The Role of Ideas in Kant and Hegel's Search for Systematic Unity

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"Entschluss"

Strebe, versuche du mehr, als das Heut und das Gestern, so wirst du

Besseres nichts als Zehr, aber auf's Beste sie sein!

"Resolve"

Strive, try more than the today and the yesterday, and you will become

Nothing better than time, but time at its best[1]

Acknowledgments

[1] G.W.F. Hegel, from a poem written in 1801, read aloud by his students on the tenth anniversary of his death, as quoted in Comay and Ruda (2018), p.107.

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Abstract

This dissertation is concerned with the role of ideas in the *Critique of Pure Reason* and Hegel's *Science of Logic*, in relation to their attempts to establish an objective philosophical basis for systematic unity. In the first *Critique* the principles of the understanding, based on the categories and the schematism, establish the conditions of possibility for experience and objects of experience, but they do not, in themselves, provide the level of rational cognition required to develop a systematic body of knowledge. This can only be achieved through the employment of the logic and judgments of reason, or, in another word, ideas. However, when reason moves beyond the empirical realm to develop its own transcendental ideas which involve unconditioned totalities, such as the immortal soul, the whole world or the existence of God, the result is that it crosses the boundary of its legitimate use. Kant argues that, whereas it is legitimate to use ideas regulatively as a means to orientate the understanding towards systematic unity in nature, they cannot be employed to constitute objects of experience, and, thereby, establish such unity 'objectively'. In my view, Kant's position is ambiguous. Furthermore, a close examination of the first *Critique* reveals that the schematism and the categories themselves rely on metaphysical principles, without resorting to traditional metaphysics.. In the *Critique of Judgment*, Kant addresses the gulf between the theoretical cognition of nature and the practical laws of freedom by attempting to 'throw a bridge' across the two domains, by means of the *a priori* principle of purposiveness in nature. However, his final works, collected and published as the *Opus Postumen*, suggest strongly that the task of establishing the idea of a systematic unity capable of providing a philosophical basis for applied natural science in general, and physics in particular, has still to be completed. I will argue that this task is only properly completed in the systematic philosophy of Schelling and, particularly, that of Hegel in the *Logic,* where he is determined to overcome the antinomies and contradictions that arise inevitably from Kant's abstract thinking and his artificial separation of form and concept, reason and understanding. The dissertation will consider Hegel's attempt to ground systematic unity in the speculative logic of the absolute idea, not as a subjective presupposition, but as the full actualisation of the concept. In so doing he is, to a large extent, seeking to rescue Kant from himself.

Contents

1. Introduction – the idea

The debate over the philosophical concept of the 'idea' can be traced back to Plato and Aristotle as 'the form of things existing apart from the things themselves [as either] the type of that which is called the form, or the principle of of the knowledge of that thing'.[2] In the first formulation, that of Plato, ideas reflect the perfect forms that constitute true reality, whereas, for Aristotle, they allow us to abstract from experience and provide us with concepts that enable knowledge of objects. In both cases ideas relate to objects 'either as their paradigmatic form or as their abstracted principle of knowledge'.[3] For Kant, however, the most important distinction is between transcendental ideas, that are not subject to, or found in, experience and do not relate to objects of appearance, and the pure concepts of the understanding, the categories, which provide the conditions of possibility for experience.

The distinction is illustrated through the analysis of the basic function of reason, which is to make syllogistic inferences: 'in the conclusion of a syllogism we restrict a predicate to a certain object, after we have thought it in the major premise in its whole domain under a certain condition' (A322/B379)[4] e.g., 'all men are mortal' provides the major premise, the condition, under which the mortality of Socrates can be inferred from Socrates being a man. The task of deducing a conclusion from a given premise is characterised as reason's legitimate descending function: 'reason attains to a cognition through actions of the understanding that constitute a series of conditions'. (A330/B387). Reason can also function to 'ascend' from given conditioned objects to the conditions from which they derive; the conditions under which things are as they are, and our judgements are true. In these circumstances a conclusion has to be reached which must ultimately refer to the totality of the conditions for conditioned objects and, therefore, it must refer to an unconditioned reality; a totality of conditions that cannot itself rest on any condition. Thus, reason is transformed from a formal logical faculty into a 'transcendental' faculty in which it develops its own concepts, distinct from the understanding – concepts of unconditioned totalities or absolute unities. Following the structure of the Wolffian[5] system of 'Special Metaphysics', these 'transcendental ideas' or ideas of reason involve the absolute (unconditioned) unity of the thinking subject [the object of psychology]; the sum total of all appearances [the object of cosmology]; and, the 'thing that contains the supreme condition of the

[2] Aquinas, *Summa Theologica*, Question XV, (1952) I,15,1 quoted in Caygill, 1995, p.236.
[3] Howard Caygill, *A Kant Dictionary,* Blackwell, 1995
[4] Immanuel Kant, *Critique of Pure Reason* (1781; 1787), trans. P. Guyer and A. Wood, Cambridge UP, 1998. Citations refer to the page number in the German 'Academy Edition '(A and/or B)
[5] Christian Wolff, 1719, *Vernünftige Gedanken non Gott, der Welt und der Seele der Menschen, auch alle Dingen überhaupt*, Halle

possibility of everything that can be thought (the being of all beings)' (A334/B39) [the object of theology]. In seeking these unconditioned totalities reason has moved beyond the empirical realm, because a totality cannot be given in experience to a finite being. Reason invites an objective deduction of these ideas that mirrors the deduction of the pure concepts of the understanding; however, this is impossible by the very fact that they are ideas, ideas that are not given in experience and have no direct relation to objects. Whilst the categories are concerned with 'the synthetic unity of representations… concepts of pure reason (transcendental ideas) have to do with the unconditioned synthetic unity of all conditions in general' (ibid). The error lies in the treatment of 'the totality of experience in the major premise of the syllogism as if it were a possible object of experience' (Caygill, ibid, p.237).

2. The island of the understanding

When it comes to the pure concepts of the understanding, 'nothing is encountered in them except the pure form of thinking' (A567/B595). The transcendental deduction shows that there must be a means for the categories, as devoid of content and no more than logical functions of the understanding, to be applied to objects given in sensible intuition. For judgment to take place the intuitive representation of the object must be 'homogenous with the concept' (A137/B176), in that, for a concept to take hold of an object given in intuition, there needs to be something in the concept which is capable of being represented in intuition. It must be possible for intuitions to conform to concepts, for, as they stand, the categories are too abstract for this to happen – they are 'entirely un-homogenous' (ibid) with any intuition. As an example, experience cannot experience 'becauseness' directly – 'no one could say that the category, e.g., causality, could also be intuited through the senses and is contained in the appearance' (A138/B177). Therefore, it is necessary to establish the 'sensible instantiation' (Gardner, 1999, p.167) of the category of causality. A 'mediating representation' is required, 'a third thing which must stand in homogeneity with the category on the one hand and the appearance on the other, and makes possible the application of the former to the latter' (A138/B177). This 'third thing' is the transcendental schematism, which not only enables the intuition to be determined by the concepts of the understanding, but also adapts those concepts to sensible intuitions of appearance, thus enabling judgment to take place by offering 'a rule of the synthesis of the imagination' (A141/B180). The transcendental schemata are set out according to the order of the categories so that, for example, the schema of the quantitative categories is number; the pure logical concept of substance becomes 'the persistence of the real in time' (A144/B830); and, the concept of causality is 'the real upon which, whenever it is posited, something else always follows (ibid). The schematism is Kant's attempt to

bring together 'empty concepts' and 'blind intuition' *a priori*; without it the categories can only act as logical functions of the understanding, lacking the ability to enable the understanding to represent any object.

The schematism sets out to identify the conceptual conditions under which the transcendental power of judgment is able to 'use the pure concepts of the understanding for synthetic judgments' (A148/B187). Kant then proceeds to consider the principles of the understanding, which make use of the schemata, to demonstrate how the categories both inform, and conform to sensible intuition. The 'axioms of intuition', corresponding to the the categories of quantity, convert the 'formal predicates of being into temporally and spatially defined principles of appearances' (Caygill, ibid, p.90) – all appearances are intuited as aggregates, manifolds of homogenous parts in space and time. Their representation as wholes presupposes conceptual synthesis, which is what provides mathematics and geometry with objective validity. Secondly, the 'anticipations of perception', corresponding to the categories of quality, provide that although all appearances are given *a posteriori*, it is given *a priori* that any and all appearances must be represented as having a determinate degree. Thirdly, the 'analogies of experience', corresponding to the categories of relation, assert that experience is only possible because 'all appearances stand *a priori* under rules of the determination of their relation to each other in one time [*first edition*]… **through the representation of a necessary connection of perceptions**'[6] (A176/B218). The distinction between subjective appearances and an objective time order of events, such that 'the preceding time necessarily determines the following time' (A199/B244), establishes the 'principle of sufficient reason' (A217/B265), not as an ontological claim but as a transcendental one – the condition of possibility for experience and, therefore, for the objects of experience. Unlike the previous analytical principles, 'the postulates of empirical thinking in general', as they relate to the modal categories, do not attempt to determine objects. They are concerned with the determination of the mode in which objects relate to the understanding i.e., in terms of possibility, actuality or necessity. As such, the postulates do not seek to establish rules for the relation of appearances or objects to each other, but for the relation of appearances to the faculty of knowledge.

[6] Original emphasis – all text in bold is taken from the original.

The central aim of the 'Transcendental Analytic' is to establish the legitimate basis for *a priori* synthetic judgments about the objects of experience. The categories, which constitute the basic logical, conceptual structure of human thought, are applied to objects of empirical intuition according to *a priori* laws (e.g. 'every event has a cause') that are objective, necessary and determinate. The principles of the understanding establish the conditions of possibility for experience and for objects of experience, as rooted in an objective time order. As such, they provide 'the laws that make possible the concept of nature in general'[7] and the degree of regularity and repetition that enables us to make sense of everyday life. Crucially, they do not provide sufficient basis for the level of rational cognition that is required to establish a systematic unity in nature that is a presupposition of applied natural science. For something to be explained scientifically it has to be placed within a systematic body of knowledge: 'systematic unity is that which first makes ordinary cognition into science, i.e., makes a system out of a mere aggregate of it' (A832/ B860). The infinite diversity of nature in all its empirical forms and variety makes it impossible for this to be achieved solely through the understanding: 'Particular laws, because they concern empirically determined appearances, cannot be completely derived from the categories, although they all stand under them (B165). The categories themselves, in their application through the schematism and the principles, are capable of bringing unity to the manifold in terms of objects, however, they do so only in the form of a 'distributive unity' (A644/B672). In order to bring the 'ordinary' knowledge of the understanding into the systematic 'collective' unity required by applied science, it is, therefore, necessary to employ the logic and judgments of reason:

> ...what reason quite uniquely prescribes and seeks to bring about concerning it is the systematic in cognition i.e., its interconnection based on one principle. This unity of reason always presupposes an idea, namely that of the form of a whole of cognition which precedes the determinate cognition of the parts and contains the conditions for determining *a priori* the place of each part in its relation to the others. Accordingly, this idea postulates complete unity of the understanding's cognition, through which this cognition comes to be not merely a contingent aggregate but a system interconnected in accordance with necessary laws. (A645/B673)

[7] Immanuel Kant, *The Metaphysical Foundations of Natural Science* (1786), translated by Michael Friedman, in *Theoretical Philosophy after 1781*, Cambridge UP, 2010, 4:469, p.185

This inevitable turn to reason, the realm of ideas, is fraught with difficulty. The legitimate use of reason within the rules of the understanding is an 'island, and enclosed in unalterable boundaries by nature itself. It is the land of truth' (A235/B294-5). Surrounding this island is reason – 'a broad and stormy ocean, the true seat of illusion' (A235/B295).

3. The ocean of reason

Judgments based on reason bring systematic unity to knowledge by allowing a multiplicity of empirical facts to be conditioned according to a single premise under which they can be deduced. The danger is that reason is compelled to search for a further condition for this initial premise and so on *ad infinitum*. Ultimately, reason has to aspire to a totality, the sum total of all conditioned objects, in other words an unconditioned absolute. For Kant, such an aspiration is the path to transcendental illusion – the deceptive extension of the concepts of the understanding to their absolute conditions beyond the boundary of experience. The illusion occurs because reason transforms itself from a formal logical process into a 'transcendental' faculty, able to develop its own concepts, characterised by Kant as 'transcendental ideas' (A320/B368) or ideas of reason.[8] The main focus of the 'Transcendental Dialectic' is to consider whether it is possible to undertake a metaphysical deduction of these transcendental ideas i.e., the absolute, unconditioned unity of the 'thinking subject' the immortal soul as the object of psychology (the non-empirical subject of consciousness); the unconditioned unity of the 'series of conditions of appearance' (the object of cosmology); and the unconditioned unity of the 'conditions of all objects thought in general' (the object of theology).[9]

The first of these, the doctrine of the immortal soul, or rational psychology, involves the paralogism of pure reason. According to Aristotle, a paralogism contains a false syllogism involving a specious claim of the truth of an antecedent from a consequent premise e.g., if A then B does not mean that if B then A. Kant distinguishes a logical paralogism, where the falsity of a syllogism is 'due to its form whatever its content may otherwise be' (A341/B399), from a transcendental paralogism where the false inference has a ground 'in the nature of human reason' (ibid). Rational psychology claims that the self is an indivisible, immaterial substance, an incorruptible and immortal soul (A345/B403), based solely on apperception – the 'I think' supplies its 'sole text' (A343/B401). As the 'I think' is a

[8] Kant uses the term *Idee* to distinguish between ideas of reason which go 'beyond the possibility of experience' (A320,B377) and the concepts of the understanding (*Begriff*)
[9] See A334/B391

non-empirical representation, rational psychology's attempt to answer the question 'What is the nature of the thing that thinks?' leads it to make claims and inferences which are paralogistic. In the second edition (see B416-20) the focus of the criticism centres on the confusion of analytic and synthetic judgments. The move from an analytic proposition (i.e., the 'I' that thinks must be regarded as a subject of thought) to a synthetic proposition ('I' as an object must be regarded as a substance) is invalid because a synthetic judgement cannot be inferred solely from an analytic judgement. The subject of an analytic judgements contains its predicate, it cannot add anything (e.g. substance) to the subject, whilst the subject of a synthetic judgement does add something to the subject. Consequently, the 'I think', as the transcendental unity of apperception, cannot constitute the self as an object or ground anything permanent in the experience of the self – 'the unity in the synthesis of thoughts' cannot be taken for 'a unity in the subject of these thoughts' (A402). Furthermore, the 'unity of consciousness' should not be confused with the 'intuition of the subject as object' (B421) to which the category of substance can be applied. Such a formulation would confuse the determining self with the determinable self – the self as the condition for all judgements with the self as intuited object of cognition.

The second transcendental idea posits the idea of a whole world or 'the unconditioned unity of objective conditions in appearance' (A406/B432). Reason makes the assumption that if a conditioned series of appearances is given then it has to be the case that '**the whole sum of conditions, and hence the absolutely unconditioned, is also given**' (A409/B436, *original emphasis*). This movement beyond the boundaries of experience, in search of the unconditioned, inevitably generates logical contradictions, which Kant terms antinomies. He presents logical proofs both for and against four pairs of antithetical propositions about the world, each of which corresponds to a particular set of the categories. For example, the quantitative antinomy, based on the thesis that 'The world has a beginning in time, and in space it is also enclosed in boundaries' (A416/B454), is contrasted with the antithesis that 'The world has no beginning and no bounds in space, but is in infinite with regard to both time and space' (A417/B455). The fourth antinomy, linked to the modal categories, sets out proofs of the two opposing propositions that there is, or is not, an ' absolutely necessary being' (A452/B480 and A453/B481). The aim is not to resolve the antinomy, but to demonstrate the problem with any principle of totality i.e., that it is impossible to establish an absolute completeness of the whole of all appearances on the basis of spatio-temporal experience. At most, such a principle acts as a regulative '**problem** for the understanding' (A508/B536, *original emphasis*):

> …thus the principle of reason is only a **rule**, prescribing a regress in the series of conditions for given appearances, in which regress it is never allowed to stop with an absolutely unconditioned. Thus it is not a principle of the possibility of experience and of the empirical cognition of objects of sense, hence not a principle of the understanding, for every experience is enclosed within its boundaries (conforming to the intuition in which it is given); nor is it a **constitutive principle** of reason for extending the concept of the world of sense beyond all possible experience; rather it is a principle of the greatest possible continuation and extension of experience, in accordance with which no empirical boundary would hold as an absolute boundary. (A509/B537)

The third transcendental idea, capable of bringing about the systematic unity that reason seeks, is that which 'contains the supreme condition of the possibility of everything that can be thought (the being of all beings)' (A334/B39). This is the transcendental idea 'not merely *in concreto* but *in individuo* i.e., as an individual thing which is determinable, or even determined through the idea alone' (A568/B596); and, as such, represents the '**thing in itself**', the 'one single genuine ideal of which human reason is capable' (A576/B603). Kant goes to some lengths to demonstrate that it is wholly illegitimate to hypostatise such a concept i.e., to make the idea of such an ideal into an object in itself or to attempt to prove its existence as objectively given:

> …all of this does not signify the objective relation of an actual object to other things, but only that of an **idea** to **concepts**, and as to the existence of a being of such preeminent excellence it leaves us in complete ignorance. (A579/B607).

However, this is exactly what reason attempts to do. It starts from the need to establish something that can be taken as the 'complete ground for the thoroughgoing determination of its concepts' (A583/B611). Furthermore, it assumes that this something has to exist necessarily, for if it was to be merely contingent it would have something other as its cause. The only 'something' that can fulfil this requirement (i.e., that is independent of all conditions and is, in itself, both a necessary and sufficient condition for everything else) is 'that which contains all reality' (A587/B615) i.e., the highest or most real being, the *ens realissium,* or God. Kant concedes that it is inevitable that reason should aspire to an 'absolute unity of complete reality as the original source of possibility' (A587/B615). He also recognises practical applications of the transcendental ideal. However, neither of these considerations has any bearing on the question of whether it is possible to provide a proof of the existence of God.

For speculative reason, there are only three possible grounds of proof for the existence of God i.e., the physico-theological, the cosmological and the ontological proof.[10] Interestingly, Kant's critique of these metaphysical proofs reverses the order in which he first presents them. He opens with the critique of the ontological proof, which rests on the argument that the statement 'God exists' is an analytic judgment. As with the concept of the infinite, where the fact that a thinking finite being has a concept of the infinite means that the infinite must exist, the existence of God is contained within the concept of God. The concept of God is that of an absolutely necessary being. It is as impossible for an absolutely necessary being not to exist, as it is for a triangle not to have three angles. The denial of God's existence contradicts the concept of God. Kant's first argument is that to deny something's existence does not necessarily contradict anything in its concept – the three angles of a triangle are only absolutely necessary under the condition that a triangle exists (is given). However 'if I cancel the subject [*e.g., the triangle*] together with the predicate then no contradiction arises; for there **is no longer anything** that could be contradicted' (A594/B622, *original emphasis*). Kant accepts the argument that there is a concept where the 'cancelling of its object is contradictory within itself, and this is the concept of the most real being' (A596/B624). He also accepts the possibility of a 'most real being', given that the most real being encompasses all reality under which existence is comprehended. If its existence is cancelled, then its internal possibility is also cancelled and, therein, lies a contradiction.

In Kant's view this argument confuses the logical possibility of the concept with the possible existence of the thing. This goes back to the question of whether '**This or that thing… exists**' (A597/B625) is an analytic or a synthetic judgment. If it is analytic then, in positing existence, nothing is added to the thought of the thing. Substituting 'reality' for 'existence' does not change it because in so doing 'then you have already posited the thing with all its predicates in the concept of the subject and assumed it to be actual, and you only repeat that in the predicate' (A598/B626). If, on the other hand, the proposition is synthetic, as Kant believes every existential proposition has to be, because its 'truth' has to be verified through experience, as grounded by the categories, then it is possible to cancel the predicate of existence without contradiction. The illusion consists in 'the confusion of a logical predicate with a real one (i.e., the determination of a thing) '(ibid). Kant's argument is that 'being' is not a real predicate, but merely a logical one

> …if I take the subject (God) together with all his predicates … and say God is, or there is a God, then I add no new predicate to the concept of God, but only posit the subject in itself with all its predicates (A599/B627)

[10] See *CPR*, A591/B619

Nothing is added to the concept beyond the expression of its logical possibility. The concept of existence is equated with the simple copula in a subject-predicate judgment e.g.,

> The proposition **God is omnipotent** contains two concepts that have their objects: God and omnipotence; the little word **'is'** is not a predicate in it, but only that which posits the predicate **in relation** to the subject. (A598/B626, *original emphases*)

The 'is' expresses a relation between concepts and objects, not an attribute of the object itself. If this is the case then the judgment that God does not exist does not contradict anything in the concept of God:

> … when I think a thing, through whichever and however many predicates I like… not the least bit gets added to the thing, when I posit that this thing is. For otherwise what would exist would not be the same as what I had thought in my concept, but more than that, and I could not say that the very object of my concept exists. (A600/B628)[11]

Kant insists that the confusion of the mere concept of a thing and its existence has to be avoided. Whatever the concept of something involves, it is necessary to go beyond it in order to provide it with existence i.e., to move from logical possibility, to real possibility, to actuality.

The ontological argument abstracts from all experience in an attempt to prove the existence of God through its concept, whereas the cosmological proof infers the existence of an absolutely necessary being on the basis of 'the experience of any **existence in general**' (A620/B648). The argument rests on the law of causality, i.e., that everything contingent must have a cause and the chain of causation has to end with an absolutely necessary and final cause that cannot be superseded. Kant's main line attack is that even if the existence of a necessary final cause is accepted this is not necessarily the same as the concept of God as the highest, most real being. There is no reason why something less than the *ens realissimum* could be absolutely necessary and, therefore, provide the modal ground for the spatio-temporal world. It is logically possible to have an absolutely necessary being that does not possess all the qualities of the *ens realissimum* (e.g., omnipotence, omniscience). In order to prove the existence of God the existence of the highest being would have to be directly inferred from that of an absolutely necessary being – we would need to know that the highest being is the only thing that is absolutely necessary. However, it is impossible to make this inference on the basis of experience and, therefore, we return to the same proposition made by the ontological argument. We have arrived at the concept of a necessary being and inferred that the most real being is the only concept that meets with its existence and thus 'we have to abandon all experience at once and seek among pure concepts for the one that might contain the conditions for the possibility of an absolutely

[11] In the famous example, 100 actual thalers contain nothing more than the idea of 100 thalers – the actual 100 thalers are neither increased nor altered in any way other than existing outside of the concept of them.

necessary being' (A607/B635). The cosmological proof also rests on what he describes as an 'entire nest of dialectical presumptions' (A609/B637): i.e., the principle of causality, on which the argument rests only applies in the sensible world and cannot, justifiably be applied to the supersensible; the inference of an absolutely necessary being from the impossibility of an infinite series reaches beyond the bounds of experience into the realm of reason; and, the confusion of a logical and a truly transcendental possibility of a concept of an all of reality.

Before he embarks on the critique of the final proof Kant inserts a short section on the 'Discovery and explanation of the dialectical illusion in all transcendental proofs of the existence of a necessary being'.[12] The discussion centres on reason's need to seek an unconditioned and, therefore, necessary cause. Although this cannot be found in any single thing it has to be assumed for existence in general, in order to provide a logical basis for the systematic unity of appearance. It is, therefore, 'nothing other than a **regulative principle** of reason, to regard all combination in the world **as if it** arose from an all-sufficient necessary cause' (A619/B647). It appears to be impossible to derive the principle of systematic unity from empirically based reason and, therefore, the idea of a most real, necessary being 'is represented as an actual object…so that a regulative principle is transformed into a constitutive one' (A619-20/B647-8). It is as if Kant feels the need to marshal his thoughts before approaching the physico-theological proof, i.e., that the existence of God can be demonstrated through 'a **determinate experience**, that of the things in the present world, their constitution and order' (A620/B648, original emphasis). God's existence is inferred from the order, purpose and wonder that is experienced empirically in the world – it is effectively the argument from design. Kant goes to some lengths to grant this proof both respect and intuitive force:

> This proof always deserves to be named with respect. It is the oldest, clearest and most appropriate to common human reason.' (A623/B651).

Furthermore, it enables the scientific study of nature, through its search for unity and purpose, bringing in 'ends and aims where they would not have been discovered by our observation itself, and extends our information about nature through the guiding thread of a particular unity whose principle is outside nature.' (A623/B651). This is why the order of proofs is reversed. Kant thinks himself on safe ground in his critique of the ontological and cosmological proofs. However, confronted with the manifold 'wonder' of nature, he cannot but endorse the 'intuitive force' of the physico-theological argument. He needs the principles that he has previously established; particularly that experience (of

[12] Both the two previous proofs are characterised as 'transcendental 'because they are set out independently of empirical principles. Kant notes that although the cosmological proof is based on experience in general 'it is not carried out on the basis of any particular constitution of experience, but of pure principles of reason' (A614/B642).

the world) cannot provide us with any object which is adequate to the concept of a highest being because such a being is, by definition, beyond all human experience ('immortal', 'ineffable' etc.). Also, no inference from human experience can bridge the gap between the conditioned and the unconditioned. Even if the experience of order and determinate aims and purposes in the world was to be granted as evidence of design this 'could at most establish a highest architect of the world, who would always be limited by the suitability of the material on which he works, but not a creator of the world, to whose idea everything is subject' (A627/B654). Nor would it discount the possibility of more than a single architect. At its heart, this argument also seeks to realise and hypostatise 'what can only be an idea' (A615/B643).

For Kant, all theology based on principles of reason, whether it be transcendental theology, where the original being is thought through reason/transcendental concepts alone (deism), or natural theology, where the original being is inferred from the order and unity of the world (theism), is speculative i.e., 'it pertains to an object or a concepts of an object to which one cannot attain in any experience (A635/B663). It is entirely legitimate, through a '**cognition of nature**' (ibid) to infer from the experience of an empirical object to its cause. In so doing it is not 'the things themselves (substances)' (ibid) that are being related to their causes – it is only 'what **happens**, thus their **states**' (ibid) that are cognised. Any attempt to move away from empirical experience towards experience in general, or from objects of experience towards things in themselves, involves the illegitimate use of reason. Furthermore, any attempt to infer from the 'form of the world' (A636/B664) to 'a cause that is entirely distinct from the world' (ibid) would again 'be a judgement of mere speculative reason, because the object here is not any object of a possible experience' (ibid). In a question, which, no doubt, Hegel would be happy to provide a robust response, Kant asks how it is possible to move beyond all possible experience 'through the power of mere ideas' (A638/B666).

Kant has effectively destroyed the claim to be able to constitute any kind of systematic unity, on the basis of these transcendental ideas. Even if considered in terms of the 'regulative principle' they are not productive and do not take the argument forward to any significant degree. Although the assertions of 'Special Metaphysics' have been demonstrated to be illusory, there is still the need to seek out ideas that will make a positive and productive contribution to the development of a philosophical basis for objective natural science.

4. Limits and boundaries

The whole thrust of the *Critique* is to establish the boundaries of the legitimate use of reason. Despite this, the distinction between limits (*Schranken*) and boundaries (*Grenzen*) is not explicit. However, the distinction is made clear in the *Prolegomena*[13]:

> Boundaries (in extended things) always presuppose a space that is found outside a certain fixed location, and that encloses that location; limits require nothing of the kind, but are mere negations that affect a magnitude insofar as it does not possess absolute completeness. (§57, pp.103-104)

The notion of a symbolic limit is drawn from 'limitation 'the third category of quality, defined as 'nothing other than reality combined with negation '(*CPR,* B111). Limits are negative because they indicate that which is not contained in a given domain or area i.e., they apply to only one domain and they negate its extension. As such they can always be pushed back; they are not permanent because they 'designate only the furthest point that a domain has reached so far'[14] In contrast, boundaries have a positive quality because they have a space beyond them and they separate two different domains. Kant argues that, at any given point in time, the understanding recognises limits to mathematics and science but no determinate boundaries because here 'reason's cognition is homogenous '(*P*, 4:352, p.104) – these disciplines each treat only one type of object i.e., respectively, abstract constructions in pure intuition, and objects in space and time. On the other hand, reason has to deal with two separate (heterogenous) domains, i.e., objects of experience, which are synthesised through the application of the pure concepts of the understanding to appearances in time and space, and ideas of things in themselves. There is a boundary between these two domains and it is the concern of critical philosophy to determine this boundary precisely. This is no easy task because, although there is a boundary to the legitimate use of reason, reason itself knows no limit. As Kant states early in the *Critique*:

> I can think whatever I like, as long as I do not contradict myself i.e., as long as my concept is a possible thought , even if I cannot give any assurance whether or not there is a corresponding object somewhere within the sum total of all possibilities.
> (Bxxxvi)

The positive role of the boundary for pure reason is to both separate the two domains and connect them together 'since a boundary is itself something positive, which belongs as much to what is within it as to the space lying outside a given totality, reason therefore, merely by expanding up to the boundary, partakes of a real positive cognition '(*P*, 4:361, p.111). In the *Prolegomena* it is the positive ideas of natural theology and intelligible world that take on this role i.e., of expanding reason up to

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[13] Immanuel Kant, *Prolegomena to Any Future Metaphysics that will be able to come forward as Science* (1783), translated by Gary Hatfield, in *Theoretical Philosophy after 1781*, Cambridge University Press, 2002. Henceforth *P*.
[14] Stephen Howard, 'Kant on Limits, Boundaries, and the Positive Function of Ideas', in *European Journal of Philosophy*, 2022, 30, p.66

and beyond the boundary towards the idea of a divine being. In the *Critique* the focus on a divine being is less prominent, given Kant's refutation of the metaphysical proofs of God. However, he cannot avoid the necessity for the use of positive, transcendental ideas in establishing the systematic unity that is the condition of possibility not just for science, but also for our day to day understanding of the world.

In its overarching aim to establish the boundaries of the understanding and the legitimate use of reason, the *Critique* can be characterised as a journey, or perhaps, more accurately, a quest. It is as if we are on an island where the understanding is searching for 'what may lie within and what without its whole sphere '(A238/B297). It lacks clarity as to whether 'certain questions lie within its horizon or not '(ibid) and frequently errs when it unavoidably 'oversteps the boundaries of its territory '(ibid). Kant knows that there is 'something 'beyond the horizon, by its definition as a boundary. He is reluctant to leave the island because it represents the solid ground of knowledge and yet, to secure the systematic unity that is the condition of possibility for such knowledge, he is forced to make use of productive ideas which take him to the limits of the horizon and beyond.

5. The use of productive ideas

The aim of 'Transcendental Dialectic' is to demonstrate the illegitimate use of reason, i.e., what happens when ideas are used to constitute an object. The employment of concepts to constitute objects is reserved exclusively for the understanding (by way of the categories and the schematism). However, the ideas of reason have 'an excellent and indispensably necessary regulative use' (A644/B672), involving the development of a logical principle of systematic unity, which serves 'the understanding as a rule' (A645/B673); thus allowing a series of objects to be seen as part of a system which is interconnected in terms of necessary laws, rather than just a 'contingent aggregate '(ibid). According to the 'Transcendental Doctrine of Method' a system is 'the unity of the manifold cognitions under one idea' (A832/B860). Within the concept of a system all the parts are related to the unity of the whole and its 'boundaries [*are*] determined *a priori*' (A833/B861). It is systematic unity, as prescribed by reason, which is 'that which first makes ordinary cognition into science, i.e. makes a system out of a mere aggregate of it'. In a systematic unity the whole is 'articulated (*articulatio*) and not heaped together (*coacervatio*) '(A832/ B860).

One of the contexts in which Kant is working is the 18th century natural history debate over the question of whether there is a natural system in nature, or, whether any attempt to classify nature according to a system is inevitably artificial:

> No natural system of plants, though one or the other approaches it quite closely, has so far been constructed; nor do I contend that this system is really natural (perhaps some other time I may issue fragments of one); nor can it become a natural system before all details in connection with our system will be known. In the meantime, however, as long as a natural system is lacking, artificial systems will definitely be needed.'[15]

The Linnaean general system of nature classified the whole of nature into the three kingdoms (animal, vegetable and mineral), divided into their separate classes, orders, genera and species. Within this system Aristotle's categories of genus (*genos*) and species (*eidos*), are naturalised alongside the other classificatory categories, thus enabling Linnaeus to allocate all living beings into an order of nature. For Aristotle, the terms denote purely logical categories which help to determine what a thing is, its essence or that which differentiates it from other things. Thus a species is determined by its genus and that which differentiates it from other things in the same genus – any definition of a species is '*per genus et differentiam*'.[16] From the 17th century onwards the terms no longer refer to logical categories, but to fixed ranks in a hierarchical, taxonomic system. However, what is retained in the Linnaean system is the Aristotelian sense that the definition of a particular species as a particular kind of thing, different from all other things; and, in this sense, it appears to be saying something about the thing's essence.

Kant is grappling with the problem of a natural system in the sense of attempting to 'make explicit and to justify through critique (in his precise sense of determining the limits) the assumptions already operative in natural history' (Sandford, ibid, p.956) i.e., the systematisation of cognition by way of 'logical principles'. Reason proposes an idea:

> Namely that of the form of a whole of cognition, which precedes the determinate cognition of the parts and contains the conditions for determining *a priori* the place of each part and its relation to the others. Accordingly, this idea postulates complete unity of the understanding's cognition, through which this cognition comes to be not merely a contingent aggregate but a system interconnected in accordance with necessary laws.'
>
> (A645/B673)

[15] Linnaeus, The Science of Nature, 1735, 23, quoted by Stella Sandford, Kant, Race and Natural History, *Philosophy and Social Criticism Vol.44(9)*, 2018, p.955

[16] through genus and a difference

This logical principle also presupposes a transcendental principle through which systematic unity, as it pertains to objects 'is assumed *a priori* as necessary' (A651/B679). At this point, Kant makes a very strong claim for, what he describes as, 'this transcendental presupposition' (ibid) – without it '…we would have no reason, and without that, no coherent use of the understanding, and, lacking that, no sufficient mark of empirical truth' (ibid). Not only is it necessary, it is also 'objectively valid' (ibid). This transcendental presupposition is what lies behind the categorisation of individual things into common species, and species into fewer genera and so on. It is a condition of the employment of reason, a logical principle, that 'a certain systematic unity of all possible empirical concepts must be sought insofar as they can be derived from higher and more general ones' (A652/B680). The only basis on which it is possible to make an inference from a general principle to a multiplicity of empirical facts is that they share the characteristics that unify them as a single species under a common genus:

> … sameness of kind is necessarily presupposed in the manifold of a possible experience (even though we cannot determine its degree *a priori*), because without it no empirical concepts and hence no experience would be possible. (A654/B682)

Just as the principle of genera postulates affinity, that of specification, articulates the variety or manifoldness that lies under the same genus. The principle of variety is a necessary counterweight to that of affinity. The understanding constantly has to balance the search for things in common with recognition of difference; ascending, on the one hand, to ever higher genera[17] and, on the other, descending through different species and subspecies.[18]

These principles cannot be taken directly from experience. Nor is their basis to be found in the categories (as logical functions of the understanding, devoid of content), the schematism or the principles of the understanding (which provide the basis for the homogeneity between the understanding and objects of intuition, but do not address homogeneity or specificity amongst objects, except in terms of time). They are necessary regulative principles of reason, transcendental presuppositions that both variety and sameness of kind can be found in the objects of nature 'in themselves' (A657/B685), without which there could be no understanding. Thus, reason

[17] Later in the same section Kant appears to offer the possibility (as a logical principle) of ascent to the highest possible genus 'the universal and true horizon' (A659/B687) which comprehends 'all manifoldness , as general species, and subspecies under itself' (ibid). Whether this amounts to an ontological claim that it is possible to ascend to 'being 'as a single genus is a different matter. Any such claim would be denied by both Aristotle and the scholastics, on the basis that every genus must be differentiated by something, a predicate, that lies outside it.

[18] Logically, it is not possible to descend to a single individual that cannot be divided because every species 'is always a concept that contains within itself only what is common to different things '(A655/B683) and as such it cannot be completely determined.

> prepares the field for the understanding: 1. by a principle of **sameness of kind** in the manifold under higher genera, 2. by a principle of the **variety** of what is same in kind under lower species; and in order to complete the systematic unity it adds 3. still another law of the **affinity** of all concepts, which offers a continuous transition from every species to every other through a graduated increase of varieties. We can call these the principles of the **homogeneity**, **specification** and **continuity** of forms.'
> (A657-8/B685-6)

Continuity is derived from the fusion of the preceding two principles, uniting them to enable the 'graduated transition from one species to another' (A660/B688). On the basis of the principle *non datur continuum formarum* (i.e. there is no vacuum of forms), this transition cannot be made by a leap, but can only be achieved gradually and continuously 'through every smaller degree of distinction' (A660/B688), within which intervening species are always possible. The logical principle of continuity of forms presupposes a transcendental one which is in conformity with nature itself.

Kant's treatment of this principle in the first *Critique* is ambiguous. On the one hand, we are reminded that it is a 'mere idea' (A661/B689), and, as such, purely regulative. As a result, it cannot constitute objects of experience; nor can it be subject to a transcendental deduction. On the other, it has objective validity and is a condition of possibility for any experience to be coherent. Kant seeks to draw a clear distinction between the categories and the 'principles of pure reason' (A664/B692), between *Begriff* and *Idee*. Even though the dynamical categories (of relation and modality) do not constitute objects directly, these laws 'are still constitutive in regard to experience, since they make possible *a priori*, the **concepts** without which there is no experience' (ibid). For example, although it is possible to 'think' of a world where the rule of cause and effect does not apply, or to imagine there to be no distinction between possibility and actuality, it is inconceivable to imagine that such a world would make any sense to human beings. Furthermore, a deduction and a schema of sensibility may be given. The principles of manifoldness, affinity and unity do not meet these criteria. They serve only as regulative principles for the systematic unity of the understanding and are not constitutive 'even in regard to empirical concepts, because for them no corresponding schema of sensibility can be given' (ibid). These ideas of reason can only be accorded 'an analogue of a schema of sensibility' (A665/B693) with the crucial difference that they do not relate directly to objects, as in the case of the application of the categories to the schemata of sensible intuition, but only provide a principle to guide the use of the understanding. Just as the sensibility constitutes an object for the understanding, so the understanding constitutes an object for reason: 'To make systematic the unity of all possible empirical actions of the understanding is a business of reason, just as the understanding connects the

manifold of appearances through concepts and brings it under empirical laws' (A664/B692). Treating purely regulative principles as constitutive leads to conflict. The solution is to treat them as subjective principles, no more than 'maxims of speculative reason' (A666/B684). This formulation, which equates constitution of objects and objectivity, appears to contradict the previous arguments for the transcendental, and therefore, *a priori* necessity for the concept of systematic unity as a condition of coherent experience.

The central question is whether Kant's attempt to draw a clear dividing line between the categories of relation and modality, on the one hand, and these principles is valid. The objectivity of the dynamical categories is based, not on their constitution of objects directly, but on their necessary *a priori* role in making possible the concepts without which no experience would be possible. Does this formulation rely any less on 'ideas' and, is it any more a condition of possibility for coherent experience than the the principle that objects have to be thought in terms of manifoldness, affinity and continuity? Rather than constitute objects, the modal categories concern the relation of objects to the understanding in terms of possibility, actuality and necessity. Is it not the case that, what might be termed the systematic principles, serve a similar *a priori* purpose and perform a similar function i.e., that of relating objects of appearance to the understanding?

From the very outset the schematism itself is reliant on the use of ideas for, without them, the categories would themselves constitute nothing more than logical functions of the understanding. Not only must there be homogeneity between the concept and the object that 'is to be subsumed under it' (A137/B1760) there must also be homogeneity between 'the category on the one hand and the appearance on the other' (A138/B177). It is homogeneity, a concept of reason, that makes possible the application of the former to the latter. The presumption of homogeneity must perforce also involve that of difference in order to establish synthetic unity. There is an anteriority of reason that lies behind the *Critique* as a whole, which, whilst not explicit, emerges progressively through the course of the 'Analytic of Principles' and the 'Appendix to the transcendental dialectic'. Even the categories themselves, with the possible exception of quantity, rely on metaphysical principles. These are not the unconditioned ideas of special metaphysics which involve an illegitimate attempt to ontologise reason, through the constitution of objects that lie beyond the boundaries of the understanding. The productive ideas that we have been discussing here make no such claims. They are concerned with the relations between objects, rather than their constitution. Furthermore, the attempt to elaborate systematic unity in relation to nature for the furtherance of science, is not the same as the attempt to establish an unconditioned totality beyond experience. Nor, I would argue, is their application different in principle to that of the categories through the schematism and the principles of the

understanding. Notwithstanding these considerations, in the first *Critique* we are left in an ambiguous position concerning systematic unity – it is not exactly transcendental 'but its peculiarity is that we must treat it as if it were.' (Sandford, ibid, p.953)

As Sandford points out, the proposition that the 'logical principle of genera therefore presupposes a transcendental one if it is applied to nature' (A653-4/B681-2) is developed further in the *Critique of Judgment*[19]. There must be a principle under which the reflecting power of judgment prescribes a rule to the concept of its object. This principle is that 'for all things in nature empirically determinate concepts can be found' (FI, 20:211n.). It is a condition of possibility for the application of logic to nature that it can be represented as a system 'in which the manifold is divided into genera and species' (ibid, 20:212). This enables the power of judgment to 'arrive at empirical concepts and their interconnection with each other, through ascent to more general but still empirical concepts' (ibid, p.16n.); thus establishing a system 'in accordance with empirical laws and does so *a priori*, consequently by means of a transcendental principle' (ibid). Sandford summarises Kant's position as follows:

> In both the first and the third Critiques the possibility of the systematic unity of knowledge is the unity of a system of logical relations, of genus to species, which is at the same time the possibility of a systematic unity of nature, of natural relations of genus to species, there being no other possible way to know nature than through the transcendental principles and subjective maxims of human cognition and reason. '
> (ibid, p.957)

Whether Kant's attempt to provide a philosophical justification for systematic unity in nature on the basis of 'mere ideas' is successful, is questionable. In his letters to Christian Garve of 212 September 1798 and to Johann Kiesewetter on 19 October of the same year,[20] Kant writes of his need to pay the 'unpaid bill of my uncompleted philosophy' (*Correspondence*, 12:257, p.551); and of a project on which he is working to fill a 'gap that now stands open' (ibid, 12:258, p. 553). This project, to which he gives the title the '*Transition* from the Metaphysical Foundations of Natural Science to Physics' (ibid 12:257, p.551 and 12:258, p.553), also described as 'a special branch of natural philosophy' (ibid, p.553), was never completed in his lifetime.[21] The surviving manuscripts, were eventually published in full in the 1930s under the title *Opus Postumen*[22] and the first incomplete English

[19] Immanuel Kant, *Critique of the Power of Judgment* (1790), trans. P. Guyer and E. Matthews, Cambridge UP, 2000. Henceforth also CPJ. Citations refer to the page number in the German 'Academy Edition', the section number (§) where appropriate. 'FI 'refers to the 'First Introduction'.

[20] Immanuel Kant, *Correspondence*, translated and edited by Arnulf Zweig, Cambridge University Press, 2009

[21] In the letter to Garve, the project is also described as 'a pain like that of Tantalus'; a vivid characterisation of the difficulties with which he was contending.

[22] All references to *Opus Postumen* are to the Cambridge edition.

translation was not published until 1995. The fact that Kant returns to the question of systematic unity in both the *Critique of the Power of Judgment* and the *Opus Postumen*, suggests strongly that he was not satisfied with the formulation in the first *Critique*.

6. Kant's 'unpaid bill'

The very nature of *Opus Postumen*, as a collection of unfinished (and frequently repetitive) drafts estimated as having been written over a lengthy period from 1786 through to February 1803, means that it is mistaken to regard it as a single, coherent piece of work. However, there is considerable textual evidence to suggest that the 'gap 'he is trying to fill is that of a philosophical basis for a science of nature 'combined in a system '(*OP*, 21:524). This science of nature has two parts. The first is 'the movable in space (matter) under laws of motion, according to concepts *a priori* '(ibid) as set out in *The Metaphysical Foundations of Natural Science*. Based on the principles of mathematics and Newtonian mechanics and derived from the categories, these laws of motion in general represent the pure part of science 'on which the apodeictic certainty that reason seeks therein can be based '(*MFNS*, 4:468); for example, the laws of attraction and repulsion. As laws of the motion of matter in general, the metaphysical foundations 'yield something that is certain and a complete system '(*OP*, 21:474) but in themselves they can only provide form without content. They do not apply to any specific empirical instance of matter. The second part of the science of nature, which Kant calls 'physics', 'proceeds from empirical principles '(*OP*, 21:524) and is knowable through experience. However, if physics is merely an empirical science of observation and experiment it would constitute nothing more than a 'fragmentary ever increasing aggregate '(*OP*, 21:474), a 'random groping among outer sense-objects '(*OP*, 22:244). In order to aspire to systematicity, a condition of possibility for it to be seen as a science, then it must be possible to make a transition to physics from the metaphysical foundations of natural science. Only through such a transition can physics itself 'be possible'. Furthermore, such a transition is not straightforward:

> These two territories (metaphysics of nature and physics) do not immediately come into contact; and, hence, one cannot cross from one to the other simply by putting one foot in front of the other. Rather, there exists a gulf between the two, over which philosophy must build a bridge in order to reach the opposite bank. For, in order for metaphysical foundations to be combined with physical [foundations] (which have heterogeneous principles) mediating concepts are required, which participate in both.
> (*OP*, 21:524-25)

Prior to the consideration of the 'mediating concepts 'required to enable this transition to take place, it is necessary to consider the competing conceptions of physics itself, as set out in the *Opus Postumen*. Howard[23] argues that too little attention has been drawn to the 'arrival point 'of the transition and the 'central issue of the 1799-1800 drafts: how physics can be conceived as a system' (ibid). He cites the four definitions that are given in the 'A 'folio of the Xth fascicle, as follows:

> Physics is the systematic investigation of nature as to [*durch*] empirically given forces of matter, insofar as they are combined among one another in one system. '
>
> (*OP*, 22:298)
>
> Physics is the empirical science of the complex of the moving forces of matter. These forces also affect the subject – man – and his organs, since man is also a corporeal being. The inner alterations thereby produced in him, with consciousness, are perceptions; his reactions on, and outer alteration of, matter is motion'
>
> (*ibid*)
>
> Physics is a system of the empirical investigation of nature which [can] only take place by observation and experiment. In the first case, the project moves the physicist; in the second, the physicist moves the object and sets it in another state for perception.
>
> (*OP*, 22:299)
>
> Physics is a system; but we cannot know [*erkennen*] a system as such, except insofar as we ourselves compose the manifold of an aggregate according to *a priori* principles (insert them ourselves) - which takes place by means of the concept of motion.
>
> (ibid)

Despite the emphasis on empirical investigation these definitions do not support the view that physics is confined to the experimental and observational study of nature, or that the attempt to transition from the *a priori*, metaphysical foundations of nature to physics is doomed to failure. Three of the four definitions specify the nature of physics as a system in itself. Furthermore, all but the first definition emphasise the interaction between the subject and the forces of motion. The final definition is particularly striking in its assertion that we can only know physics as a system 'insofar as we ourselves compose the manifold of an aggregate according to *a priori* principles (insert them ourselves')' (ibid). This is Kant's attempt to describe the process of transition, something that can only be achieved through the 'mediating concepts', the ideas that bridge the gap between the two heterogenous domains.

[23] Stephen Howard, *Kant's Late Philosophy of Nature*, Cambridge UP, 2023

In order to explore the nature of these ideas it is necessary to consider Kant's distinction between physics as an 'elementary system' (i.e., the moving forces of matter which can be outlined and classified) and a 'doctrinal system', which provides for the principles and the form of such a classification:

> …the moving forces can and must [be enumerated] in an elementary system, which belongs to physics; and these forces, when thought together with the form of their combination into the system, according to principles, constitute the doctrinal system of physics itself (*OP*, 22:358)

Involving' the material element of the objects of experience '(*OP*, 22:496), which can be classified methodically [Kant inserts 'e.g., according to Linnaeus '(ibid)], the elementary system can never be wholly completed – at any given time it has limits, set by the current state of knowledge, but no boundaries. On the other hand, the 'doctrinal system 'which concerns the formal principles of natural science 'can [and should] be presented completely '(ibid). As an idea, the doctrinal system has no limits but, for Kant, there is a boundary, which is set by the rules governing the legitimate use of reason.[24] The doctrinal system involves ' the connection of the perception of sense-objects to the formal unity of experience' (*OP*, 22:460) and, as such, it constitutes a subjective system of perceptions. Corresponding to this subjective system, based on a formal *a priori* principles, is an elementary natural system of empirical representations, which involves the 'whole of the coordination of natural things, according to principles of the division of objects of experience into classes, genera, species, etc.,' (ibid), and, as such, constitutes an objective system (in the Kantian sense of having objective validity).

It would be disingenuous to pretend that, emerging from *Opus Postumen*, there is a single coherent conception of these distinctions. The collection of writings clearly contain a number of different drafts, which are often contradictory. For example, there are explicit references to the impossibility of an objective elementary system:

> Thus we cannot, as it seems, even with all our means of having experience, discern *a priori* – with universal validity – which (and how many) objects of perception (which, taken together, constitute matter) and moving forces (in kind and number) there are which could be taken by us as underlying our possible experience. Rather, [it seems,] that we could, at best, by random groping among outer sense-objects, merely compile an

[24] Howard (ibid) points out that the the two systems are sometimes used 'interchangeably' (ibid, p.36) but argues that in fascicles X&XI the distinction is made increasingly clear.

> enumeration of certain forces… The reason is that we cannot come to knowledge of them by the investigation of nature, according to an *a priori* principle -–that is to say, we cannot specify the primary materials of the moving forces and develop an elementary system of them. (22:344, Xth fascicle, (half-)sheet VIII, page 2)

Compare this with the following passage:

> That the objects of sense must allow of being specified and divided by genus and species, prior to experience and for the sake of it, does not, thus, take place by fragmentary groping around, but according to an objective principle of combination in a system of empirically given natural forces. The latter have influence on the senses, and yet; at the same time, must be thought of as united *a priori* by the understanding into an absolute whole, as regards quantity and quality; and, hence, represented as united specifically into a system of physics. This amounts to the transition from the metaphysical foundations of natural science to physics, in which the manifold [is] united according to the form of a system… not through that which the understanding merely extracts from the manifold, but only insofar as it has itself previously inserted [the form of] the system. (*OP*, 22:354, Xth fascicle, sheet X page 2,)

These two passages[25] clearly contradict each other. The first, denies the possibility of an elementary or natural system of the materials of the moving forces of matter. In the second passage the understanding does not merely extract from the manifold by means of sensibility but inserts the form of a system. Such a form can only be based on the doctrinal system of physics. This is made explicit in a third passage:

> Physics is a doctrinal system (*systema doctrinale*) of sensible representations, insofar as they are combined through the subject's understanding to a principle of experience. It is not a fragmentary aggregate of perceptions (empirical representations with consciousness) but a system of perceptions in the concept of the subject, according to a principle of their combination to the synthetic unity (in experience) of the manifold which is given in intuition… The **system** of empirical representations (in a single experience) is, however, not itself empirical, but is founded on a formal principle, which emerges from a synthetic *a priori* principle (hence from a transcendental principle).
>
> (*OP*, 22:459/60, XI fascicle, sheet III, page 3)

The doctrinal system is ‘the connection of the perception of sense-objects to the formal unity of experience in the subject’(ibid, 22:460). The elementary system, involving the classification of

[25] Both extracts date from between August 1799 and April 1800 (Howard, ibid, p.60)

objects into 'classes, genera, species etc.,' both corresponds to, and is grounded on this 'formal principle' which is not in itself empirical, but is *a priori* and, therefore, transcendental. These passages from *Opus Postumen* provide the basis for Howard to argue that "Kant's conception of physics now foregrounds the activity of the perceiving subject, who combines and unifies perceptions, outer and inner sensible representations with consciousness into a system' (Howard, ibid, p.41). There is a reciprocal relationship between the effect of the subject on the outer sense-object, the object of appearance and the moving forces involved in this object, which are directed towards the subject as the 'cause of perception' (*OP*, 22:505). Kant argues that, as a result, it is possible to 'determine *a priori* those forces which affect perception, as 'anticipations of sensible representations in empirical intuition' (ibid). Here, it is not merely the form of perception which is presented as *a priori,* as in the Analytic of Principles – there is also a capacity to anticipate the natural world which goes beyond the categories themselves (for example beyond the category of quantity) and the principles of the understanding (for example the anticipations of perception). This capacity, 'to present perceptions *a priori* for the sake of experience' (*OP*, 22:504), not only in terms of form, but also in terms of content (matter), goes beyond the strict distinction between form and content / concept and intuition that is maintained in the first *Critique*. Yet again, in order to answer the fundamental problem of transcendental philosophy i.e., 'How are synthetic *a priori* propositions possible?' (*OP*, 22:474), Kant is drawn towards the ideas of reason. These are not the lofty ideals of special metaphysics but the productive ideas of manifoldness, affinity, and the continuity between them that is underpinned by the forces of attraction and repulsion.

Attraction and repulsion constitute the fundamental forces of matter. Just as it is impossible to imagine circumstances where everything is the same or everything is different, so it is impossible to imagine that space could be an object of the senses without these laws:

> All matter must have repulsive forces, since otherwise it would fill no space; but attractive force must also be attributed to it, since otherwise it would disperse itself into the infinity of space '(*OP*, 21:310)

The interaction of these forces provides the condition of possibility, not only for the movement of matter, but also for the possibility of perception of it. Kant wants to establish the 'primordial grounding [of these] dynamical concepts' (Caygill, 2020, p.240). He argues that Newton does not provide the necessary 'reasoned and justified transition from metaphysical principles to physics' (ibid). Newton does provide a mathematical justification based on observation and, therefore, experience. However:

> 'It is noteworthy that Newton's propositions in his *Principia Philosophiae Mathematica* are not developed systematically, from a principle, but had to be compiled empirically and rhapsodically. Consequently, they led to the expectation of ever new additions, and, hence, his book could not contain a philosophical system.
> (*OP*, 22:518, quoted by Caygill, ibid, p.242)

What is required is 'a concept of reason from which it would be possible to infer *a priori* a law for the determination of forces '(*OP*, 22:158). This is found in the interaction of attractive and repulsive forces, which provides the condition of possibility, not only for physics as a science, but also for experience and the objects of experience. However, these forces 'cannot themselves be comprehended or constructed for presentation in any possible intuition' (Caygill, 1995, p.203). In the first *Critique* Kant distinguishes between representations based on what the understanding thinks about an object 'such as substance, force, divisibility etc.,' (A20/B35), and that which 'belongs to sensation' (A21/B35) such as colour or hardness. We can sense the effects of forces, in relation to causality, but not their actions directly. This combination of the doctrinal and elementary systems of physics would not be possible without the transcendental ability to investigate nature according to concepts of reason. They span the boundary between the *a priori* and the empirical elements specific to physics as the scientific investigation of nature. As Caygill has argued this 'announced the season of systematic philosophy in Germany, one in which philosophers such as Schelling and Hegel attempted to reconcile the work of science with the philosophy of the absolute idea. '(ibid, p.244).

7. The season of systematic philosophy

This is effectively announced in the publication of the *Differenzschrift*[26] in 1801. Hegel argues that in 'the principle of the deduction of the categories Kant's philosophy is authentic idealism' (p.79). However, in seeking to limit the role of ideas, Kant makes the categories into 'static dead pigeonholes of the intellect' (ibid p.80). For Hegel the principle of the identity of subject and object, which is, at the same time, the principle of speculative philosophy, is 'most definitely articulated in the deduction of the forms of the intellect (*Verstand*)' (ibid). It is 'Reason (*Vernunft*) itself that baptized this theory of the intellect' (ibid), rather than the opposite. Despite this, in the first *Critique* identity is limited to the categories – when it comes to the realm of experience 'the only *a priori* principle is a merely subjective maxim of the faculty of reflective judgment' (ibid, p.81). Consequently, ideas and Reason itself are restricted to the realm of finite thought. Hegel's aim, through speculative thinking, is to

[26] G. W. F. Hegel: D*ifferenz des Fichteschen und Schellingschen Systems, der Philosophie*, Jena: Akademische Buchhandlung, 1801. Translated by Harris and Cerf, State University of New York Press, 1977.

'produce a totality of knowing, a system of science' (ibid, p.113), based on the internal connection of finite things (the manifold) to the Absolute, freeing the manifold from contingency and paving the way for 'objective completeness' (ibid) – 'authentic' speculative thought 'necessarily begins from the absolute identity' (ibid, p.115).

Hegel proceeds to consider Fichte's attempt to establish the identity of subject and object / thought and being, based on the principle of 'intellectual intuition, pure thinking of itself, pure consciousness, Ego = Ego, I am. The Absolute is Subject-Object '(ibid, p.119). However, even in its absolute self-positing, the self is unable, to completely avoid an opposition between pure consciousness and empirical consciousness, between the Ego and the non-Ego. To be aware of itself, the mind has to introduce a mental construct of something else. Sensations must have something corresponding to them – the 'me' requires an 'it'. As a result, although the Ego

> ought to nullify the objective world, it ought to have absolute causality with respect to the non-Ego. This is found [by Fichte] to be contradictory, for it would imply suspending the non-Ego and the positing of the opposite, the positing of a non-Ego is absolute. (ibid, p.132).

Heinrich[27] characterises Fichte's analysis as involving two 'selves'; both a 'limited self in the correlation [between the self and the not-self] and the absolute Self as somehow establishing the correlation' (ibid, p.211).[28] For the absolute Self to 'annihilate' the 'specific limitation into which [it] has entered' (ibid), it has to 'dissolve any particular state of limitation' (ibid). However, each time the mind is able to dissolve any particular state of limitation it has to enter another, as part of a never ending sequence of temporal events. As Hegel points out in the *Differenzschrift*, Fichte's formulation

> …surrenders Reason to the intellect and passes over into the chain of finite [acts and objects] of consciousness from which it never reconstructs itself again as identity and true infinity. Transcendental intuition, the very principle [of speculation], thereby assumes the awkward posture of something that is in opposition to the manifold that is deduced from it. '(p.81).

Pure consciousness becomes conditioned by objective infinity, entering into infinite regress. The self posits itself as self-positing and, therefore, it has to know that it knows and know that it knows that it knows, and so on… As a result the proposition, Ego = Ego, becomes 'Ego *ought* to be equal to Ego ' (ibid, p.82) and identity is constituted only as a subjective Subject-Object.

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[27] Dieter Heinrich: *Between Kant and Hegel*, edited by David Pacini, Harvard University Press, 2008

[28] It should be noted that Heinrich's characterisation of Fichte's approach as involving 'two selves' has not gone uncontested. An alternative interpretation could accept that the 'I' posits the 'not-I' in opposition to itself, whilst, simultaneously, maintaining that the 'not-I' is actually an 'I' posited 'not-I', thus avoiding the duality of the 'two selves'. Be this as it may, it does not alter the central thrust of Hegel's critique..

In contrast, Schelling 'sets the objective Subject-Object beside the subjective Subject-Object [Fichte] and presents both as united in something higher than the subject '(p.82) – the principle of identity is the absolute principle of the system as a whole. The *System of Transcendental Idealism*[29] seeks to resolve the apparent antinomy involved in us being able to think 'both of presentations as conforming to objects, and objects as conforming to presentations '(Schelling, 1800, p.11). For Schelling there must be a 'predetermining harmony' (ibid) between the ideal and the real, which requires an identity between the two; 'some universally mediating factor in our knowledge which is the sole ground thereof' (ibid, p.15). The only unconditional ground for our knowledge has to be knowledge of ourselves i.e., self-consciousness, which defines 'the entire horizon of our knowing even when extended to infinity' (ibid, p.17). No matter how diverse the manifold of empirical presentations they all belong to the same 'I think', which has to accompany all presentation in order to preserve its continuity. The self is not a 'thing and it is only in the act of productive thinking that it becomes an object for itself – the self arises for us 'as its own product, at once producing and produced' (ibid, p.30).

Schelling goes on to consider how it is possible for 'the objective world with all its determinations' (ibid, p.34) to be posited through the self. In the act of self-positing there must also be a positing of something opposed to the self – there must be a negation otherwise there would be no means to distinguish the self from others. However, the self is limited i.e., it opposes something to itself, but 'only in that it intuits itself as such' (ibid, p.37) and, therefore, it is as though the self is simultaneously both limited and unlimited. This only makes sense if it is understood that it is the unlimited self, itself, that 'gives rise to the limitation' (ibid, p.38). All limitation has to be posited through self-consciousness – in principle self-consciousness is purely ideal 'but through it the self arises as purely real' (ibid, p.43). It is only through the act of self-intuition that the self becomes limited because the act of self-consciousness comes first and limitation stems from it. This is the opposite of the dogmatic approach where the boundary or limitation is set independently and self-consciousness is dependent on that limitation.[30] This is untenable because the boundary (of the self) has to be simultaneously both dependent and independent of the self:

> This is conceivable only if the self is equivalent to an action in which there are two opposite activities, one which undergoes limitation, and of which the boundary is therefore independent, and one which limits, and is for that reason illimitable.

[29] F.W. J. Schelling: *System of Transcendental Idealism* (1800), translated by Peter Heath, University of Virginia Press, 1993

[30] Schelling does not make an explicit distinction between 'limit' and 'boundary', however it is possible to conceive that 'limitation' is used here to describe the act which results in a 'boundary' being set.

(ibid, p.43)

The two opposites can neither subsist together nor destroy each other, because 'each is what it is only in opposition to the other' (ibid, p.46). There is both an inability to unite and a necessity to do so, otherwise the identity of self-consciousness is impossible.

For Hegel, in the *Differenzschrift* ,this represents the basic principle of speculative philosophy, through which he seeks to overcome Kant's difficulties in establishing systematic unity. In contrast to the intellect, which has to 'exhibit correctly the opposites of what it has posited' (Hegel, ibid, p.103), speculative reason 'unites the contradictories, posits both together and suspends them both' (ibid). The opposition of subject and object has reality, but it does so only in the Absolute (i.e., in thought); the 'reality of opposites and real opposition only happen because of the identity of the opposites.' (ibid, pp.157-8) – real opposition is only possible through absolute identity.

8. Three forms of philosophical thought

The principle of speculation, involving unity in difference and identity in opposition, is further addressed by Hegel in his letter to Niethammer (October 1812), where he makes an explicit distinction between 'three forms 'of 'philosophical content 'i.e. the abstract, the dialectical and the speculative. The abstract form of reasoning, is associated with the understanding 'which holds determinations fast and comes to know them in their fixed distinction'; the dialectical is 'the movement and confusion of such fixed determinateness it is negative reason'; and, finally, the speculative, which proceeds out of the dialectic to provide a positive result. Consistent with the *Differenzschrift*, the speculative form involves 'knowledge of what is opposed in its very oneness, more precisely the knowledge that the opposites are in truth one. 'Speculation is, for Hegel , the only genuine form of philosophical reason; 'it is the truth'[31].

In the *Encyclopedia Logic*[32], these distinctions between what he now describes as three forms of logic, or 'moments of every properly logical content '(§79), are explicated further. The abstract form, relates to objects by separating them into universals, which both subsume and are maintained in opposition to the particular. This form of reasoning, which Hegel associates with Kant, is necessary in both the theoretical and the practical sphere. In the theoretical sphere, it establishes determinate difference – thinking proceeds from one determination to another in order to develop e.g.,

[31] All quotations are from Hegel's letter to Niethammer, 23 October 1812 (Werke III, 301-16), see *Hegel: The Letters*, Clark Butler and Christine Seller ed., Purdue Research Foundation, https://www.marxists.org/archive/hegel/works/letters

[32] G W F Hegel: *Encyclopedia of the Philosophical Sciences in Basic Outline – Part 1: The Science of Logic* (1817), translated by Brinkmann and Dahlstrom, Cambridge University Press, 2010. Citations refer to the paragraph number §.

mathematical and scientific knowledge. In the practical sphere, it enables action to be linked to determinate purpose, necessary to avoid the pursuance of everything, leading to nothing. However, such thinking remains firmly rooted in the finite. The dialectical moment involves 'the self-sublation of such finite determinations by themselves and their transition into their opposites '(§81). The dialectic recognises that every abstract determination of the understanding inevitably turns into its opposite and that 'all finite things, instead of being something fixed and ultimate are really changeable and perishable '(ibid). The 'one sided and limited character '(ibid) of any determination of the understanding is exposed through its negation and 'the sublating of itself '(ibid). Although, Hegel characterises dialectic as the 'negatively rational '(§79,), he also recognises that such a negation is not an 'empty abstract nothing but instead the negation of definite determinations that are contained in the result '(§82). This is the 'fundamental determination of the third form of the logical, namely of the speculative or positively rational '(§81, Add.).

The question is whether the speculative is truly distinct from the dialectical, or merely an extension of the dialectic to embrace the positive outcome to be achieved in grasping the 'unity of the determinations their opposition, the affirmative that is contained in their dissolution and their passing over into something else '(ibid, §82). In both the *Encyclopedia* and the letter to Niethammer, Hegel maintains an explicit distinction between the two.[33] In contrast, in the *Logic*[34] the speculative is characterised not as distinct from but as 'the most important aspect of dialectic '(21.41). Essentially, it consists 'in grasping opposites in their unity or the positive in the negative '(ibid).

A thoroughgoing attempt to demarcate clear lines of separation between dialectical and speculative thought can found in Gillian Rose's essay, 'From Speculative to Dialectical Thinking – Hegel and Adorno'[35]. She argues that Hegel's concept of the truth of speculative reason can be explicated through the extended metaphor of the Bacchanalian revel in the *Phenomenology of Spirit*[36]:

> The True is thus the Bacchanalian revel in which no member is not drunk; yet because each member collapses as soon as he drops out, the revel is just as much transparent and

[33] It is worth noting that in both these texts Hegel is setting out a formula for philosophical instruction and therefore, his approach appears to prioritise clarity over complexity. Nevertheless, in the *Encyclopedia*, the clearest distinction is drawn between the abstract logic of the understanding, which cannot provide a firm ground for knowledge because it 'turns out to be constantly sublating itself and turning over into its opposite' (ibid, §82, Add., p.133), and speculative thought, which is prepared to contain 'the opposites as ideal moments within itself' (ibid).

[34] G W F Hegel: *The Science of Logic* (1812), translated by George di Giovanni, Cambridge University Press, 2010. Citations refer to the volume and page number in the German 'Academy Edition'.

[35] In *Judaism and Modernity, Philosophical Essays*, first published by Blackwell 1993, citations refer to the Verso edition, 2017, pp. 53-64.

[36] G W F Hegel (1807), translated by A V Miller, Oxford University Press, 1977 (abbreviated to *PhS* in the text0

> simple repose. Judged in the court of this movement, the single shapes of Spirit do not persist any more than determinate thoughts do, but they are as much positive and necessary movements, as they are negative and evanescent. (*PhS* §47, pp.27-28)

The 'True 'lies neither in the 'revel 'nor in the 'simple repose', nor in the 'judgement 'of particular determinations which appear to be negative and contradictory. Viewed as the 'whole 'the revel is simultaneously full of activity (changing) and at rest (remaining the same). Speculative reason understands that, similarly, the truth has the appearance of continually moving and shifting, and yet remains constant and stable – it cannot be seen in isolation, but only in terms of the dynamic context of the whole.

The question remains as to whether speculative thought is capable of asserting more than mere '**maxims** of reason' (A666/B694). Can it overcome the antinomies, which prevent Kant from asserting the objective, transcendental nature of systematic unity as more than an 'as if' and establish the unity in difference which constantly evades him? Ultimately, it falls to the *Logic*, to determine whether Hegel can pick up the tab for Kant's 'unpaid bill'.

9. System and science in Hegel's *Logic*

Kant and Hegel share a similar approach to the philosophical basis of a scientific system, in that they both insist on the centrality of the idea. For Kant, what makes 'ordinary cognition into science' (A832/B860) is systematic unity. What he understands by such a system is

> the unity of the manifold cognitions under one idea. This is the rational concept of the form of the whole, insofar as through this the domain of the manifold as well as the position of the parts with respect to each other is determined *a priori*. (ibid)

In the *Encyclopedia* Hegel emphasises that, without a system, philosophy 'can be nothing scientific ' (§14). Philosophy is concerned with what he terms the 'absolute 'idea, the science of which 'is essentially a system, since the true insofar as it is concrete exists only through unfolding itself in itself, collecting and holding itself together in a unity, i.e., as a totality '(ibid). Whereas Kant attempts to restrict ideas to a purely regulative role, Hegel views the world as a system that is intelligible through rational thought, which is the purpose of philosophy to determine and reflect. The movements of being, essence and the concept, unfolded in the *Science of Logic*, aim to demonstrate

that the idea is not a subjective entity but the 'full realization or actualisation of a concept … [and] is thus true or the truth'.[37]

Hegel recognises that if the concept is the truth of being and essence then it is reasonable to ask why the *Science of Logic* does not begin with it. The question is most directly addressed in the *Encyclopedia*, immediately before the section on 'The doctrine of the concept':

> … where it is a matter of knowing through thinking, it is not possible to begin with the truth, because the truth, insofar as it forms the beginning, rests on mere assurance while the truth that is thought has to verify itself, as such, to thinking. (§159, Add.)

Without the immanent development that begins with the presuppositionless notion of pure being the concept would exist in name only; the task is to show how being and essence sublate themselves in the unity of the concept.

(i) Being

Hegel's one presupposition is that logic is concerned with '*thinking as such*' (21.56); what it is to be thinking. Beyond that, the beginning must be the thought of as being which is completely abstract and indeterminate, lacking any content or mediation. However, to think of being as totally indeterminate is to think of nothing and this realization involves a process of reflection on what it is to think such a thought. At this point it becomes clear that to be thinking at all must involve, at the very least, a minimum level of determinacy (*Dasein*). The categories of being, quantity, quality, and their relation to each other in the form of measure, develop immanently through the 'Doctrine of Being'.

The initial duality of 'being 'and 'nothing 'is reflected throughout the *Logic* in, for example immediacy and mediation, differentiation and unity, content and form. The dialectical interplay of these dualities, their distinguishability and yet inseparability, is the driver that enables Hegel to move beyond what he regards as Kant's abstract separations to the recognition that all determination involves negation, and, that the result of negation is not nothing. The most most explicit statement on the dialectic and it's role in the development of logic as a science is to be found in the 'Preface to the Second Edition 'of the *Logic:*

> The one thing needed to achieve *scientific progress* – and it is essential to make an effort at gaining this quite *simple* insight into it – is the recognition of the logical principle that

[37] Michael Inwood, *A Hegel Dictionary*, 1995, p.124.

> negation is equally positive, or that what is self-contradictory does not resolve itself into a nullity, into abstract nothingness, but essentially only into the negation of its *particular* content; or that such a negation is not just negation, but is *the negation of the determined fact* which is resolved, and is therefore determinate negation; that in the result there is therefore contained in essence that from which the result derives… Because the result, the negation, is a *determinate* negation, it has a *content*. It is a new concept but one higher and richer than the preceding – richer because it negates or opposes the preceding and therefore contains it, and it contains even more than that, for it is the unity of itself and its opposite. – It is above all in this way that the system of concepts is to be to erected – and it has to come to completion in an unstoppable and pure progression that admits of nothing extraneous.
>
> (21.38)

Thus, it is clear from the beginning that an unmediated immediacy is a logical impossibility; immediacy and mediation exist 'unseparated and inseparable and the opposition between them nothing real '(21.54). Equally impossible is the idea of experiential knowledge based on passive apprehension of the 'direct sensory presence of the world to the mind'.[38] If all being is essentially mediated or reflected, then any logic of being has to be conceived within a logic of essence. Furthermore, if being and reflected being are 'inseparable 'then the logical implication is that so are appearance and essence (that which appears) and, crucially in relation to Kant, form and matter, the separation of which into' empty 'concepts and 'blind 'intuition is an example of abstract thinking. Form and matter are distinguishable, in that form relates to an object's purpose (it's final cause in Aristotle's terms), and the matter is that which serves the purpose (the efficient cause), but they are not separate:

> The two sides of the whole, condition and ground, are therefore one essential unity, as content as well as form. They pass into one another, or, since they are reflections, they posit themselves as sublated, refer themselves to this their negation, and reciprocally presuppose each other. (11.318)

Hegel also seeks to overcome the Kantian separation between reflective and determinate judgment as set out in the *Critique of the Power of Judgment*:

> The power of judgment in general is the faculty for thinking of the particular as contained under the universal. If the universal (the rule, the principle, the law) is given, then the power of judgment, which subsumes the particular under it (even when, as a

[38] Robert B. Pippin, *Hegel's Realm of Shadows – Logic as Metaphysics in The Science of Logic*, University of Chicago Press, 2019, p.196

> transcendental power of judgment, it provides the conditions *a priori* in accordance with which alone anything can be subsumed under the universal), is determining. If, however, only the particular is given, for which the universal is to be found, then the power of judgment is merely reflecting. (5:179)

For Kant, reflecting judgment is purely regulative rather than determining and constitutive. This is what lies behind his difficulties in establishing a firm basis for systematic unity, beyond the 'as if' – a 'mere' maxim of speculative reason. Hegel argues that every determinate judgment must, necessarily, 'also involve reflection on which concept to apply and every reflective search for a concept is dependent on a particular which is sufficiently determinate to warrant the judgment of one rather than the other '(Pippin, ibid, p.208). The two forms of judgment make up a whole; they are not two separate activities. The determinations that derive from reflection on the immediate are 'not anything external to it but [*are*] rather its true being '(11.255). Ordinary consciousness treats things as simply being, made up of a list of contingent determinations relating to quantity, quality and measure. Logic shows us that this cannot provide a sufficient account for the subject of these determinations. It cannot, for example, provide a solution to the problem of 'indifference 'i.e., which properties are essential to that which the thing is, and which are indifferent to it. Immediate properties do not stay the same; ice melts, that which is young grows old and colours fade. There must be something more permanent that grounds temporal change, otherwise that change would appear chaotic. Furthermore, there would be no basis for the division of objects into separate species and genera on the basis of manifoldness and affinity, let alone the continuity between them. The immediate determinations that ordinary consciousness takes up as simply being soon 'show themselves not as fixed but as passing over, and essence is the result of their dialectic '(§111).

(ii) Essence

Having demonstrated that it is not possible to determine what is, simply by thinking of being, Hegel turns to essence as the ground for something being what it is in terms of the form it takes. The 'possibility of intelligibly determined actuality '(Pippin, ibid, p.219) is explained in terms of the relationship between what is sensed and what is thought, and how we can think about that which appears, not as mere seeming (*Schein*), but as a reflection of the essence of the thing. Once the ground for something being what it is in terms of the form it takes is established, *Schein* (seeming) becomes *Erscheinung* (the appearance or disclosure of essence).

A clear distinction between the object of the senses as appearance and the object in itself is also made by Kant:

> What is not to be encountered in the object in itself at all, but is always to be encountered in relation to the subject and is inseparable from the representation of the object, is appearance [*Erscheinung*] (B69/70n.)

To the extent that objects appear in accordance with the *a priori* categories of the understanding they constitute *Phänomena*. However, if reason strays beyond its boundaries and seeks to pass off subjective principles as objective, the result is 'transcendental illusion '(A297/B353) or mere *Schein*, represented by Kant as objects of 'non-sensible intuition '(B307). Thus, for Kant 'The distinction between *Phänomena* as objects of the senses and *Noumena* as intelligible objects is superimposed on that between *Erscheinung* and *Ding an Sich*'.[39] He attempts to separate the aesthetic (the logic of sensibility), from the analytic (the logic of the understanding) and the dialectic (the logic of reason). Hegel, on the other hand, recognises the distinguishability yet inseparability of concept and intuition; the simultaneous duality and oneness of these components. It is only through a precise analysis of this mutual identity in difference, that it is possible to bring together the diversity of predication contained within the manifold and the conceptual unity without which it would be impossible to make sense of the natural world. The process is one of immanent movement and mediation. As immediacy, *Schein* is reflected and comes to completion in appearance (*Erscheinung*): 'what reflection does to the immediate, and the determinations that derive from it, is not anything external to it but it is rather its true being' (11.254). Appearance can be nothing other than the movement or appearance of essence. For Hegel, 'Essence as such is one with its reflection, inseparable from its movement… essence is neither *before* its movement nor *in* the movement: this movement has no substrate on which it runs its course '(11.295). At the beginning of Section II of the 'Doctrine of Essence 'Hegel sets out the three stages of this movement. Firstly, concrete immediacy, the thing (*Ding/Sache*), is reflected or mediated as the appearance of the object as that which stands against the subject (*Gegenstand*)[40], which, secondly, reflects the essential object of knowledge (*Objecte*). The third stage is the relation between the first two, which is overcome in the concept:

> the being that appears and essential being stand referred to each other absolutely. Thus concrete existence is, *third*, essential *relation*; what appears shows the essential, and the essential is in its appearance. – Relation is the still incomplete union of reflection into otherness and reflection into itself; the complete interpenetrating of the two is *actuality*. (11.324)

[39] (the thing in itself) Barbara Cassin et al, *Dictionary of Untranslatables – A Philosophical Lexicon*, translated and edited by Emily Apter, Jaques Lezra and Michael Wood, Princeton University Press, 2004, p.283

[40] In the logic of essence the object is a *Gegenstand*. As such the object stands in the way of the subject, which is, itself, that which has the object standing in its way – it is not possible to have one without the other. This formulation seeks to overcome the antinomies in the Kantian approach, which seeks to separate out objectivity and subjectivity. Where Hegel wishes to refer to some 'thing' in a more neutral sense he will use *Ding* or *Sache*.

This actuality (*Wirklichkeit*) is not the outcome of a process of mechanical causation, characteristic of the finite reasoning of the understanding, nor is it 'the common actuality of what is immediately on hand but instead the idea as actuality '(§142, Add.)[41] as found in the concept. Hegel is not a subjective idealist, arguing that that objects are 'constituted 'by thought (in the Kantian sense of constitution). There is such a thing as external reality. However, the 'central question of actuality is a "thought determination '"(Pippin, ibid, p.247). The sense in which there is no actuality external to thought is through the movement in which 'the opposition of the subjective and the objective fall away '(§24). Logically, there is no separation between appearance and actuality, outer and inner – their unity lies in the concept.

It is reasonable to ask why, having brought the objective logic to a conclusion in the logic of essence, and established that the truth of objects lies in the concept, Hegel does not stop there. One answer may be found in the Bacchanalian revel where 'Appearance is the arising and passing away that does not itself arise and pass away, but is 'in itself' (i.e. subsists intrinsically), and constitutes the actuality and the movement of the life of truth' (*PhS*, §47, p.27). As a whole, this dialectical movement, that is also repose, distinguishes itself as 'something that recollects itself, whose existence is self knowledge and whose self-knowledge is just as immediately existence' (*PhS,* §47, p.28). This formulation opens the door to the speculative moment that Hegel is seeking to develop in 'The Science of Subjective Logic or The Doctrine of the Concept'[42], in order to establish the full actualisation of the concept, as truth.

(iii) Concept

The opening section of the 'Subjective Logic' sets out two main tasks, both of which involve serious engagement with Kant. The first of these is to establish 'the form of the *absolute* which is higher than being and essence' (12.24) i.e., the '*concept of the concept*' (12.16), which is clearly stated as 'none other than the "I" or pure self-consciousness… the concept that has come into *determinate existence*' (ibid). The relation of the "I" to the understanding is not something external – it does not 'have' concepts in the same sense that it has 'a coat, complexion and other external properties' (12.17). Hegel recognises that the essence of the unity of the concept can be found in the Kantian formulation – 'the *original synthetic* unity, the unity of the "I think", or of self-consciousness' (12.18). Kant's

[41] As an example s block of stone in a sculptor's studio might be referred to as nothing. It only takes on 'actuality' when formed in accordance with the sculptor's idea.

[42] In her essay 'From Speculative to Dialectical Thinking', Rose argues that under Hegel's formulation, the court of judgment allows for the movement of the revel and the role of the particular in recollecting the whole, thus allowing him to move beyond the 'dialectical antinomies of subject and object, particular and universal (Rose, 2017, p.61) into the realm of speculative thought. In contrast, Adorno who, she argues, cannot go beyond the arresting judgment itself, is confined to negative dialectical oppositions that do not allow for any 'repose'.

definition of objects is 'that in the concept of which the *manifold* of intuition is *united*' (B137), which necessarily involves a 'unity of consciousness in the synthesis of them' (ibid). This alone establishes objective validity and the transcendental possibility of the understanding – objective unity rests on the unity of the "I" with itself. For Hegel, the synthesis of apperception 'is one of the most profound principles for speculative development' (12.22). The problem arises when the concept (the unity of self-consciousness) is restricted or conditioned by the manifold of intuition or experience, precisely because it is viewed as empty of determination. Rather than an empty concept, self-consciousness is the 'ground and source of all finite determinateness and manifoldness' (12.23). Kant reduces reason, the highest stage of thought, to the '*regulative unity of the systematic employment of the understanding*' (ibid), and in so doing does not accept the full implications of his own insight that 'the *object* in which the manifold of intuition is *unified* is this unity only by *virtue of the unity of self-consciousness'* (ibid). At this point Hegel believes that he has achieved his first task i.e., the concept, as self-consciousness, has established itself as the unconditional foundation of being and essence.

Hegel recognises that 'the concept, purely as concept is still incomplete, that it has only arrived at *abstract truth*' (12.24). The second task is to go beyond the nature of the concept, as such, in order to establish 'its *own* reality, one that it generates out of itself' (ibid). Kant conceives of the relationship between thought and sensible intuition as one of mere appearance. Although he acknowledges the idea of a higher unity of these terms, this 'mere' idea is not recognised as the truth but viewed as an example of 'illegitimate figments of thought' (12.25). Reason and understanding (plus reflective judgment in the third *Critique*) are all aspects of one capacity (i.e., thought), which is spontaneous. The understanding (*Verstand*) and reflective judgment are both concerned with finite objects of thought, which are not self-given but are intuited by the senses. In contrast, reason (*Vernunft*) is not subject to any such restriction, because it is self-determining; its object is itself. Kant's inability to establish a sound basis for a system of science is the result of his insistence on the distinction between the understanding and reason.. For Hegel, overcoming this distinction is the only way to authorise the 'ground and source of all finite determinateness and manifoldness' (12.23). The *Logic* equates the determination of the unity of the manifold with 'the unity by thought of itself, of its own unity' (Pippin, ibid. p.261). This is an act of thought's own self-determination that is not dependent on anything unconditioned that lies outside of itself. The reality generated in the concept is not the same as that found in, for example, in the content of the physical sciences. Hegel is concerned exclusively with logic as the '*formal science*' (12.25) – the 'absolute form' that contains 'the pure idea of truth itself' (ibid).

In terms of the question: 'What is truth?', Hegel engages with the nominal definition i.e., the agreement of cognition with its subject matter. Kant's argument is that even if this definition is 'granted and presupposed' (A58/B82), we would still require 'a general criterion of truth… which was valid for all cognitions without any distinction among their objects' (ibid). However, any such criterion would be 'impossible and absurd' (A59/B83) because it necessarily involves abstracting from all determinate content of cognition – precisely that with which truth is concerned. Hegel argues that in the original definition 'it is not the content that constitutes the truth, but the *agreement* of it with the content' (12.26). The alternative would be to 'leave aside any talk about content' (12.27), which he thinks is 'the cause of the confusion here' (ibid) and remain with the view that logic is purely formal, and therefore, abstracts from all content. This would be equally absurd because we would be left with a 'one sided cognition which is not supposed to contain any subject matter' (ibid). Hegel thinks that in the synthetic unity of apperception and the categories there is a recognition of the duality between form and content that is a requirement for truth, but that Kant shies away from the full implications of this. The pull of the 'material of the senses, the manifoldness of intuition' (ibid) is too strong. As a result, Kant cannot escape the disjuncture between 'blind intuition' and 'empty concepts'. If logic is the science of absolute form then it must have a content which is equal to it. This content lies in the laws of logic themselves. These will not be found in the functions of positive judgment or the restricted role of the categories, where they are stripped of ideas. The concept and the categories have to be considered speculatively, 'in and for themselves' (ibid), where it is recognised that the '*self-unveiled truth*' (12.30) lies in Reason, or the Idea, as the only realization adequate to it. Giving itself its own content and its own reality, the concept 'determines itself as *objectivity*' (12.127), the only firm ground of the intelligibility of objects. In a footnote, Pippin (ibid, p.278) notes Hegel's comment that 'this latter transition is essentially the same as the…proof from the concept of God to his existence' (12.27) i.e., the ontological proof. Hegel is prepared to defend the concept of God as the 'absolute divine concept itself' (12.129) but only as it is 'taken up in the idea' (ibid) The attempt to find 'being' or 'existence' in the concept of God is riddled with difficulty, particularly as it appears to indicate something that might be found in 'the *context of external experience*'(ibid) which is of course, for Hegel, 'sensuous, temporal and perishable' (ibid). His final comment on the matter is very clear:

> '… objectivity is just that much richer and higher than the being or existence of the ontological proof, as the pure concept is richer than that metaphysical vacuum of the sum-total of all reality' (ibid).

The real 'truth' lies in the unity of objectivity and subjectivity in the concept, contained within 'absolute idea', which alone constitutes actuality.

(iv) The absolute idea

As noted by Comay and Ruda, 'Hegel's critics, from Kierkegaard onward, have never stopped reviling Hegel's absolute idealism as a philosophy of identity',[43] containing his 'most moribund metaphysical baggage' (ibid, p.2). Kierkegaard sees Hegel's speculative philosophy as an attempt to arrive at objective, eternal truth through thought. Speculative contemplation may be, for Aristotle, the 'blessed pastime of the eternal gods',[44] but, as eternal themselves, they do not have to think about how to live their lives. The danger for finite human beings is that, in giving themselves up to speculative philosophy, to the search for the objective, the 'absolute idea', they are lured away from the infinite dialectic of certainty and uncertainty that lies at the heart of faith. Kierkegaard's charge is that Hegel is a philosophical dancer who leaps too high in seeking to overcome the earthbound, finite nature of human existence and collapse the infinite qualitative difference between the human and the divine, evidence for which can be found at the beginning of the *Logic* where the realm of pure thought is characterised as

> … *truth unveiled, truth as it is in and for itself*. It can therefore be said that this content is *the exposition of God as he is in his eternal essence before the creation of nature and the finite spirit*. (21.34)

Kierkegaard can accept that, in an abstract-objective sense, pure thought can be understood as corresponding to its object 'which object is therefore the thought itself' (*CUP*, p.112). However this 'objective thought has no relation to the existing subject' (ibid).

If Hegel is interpreted as the defender of a substantial absolute or an objective proof of God as a necessary being lying outside of thought, then this critique is hard to counter. It is true that the *Logic* does not address the 'persistent striving' (*CUP*, p.110) of human life, but nor is it an attempt to elaborate an 'existential system'. The *Logic* is solely concerned with the science of pure thinking, the *noēsis noēsos*[45]; it exists 'in the realm of shadows, the world of simple essentialities, freed of all

[43] Rebecca Comay and Frank Ruda, *The Dash–The Other Side of Absolute Knowing*, Massachusetts Institute of Technology Press, 2018, p.1

[44] Søren Kierkegaard (writing as Johannes Climacus), *Concluding Unscientific Postscript to Philosophical Fragments*, first published in Copenhagen 1846, translated by D. F. Swenson and W. Lowrie, Princeton University Press, 1941, p.54.

[45] thought of thought

sensuous concretion' (21.42). The focus is on 'thinking's or reason's knowledge of itself, thinking's determination of thinking' (Pippin, ibid, p.5). The *Logic* is not concerned with 'existence' and, as such, does not provide a content, still less any kind of absolute content, beyond the rules of thought. At the end of the *Encyclopedia*, Hegel appears to offer a warning against those who would seek a substantive absolute in his work

> When one speaks of the absolute idea, one can think that here finally the substantive must come to the fore, that here everything must become clear. (§237A).

However, it is manifest in the *Logic* itself that any such expectations are liable to disappointment:

> The absolute idea has shown itself to amount to this, namely that determinateness does not have the shape of a *content*, but that it is simply as *form* and that accordingly the idea is the absolutely *universal idea*. What is left to be considered here, therefore, is thus not a content as such, but the universal character of its form – that is, *method*.
> (12.237)

Method is not 'just the manner in which cognition proceeds (ibid); it is 'the movement of the concept itself' (12.238), proceeding throughout the *Logic*. The usual manner in which dialectic is presented is outlined as the sort of thinking that leads inevitably to antinomic and contradictory claims. The error here lies in the assumption that it 'has only a negative result' (12.243), which is seen as either the fault of the subject matter or of subjective cognition. The antinomies, for example between finite and infinite, the particular and the universal, are assumed to be fixed. As discussed earlier, for Hegel, the negation is not 'an *empty negative*, the *nothing* which is normally taken to be the result of the dialectic' (12.244-45). That which is taken as an immediate universal proves to be the other of itself, i.e., what is taken as immediate 'is posited as *mediated*, as *referred* to an other' (12.244). The second universal is the negative of the first, but it contains the determinations of the first within it – 'The first is essentially *preserved* and contained also in the other.' (12.245). This is the principle of speculative dialectics, to 'hold fast to the positive in *its* negative' (ibid). It is what lies behind propositions where 'the immediate is placed as the subject but the mediated as its predicate' (ibid), e.g., the finite is infinite; one is many; the singular is the universal. Hegel recognises that the original form of these propositions is inadequate. This is because the positive judgment, the classic syllogism, 'is incapable of holding within its grasp the speculative content and truth.' (ibid).[46] It is associated with the abstract thinking of the understanding, which holds all determinations as fixed and cannot admit of

[46] Rose argues that 'To read a proposition 'speculatively' means that the identity which is affirmed between subject and predicate *[as in the case of a positive judgment – my insertion]* is seen equally to affirm a lack of identity between subject and predicate' (Rose, 2009, p.52) – a 'result to be achieved' (ibid) in the sense that the concept of the object does not, as yet, correspond to the object to which it should correspond.

contradiction, whereas, for Hegel, 'the thought of contradiction is the essential moment of the concept' (12.246).

At its core, the *Logic* is attempting to overcome the dichotomies between concept and intuition / theoretical and practical reason, which result in Kant's failure to secure the ground of systematic unity. Hegel argues that the speculative method, as outlined above, is 'the absolute form, the concept that knows itself and everything as concept, there is no content that would stand out over against it' (12.250). The content of cognition is deduced through the method and, as such, it expands into '*a system of totality*' (12.249). This unfolds from simple to more complex and more concrete determinations – at each stage of dialectical advance the universal concept carries all that it has previously gained 'inwardly enriched and compressed within itself' (12.250,). In this formulation science is presented as 'a *circle* that winds around itself, where the mediation winds the end back to the beginning which is the simple ground; the circle is thus a *circle of circles*' (12.252). Comay and Ruda liken the relationship of the *Phenomenology* to the *Logic* to a Möbius strip in which the two sides are *verschränkt* (i.e., interlocked or entangled) whilst remaining unbridgeable. The same metaphor can be applied to the circular development of the *Logic* where the path leads back to the beginning, but the return 'is different than when a traveller comes home to the same place after circumnavigating the globe' (Comay and Ruda, ibid, p.46).

Whether this is sufficient to justify the claim that the absolute idea, as method, moves us beyond the Kantian distinction between subject and object is a question that remains to be answered. Rose argues that, as a statement of method, the end of the *Logic* remains as 'abstract as the beginning' (2009, p.199). There is, of course, an inevitability in this. How could it be otherwise when the central 'content' is solely thought thinking about thinking, 'a phenomenology of abstract philosophical consciousness' (ibid, p.200), which necessarily involves abstracting from concrete reality? Any attempt to conceptualise, necessarily involves a separation between existence and the concept, between the finite and the infinite. The *Logic* is not an attempt to derive the content of the world from thought alone or determine the world's 'purpose'. Nevertheless, truth is to be found in the correct formulation of the logical structure of the synthetic unity of apperception, i.e. self-consciousness, meaning that we can reliably ask questions about the world that do not rely exclusively on sensory experience (or, for that matter, on dogmatic assertion). In terms of the *Logic's* mirroring of the categories, the logic of being relates to the 'mathematical' concepts of quantity and quality, whereas the logic of essence relates to the categories of relation. The logic of the concept mirrors the modal categories. For Kant the modality of the idea is that of possibility, the 'as if', whereas for Hegel the modality of the idea, as concept, is that of actuality. In moving us beyond either mechanical or

dogmatic explanations, the possibility of the realization of human freedom and a 'philosophy of reality' (Pippin, ibid, p.320) is actualised, even if it is accepted that 'Hegel did not believe that freedom could be achieved in the pages of the *Logic*' (Rose, ibid, p.199).

At the end of the book there is an attempt to address the abstract nature of the absolute idea in relation to 'reality' or nature; what could be characterised as the 'bearing of the logical on the extralogical' (Pippin, ibid, p.321). The absolute idea as pure concept 'has itself as its subject matter' (12.252). However as it works through 'the totality of its determinations [*it*] builds itself up to the entirety of its reality, to the system of science' (12.252-53). As still firmly contained in the sphere of logic, 'shut up in pure thought' (12.253) there is an '*impulse* to sublate it' (ibid) through a transition to '*the beginning of another sphere and science*' (ibid). However, this is not a transition in the sense that it 'has become' (ibid), as is normally the case in the Logic.[47] Sublation usually involves the resolution of the oppositions involved in a particular context through the 'assertion of the unconditioned (the absolute)'.[48] It is difficult to see how this could be applied through the philosophy of nature – there would need to be an *a priori* assurance that our experience of nature is necessarily compliant with the categories of the *Logic*. As a result 'there is no transition that takes place' (ibid) in this sense. The idea makes a decision, a resolve (*Entschluss*), to '*freely discharge[s]* itself, absolutely certain of itself and internally at rest' (ibid). Lest there be any doubt, there is an unequivocal recognition that an external world exists and that objects (*Gegenstande*) possess their own qualities and attributes independently of human beings – 'the *externality of space and time* absolutely existing for itself without subjectivity' (ibid). However, this externality has to be grasped by consciousness – it is only through thought that human beings can conceptualise or make sense of the world and it is only through thought that it is possible to maintain systematic unity. As such, this externality, the subject matter of the science of nature remains 'within the idea… in and for itself the totality of the concept' (ibid). In the resolve to discharge or let go of itself , to offer itself up to nature '*the science of the spirit*' (ibid) affirms itself as 'the highest concept of itself, the pure concept conceptually comprehending itself' (ibid).

10. Conclusion – bringing Kant to his senses?

[47] Hegel cites, as an example, when 'the subjective concept in its totality *becomes objectivity*' (ibid)

[48] Terry Pinkard, *Hegel's Naturalism: Mind, Nature and the Final Ends of Life*, Oxford University Press, 2012, p.36, n.22)

Both Kant and Hegel insist on the importance of the idea of systematic unity. For Kant it is 'what makes ordinary cognition into a science' (A831/B860), whereas, for Hegel, it is the basis of the ability of rational thought to make the world intelligible. On my reading, *The Science of Logic* sets out the role of ideas, in the form of the concept, not as a refutation of Kant, but more as a deep engagement with him; a fully systematic derivation of the categories of thought and a revision of the transcendental logic.

Hegel argues that Kant is overly tied to abstract thought and the fixed determinations of the understanding. This is what leads him to separate form and content; concept and intuition; reflective and determinate judgment. Throughout the *Logic* the mediation and interplay of these dualities show themselves to remain distinct but inseparable. The understanding can only posit concepts such as objective and subjective as fixed in their opposition, whereas speculative reason 'unites the contradictories, posits both together and suspends them both' (*Differenzschrift,* p.103). The transcendental unity of apperception, the 'I think', is 'one of the profoudest and truest insights to be found in the Critique of Reason' (12.17-18) and the deduction of the categories is authentic idealism. However, the problem arises when the unity of self-consciousness is restricted, conditioned by the manifold of appearances, leading to the distinction between objects of experience and things in themselves. Hegel believes that Kant is not prepared to accept the full implications of his own insights, i.e., that it is only through the unity of self-consciousness that the manifold of intuition can be unified. Nothing can be judged to lie outside the conceptual structure of thought. As such, the concept is 'given as the *objective element* of cognition, consequently as the truth' and, yet, at the same time it is 'taken to be something *merely subjective*' (12.19). This is why Kant has such difficulty with systematic unity. He knows it is necessary in order to make the natural world intelligible, but the restrictions he places on the legitimate role of ideas prevent him from reaching an unequivocal position.

Hegel does not attempt to provide an objective basis for systematic unity through the resurrection of the metaphysical tradition. One of the achievements of the *Logic* is that it succeeds in separating the search for systematic unity from the search for the existence of an external, unconditioned substance or being. The only 'thing' that is unconditioned is thought itself, something Kant accepts in the recognition that thought knows no limit. The opposition between the 'objective' categories and 'subjective' ideas is sublated through the *Logic*, which now 'takes the place of the former metaphysics.' (21.48). In this essentially non-metaphysical [in the traditional sense] interpretation to the *Logic*, I am indebted to Robert Pippin.[49] This approach has been described by Houlgate as 'overtly

[49] Specifically as argued in *Hegel's Realm of Shadows*, cited previously.

committed to continuing the project of the transcendental logic as Kant himself conceived it'.[50] Houlgate agrees that Hegel differs from Kant, firstly, in that the categories of thought are not based on the table of judgments but are derived from the thought of pure indeterminate being and developed through an immanent dialectical process; and, secondly, in that Hegel does not accept the Kantian distinction between objects of experience and things in themselves – nothing can be judged to lie outside or beyond the categorical structure of thought. However, he criticises Pippin's emphasis on the '*operations* of self-conscious reflecting and conceiving' (Houlgate, ibid, p.139), which he characterises as subjective, in contrast to the objective 'ontological structures of "reflexivity" and "concept"' (ibid).[51] For Houlgate the categories articulated in the Logic 'are forms or ways of being as well as categories of thought' (ibid, p.140) and Hegel's logic is not merely transcendental but ontological. Houlgate seeks to reinstate the Logic as 'an ontology in the strong sense' (ibid) i.e., that thought is not just about being as it is for thought but '*being as such*' (ibid); whereas for Pippin thought 'is all that "being" could intelligbly be'.[52]

Pippin is criticised for assigning 'a considerably more limited role to Hegelian logic' (ibid, p.141) and seeking to introduce a false distinction between being as such and being as it is understood to be in the concept. This criticism is unfair as there is no distinction here – being is shown to be understandable solely through thought, through the concept. Pippin would accept that, in the *Logic,* there is a danger in the confusion of the 'conceptual' order and the 'real order', the conditions of thought with the conditions of existence. Houlgate's error is to conflate the structure of being as a logical category with the structure of existence. As argued previously, the *Logic* is not an attempt to elaborate an 'existential system'. Were it to attempt to do so, it would, indeed, be guilty of Kierkegaard's 'leap too high'. Nor does it seek to revive a metaphysical proof of God's existence or a substantive absolute. It is solely concerned with the science of pure thinking; the establishment of coherent, systematic unity through a metaphysics of logic, which is exclusively the realm of ideas. Logic is the science of absolute form; its content lies in the laws of logic themselves and it is not concerned with concrete existence beyond the rules of thought. There is a unity of concept and reality that lies in the absolute idea as 'the realization of the concept' (Rose, ibid, p.219). If, as Rose argues, 'the place of appearance of the 'absolute' in the *Logic* is an admission of its limitation, of the element of abstraction' (ibid), then so be it – it is a price to be paid to settle Kant's 'unpaid bill'.

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[50] Stephen Houlgate *The Opening of Hegel's Logic*, Purdue University Press, 2006, p.137. Houlgate's critique of Pippin is based on the latter's earlier work *Hegel's Idealism: The Satisfactions of Self-Consciousness* (Cambridge University Press, 1989) however, in my view, it applies equally to *Hegel's Realm of Shadows*.

[51] Houlgate treats the ontological reading as objective and Pippin's emphasis on self-consciousness as subjective, but isn't the whole point that , for Hegel, the distinction between objectivity and subjectivity is broken down – in the Logic self-consciousness takes on an objective form that is, to all intents and purposes, ontological?

[52] Houlgate, ibid, p.140, quoting Pippin, 1989, p.98

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Bibliography

Original texts

Hegel, G.W.F. *Differenz des Fichteschen und Schellingschen Systems, der Philosophie*, Jena: Akademische Buchhandlung (1801), translated by Harris and Cerf, State University of New York Press, 1977.

Hegel, G.W.F. *Phenomenology of Spirit* (1807), translated by A V Miller, Oxford University Press, 1977 [abbreviated to *PhS* in the text].

Hegel, G.W.F. Letter to Niethammer, 23 October 1812 (*Werke III, 301-16*), see *Hegel: The Letters*, Clark Butler and Christine Seller ed., Purdue Research Foundation, https://www.marxists.org/archive/hegel/works/letters.

Hegel, G.W.F. *The Science of Logic* (1812), translated by George di Giovanni, Cambridge University Press, 2010.

Hegel, G.W. F. *Encyclopedia of the Philosophical Sciences in Basic Outline – Part 1: The Science of Logic* (1817), translated by Brinkmann and Dahlstrom, Cambridge University Press, 2010.

Kant, Immanuel. *Prolegomena to Any Future Metaphysics that will be able to come forward as Science* (1783), translated by Gary Hatfield, in T*heoretical Philosophy after 1781*, Cambridge University Press, 2002.

Kant, Immanuel. *The Metaphysical Foundations of Natural Science* (1786), translated by Michael Friedman, in *Theoretical Philosophy after 1781*, Cambridge University Press, 2010.

Kant, Immanuel. *Critique of Pure Reason* (1781; 1787), translated by P. Guyer and A. Wood, Cambridge University Press, 1998.

Kant, Immanuel. *Critique of Practical Reason* (1788) in *Practical Philosophy*, translated by Mary Gregor, Cambridge University Press, 1996.

Kant, Immanuel. *Critique of the Power of Judgment* (1790), translated by P. Guyer and E. Matthews, Cambridge University Press, 2000.

Kant, Immanuel. *Opus Postumen*, edited by E. Förster, translated by E. Förster and M. Rosen, Cambridge University Press, 1993.

Kant, Immanuel. *Correspondence*, translated and edited by Arnulf Zweig, Cambridge University Press, 2009.

Kierkegaard, Søren (writing as Johannes Climacus). *Concluding Unscientific Postscript to Philosophical Fragments*, first published in Copenhagen 1846, translated by D. F. Swenson and W. Lowrie, Princeton University Press, 1941

Schelling, F.W. J. *System of Transcendental Idealism* (1800), translated by Peter Heath, University of Virginia Press, 1993.

Wolff, Christian. *Vernünftige Gedanken non Gott, der Welt und der Seele der Menschen, auch alle Dingen überhaupt*, Halle, 1719.

Secondary texts

Cassin, Barbara et al. *Dictionary of Untranslatables – A Philosophical Lexicon*, translated and edited by Emily Apter, Jaques Lezra and Michael Wood, Princeton University Press, 2004.

Caygill, Howard. *A Kant Dictionary*, Blackwell, 1995.

Comay, Rebecca and Ruda, Frank. T*he Dash–The Other Side of Absolute Knowing*, Massachusetts Institute of Technology, 2018.

Gardner, Sebastian. *Kant and the Critique of Pure Reason*, Routledge, 1999.

Heinrich, Dieter. *Between Kant and Hegel*, edited by David Pacini, Harvard University Press, 2008.

Howard, Stephen. 'Kant on Limits, Boundaries, and the Positive Function of Ideas', in *European Journal of Philosophy*, 30, pp.64-78, 2022.

Howard, Stephen. *Kant's Late Philosophy of Nature*, Cambridge University Press, 2023.

Houlgate, Stephen. The Opening of Hegel's Logic, Purdue University Press, 2006.

Inwood Michael. *A Hegel Dictionary*, Blackwell, 1992.

Pinkard, Terry. *Hegel's Naturalism: Mind, Nature and the Final Ends of Life,* Oxford University Press, 2012.

Pippin, Robert B. *Hegel's Idealism: The Satisfactions of Self-Consciousness*, Cambridge University Press, 1989.

Pippin, Robert B. *Hegel's Realm of Shadows – Logic as Metaphysics in The Science of Logic*, University of Chicago Press, 2019.

Rose, Gillian. 'From Speculative to Dialectical Thinking – Hegel and Adorno', in *Judaism and Modernity, Philosophical Essays*, first published by Blackwell 1993, citations refer to the Verso edition, 2017.

Rose, Gillian. *Hegel Contra Sociology*, first published by the Athlone Press, London, 1995, citations refer to the Verso edition, 2009.

Sandford, Stella. 'Kant, Race and Natural History', in *Philosophy and Social Criticism*, Vol.44(9), pp.950-977, 2018.