of ‘*energetische werkwijze*’ (literally: energetical mode of operation). Although ‘energetical’ is not an acknowledged English word, it is perhaps still more appropriate than *energy*. Stafleu (1966:129) explains that energy should not be identified with a measurable magnitude within a physically qualified individuality structure (Dooyeweerd’s term for many-sided natural and societal entities) but nonetheless may be used as a qualifier of the term ‘*werkwijze*’ (mode of operation). My preference is to speak of energy operation as it is also explained in PDD, although it would also be acceptable to choose *action* or *activity* alternatively (Strauss 2009:89–90).

I pointed out that the expression *interaction* (suggested by Sikkema 2005:20) is compound because ‘inter’ is derived from space and therefore cannot be included in a description of the meaning nucleus of the physical aspect.

Action or activity is the equivalent of ‘operation’ in the expression ‘energy operation’. My suggestion was to use ‘operation’, which will indeed also cover the quantum level. Therefore, if the term *energy* fails to apply to the



quantum level, the expression energy operation within such a context should be interpreted just to refer to 'operation' or 'action'. (A discussion of the '*Energiesatz*' within quantum theory is found in Von Weizsäcker 2002:239–244.) In an email (personal comm., 24 May 2008) Stafleu mentions his preference for the term *activity*. This term is equivalent to the Greek word *energeia*. *Energeia*, in turn, is equivalent to *working or operation* (Keep in mind that Planck introduced a '*Wirkungsquantum*' representing the relationship between *energy and frequency*.) In Aristotle's philosophy it is related to what is designated as *dunamis* and to the *act-potency* scheme. I have to remind Stafleu that he introduced the term *energeia* in his email to me of 24 May 2008.

Acknowledging the energy-related meaning of the term *energeia* does not justify the objection made by Stafleu, namely that it may appear as if 'antique Greek disciplines Strauss's philosophy'. He does not realise that the Latin term *actus*, to which his term *activity* (and Sikkema's [2005] term *action*) could be traced, is just the Latin equivalent of *energeia* – which would entail that 'antique Greek disciplines' all of us!

The fact of the matter is that we have to distinguish between the *states of affairs* upon which Greek philosophy stumbled and the philosophical context within which an account is given of what they were confronted with.

Before we return to the main line of Stafleu's critical assessment, an elaboration of Dooyeweerd's idea of individuality structures should be mentioned. Universal modal laws are specified by type laws (what Dooyeweerd calls 'individuality structures'). However, as Stafleu points out, different type laws may share kind-related type laws. He mentions typical laws shared by electrons and the neutrino (such as their involvement in beta-radioactivity) and remarks that since electrons are electrically charged, they are 'subject to Coulomb's law, which neutrinos are typically not'.

## Types of artefact

The idea of a *law sphere* is normally introduced with a view to the law side of a modal aspect (in the case of the norming aspects one may speak of *norm spheres*). Stafleu (2014) explains this as follows: 'On the law side, natural frames are sets of natural laws; normative frames are sets of values and norms'. He assumes that 'values or normative principles' are 'universal and invariant'. This formulation coincides with the way in which I characterised principles in PDD: 'A principle is a universal and constant point of departure' (Strauss 2009:297).

According to Stafleu (2014), artefacts 'have a character of their own, a set consisting of natural laws, normative principles and norms'. He holds that a norm is a positivised principle. Strangely he then says that the 'application of culturally determined norms' may cause 'the universal character type of the state or the church' to result in 'a large variety of different characters of states and churches'. When he continues in the next sentence with the remark that these different characters of states and churches 'can

be compared with the help of the supposedly invariant normative character types' then it is clear that the invariant character types are not multiplied into a 'large variety of different characters of states and churches', since actually it merely gives rise to different states and churches – on the *factual side* of reality.

In passing, we may note that Stafleu (2014) prefers to speak of the 'subject and object side' of an aspect, because he takes the term *fact* 'to be an objective expression of human knowledge'. Dooyeweerd's mature conception, which also represents my own preference, interprets the term 'factual' to embrace both the (factual) subject-side and the (factual) object-side of an aspect. What in an ontic sense *is the case* could be acknowledged in a statement of fact, without identifying the two. However, this appears to be more of a terminological difference than a(n) (f)actual difference.

## Designating the cultural–historical and social aspects

Stafleu mentions my objection to the designation of the cultural–historical aspect as the techno-formative aspect, namely that it would restrict the meaning of this aspect to subject–object relations. His rebuttal is that the Greek term *techné* means skill, and people learn new skills from each other, implying a subject–subject relation. In spite of the terminological difference, we thus agree that this aspect should embrace both subject–subject and subject–object relations. However, it should be noted (as Van Riessen always emphasised in his lectures) that *all* subject–object relations are founded in subject–subject relations.

*Remark:* Of course within the numerical aspect one does not find any subject–object relations – all numbers are arithmetical subjects: natural numbers, integers, rational numbers, real numbers, complex numbers and transfinite numbers (Cantor). The spatial aspect is the first one in which subject–object relations are found: two points demarcate a one-dimensional spatial subject, such as a straight line, but the points themselves are not extended in one dimension (Strauss 2013). The 'point-of-intersection' (a spatial object) of two intersecting lines (spatial subjects) mediates the subject–subject relation between the lines. Another example is given in normal linguistic communicative acts. The physical sounds or signs are objectified in the lingual aspect in order to mediate the lingual interaction taking place.

Moreover, the focus on skills remains directed at *power over objects* and should therefore be distinguished from cultural–historical subject–subject relations. In the latter case we need the idea of an *office*. This issue is related to Stafleu's (2004:130) proposal to introduce a 'political aspect' of 'authority and discipline' (to which I shall return below).

## The meaning of the social aspect

I questioned Stafleu's (2004) idea that the relation frame of keeping company does not imply authority because the features of both super- and subordination and the next-to-

each-other reflect spatial analogies within all the normative contexts where we find both office-bearers and subordinates as well as coordinational relationships (Strauss 2009:506, note 1). Since I mentioned a similar criticism from Basden, Stafleu here referred to his response to Basden (2005:70ff.). However, in this 2005 article he wants to exclude 'authority' from the social aspect. He proposes to call the social aspect 'the relation frame of keeping company' (Stafleu 2005:152 [companionship]; *ibid*:156 [company].) The paragraph heading on page 156 reads: 'The relation frame of keeping company does not imply authority'. If one aims at accounting for the general modal structure of the social aspect (the 'relation frame of keeping company'), one certainly has to disregard the *typical way* in which coordinational relationships, communal relationships and collective relationships specify the modal universality of the social aspect (in Dutch Dooyeweerd distinguishes between *verband*-, *gemeenschaps*- and *maatschapsverhoudingen*). Coordinational relationships are distinguished from communal relationships and collective relationships in that the former lack relations of super- and subordination whereas the latter may have them. But owing to the fact that, for example, all collective relationships also function within the social aspect of reality, this functioning does not terminate the inherent relation of super- and subordination present within societal collectivities. Dooyeweerd is therefore fully justified in speaking of the 'social authority function' [*sociale gezagsfunctie*]. He writes: 'In a general sense the social function of authority reveals itself in the demand for respect from the socially inferior to the socially superior' (Dooyeweerd 1931:161; Dooyeweerd 2010:140).

Not realising this caused Stafleu (2004) to restrict the social aspect to next-to-each-other relationships (i.e. coordinational relationships) and to characterise his new political aspect by relationships of super- and subordination. In Strauss (2006:chaps. 3, 4) I have subjected this entire issue to an extensive analysis by employing the distinction between the elementary basic concepts of sociology as a special science and the compound basic concepts of this discipline.

Stafleu calls upon a footnote in the second volume of Dooyeweerd's *magnum opus* to conclude that Dooyeweerd gives preference to using the term *social* in the sense of 'embracing all modal aspects of society alike' (Dooyeweerd 1997, II:70). Yet I do not think this interpretation is correct. Since Dooyeweerd did not distinguish between a conceptual and a concept-transcending use of modal terms, he sometimes inserted a footnote to inform his readers in what sense he employs the term 'social'. Initially I thought that he used 'social' for the social law sphere and 'societal' for society as a whole, but it turned out that Dooyeweerd does not apply this scheme consistently. In the third volume of his *New critique* he mentions a 'club as an historical form of organized social power' and then adds a footnote stating the exact opposite of what Stafleu found on page 70 of the second volume: 'The adjective "social" is here meant in the sense of "related to the modal aspect of social intercourse"' (Dooyeweerd 1997, III:603, note 1).

Stafleu (2005:152) suggests that we should 'avoid the expression "social aspect" ... because it lacks precision'. Clearly, Stafleu wants to avoid using the term 'social' sometimes to refer to a modal aspect and at others in the sense of 'embracing all modal aspects of society alike'. However, owing to the inevitability of employing modal terms in a conceptual context as well as in a concept-transcending way, it will be necessary to do away with the usual designations of *all* the modal aspects. The biotic meaning of the term *life*, for example, enables a conceptual use of this biotic term, such as when we refer to plants, animals and humans that are alive. But Christians read in the Scriptures that God is life – clearly a concept-transcending use of a term derived from the biotic aspect, similar to speaking of a life and world view which obviously exceeds the limits of a conceptual use of the term 'life'.

It is therefore understandable that Dooyeweerd in fact continued to distinguish between the *social aspect* and its meaning nucleus: '*omgang en verkeer*'. I prefer to render this Dutch phrase by borrowing a term from Georg Simmel: '*Vergesellschaftung*' = 'sociation'. Dooyeweerd frequently combines the aspect designation with the meaning nucleus, for example on the opening page of the first volume of a *New critique*, where he refers to 'the aspect of social intercourse' (Dooyeweerd 1997, I:3). And whenever he explains analogies of this aspect in other aspects he consistently maintains the word 'social'. In the original Dutch edition of his work on the *Crisis in humanist political theory* he pays attention to the integrating function of the state whereas starting 'out with the social analogies within the meaning of law' (Dooyeweerd 2010:139). He proceeds by speaking about the 'social law sphere with its sociational or interactive meaning' (Dutch: '*... den socialen wetskring met zijn omgangs- of verkeerzin*' – Dooyeweerd 1931:160).

In chapter 7 of his work on 'action-freedom' and 'behavioural control' Woldring introduces the suggestion to designate the core moment of the social aspect with the phrase '*agogische interactie*' ('agogic interaction' – Woldring 1976:135ff.). He responds to ideas of the sociologist R. van Dijk and understands the meaning of '*agogologie*' in a broader sense as mere *education* or *Bildung*. He derives it from the Greek '*pedagogos*' pointing at a person who is a 'child-guider' ('*kinderbegeleider*') (*ibid*:135–136). Woldring primarily wants to account for being a fellow-human (*ibid*:134). Being a fellow-human ('*medemens*') is, according to him, an undifferentiated basic notion, manifesting itself in differently qualified actions, such as economic, juridical, social and other kinds of action (*ibid*:134). But the way in which he understands the phrase agogic interaction is equally many-sided, for on the whole the agogical concerns helping humans in their striving towards self-education or self-disclosure (*ibid*:136). The term 'inter' is derived from the spatial meaning of 'between' and the term 'action' analogically reflects the core meaning of the physical aspect – therefore 'interaction' does not have an original social meaning. Designating the core meaning (meaning nucleus) of an aspect should not contain analogies

of other aspects. The agological appears to be an equally basic notion, on a par with 'being a fellow-human', but precisely for that reason its undifferentiated nature disqualifies it to be used as a designation of the meaning nucleus of the social aspect. Therefore, for the lack of a better term, I would prefer to stick to 'sociation'.

While Dooyeweerd still accepted the discipline of sociology in 1931 as being delimited by the social aspect as angle of approach, he eventually opted for a *social-philosophic* understanding of the field of investigation of both *philosophical sociology* and *positive sociology*. In my work on the *Reintegrating social theory* I argued that if 'positive sociology is indeed characterized by a *social philosophic* viewpoint, it inevitably becomes an integral part (a mere sub-discipline) of social philosophy' (Strauss 2006:63).

When social forms of 'interaction' are systematically classified, alternative options provided by the analogies from the spatial aspect are specified. These options make it possible to distinguish between social intercourse on equal footing and social intercourse within the context of relations of super- and subordination – thus specifying two distinct spatial (dimensional) analogies within the social aspect: the *vertical* and the *horizontal*. Within space the *number* of dimensions highlights a numerical analogy on the law side.

When Stafleu remarks that 'a sovereign is a political *subject* (whether a person or a government)' he leaves aside the concept of the *office* occupied by a competent organ – for example the office of President within a constitutional state under the rule of law. The state is by definition more than just the government, because it embraces all citizens – including those in office and those acting as subjects within the state. It is therefore more appropriate to refer to an 'office-bearer' than to the 'sovereign' as 'a political subject'.

Once a complex analysis has shown that the distinction between coordinational, communal and collective relationships (Dutch: '*maatschapsverhoudingen*', '*gemeenschapsverhoudingen*' and '*verbandverhoudingen*') draws upon all the substratum functions of the social aspect, it should be clear that the social aspect cannot be identified merely with one of these specified forms of social functioning as Stafleu does with his abovementioned understanding of the 'relation frame of keeping company' which does not imply an element of 'authority'.

The traditional distinction between law and morality illustrates a similar mistake. It claims that law is external, universal and binding whereas morality is supposed to be internal, particular and voluntary. In this view the meaning of the jural aspect is identified with the nature of a legal collectivity, such as the state (i.e. with a '*regsverband*'), whereas morality is identified with a moral coordinational relationship. However, when we consider moral relations within the nuclear family from the perspective of the children, then parenthood holds over all the children (universally),

whereas the authority of the parents is external and binding. Any jural coordinational relationship, in contrast, displays the alleged features of morality, because, for example, entering into a civil contract requires an inner (voluntary) decision of a particular individual. Civil legal actions such as these therefore display the features traditionally assigned to *morality*, whereas the position of children within the nuclear family conforms to the traits traditionally ascribed to *law*!

A proper understanding of the universal modal structure of the social aspect precedes both the modal total concepts pertaining to the distinction between coordinational, communal and collective relationships and the typical concepts related to the type laws holding for societal entities that cannot be described merely in terms of one of their modal functions.

### Once more: The cultural–historical aspect

Let us now return to the important analysis of different contexts of technology given by Stafleu. In order to do this we should note that perhaps the most important distinction needed to understand what Dooyeweerd and I mean by *the cultural–historical modal aspect*, is that between the concrete many-sidedness of the different kinds of events, on the one hand – and also differently qualified types of events (including natural processes) – and the different modal aspects of reality in which these events function, on the other hand. In its broadest sense, the idea of history encompasses the total, transmodal genesis and unfolding of creation. This integral process of becoming comes to expression in all the different modal aspects of reality. Acknowledging this integral perspective is a necessary and decisive presupposition for the identification and distinguishing of the different modal aspects distinguishable in any many-sided concrete process.

The adjective *cultural* (or *cultural–historical*) points at a specific mode of functioning; it designates one of the ways in which the on-going, dynamic existence of reality constantly manifests itself. In all cultural subject–object relations this modal aspect actualises the free formative fantasy of human beings – often also referred to as *creativity*. The archaeologist Narr formulated three criteria which could be applied to identify uniquely human artefacts: (1) The form of the produced tool may not be suggested or determined by the original raw material (e.g. in distinction from a stick from which irritating leaves and twigs need merely be removed); (2) the function of the tools may not be suggested (a rock in its natural shape is a strengthening of the fist; a stick an elongation of the arm or fingers), that is, tools may not be merely extended physical organs; and (3) the manner of production may not be suggested, with appeal to the technical moment which implies that tools must be formed by means of (formed or unformed) tools (cf. Narr 1988:281). The use and manufacturing of tools conforming to these three criteria concern the historical subject–object relation. It would be mistaken to designate this mode as the techno-formative aspect, because such an indication would exclude historical subject-subject relations.



Modal historical subject–subject relations concern formative control in inter-human association which are organised in societal structures with relations of authority and subordination. If the meaning of free formative control is rendered by using the synonymous term *power*, then the preceding distinction between subject–object and subject–subject relations could be articulated by differentiating between power over objects and power over subjects. The legitimacy of power over other human beings requires the notion of office and the competence entailed in such an office. The authority with which a person occupying a certain office is endowed, legitimises that person's competence to concretise principles in the form of rules which other human beings ought to obey. This competence of an office-bearer, enabling the shaping and transformation of principles into rules of conduct which are valid within typical spheres of social intercourse, actually evinces a subjective moment functioning at the norm side of reality. Dooyeweerd speaks about the formative human will through which 'normative principles' are 'positivised' and then adds: 'The human formative will is to be conceived of as a subjective moment on the law-side of these law-spheres themselves' (1997, II:239).

In his critical treatment of Dooyeweerd's philosophy of history, C.T. McIntire (1985) argues against the existence of a historical modal aspect. One of his arguments concerns the 'absence' of historically qualified entities. Unfortunately he (and Stafleu) did not discuss Van Riessen's analysis of technique, where it is shown that since tools are made in order to make something else, they not only have a cultural foundational function, but are also qualified by the cultural–historical aspect. Another way of formulating this perspective is to say that it is typical of the most basic human tools that their 'end' is to be a 'means', since they are *formed* (their foundational function) in order to *form* or *produce* something else (their qualifying function)! Schuurman continues this characterisation in terms of a cultural foundational and qualifying function: 'All technical objects are exceptional in the sense that both their foundational and qualifying function are cultural or technical in nature' (Schuurman 2009:9ff.).

Alongside other typically human activities, cultural formation gives expression to the human calling to unfold the possibilities of creation. Dooyeweerd (1997, II:197–198) writes:

Mastery or control, in its original modal sense, elevates itself above what is given and actualized after a fixed pattern apart from human planning. It pre-supposes a given material whose possibilities are disclosed in a way exceeding the patterns given and realized by nature, and actualized after a free project of form-giving with endless possibilities of variation.

Within the cultural–historical aspect this relation of super- and subordination analogically reflects the meaning of the spatial aspect – where dimensionality and position find their original modal seat (respectively on the law side and the factual side).

Stafleu's appeal to the Greek meaning of the term *techné* relativises his own abovementioned objection to the term

*energeia*. Therefore we may continue using the phrase *energy operation* – understood as the equivalent of incorporating the idea of '*energeia*/activity'.

Stafleu provides us with a new and insightful discussion of particular human skills characterised by different modal aspects, such as quantitative and spatial skills (related to mathematics); movement skills (the wheel exceeded by far the possibilities of walking); agriculture as a biotically founded technology (which includes the 'transition from nomadic cattle breeding to agriculture' whereas 'biotechnology' currently refers to a restricted way to 'genetic manipulation'), and so on. But insofar as tools feature throughout his own analysis, what he achieves is merely complementary to what Van Riessen and Schuurman achieved with their claim that tools are founded in the cultural–historical aspect and qualified by it (see Schuurman 1980:10; Van Riessen 1949:506–507).

Stafleu also raised the issue of time, the supra-temporal and eternity. Since he does not refer to the analysis which I gave of this problem in 2004 I am not going to respond to his remarks but rather ask him to read pages 176–180 of my 2004 article which appeared in *Philosophia Reformata* (see Strauss 2004). Hopefully he may find my approach to this issue acceptable!

## Conclusion

I hope to have shown that many of the apparent differences between Stafleu and me are actually mere terminological differences. In some instances he explored new avenues of thought which I appreciate and in other instances I introduced him to systematic distinctions which I have developed in other contexts (most likely not familiar to him). My appreciation of his thorough work on the theoretical foundations of physics has now been expanded because I am thankful for his insightful elaboration of modally directed technical skills, although I think the way in which Van Riessen and Schuurman account for the totality structure of tools is complementary to Stafleu's approach.

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## References

- Basden, A., 2005, 'Brief comments on Stafleu's proposal for a new political aspect', *Philosophia Reformata* 70(1), 70–75.
- Bell, E.T., 1965, *Men of mathematics*, vol. I, Penguin Books, Harmondsworth.
- Black, M., 1979, 'More about metaphor', in A. Ortony (ed.), *Metaphor and thought*, pp. 1–24, Cambridge University Press, New York.
- Bodin, J. 1981, *Sechs Bücher über den Staat, Buch I–III. Übersetzt und mit Anmerkungen versehen von Bernd Wimmer, Eingeleitet und herausgegeben von P.C. Meyer-Tasch*, Verlag C.H. Beck, München.
- Coseriu, E. [1966] 1978, 'Einführung in die strukturelle Betrachtung des Wortschatzes', in H. Geckeler (ed.), *Strukturelle Bedeutungslehre*, Wissenschaftliche Buchgesellschaft, Darmstadt.



- Dooyeweerd, H., 1931, *Crisis in de humanistische staatsleer*, N.V. Boekhandel W. Ten Have, Amsterdam.
- Dooyeweerd, H., 1997, A new critique of theoretical thought: Collected works of Herman Dooyeweerd, Series A, vols. I–IV, D.F.M. Strauss (ed.), Edwin Mellen, Lewiston.
- Dooyeweerd, H., 2010, *The crisis in humanist political theory*: Collected works of Herman Dooyeweerd, Series B, vol. 7, Paideia Press, Grand Rapids.
- Laugwitz, D., 1986, *Zahlen und Kontinuum, eine Einführung in die Infinitesimalmathematik*, Wissenschaftliche Buchgesellschaft, Darmstadt.
- McIntire, C.T. (ed.), 1985, *The legacy of Herman Dooyeweerd: Reflections on critical philosophy in the Christian tradition*, University Press of America, Toronto.
- Monahan, M.J., 2013, Book review of Taylor, P., 2013, *Race, A philosophical introduction*, 2nd edn., *South African Journal of Philosophy* 32(3), 284–289.
- Narr, K.J., 1988, 'Von der Natur der frühesten Menschheit', in W. Böhme. (ed.), *Evolution und Gottesglaube*, pp. 273–302, Van den Hoek & Ruprecht, Göttingen.
- Schuurman, E., 1980, *Technology and the future – A philosophical challenge*, Wedge Publishing Foundation, Toronto.
- Schuurman, E., 2009, *Technology and the future – A philosophical challenge*, Paideia Press, Grand Rapids.
- Sikkema, A.E., 2005, 'A physicist's reformed critique of nonreductive physicalism and emergence', *Pro Rege*, June, 20–32.
- Stafleu, M.D., 1966, 'Quantumfysica en wijsbegeerte der wetsidee', *Philosophia Reformata* 31, 126–156.
- Stafleu, M.D., 1968, 'Individualiteit in de fysica', in *Reflecties, Opstellen aangeboden aan Prof. Dr. J.P.A. Mekkes ter gelegenheid van zijn zeventigste verjaardag*, pp. 287–305, Buijten & Schipperheijn, Amsterdam.
- Stafleu, M.D., 1970a, 'Analysis of time in modern physics', in *Philosophia Reformata* 35, 1–24.
- Stafleu, M.D., 1970b, 'Analysis of time in modern physics (continued)', in *Philosophia Reformata* 35, 119–131.
- Stafleu, M.D., 2002, *Een wereld vol relaties*, Buijten & Schipperheijn, Amsterdam.
- Stafleu, M.D., 2004, 'On the character of social communities, the state and the public domain', *Philosophia Reformata* 69(2), 125–139.
- Stafleu, M.D., 2005, 'The relation frame of keeping company: Reply to Andrew Basden', *Philosophia Reformata* 70(2), 151–164.
- Stafleu, M.D., 2006, 'Infinity and continuity: Time and context relevant philosophy', *Journal for Christian Scholarship/Tydskrif vir Christelike Wetenskap*, Special Edition 1, 163–174.
- Stafleu, M.D., 2014, 'Nuances in the Philosophy of the Cosmonomic Idea', *Koers – Bulletin for Christian Scholarship* 79(3), Art. #423, 8 pages. <http://dx.doi.org/10.4102/koers.v79i3.423>
- Strauss, D.F.M., 2004, 'Intellectual influence upon the reformational philosophy of Dooyeweerd', *Philosophia Reformata* 69(2), 151–181.
- Strauss, D.F.M., 2006, *Reintegrating social theory*, Peter Lang, Frankfurt am Main/New York.
- Strauss, D.F.M., 2009, *Philosophy: Discipline of the disciplines*, Paideia Press, Grand Rapids.
- Strauss, D.F.M., 2013, 'What is a Line?', *Axiomathes* 24(2), 181–205.
- Taylor, P.C., 2013, *Race: A philosophical introduction*, 2nd edn., John Wiley and Sons Ltd, Hoboken.
- Trier, J., 1973, *Aufsätze und Vorträge zur Wortfeldtheorie*, Von Anthony van der Lee & Oskar Reichmann (eds.), Mouton, The Hague.
- Van Eikema Hommes, H.J., 1972, *De elementaire grondberippen der rechtswetenschap*, Kluwer, Deventer.
- Van Riessen, H. 1949. *Filosofie en techniek*, Kampen, Kok.
- Von Weizsäcker, C.F., 2002, *Große Physiker, Von Aristoteles bis Werner Heisenberg*, Deutscher Taschenbuch Verlag, München.
- Woldring, H.E.S., 1976, *Tussen handelingsvryheid en gedragsbeheersing*, Van Gorcum, Assen.