Reason: Its Kaleidoscopic Ideological Interface
Part 1 – Historical background

D.F.M. Strauss

Samevatting

Die Westerse spekulatiewe metafisika neem sekerlik sy vertrekpunt in die gelykstelling van denke en syn soos dit deur Parmenides na vore gebring is. Op hierdie basis het daar – te midde en ten spyte van onderliggende ooreenkomste – 'n verstommende kaleidoskopiese veelvormigheid in the opvattings oor die aard van die menslike 'rede' ontstaan. In hierdie artikel word aandag geskenk aan die ideologiese vertekenings waaronder die 'rede' oor baie eeue gely het. Vanaf die statiese synsklem in Parmenides se rede-opvatting en via talle tussen-liggende hoofstasies en selfs kleiner afdraai-paaie word ons gedagtegang uiteindelik via die Griekse, Middeleeuse en Moderne denke in Deel I heengevoer tot by Immanuel Kant. In die tweede vervolg-deel sal daar oorgegaan word om in die lig van die meer resente moderne ontwikkelinge gedurende die laaste 200 jaar te kom tot 'n bestekopname van die struktuur en grense van rasionaliteit binne die skeppingsgegewe bestaanshorison van die mens. Binne hierdie besinningskonteks sal daar naas die reeds behandelde gestaltes van die rede (soos die *selfversekerde rede* van Descartes, die logiese skeppingskrag van Hobbes se *konstruerende rede asook* die die *suiwere rede* van Kant) ook stilgestaan word by die kontemporêre (postmoderne) ongemak met *rasionaliteit as sodanig*. Onderweg na hierdie eindpunt sal daar in die vervolg-aflewering onder meer ook vlugtig stilgestaan word by die belangrikste verskuiwinge wat gaandeweg ingetree het – vanaf die *dialekties-ontvouende rede* van Hegel, die *historiese rede* van Dilthey; die *tradisie-bewuste rede* van Gadamer, die *dwase* rede van Thevenaz, en die *ontwortelde rede* van die postmodernisme tot by 'n Christelike perspektief op die aard van rasionaliteit.

1. Orientation

One of the most lasting convictions regarding the uniqueness of being human is found in the belief that *rationality* is a constitutive feature of human nature. Even modern Darwinism and contemporary neo-Darwinism,

in spite of tracing the origins of humankind back to animal ancestors and notwithstanding placing humans within the realm of animals, continues an essential element of this legacy in the classificatory designation: *homo sapiens*.

The human person is endowed with and characterized by *sapiens* (*wisdom*). It comprises the capacity to *understand* the human predicament, to *think discursively* and to *argue convincingly*.

In spite of all other differences of opinion regarding human nature it may seem as if universal agreement prevails in this regard. Human rationality as such seems to be a defining feature of *being human*.

Yet, this apparent universal consensus seems to be seriously threatened as soon as one starts to look at the numberless *shapes* and *forms* in which human rationality actually surfaced in the history of philosophy and within the various academic disciplines.

2. Reason in its multiple shapes

2.1 Thought and Being: the origins of Western Metaphysics

At the cradle of Western philosophical speculation one certainly has to acknowledge Parmenides with his fundamental identification of *thought* and *being*. Zeno's arguments against multiplicity and movement (*Achilles and the Tortoise*, the *flying arrow*, and so on) simply explore the basic position taken by Parmenides in his claim that *thought* and *being* are the same.[1] Thought can only think what is, because it cannot contemplate what does not exist.[2] Veling remarks that it was Parmenides who inspired many later thinkers to pursue a *rational* search for "true reality" amidst what is *changeful* (2000:29). Eventually this affirmation of the *identity* of thought and being emerged as the idea that reality itself has a *rational structure*. We shall return to this in a later context.

2.2 'Autocratic' and 'dialectical' reason: Heraclitus and Anaxagoras

The scene of Early Greek philosophy also witnessed the supposedly uniform "world logos" ("world reason") of Heraclitus as well as the unity of conceptual oppositions in his dialectical claim:

> For all things are alike in that they differ, all harmonize with one another in that they conflict with one another, all converse in that they do not converse, all are rational in being irrational; individual

---

1 Diels-Kranz I, 231; Parmenides, B. Fr. 3: "For thinking and being are the same": (τὸ γὰρ αὐτὸ νοεῖν ἐστίν τε καὶ εἶναι).

2 Diels-Kranz I, 236; 28:18. Parmenides, B. Fr. 8: οὐ γὰρ φατὸν οὐδὲ νοητόν ἔστιν ὅπως οὐκ ἔστι. ["For it is neither expressible nor thinkable that (what-*is*) is not."]

things are by nature contrary, because they mutually agree. For rational world-order [nomos] and nature [physis], by means of which we accomplish all things, do not agree in that they agree.[1]

In the thought of Anaxagoras "*nous*" (reason) elevated itself as a form-giving autocratic instance above the infinite multiplicity of ("homeo-morphic") material germs. In order to rule over formless matter the "*nous*" ought to be pure and without matter ("matterless").[2]

2.3 The 'intuitive' reason of Plato

Even in Plato' account of the origin of the world (cf. his dialogue *Timaeus*) the "divine work master" (*demiourgos*) merely *gives* form to *formless matter*. Because the world of the senses is subject to *continual change*, Plato introduces his *reason* as having the capacity to grasp the eternal and static essences of changing things through a supra-sensory intuitive *noetic* act, transcending the world of the senses. Theoretical reason, according to Plato, can even reach up the realm of divinity.

In his dialogue *Theaitetos* Plato actually highlights a very crucial trait of human rationality when he argues that the *logos* is directed at discerning *differences* on the basis of which a specific entity may be distinguished from whatever else there is (see *Theaitetos* 208 b – 210 a). We shall see that one of the most basic features of our logical-analytical ability is indeed given in the inevitability of being involved in acts of *identification* and *distinguishing*.

In his discussion of the nature of these (supposedly) eternal, static and universal ideal forms (*eidè*) Plato anticipates problems and theoretical positions stretched out over more than two millennia. Particularly in his eleatic dialogue *Parmenides* he explores the other side of the coin by exploring the *limits* of concept formation, by higlighting what cannot be affirmed but only *denied*.

But in the mean time his pupil, Aristotle, wants to think through in more depth the nature of *concept formation*.

---

1   These words, which were expressed by a later disciple of Heraclitus, were erroneously ascribed to Hippocrates' writing, *Περὶ διαίτης*, I, xi, 6 (see Dooyeweerd, 2003:45-46, note 2):

    Περὶ διαίτης, I, xi, 6. *πάντα γὰρ ὅμοια ἀνόμοια ἐόντα καὶ σύμφορα πάντα διάφορα ἐόντα, διαλεγόμενα οὐ διαλεγόμενα, γνώμην ἔχοντα ἀγνώμονα, ὑπεναντίος ὁ τρόπος ἑκάστων ὁμολογεόμενος· νόμος γὰρ καὶ φύσις, οἷσι πάντα διαπρησσόμεθα, οὐχ ὁμολογεῖται ὁμολογεόμενα·*

2   Diels-Kranz, B Fr.12: *νοῦς δέ ἐστιν ἄπειρον καὶ αὐτοκρατὲς καὶ μέμεικται οὐδενὶ, ἀλλὰ μόνος ἐπ᾽ ἐστιν.*

73

2.4 The self-contemplative Νους (reason) of Aristotle

Aristotle also realized that *universality* plays a key role in human under-standing, though in his *Categories* he starts with the strictly *individual* primary substance (*proten ousian*).[1] However, in its *individuality* it pre-cludes *conceptual* knowledge – something Aristotle did not want to sacri-fice. As a consequence he introduced the *secondary substance*, which is supposed to be the *universal substantial form* of an entity. This secondary substance is designated as the *to ti èn einai* (*De Anima*, 412 b 16 and *Metaph.* 1035 b 32). According to Aristotle a concept is always focussed upon what is general or *universal*.[2] In this way he wants to safe-guard the *universality* of theoretical knowledge.

Clearly, "reason" at the very outset of Western philosophical reflection, was truncated and confined to *conceptual knowledge*. The limits of know-ledge coincides with the scope of *concept formation*. If it turns out to be impossible to form a *concept* of what is individual, then by definition in-dividuality is *unknowable*. In the thought of Aristotle this restriction is in-timately connected to the fundamental *dualism* between form and matter. Aristotle's "unmoved mover" is involved in eternal self-contemplation, disconnected from all matter (cf. *Metaph.* 1074 A 30 ff.). Pötscher even says that Aristotle not only understands his 'God' to be spiritual and im-material, but positions it also in radical *opposition* to matter.[3]

The twofold split present in the opposition between form and matter and in the acknowledgement of the boundaries of concept formation inspired alternative routes to be pursued during the early middle ages.

2.5 Thought, being and unity: the mixed legacy of Plotinus

The issue of unity and multiplicity surfaced explicitly in Plato's dialogue *Parmenides*. Krämer even holds the opinion that the 'One' (ἕν) already in the earlier dialogues plays a hidden role similar to the *idea of the good* (τοῦ ἀγαθοῦ ἰδέα) (Krämer, 1959:135).

The first antinomy discussed by Plato in his dialogue *Parmenides* pro-ceeds from the assumption that the unity of the 'One' is absolute in the sense that it does not allow for any multiplicity. Yet it is not possible to

---

1   Compare Metaphysics 1031 b 18 ff.: *πρώτεν οὐσιαν.*

2   The Greek of this claim reads: *ὁ δὲ λόγος ἐστὶ τοῦ καθόλου* (*Metaph.* 1035 b 34–1036 a 1). Compare also *Metaph.* 1036 a 8: *καθόλου λόγου.*

3   Pötscher, 1970:51: "Dadurch das Aristoteles seinen Gott nicht nur als geistiges, also im-materielles Wesen verstanden, sondern in einen radikalen Gegensatz, in Widerspruch zur Materie gebracht, mit welcher er nichts, aber schon gar nichts und in keiner Weise zu tun haben konnte."

affirm anything of that undifferentiated unity. Suppose one claims that it is a *whole*, then this affirmation becomes self-destructive because a whole is only a whole when all its parts are present. Therefore, in affirming that it is a whole one has actually introduced multiplicity (ALL the PARTS) into the 'One'! Thus the discussion leader argues that it is impossible to affirm that the one is without *limits*, that it has this or that *form*, that it is *somewhere,* that it is moving or at rest, that it is identical to or different from itself, and so on (cf. Parmenides 138 a – 142 a).

Plotinus wants to continue this legacy, but at the same time he succeeds – contradicting his true intention – in showing that it is impossible to do away with positive determinations altogether. His contribution to the legacy of a *via negativa* cannot be denied, just as little as one can argue that he has succeeded in making acceptable a consistent negation of all possible conceptual determinations.

Where Parmenides identified thought and being, Plotinus considers the '*One*' (ἕν) to be *elevated above* all thought and being. Already at this basic point I have intensionally italicized the words "*elevated above*," because it already demonstrates the inherent untenability of every attempt to defend a "negative theological" approach: if the ἕν is truly totally different from whatever there is ('being'), then it is not warranted to use terms with a *spatial connotation* in order to describe this condition (or: the intended lack of positive features) of the ἕν. Properties like being *elevated* or being *above* something else imply participation in 'being'.

Already when Plotinus wants to affirm the identity of the 'One' and 'the Good' he cannot side-step the embarrassing remark that it should not be seen as a predication. Without the (unintended) aid of such positive affirmations Plotinus would not have been able to articulate the radical opposition in his thought between the ἕν and *matter*. The former is good, the latter bad; the former is first, the latter is last [cf. *En*. (= *Enneads*) 1,8,13; V,3,11; VI,7,25 and VI,9,2). To these minimal positive affirmations he even adds further qualifications. For example, he designates the ἕν as the primary beauty (τὸ πρῶτον καλόν – *En*. I,6,9,40 nd 43). Similarly the ἕν is exhanged with terms like absolute beauty (αὐτοκαλον) and the absolute good (αὐτο αγαθόν) (*En*. I,8,13,10).

Plotinus actually – and still contradicting his stated intentions! – opened the way for employing specific terms in apparently radically different meanings (analogously or stretched beyond their original intended domain of possible meaning nuances). Consistent with his negative approach he holds that distinct from the ἕν (the 'Good') there is a derived good which is a copy of the original (elevated) good. The same applies to

beauty. This ammounts to the affirmation that there is a Good above good and a Beauty above beauty (see *En*. VI,9,6,41 where he refers to the ἕν – which is identical to the 'Good' – in terms of the expression "elevated above the good": ὑπεράγαθον!). The expression used for Beauty above beauty is: κάλλος ὑπερ κάλλος (*En*. VI,7,32,29).

The most competent Plotinus scholars did not realize why Plotinus actually had to move to and fro between a negative and positive mode of thinking. A consistent negative approach is simply impossible. One always finds subtle affirmations which cancel the denial of all positive determinations. For that reason Plotinus even made a distinction between the *original unity* (αὐτοέν – *En*. V,3,12,51) and the *non-original unity* of the *Nous*, the ἐνοειδοῦς (En. VI,9,5,26). The term 'unity' is thus employed both in the sense of 'origin' and in a secondary *derivative* meaning.

Plotinus actually quite effectively demonstrated the inevitability to sidestep the employment of terms in contexts which transcend the boundaries of their original domains of employment. The term 'one' may be used in an original numerical context (its original domain of application) and it may be used in a sense which transcends the limits (boundaries) of numerical relations as such. It is preferable to designate such "concept transcending" usages as instances of *idea-knowledge*.

Taking this distinction into account explains why it is incorrect to apply conceptual standards when it comes to the idea of the ἕν as origin in Plotinus' thought. Heinemann is a victim of this misconception when he asks: "Where in the world do we find a One that is not at the same time a many, and a Many that is not at the same time a One" (1921:250)?

Also Kremer falls into the same trap. He states that in the identification of the 'One' and the 'Good' Plotinus violates his own principle. Implicitly he clearly applies the yardstick of the *negative* approach of Plotinus (1966:195). But in terms of this norm the primary choice to speak about the 'One' in itself should already be seen as a violation of a consistent adherence to the negative approach.

After Plotinus medieval philosophy transformed his distinction between the 'One' and Reason (the '*Nous*') by recombining it within the essence of God. Plotinus conceived of the *Nous* as the "one-in-many" and influenced the realistic view according to which the pre-existing ideas in the divine mind are copied in the existing creatures.

2.6 The chain of being: stretching reason to the "ipsum esse"

Thomas Aquinas' assessment of reason largely continued the legacy from Greece and neo-Platonism. He considers the human intellect to be independent of the activity of the body and as an ability not radically infected by sin but just 'wounded' by it. The true being of things is given in their *participation* in the being of God. The autonomy of natural reason (*naturalem rationem*) implies that the human being can arrive at knowledge of God as the first cause of everything (*secumdum quod est prima omnium causa – Summa Theologica*, II,62,3).

Unfortunately the artificial synthesis between Greek antiquity and biblical Christianity – sustained by the societal power of the Roman Church – did not survive the disintegrating effects of the nominalistic movement emerging during the late 13th and early 14th century.

3. The new assessment of human reason since the Renaissance

The new Renaissance spirit carried through to its extreme the disintegrating implications manifesting themselves in the assumptions of modern *nominalism*. John the Scott and William of Ockham denied the primacy of the human intellect as opposed to the will and opened up an avenue for an arbitrary creativity by means of which the human intellect can acquire *control* over the surrounding world. In stead of looking at the world from the perspective of a pre-ordained hierarchical order of being with God as the highest being, the nominalistic attitude stripped reality of any and all forms of order-determination. It thus leaves open a new domain of exploration manifested in the Renaissance urge towards the rational mastery of the world – which soon found a powerful ally in the rise of modern natural science.

3.1 Enthroning 'self-assured' human reason

Particularly Descartes, with his well-known methodical skepticism, affirmed the autonomy of the thinking subject as the ultimate starting-point for philosophical thought. He carried through the consequences of denying any universality *outside* the human intellect. The most important implicit consequence of this nominalistic orientation is that it does not acknowledge any order *transcending* the human being as such. A universal law-order *for* creatures and also the *orderliness of* such creatures (which are subjected to creational laws), are transposed to the *human mind*. The seemingly innocent remark that "number and all universals are only modes of thought" (Descartes, *The Principles of Philosophy*, LVIII) contains the radical reorientation caused by nominalism.

In the mould of this new spiritual climate the "world" no longer embraces

the human being. Rather, it is projected and seen as an entity, an *object*, at the *disposal* of the autonomously free rational human being.[1] The *circulus vitiosis* present in the proof used by Descartes for the existence of God actually demonstrates his *ultimate trust* in *human reason*. Having found his point of departure in the *cogito* (I think) he proceeds under the guidance of the maxim that rational thinking ought to be *clear* and *distinct*. In his *Meditations* III he takes as a "general rule, that all that is very clearly and distinctly apprehended (conceived) is true." However, the fundamental question is: "What guarantees the truth of clear and distinct thought" (Descartes, 1965:95-96)?

Descartes answers:

> And the whole force of the argument of which I have here availed myself to establish the existence of God, consists in this, that I perceive I could not possibly be of such a nature as I am, and yet have in my mind the idea of a God, if God did not in reality exist,—this same God, I say, whose idea is in my mind—that is, a being who possesses all those lofty perfections, of which the mind may have some slight conception, without, however, being able fully to comprehend them, – and who is wholly superior to all defect [and has nothing that marks imperfection]: whence it is sufficiently manifest that he cannot be a deceiver, since it is a dictate of the natural light that all fraud and deception spring from some defect (Descartes, 1965:110).

If God cannot be a "deceiver," how do we know that he really does exist? In order to answer this question Descartes once again appeals to the maxim of *clear* and *distinct* thought:

> For, without doubt, those that represent substances are something more, and contain in themselves, so to speak, more objective reality [that is, participate by representation in higher degrees of being or perfection] than those that represent only modes or accidents; and again, the idea by which I conceive a God [sovereign], eternal, infinite [immutable], all-knowing, all-powerful, and the creator of all things that are out of himself, – this, I say, has certainly in it more objective reality than those ideas by which finite substances are represented (1965:100).

As long as one thinks clearly and distinctly (and do not allow the will to distract one from this path), one cannot be deceived and whatever is apprehended is always true – because it will not deceive us. Of all the ideas

---

1   In his discussion of the thought of Descartes Von Weiszäcker reveals a penetrating understanding of this state of affairs: "Dies ist ein charakteristisch neuzeitlicher Sachverhalt, Nicht die Welt, in der ich mich vorfinde, garantiert mein Dasein. Diese Garantie geht mich verloren, und wenn ich die Welt wiederfinde, dann als Gegenstand meines selbstgewissen Denkens und darum as Objekt, das ich hantieren kann" (2002:130-131).

in the human mind the idea of God is the clearest and most distinct of all of them, hence God must exist. The vicious circle is 'clear(!)': that God exists is seen through clear and distinct thinking. Why is clear and distinct thinking true? Because God ensures us that clear and distinct thinking will not *deceive* us. Thus the existence of God is dependent upon the truth of clear and distinct thinking while the truth of clear and distinct thinking is dependent upon the non-deceiving God![1]

This circle actually unveils the fact that Descartes merely used his idea of God to impregnate his new mathematical method of analysis with the feature of *infallibility*. Underneath the *methodical doubt* leading to the conclusion: "I think, therefore I exist" (cogito ergo sum), one finds his deeply rooted modern trust ('faith') in the rationality of 'reason.' Unfortunately his argument is self-defeating. While doubting whatever otherwise seems to be true, he 'discovered' that he cannot doubt that he is doubting – which is a form of thinking – and from that basic fact he came to the affirmation of his own existence as a thinking being:

> Accordingly, seeing that our senses sometimes deceive us, I was willing to suppose that there existed nothing really such as they presented to us; and because some men err in reasoning, and fall into paralogisms, even on the simplest matters of geometry, I, convinced that I was as open to error as any other, rejected as false all the reasonings I had hitherto taken for demonstrations; and finally, when I considered that the very same thoughts (presentations) which we experience when awake may also be experienced when we are asleep, while there is at that time not one of them true, I supposed that all the objects (presentations) that had ever entered into my mind when awake, had in them no more truth than the illusions of my dreams. But immediately upon this I observed that, whilst I thus wished to think that all was false, it was absolutely necessary that I, who thus thought, should be somewhat; and as I observed that this truth, *I think, hence I am,* was so certain and of such evidence, that no ground of doubt, however extravagant, could be alleged by the sceptics capable of shaking it, I concluded that I might, without scruple, accept it as the first principle of the philosophy of which I was in search (Descartes, 1965:25-26).

His argument disqualifies every possible perception (observation) and all reasonings formerly taken to be reliable and true. But then he says: "But immediately upon this I observed that, whilst I thus wished to think that

---

1   Von Weiszäcker has a sound understanding of the modern characteristic present in Descartes' approach. Descartes reaches certainty about God not by considering the world, but by focussing upon himself (cf. 1972:16).

all was false ...” – a remark that demonstrates that he suddenly elevated *one observation amongst others* above all doubt!

4. 'Reason' dressed in changing 'clothes'

The arena has now been set for the exploration a deified human reason independent of any given order which determines its existence. What eventually became known as the Copernican revolution in epistemology, namely assigning primacy no longer to the 'world' but instead to the thinking subject (who transformed the latter into a controllable 'object'), was explored further by the intermediate phase in which Hobbes explored the motive of *logical creation* and Locke, Hume and Berkeley attempted to see where their trust in sense-experience can take them – without realizing that they simply traced a different path for reason, so-called 'psychological reason.'

4.1 Berkeley: 'esse est percipi'

Berkeley argues that the existence of whatever there is, is given in its *being perceived*. His famous dictum is: *esse est percipi*.[1] If I am not looking at or sensing an 'object' there is some "other spirit" who "actually does perceive it." Berkeley takes the subsequent step: "that there is no *sense-less unperceived* substance" (Berkeley, 1969:100). When no human being perceives or observes things their existence is guaranteed by God as an ever-perceiving mind, who through this act of perceiving also undergirds the constant and uniform manner in which things exist:

> That is to say, that there are certain permanent and distinct parcels of Matter, corresponding to our ideas, which, though they do not excite them in our minds, or anywise immediately affect us, as being altogether passive and unperceivable to us, they are nevertheless to God, by *whom they are perceived,* as it were, so many occasions to remind Him when and what ideas to imprint on our minds – that so things may go on in a constant uniform manner (Berkeley, 1969:100)

---

1   "And to me it is no less evident that the various SENSATIONS, or *ideas imprinted on the sense,* however blended or combined together (that is, whatever *objects* they compose), cannot exist otherwise than in a mind perceiving them – I think an intuitive knowledge may be obtained of this by anyone that shall attend to *what is meant by the term exist when applied to sensible things.* The table I write on I say exists, that is, I see and feel it; and if I were out of my study I should say it existed – meaning thereby that if I was in my study I might perceive it, or that some other spirit actually does perceive it. There was an odour, that is, it was smelt; there was a sound, that is, it was heard; a colour or figure, and it was perceived by sight or touch. This is all that I can understand by these and the like expressions. – For as to what is said of the absolute existence of unthinking things without any relation to their being perceived, that is to me perfectly unintelligible. Their *esse is percipi,* nor is it possible they should have any existence out of the minds or thinking things which perceive them" (Berkeley, 1969:66).

4.2 'Pure reason': Kant

Kant realized that an unrestricted use of the category of *causality* (understood in a deterministic sense) necessarily leads to an abolition of all freedom. Therefore he aimed at confining the application of reason only to sensory phenomena in order to leave open a supersensory domain for the ethical autonomy and freedom of the human being. Discussing the solution of the third cosmological idea he once again explains that we are not allowed to ascribe any *absolute reality* to appearances:

> The common but fallacious presupposition of the *absolute reality* of appearances here manifests its injurious influence, to the confounding reason. *For if appearances are things in themselves, freedom cannot be upheld* (I am italicizing – DS).[1].

Although Kant agrees with Hume that all knowledge begins with experience, he holds that it does not follow that all knowledge also totally arises *out of experience* (B. 1). Knowledge which is independent of experience and even of all impressions of the senses is entitled *a priori*. Such knowledge is distinguished from what is *empirical*, that is to say, from knowledge that has its sources *a posteriori* in experience (CPR, B:2). Kant distinguishes two stems of knowledge, namely *sensibility* and *understanding*. The a priori concepts of understanding are introduced as *categories* of understanding and they apply *a priori* to objects of intuition in general (CPR, B:105-106).

When combined with the modes of pure sensibility or with one another, these *a priori* categories generates a large number of derivative *a priori* concepts.[2] The ordinary employment of our understanding gives us for example the proposition: 'every alteration must have a cause' (CPR, B:5). In this case the very concept of a cause so manifestly contains the concept of a necessity of connection with an effect (and of the strict universality of this rule), that Kant could not follow the attempt made by Hume, to derive it from a repeated association of what happens with what precedes, and from a custom of connecting representations, constituting therefore a merely subjective necessity (CPR, B:5).

The most important trait of Kant's *pure reason* is that it embodies the motive of *logical creation* in its ultimate rationalistic shape.[3] Galileo turned the classical conception upside down with his argument that a moving body does not need a dynamic force to continue its movement. He holds

---

1   "Denn, sind Erscheinungen Dinge an sich selbst, so ist Freiheit nicht zu retten" (Kant, CPR B:564).

2   Yet he does not attempt to give a complete inventory of such concepts (cf. CPR, A:82).

3   See Strauss, 1982 and 1988.

that without the effect of impinging forces a body in motion will simply *continue its* motion endlessly. In his *Dialogues and mathematical demonstrations concerning two new sciences* (1638 – German translation, 1973, Darmstadt), Galileo formulates this idea in terms of a *thought-experiment* in which he assumes that a body is being placed on a horizontal plane where it continues its motion without any impediment. This provides the basis for his conclusion that the motion of this body will be *uniform* and *ever-enduring*, if the plane is infinitely extended.

The formuation given by Galileo to the principle of *inertia* exerted a strong influence on Kant. It is particularly Holz who traced these roots of the kantian view regarding the thought categories (cf. Holz, 1975: 345-358). C.F. von Weizsacker (1971:128) framed Kant's problem in terms of the question:

> What is nature, that it must obey laws which man could formulate with his understanding? Kant, in fact, in his conception of the categories, even moved a step further (1972:128).

The striking element in Galileo's thought-experiment is that he did not commence with any "sense-data" in order to arrive at his law of inertia. This law is derived *from* and *prescribed* to moving entities solely by making an appeal to the *pure understanding* of a person in its *spontaneous subjectivity*. This highlights the crucial epistemological turn to which we have alluded above: primacy is no longer ascribed to the object, but to the *subject*.

Just compare the words used by Kant in a slightly different context when he asked how "*subjective conditions of thought* can have *objective validity*, that is, can furnish conditions of the possibility of all knowledge of objects" (CPR, B:122). The solution to this problem provided by Kant demonstrates that he drew the radical humanistic conclusion: the laws of nature are *a priori* contained in our subjective understanding:

> ... the categories are conditions of the possibility of experience, and are therefore valid *a priori* for all objects of experience (CPR, B:161); Categories are concepts which prescribe laws *a priori* to appearances, and therefore to nature, the sum of all appearances' (CPR, B:163).

In his *Prolegomena* one finds this account embedded in his distinction between empirical laws of nature and the a priori form-giving function of human understanding:

> We rather have to distinguish empirical laws of nature, which always presuppose particular perceptions, from the pure or general natural laws, which, without having a foundation in particular perceptions, only contain the conditions of their necessary connection

in an experience. In respect of the latter nature and possible experience are entirely the same; and since within these the law-conformity of the necessary connection of appearances in an experience (without which we are totally incapable of knowing any object of the world of the sense), actually is based upon the original laws of the understanding, so it initially does sound strange, but it is nonetheless certain, when I state with respect to the latter: understanding creates its laws (a priori) not out of nature, but prescribes them to nature (1783 par.36:320).

In this way Kant attempted to consolidate and strengthen the natural (mathematical[1]) science-ideal of modernity – restricted to the (rationalistically elevated) *understanding* which he considers to be the *a priori lawgiver of nature*![2]

The idea that human understanding *constructs* (*structures*) reality in a rational way is arguably the most powerful and influential stance of modern Humanism. Although Kant explored this orientation in rationalistic terms, it inherently contains the starting-point for its opposite, because outside the human mind *no* universality is found. Thus a rich variety of *irrationalistic* stances are found in post-Kantian thinking – our concern in Part 2 of this study which intends to end with a positive assessment of the structure and limitations of "human reason."

5. Bibliography

BERKELEY, G. 1969. T*he Principles of Human Knowledge with other Writings*, edited and introduced by G.J. Warnock. London: The Fontana Library.

DESCARTES, R. 1965. A Discourse on Method, Meditations and Principles, translated by John Veitch, Introduced by A.D. Lindsay. London: Everyman's Library.

GAUSS, H. 1960: *Philosophischer Handkommenar zu den Dialogen Platos*. Volume III, First Part. Bern.

DOOYEWEERD, H. 2004. *Reformation and Scholasticism in Philosophy. The Greek Prelude*. Volume I. The Collected Works of Herman Dooyeweerd, Series A, Volume 5, General Editor D.F.M. Strauss. Lewiston: The Edwin Mellen Press.

HAPP, H. 1971. Hyle, *Studien zum aristotelischen Materie-Begriff*. Berlin.

HEINEMANN, F. 1921. *Plotin*. Leipzig.

---

1   This qualification is justified by Kant's remark that "in every particular natural theory there is only so much genuine science as there is mathematics in it" ("Ich behaupte aber, daß in jeder besonderen Naturlehre nur so viel eigentliche Wissenschaft angetroffen werden könne, als darin Mathematik anzutreffen ist" (Kant, 1786:A-VIII = 1968:14).

2   The application of understanding is limited to sensibility in order to save-guard a separate super-sensory domain for humanity in its practical-ethical freedom and autonomy.

KANT, I. 1783. *Prolegomena einer jeden künftigen Metphysik die als Wissen-schaft wird auftreten können*. Hamburg: Felix Meiner edition.

KANT, I. 1786. *Metaphysiche Anfangsgründe der Naturwissenschaft*. Darmstadt: Wissenschaftliche Buchgesellschaft. Kant Werke. Volume 8 (1968).

KANT, I. 1787. *Kritik der reinen Vernunft* (1781). 1st print 1781 (references to CPR A or B).

KRÄMER, H.J. 1959: *Arete bei Plato und Aristoteles. Zum Wesen und Geschichte der platonischen Ontologie*. Heildeberg.

KREMER, K. 1966. *Die neuplatonische Seinsphilosophie und ihre Wirkung auf Thomas von Aquin.* Leiden.

PÖTSCHER, W. 1970. *Strukturprobleme der aristotelischen und theophrastischen Gottesvorstellung.* Leiden.

PRANTL, C. 1855. *Geschichte der Logik im Abendlande*. Leipzig.

STRAUSS, D.F.M. 1982. The Place and Meaning of Kant's Critique of Pure Reason (1781) in the legacy of Western philosophy, *Suid-Afrikaanse Tydskrif vir Wysbegeerte*. 1982. (pp.131-147).

STRAUSS, D.F.M. 1998. Die postmodernisme – metodologiese oorwegings, in: *Journal for Christian Scholarship*. April 1998 (pp.13-33).

VON WEISZÄCKER, C.F. 1972. *Voraussetzungen des naturwissenschaftlichen Denkens*, Herderbücherei. Band 415.

VON WEISZÄCKER, C.F. 2002. *Große Physiker*, *Von Aristoteles bis Werner Heisenberg*. München: Deutscher Taschenbuch Verlag.

VELING, K. 2000. *Ruimte voor de rede, Filosofie als systematische reflectie*. Kampen: Agora.