The Antinomy of the Organic, or How Visibility Can Coincide with Blind Mechanism in Nature:

A Comparative Study of Kant's Philosophy of Nature and Schelling's *Naturphilosophie*

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I, Bárbara Núñez de Cáceres González, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Abstract

This is a comparative study between Kant's and Schelling's approaches regarding the antithesis between mechanism and teleology in nature. I show how this opposition is reformulated in Schelling's *Naturphilosophie*, and how he ultimately resolves it as an opposition of epistemic attitudes towards nature. My conclusion is that Schelling's outcome is similar but in inverse fashion to Kant's. According to Kant, the antithesis is the result of a conflict between capacities in their proclivity to put forward their own maxims, which themselves are mutually exclusive. The outlook of the conflict looks like this: on the one hand, reflective judgement places its maxim, which states that some natural products, namely, living beings, cannot be judged to be possible in terms of mechanical laws. On the other hand, understanding affirms that if not explainable through natural laws, then living beings entail a different kind of causality. The two maxims, antithesis and thesis respectively, thus assume two different types of causality. The former is a causality that appears to be governed by purposes, the latter appears to be mechanical, but if we suppose that some natural products are possible only if conceived as purposes, then we face the contradictory scenario of trying to fit an uncaused causality (freedom) in a world determined by mechanical relations, which *per se* rules out any possibility of freedom. Kant's solution to the conflict is to restrict the maxims to their proper place as regulative functions of reason, so the principle of purposiveness has no claims over objective truth. Schelling's solution, on the other hand, is not merely formal but ontological. In his works on *Naturphilosophie*, Schelling developed a monistic approach to reality as a unitary whole constituted by opposing aspects that are reconciled only through the original principle of philosophy and nature. Such a framework inverts the explanatory role and ontological status of mechanism and teleology in nature: the latter expressing a constitutive and original principle of nature as a whole; the former, demoted as an explanatory strategy pertaining to empirical investigation. In this dissertation I show that, once Schelling demotes mechanism to a derivative, partial and merely functional approach, it no longer can oppose teleology constitutively and therefore the contradiction disappears. Moreover, I also explain that in Schelling's framework the cognitive dissonance between capacities of reason still obtains. It is precisely the epistemic difference of function and scope between discursive understanding and intellectual intuition what gives us access to nature through two opposing perspectives: intellectual intuition, the proper philosophical one, gives us access to the productivity of totality; reflection, the empirical one, which is subsidiary, gives us collections of facts and isolated products. According to Schelling, by means of a shift in attitude, from reflection to intuition, the philosopher is able overcome the initial opposition by showing that, before the organic totality of nature, mechanism is not one of its constitutive principles originally.

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Introduction

The antinomy of teleological judgement in the *Critique of Judgement* (§§69-78) is one of the most controversial passages of Immanuel Kant's critical philosophy. It not only paved the way to raise far-reaching metaphysical questions regarding the so-called supersensible ground of existence, but also unleashed a series of philosophical reactions amongst which Schelling's own *Naturphilosophie* stood out as one of the most challenging. If the question posed in virtue of this antinomy was for Kant, how we can overcome the conflict between reflective principles of judgement, so we can get a better understanding of natural purposes, for Schelling the question moved beyond the scope of reflection towards the possibility of a deduction of reality from a supersensible principle, and then it became an answer about the constitution of reality for human cognition, which ultimately lay before us that mechanism is a strategy of reflection and organism is the form of the unity of nature.

The antinomy of teleological judgement develops the idea that reason runs into a conflict whenever it wants to arrive to a cogent explanation of the nature of organic beings. As such, it implies a contradiction between mechanism and teleology since, Kant contends, organic beings are, on the one hand, natural products necessarily ruled by mechanical laws and therefore subject to efficient causality, but on the other, they appear to us to be purposive, and thus exhibit relations based on final causes. Kant argues that the contradiction we experience has its roots in our discursive mode of thinking and not in things as they might be in themselves. Indeed, given that for Kant the understanding is limited by the mediation of sensibility, what we can assert as true categorical knowledge is only whatever can be constituted by virtue of the a priori synthesis of the categories and the forms of intuition. However, a great diversity of phenomena in existence fails to meet the adequacy to the universal laws of nature. This vast range of contingent events is the proof, Kant holds, that the necessary connexions we find in nature concern nothing but the connexion of our concepts rather than the character of things themselves (CJ, 5:384).

The question that initially inspired the present study is the following: if not by the conceptual opposition that organised beings elicit from reason's maxims, then how can we differentiate them from inorganic matter in Schelling's *Naturphilosophie*?

The answer that I drew from Kantian transcendental idealism is that the implicit contradiction in the notion of organic life stems from reason's inability to determine the nature of its inner constitution. Such a contradiction implies two opposite principles, namely, (1) that they are material bodies and (2) they are endowed with a causality characteristic of the setting of purposes, which is not visible in matter.

My question made sense against the backdrop of another assumption relative to Schelling's initial disquisitions on the form of nature: nature's possibility presupposes an ontological principle that involves not only unity of origin, but also, unity of substance. Insofar as this unity conditions all that exists, it is transferred to all the products of its activity. Schelling's first principle is essentially an unconditioned one; this amounts to the identity of being and thinking: when the absolute I is, then it thinks, and it thinks when it is. Hence it is intuited as cause of itself, a causality ascribed precisely to purposive beings. From this it follows that, in conformity with the principle of the unity of origin and unity of substance, everything that stems from the unconditioned should be purposive. Nature, then, should be constitutively purposive as well. If, in agreement with this reasoning, everything that exists is subject to absolute contingency, it is fair to ask for the source of the necessity observed amongst the mechanical relations we find in nature. If all material bodies are organised, what does it make my body a living thing, which seems to have a purpose directing its activity, and the wall in front of me, which undergoes only blind change, a 'dead' body? Although, I could not answer this guiding question, I could form an outlook of the antinomy in question in Schelling's philosophy.

After this comparative study, I could conclude the following: First, in Kant reason is able to posit organic life only in virtue of the difference with its counterpart, the inorganic, and that the unity Kant claims is necessary to make organic beings intelligible is mysterious, exterior to them and serves only a methodological function. And, second, that for Schelling the difference between organic and inorganic is directly associated with the way in which we approach nature, be it either through reflection or through intellectual intuition. The epistemic scope of the latter gives us the unity that is constitutive of the totality of nature, whereas the former gives us only sections and traces of something that is not seen in its organised entirety. The result of the analytic methods applied by common understanding is, therefore, the isolation of aspects or parts of nature in order to see them as *mere facts*, and under this lens living beings are observed as inert and inorganic things fitting the mechanistic model.

analyses of reflection. In this work we will see Schelling's approach emphasising the idea that the predisposition to demote the principle of teleology to something that is not constitutive of nature promotes the schisms of reality because we cannot give a justification for its existence even if we act purposively and judge living beings as having purposive activity. Schelling's effort to find the source of purposiveness is presented in this work against the backdrop of the distortions of the understanding's mode of reflection, whose positings are structured as aggregates of atomic units exterior to each other. Since the reflective ordering of reason cannot give us the original form of nature's organisation, Schelling proposes to draw back to the perspective of intellectual intuition. This change of attitude puts us back in the perspective of intuition where the productive unity of nature arises directly. This unity gives us a sense of the ontological identity that is involved in the relation of the opposites of reality, that is, between the negative and positive forces, between the mind (*Geist*) and matter, and finally between teleology and mechanism. To be sure, new possibilities of our understanding of nature emerge with Schelling's overturn of Kant's terms. Nonetheless, the question arises as to whether Schelling's philosophy is able to account for a fringe of contingency in a necessarily organised whole of nature. Perhaps the most important evidence provided in this work is that Schelling's critical view of Kant's criticism is that he provides a re-signified function and ontological status of the capacities that give us access to the make-up of reality, and that this in turn transformed the meaning of the relation between mechanism and teleology.

In this work I proceed in the following way. In the first chapter I provide an overview of Kant's transcendental idealism with an emphasis on the systematic character of the investigation of nature. In the first section, I show that according to the Kantian framework, the origin of the system of nature is ideal and that the realist account of systematicity falls short in attempting to provide an ontological support for a putative transcendent unconditioned. The unconditioned from which all reality as an organised whole derives will ultimately be connected with Schelling's *Naturphilosophie*. The second section gives a more in-depth account of the transcendental synthesis of the form of nature and of the dual structure that derives from the principles of reason. Here I show that the principles of mechanism and teleology that serve as maxims for reflective judgement have their origin in reason's cosmological ideas. In virtue of this relation we are able to conceive two opposite

types of whole, ultimately giving rise to the first and second antinomies in the *Critique of Pure Reason*. Further, in section number three, the presentation of the structure of the dynamic whole sets the stage for the introduction of the principle of purposiveness, since, as I show, the weaving together of a dynamic whole requires the ability of reflective judgement to descend down to the particular to find for it a corresponding concept commensurate to our understanding's structure. In the light of the concept of purposiveness in general we will be able to understand the problem posed by the antinomy of teleological judgement and its relevance for the understanding of Kant's idea of organic beings. Particularly, I intend to show why the idea of system presupposes the solution that Kant offered to overcome the antinomy and, at the same time, understand the epistemic status that living organisms have in this whole. The fourth section introduces Kant's antinomy of teleological judgement. I provide Kant's argument for the conflict found in reason's positing of certain natural products and I link the cosmological ideas described in section two with the maxims used by reflective judgement in its regulation of the meaning of organic life. We discover that the conflict is not attributable to nature itself and that the unity of reason, by means of the transcendental ideal, brings together the opposite principles according to the form of purposeful systematicity in agreement with the mechanics of nature.

The second chapter of this paper is devoted to Schelling's early development of his *Naturphilosophie* and its origin from a first principle. In the first section I discuss Schelling's idea of the unconditioned against the backdrop of Kant's dualisms. Here I display Schelling's criticism to Kant. Specifically, I focus on the idea that Kant's restriction of the access to the unconditioned drives his philosophy to the stark opposition between two irreconcilable dimensions: a noumenal and an experiential one; this, I try to show, is intimately connected with their analysis from the point of view of reflection. In the second section, I move on to show the way in which Schelling provides a way of access to the unconditioned, which in his framework is not only possible but also essential for our comprehension of nature as an organised whole. Once the access to the unconditioned is secured in intellectual intuition, it is determined through the structure of absolute identity or absolute self-positing. The absolute is thus the basis to understand nature as an absolute productivity. Schelling's *Naturphilosophie* sets a totally different ontology because it inverts the terms in which the constitutive principles of nature are organised. The third section examines the

antithesis of mechanism and teleology in virtue of Schelling's organising principle of the unconditioned, that is, an absolute productivity of nature that is the source of all organisation. Schelling's dynamical conception of matter and the complex organisation that is exhibited in purposive organisms are offered as evidence of the constitutive organisation of the whole, which is purposive, while the mechanisms of nature are set against this positive idea of organisation, where the latter appear as a result of a derivative and subsidiary approach to nature. Finally, I show that although there appears an opposition between reflection and intellectual intuition, this opposition is not constitutive of nature, and that the source of contradictory and divisive concepts, from which the idea of mechanism derives, namely, the understanding, is only an abstract approach that is unable to grasp the whole of nature as an organised and purposive whole.

Part 1

The Twofold Presentation of the System of Nature

1.1. The Systematicity of Nature in Kant's Critical Project.

In words of Immanuel Kant himself, "ultimately, …the critique of pure reason leads necessarily to science." (B22). This claim could be broadly construed as an attempt to derive a propaedeutic to all the sciences (Cf. BXXII-BXXIII, A834-35/B862-63); and specifically, to justify the possibility of the conceptual understanding of the world presupposed in all scientific activity, particularly that of Newtonian science.[1] In the *Critique of Pure Reason* (CPR) Kant undertakes a sustained effort to discover the conditions of possibility of knowledge at the level of a consciousness that is specifically engaged in 'cognitive experience'.[2] The analysis of experience in the CPR thus regards the expounding of pure concepts, principles and rules that raise the possibility of cognition of nature as a whole in an effort to secure the foundations of natural science in higher sources of rational law. A whole that not only expresses certain order and organization, but also seems purposive in a way that fits our own cognitive capacity.

Proving the possibility of experience was one of the main challenges of the *First Critique*. Kant linked the concept of experience to nature, as he defined the latter

[1] Several scholars have argued in favour of this claim. For example, M. Friedman, in *Matter and Motion in the Metaphysical Foundations and the First Critique* argues that the possibility of experience that Kant explored in the *First Critique* was exclusively scientific. (Watkins, 2001, pp. 54-68). In the same line, E. Watkins claims that both the *Critique of Pure Reason* and the *Metaphysical Foundations* were attempts to provide a priori foundations for Newtonian mechanics which in Kant's view stood in need of a priori justification in order to qualify for its status of science proper (*Kant's Justification of the Laws of Mechanics*, in Watkins et al, 2001, p. 138).

[2] For Kant, the necessity of the categories as conditions for the possibility of knowledge constrains us in a way such that without them, we would have no *experience* at all. Now, this narrow definition of experience does not mean that Kant ruled out the existence of other types of consciousness. Such an argument has been put forward by Lucy Allais in *Manifest Realism: Kant's Idealism and his Realism*, (2015, 260-289) where she claims that in rendering the concept of experience as something exclusively cognitive, "[Kant] is not attempting to show that the categories are necessary conditions of having any kind of consciousness, or of having an inner life, or of perception, but just that they are conditions of empirical cognition of objects." (p. 262).

as “the coherence of appearance as regards their existence according to necessary rules, i.e. according to laws.” (A216/B263). Indeed, the critical project set out to demonstrate that nature is a structured whole of necessary coherence and lawfulness whose validity sprung not as empiricists thought, from qualities of things as if they were independent from us, but precisely from the inextricable dependency of our cognition of objects on formal, subjective transcendental sources. A position like this explains why laws of nature are rational, coherent and can be discovered and integrated into a body of science even before any empirical inquiry supports their validity. In Kant's view, natural science compels nature into answering its questions by following a plan that is previously outlined in subjective sources, for 'reason has insight only into what it itself produces according to its own plan.' (BXIII). Accordingly, the result of our necessary and coherent laws results from the structure of pure reason. This dependence guarantees that, against the landscape of contingent phenomena arising in sensible experience, we can provide constancy and organization to our observations of nature.

Kant’s conception of the relation between our cognitive faculties and extra-mental objects established that empirically real objects are subject-dependent. At one level, the spatiotemporal nature of reality must be sought in the subject to whom this reality appears. Objects are bound to appear to a subject in a certain way, which is spatiotemporal. Such a way is a condition found a priori in the subject; in consequence, space and time are considered by Kant as 'sources of cognition'. (A38/B55) Once an empirical object appears to us, it has already been forged by space and time, and belongs to the forms 'actually and necessarily.' (A38/B55). It is precisely this character of being non-empirical conditions of the possibility of experience that space and time are placed amongst the transcendental sources of cognition. It is noteworthy that an a priori condition implies that a rule is presupposed for a further thing to obtain, so, the latter is bound to the former. This is how apriority entails necessity, according to Kant, for “reason as separated from all experience can only cognize everything a priori and as necessary, or not cognize it at all.” (A775/B803).[3] From this it follows, that to the consequent, that is, experience, no necessity can be attached. Not gratuitously, Kant claimed that: 'experience teaches us what exists and

[3] In this respect, Kant claimed that anything that shows this character comes under the field of analyses of transcendental philosophy. This statement is consonant with Kant’s own characterisation of transcendental philosophy as a system that includes ‘a comprehensive analysis of the whole human a priori cognition.’ (A13/B27).

how it exists, but never that it must necessarily exist so and not otherwise. Experience therefore can never teach us the nature of things in themselves.' (*Prolegomena*, 4:294).

The same can be said of the pure intellectual functions of cognition, understanding and reason. On one side, the pure concepts of understanding or categories, give their scientific form to all rational representations of reality (A83/B109, Cf. A310/B367). The categories are very general concepts that have the role of unifying representations in a judgement. They are conditions of possibility of intellectual activity by providing determinate content in order that judgement can exercise its syntactical role. In words of Henry Allison, the pure concepts of understanding are 'analytic unities' that unite in a single representation a series of marks that pertain to a diversity of objects.' (Allison, 1983, p. 125). In this manner, the categories serve as second-order concepts that generate rules under which further empirical concepts can be ordered. Kant thought that this pure form resides in the structure projected by the combinations of four categorial headings: Quantity (Magnitude), Quality, Relation and Modality, and the corresponding derivative a priori (also pure) concepts, which descend in triads from each category: Unity, Plurality, and Totality; Reality, Negation and Limitation; Substantia et accidens, Cause and Effect and Community. (A80/B106). On the side of reason, these same concepts are pushed beyond the confines of possible experience and become concepts of reason, or ideas, which are directed to the goal of completing the series of all possible conditions up to the absolute (the unconditioned). From this tendency opposite consequences derive. The antinomies of pure reason come down as somewhat negative outcomes for speculative thinking. For as long as we try to think through the ideas and disregard the fact that they do not have any objectual reference, reality appears perplexing and contradictory.

These three levels of cognition, sensibility, understanding and reason give experience its form. Now, nature, when thought through concepts, unfolds itself as a whole. Defined by Kant in different places, as 'the object of all possible experience' (A114/B), or 'the whole of all appearances' (MF, 467), nature is posited by science under principles of rational connection that allow empirical concepts to be ordered into a doctrine that renders unity and coherence to rational cognitions. This conceptual unity or system, as we might suspect by now, comes from pure self-

consciousness and, therefore, is a transcendental condition for any possible rational systematic view of nature.

This position rejects realist interpretations of the system, as this would imply that nature is an actual entity and its form a real property. From a realist's perspective, granting that nature has the form of a system – i.e. that it is unified in a certain way – , she would explain it as the result of the world's impinging on our cognitive faculties as if mirroring its image on them. We would then have the mental item 'system' brought about by the corresponding effect of the object perceived. When confronted with this option, one has to ask first for the tangible boundaries of such a unity. Do we have any empirical experience of the perimeter of this unity? How could we differentiate the impression 'unity' from the rest of the impression aggregates that impact on us? How could an impression with no delimitate material shape, this supposed 'unity', contain, a vast number of impressions, and how are they related to the former and to each other? Moreover, if the realist contrives that the organization of the world is a property of objects in themselves, even when she cannot explain the material origin and nature of such a unifying factor, the justification for contingent facts to take place in the context of such a unity would be unavailable.

The realist account substantiate a monistic interpretation of the system of the world: one culminating in an absolute material exterior that albeit moves back and forth from stark determinism to extreme contingency, fails to offer formal devices that justify organisation and uniformity to phenomena, thus validating the testimony of experience. In fact, objects of outer senses is not questioned in Kant's critical work, but rather their epistemic valence. He takes for granted the contingency of empirical objects that comes along with actuality. And as we will see later in this section, empirical contingency is the ontological anchor of the Kantian notion of systematicity.

As I have been pointing out, contrary to denying the existence of objects in space and explaining representations by mere causal theories, Kant's transcendental idealism offers a theory that seeks to demonstrate how our knowledge of empirical objects is the result of unified a priori synthetic operations that give to experience a multidimensional character.[4] The clearest contrast is presented by sensibility and

[4] This is one of Dieter Henrich's distinctive contributions towards our understanding of Kant. According to Henrich, Kant inherited from his predecessors the requirement of a philosophical system. It was fulfilled by relating the analysis of mental activity with an ontological framework which took up the long-established distinction between the

understanding. Conceptual and spatiotemporal aspects of experience cannot be reduced to one another and both are presupposed in the presentation of empirical objects. We can hardly deny that we can have sensorial experiences that do not require the use of concepts to perceive its distinctiveness. To illustrate Kant's argument, suppose we set out to describe pain presentations. They do not appear to contain a quality that goes beyond the limiting objective opposition of 'stronger' or 'weaker', neither are they completely defined by their anatomical location. Some sort of 'coloration' makes emotional and physical pains distinctively meaningful irrespective of the lack of correspondence with concepts. On the other hand, we can find concepts with no concrete objective reference, like when we try to imagine an object corresponding to the concept of 'extension'.

Irrespective of the functional and structural heterogeneity of human cognitive faculties, we live the world of experience as a unified whole. Both functions are inextricably intertwined in our knowledge of objects. The synthesis of the diverse, that is, the a priori application of the categories to the organized material of sensibility, constitute the genesis of experience, whose justification Kant developed in the A and B editions of the *Critique of Pure Reason* as the highly complex and controversial *Transcendental Deduction of the Categories*.[5] Roughly seen, Kant's scheme presents a pure synthesis of concepts and intuitions 'to prove that –as E. Förster spells out– the pure concepts of the understanding relate to objects.'[6] Space and time bring up a preliminary unity to the manifolds of sensation, so this organised constellation of material of intuition is taken up by the categories to apply further meaning to it. Once these higher intellectual functions apply its universal meaning to given intuitions, our representations become unitary and objective, that is, their

intellectual and sensible worlds. Notwithstanding this dualism as Kant's starting point, his system became, in words of Henrich, multidimensional. (Henrich, 2008, p. 65). In light of this, Kant provided a new scheme of mental activity in which the Cartesian *res cogitans* turned into a heterogeneous structure constituted by two separate functional sections, namely, the understanding and sensibility. 'Kant's system does not, however, remain dualistic; rather it becomes multidimensional in that Kant introduced further principles that cannot be reduced to one of the two elements of knowledge, either to sensation or to cognition'. (Henrich, 2008, 39).

[5] Dieter Henrich's highly influential paper on Kant's transcendental deduction showed us that insofar as intuitions already possess unity (§20) before they are subject to the categories (§26), the B version of the deduction should be read as a two-steps-in-one-proof thesis. (*The Proof Structure in Kant's Transcendental Deduction*, 1969, p. 653 ff). For a scholarly study of the genesis, methodology and developments of the transcendental deduction in the three *Critiques* and the *Opus postumum*, see E. Förster, 1989.

[6] (Ibid, 1989, p. xvii)

content has a meaning that it is universally valid, as in the proposition 'every event is determined by a cause', which is self-evident for every intelligent mind. According to Kant, there is a functional interdependence between intuitions and categories, so the latter are valid for all sensible objects and have meaning only in their application to the former (B161). By themselves, pure concepts are empty blind forms. (A51/B75) To clarify, despite the fact that space and time are subjective in nature, our outer experiences are real, particular and objective, that is to say, epistemically-laden or suitable to be true or false.[7]

To summarize, Kant argues that space and time are not properties of outer experiences, but forms that limit and shape our experience of the world by giving informed sensible content that can be potentially subsumed under the categories. Hence, they must be presupposed in any concrete perceptual experience of outer or inner objects. Now, only insofar as there is an a priori categorial unity of experience across time and space, we can have a cognitive experience of the world of nature as a whole. Such a unity appeals still again to a further synthesis that shapes and distinguishes the way we experience the world, namely, the ability to refer our presentations to the scope of 'my thinking'. The '*I think*' that accompanies all my presentations (A341/B132) is the inner unity that refers all presentations to one consciousness and is presupposed in all further synthetic operations of the mind. This Kant pinned down as the spontaneity of the transcendental unity of apperception, the activity that yields self-consciousness.

All these primitive synthesis are relevant for our discussion since, for Kant, the system of nature encompasses a body of concepts that reflects the synthesis of the diverse in transcendental consciousness. Kant's idea of systematicity is linked to these specific features of experience that are determined a priori by intellectual forms and the ideality of space and time, all of which account for the possibility of scientific experience as such. Features like furnishing synthetic connections with an objective value for the objects of experience can be seen in the doctrinal unity of concepts in a scientific corpus. These connections carry the intelligibility of our systems of objects by its necessary relation to concepts. Kant thinks that the principles of pure reason, in their most basic form, the categories, lay out the systematic unity of nature, hence playing a fundamental role in making up the whole set of physical and mathematical

[7] The empirically real is nothing outside the limits of our sensibility. The opposite is what Kant called the external in a transcendental sense (A374) and denotes an existence that is not determined by the transcendental subject.

laws that render the physical bases of explanation of natural phenomena. The idea of nature, Kant says in his *Metaphysical Foundations*, 'already carries with it the concept of laws', and in virtue of it, the necessity of nature's laws is contained in the a priori principles at work in all rational explanations about it. (MF 4: 469). The categories are the principles at work in universal physics. As Kant points out:

> '[…] all possible perceptions, and hence also everything whatever that can reach empirical consciousness, i.e., all appearances of nature, must in regard to their combination be subject to the categories. Nature (regarded merely as nature as such) depends (as *naturata formaliter spectata*) on the categories as the original basis of its necessary law-governedness.' (B165)

This quote can be seen as the justification of the ultimate rooting of pure physics in the elementary principles that give form to all rational cognitions. What Kant is trying to tell us is that the system of nature as a whole is essentially drawn up by a plan that resides originally in human understanding, and as such, it is intentionally laden. (A83/B109). And as we will see in the next section, this form has a certain structure, specified, on one side, by mechanical relations, and on another regulated by a dynamical form which sets the stage for the idea of nature as a teleological whole. The former structure is manifested in that pure part of physics, which, in Kant words, is a science that 'must reduce nature in general, whether it regards the object of the external or that of the internal sense (the object of Physics as well as Psychology), to universal laws.' (Prolegomena, 4:295). The latter entails the underlying idea of what Kant called a '*technic* of nature', which denotes the idea of 'nature's causality regarding the form that its products have as purposes.' (CJ, 20:219) This telic form projects the nominal character that nature seems to be both a system and a creative whole, which stands in stark contrast to 'the mechanism of nature', under whose concept only strict objective relations come about.

1.2. The Form of the Systematic Unity of Reason and its Dual Projection of the World-*nexus*.

In the previous section I attempted to show that Kant's conception of systematicity concerns subjective precepts that give semantic form to our judgements about natural states of affairs. Indeed, his conviction was that neither the order and

regularity that we find in nature nor the necessity of natural laws can be attributed to empirical facts, since appearances lack both the intrinsic connexion and the objective validity that legitimates our capacity to consider them true or false. (A126). To be sure, one aspect that had centre stage in Kant's critical enterprise is the problem of the unity of experience. This very important feature of Kantian philosophy is implied in the idea of nature, which he defines as 'the totality of objects of possible experience.' (Prolegomena, 4:296-7).

The reference to the totality of experience, more than describing an empirical acquaintance with the boundaries of a quantifiable whole, rather impossible to find in a concrete experience, reveals the background operation of a transcendental principle, which Kant thinks is the condition of possibility of the form and unity of the system of nature. Kant gave this condition the status of an *absolute principle* having its origin in reason, since only this quality provides the highest potential of derivation and universality that is required for the unification of experience.[8]

Thus, the reference to totality is furnished by means of the unconditioned, a principle that meets the condition of absoluteness and completeness that Kant sought to give rational validity to the idea of an absolute whole of unconditioned unity. The problem of the unconditioned as the first and most cohesive principle for the system of experience has as its core the questions: how can we arrive at it and what is its nature? Let us follow the path of both methods to attest the rising of the absolute. In the Introduction to the Transcendental Dialectic, Kant presents the faculty of pure reason as 'our supreme cognitive power' containing two regulative uses, namely, the logical and the real. (A298/B355). Since both uses are involved in the articulation of the unconditioned, from them two regulative methods to arrive at it derive: the

[8] It is important to note that for Kant a principle denotes a specific acquisition, namely, the process whereby one 'cognizes the particular in the universal through concepts'. (A300/B356). The form of the acquisition is the syllogism, whose major premises run as principles. However, according to him, not all major premises are principles proper. A case in point are those universal propositions that have an empirical origin, which do not meet the conditions to be principles. From this it follows that, universality, although is a defining feature, it is not sufficient to determine the idea of principle. Rather, Kant thinks, it is the origin of the presentation and its capacity to allow reasoning from pure universality what makes a proposition an absolute principle. And, as such, nothing from sensibility should be contained in it. (A302/B358). Elsewhere, Kant claimed that principles are such because they cannot be deduced from higher rules. (Prolegomena, 4:305). In this sense, categories can function as principles, for they are not deduced from higher concepts, but since they only have full-fledged determinacy in their application to forms of sensibility, the particular they allow to exhibit in the universal is mixed with intuition, and so they cannot comply with the requirement of absoluteness.

regressive and the progressive, a distinction that mirrors Kant's division of the categories in mathematical and dynamic.

To begin with, reason's tendency to reach the most complete condition, pushes it to provoke the expansion of concepts to their widest extension. For this reason uses a principle of its own, viz., for every shown condition, reason commands the understanding to find the rationale behind it (the condition of the condition), up to two stages: (1) the most remote element of the series of the empirical synthesis (premises), and (2), up to 'the unconditioned whereby the cognition's unity is completed.' (A307/B364). The first process is the regressive method, which unfolds a series in virtue of the mathematical concept of the world or *Weltbegriffe*. The second process follows the first when, in the regression of the series of conditions, reason never finds a limit and then turns to the absolute '*principle of pure reason*' by way of which it jumps from the remotest element of the series to the entirety of the series of subordinated conditions, thus ending and completing the series. This completed series Kant called the dynamical concept of Nature or *Naturbegriffe*,. (Cf. A497/B526). This so-called 'unconditioned', inasmuch as it is 'the complete magnitude of range' of a given condition, represents the comprehensive limit imposed by reason when it is presented with a regressing series continuing up to infinity.

Kant maintained that this inference to totality brings up a *pure concept of reason* which alone makes possible the whole synthesis of the unconditioned (A322/B379). Also characterised by Kant as a 'transcendental ideas', these concepts attain a sort of unity that cannot be reached by the understanding, since no actual experience can ever get to the totality of series. It is clear now that not only the procedure of arriving to the greatest possible extension is needed to attain unity, but also to lay out, as it were, the perimeter of such an extension through a pure synthetic function that allows us to think of this extension of conditions as a whole that is unconditioned absolutely. (Cf. A326/B382).

Now, this two-fold concept of the unconditioned mirrors two ontological ideas of nature as a whole, which Kant characterises in the Prolegomena as 'this unification originates either merely relative to the subject and is contingent and subjective, or it happens absolutely and is necessary or objective.' (4:305). Accordingly, the objective unification has its conditions of possibility in the synthesis furnished by the mathematical use of the understanding and it gives rise to an idea of whole as a necessary connexion or the *nexus effectivus*; whereas the subjective

unification projects on the whole of existence the regulative principle of purposiveness and gives rise to the *nexus finalis*. Following Kant's division of nature as a whole according to either composition and division or articulation (A445/B446; Cf. A236/B296), he calls them respectively the mathematical and the dynamical wholes and parallel the concepts of *world* and *nature* in the System of Cosmological Ideas, which we previously referred as *Weltbegriffe* and *Naturbegriffe*. (A420/B447-8; MF, 4:467).

Let us run through both meanings with more detail. The mathematical whole takes account of aggregation in space and time, and since it renders nature in terms of quantity it commits to the mechanistic model of explanation of natural phenomena. The dynamical whole, on the other hand, is concerned with existence and the relation of appearances to one another. (A178/B221). As existence cannot be grasped a priori, but in the synthesis of perceptions, the unity derived from this type of whole follows, not from pure intuition, but from the connexion of perceptions, and thus their a priori necessity, since cannot be determined a priori in pure intuition lodges, as it were, in the categories. So, whilst the mathematical whole can display a constituted experience within an a priori synthesis, the dynamical whole requires the empirical to constitute cognitions. The first is derived from a purely rational cognition of nature based on concept construction. The second is grounded on principles of the necessity of what belongs to the existence of nature and therefore is metaphysical. (MF, 4:469).

In this same section, Kant stipulates the *Weltbegriffe* as 'the mathematical whole of all appearances and the totality of their synthesis on both the large and small scale, i.e., the totality of the synthesis as it advances both by composition and by division'. (Ibid.). He holds that this type of combination arises from the sum of its parts and is governed by the application of the principles of magnitude and quality to intuition, pure and empirical respectively. Accordingly, the fact that it is a sum appeals to the kind of grasping that takes place through 'the assembly of what is homogeneous'. This implies the synthesis of a multiplicity of homogeneous units which, Kant holds, becomes possible only through the concept of magnitude (quanta). (A162/B203; A419/B446, n. 70). And since the form of mathematical cognition deals solely with magnitudes, rules of mathematical synthesis are involved in this idea of material nature, where the kind of evidence provided by them is apodeictic, giving place to what Kant calls 'natural necessity'. The reason for this is

that magnitude and quality, emanating from pure understanding, proceed to non-empirical intuition to exhibit the individual object corresponding to it a priori. Judgement's unification in this case is represented as unconditionally necessary and validly objective because universality descends from the categories and the synthesis with intuitions is established a priori. Likewise, the fact that the empirical content conforms a posteriori to the already set up conditions in pure synthesis, material nature is rendered empirically as a mechanical cognition. (A721/B749).

In contrast, the *Naturbegriffe* does not take account of aggregation in space and time to deliver the whole as a magnitude, but turns the application of dynamical principles (like substance and causality) to 'the existence of the objects of possible empirical intuition', which 'cannot be cognised a priori'. (A160/B199; A178/B220). Kant adds that this principle determines the coherence of nature's determinations as a 'dynamical whole'. (Ibid, n. 70). In this respect, the content of cognition is rendered in terms of 'the unity of the existence of appearances' according to the dynamical principle of causality. (A419/B446). However, dynamical principles can only be applied through the necessary connexion of perceptions. This produces a synthesis in time mixed with empirical cognition. According to Kant, such a process occurs because the dynamical principles fulfil their application only when the empirical content ('the presentation of a necessary connexion of perceptions') has been taken up in intuition. (A176/B218). The empirical mediation, as it were, limits the principles' application such that their relation to pure intuition is indirect: 'time [...] cannot itself be perceived. Therefore determination of the existence of objects in time can come about only through the linking perceptions in time [...] and only through concepts connecting them a priori.' (A179/B219). As a consequence, these principles' universality cannot be exhibited in an a priori synthesis and their necessity cannot be apodeictic. Perceptions come together contingently, so the necessity derived from its connexion through concepts must be presupposed by concepts, and only realised through the linking of perceptions. The upshot of the indirect application of dynamic principles to intuition is that it involves a necessity that disallows the ability to produce demonstrations. An example will make this clear: 'the accident belongs necessarily to some substance'. By itself, this proposition yields only discursive certainty, rather than intuitive. Here we see that the empirical ingredient is implied in order to infer the necessity bore by the proposition. For without the concept of matter (the filling of space), neither substance nor accident would have a concrete

differentiation in the relation.[9] Kant illustrates how the dynamic determination proceeds in the analysis of the concept of substance in part two of the Transcendental Logic. He shows that the tension in the opposition between the permanent (substance) and what undergoes change (accidents) is necessary to understand one another. But in this relation, whilst the concept (the permanent) makes the presentation of a transition possible (from not-being to being), only the empirical fulfils the requirement for the varying determinations of what endures to obtain. (A187/B231).

It seems evident now that concepts and principles of reason are involved in the concept of the unity of experience as a system. In the Appendix to the Transcendental Logic Kant argues that reason's legislation and government upon understanding's own ruling brings about 'the *systematic* character of cognition, i.e., its coherence based on a principle.' (A645/674). The principle in question is: the *idea of the form of a whole* of a given representation, which Kant stipulates as:

> '[…] a whole that precedes the determinate cognition of the parts and contains the conditions for determining a priori for each part its position and its relation to the remaining parts.' (Ibid).

Through this principle, Kant observes, the elements of a determinate collection of representations cohere amongst themselves not as mere contingent aggregates, but, as long as they are sustained by the type of connexion established by the dynamic idea of *system*, the parts carry the reason of their being in their relation to the whole. The outcome of this, Kant contends, is a thoroughgoing unity that serves the understanding as a rule. (Ibid.).[10] This is significant, given that the idea, in setting the goal of freeing the understanding from its own conditions, lets us, as it were, put a distance with regard to the understanding's grasping of the object, and from that outlook see 'what share each of these natural causes has in [the whole of] appearance'. (A646/B674).

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[9] Kant says: 'we speak more accurately and correctly if we characterise an accident only as the way in which the existence of a substance is determined positively.' (A187/B230).

[10] To use Paul Abela's characterisation of reason's relation to understanding, the former, he says, has a relation of dependency upon the deliverances of the latter, for reason, as far as it is associated with assembling the structure needs the understanding's content deliverances. (*The Demands of Systematicity: Rational Judgement and the Structure of Nature*, in Bird, 2006. p. 410).

It is important to note that Kant assigns to transcendental ideas only a regulative use. This means that ideas do not engage straightforwardly with objects of the understanding and therefore cannot constitute objects. Ideas' function rests in the implementing of the model of perfection and completeness that directs the understanding's concepts towards the goal of 'converging in one point', providing for them 'the greatest unity, in addition to the greatest extension.' (A644/B672). Nevertheless, a problem arises every time that reason attempts to bypass the limits set by sensibility in order to find objectual correlates for them.[11] In Kant's approach, this shift brings us under the illusion that we are grasping a real object outside of possible experience, 'just as objects are seen behind the mirror's plane'. Yet, Kant says, the illusion which we are subject to in virtue of them is necessary in order to direct the understanding beyond what is given towards its utmost expansion and the entirety of possible experience. (A645/B673). In other words, the setting of a purpose has as a consequence the onward direction of the will towards an everlasting yet-to-be-attained completion.

Ultimately, the interconnectivity between principles, each of which has a function relative to the whole, provides a notion of nature as a telic entity, endowed with the unconditioned and original unity that the idea of reason projects upon it. It is important to emphasise, however, that as long as 'the unity of reason is the unity of a system', the system under which the objective contents of experience seem to fit is in fact for Kant merely a 'projected unity' performed by 'the hypothetical employment of reason' which uses a principle to extend over objects. (A680/B708). With this consideration, Kant wants us to regard the system of nature as 'a problem', that is, as a proposition that expresses, not objective, but only a logical possibility that cannot reach the real through the concept of understanding. (A75/B101; A681/B709). With this observation Kant secures the subjective necessity required for an a priori condition of knowledge without having to give it the status of a constitutive principle.[12]

[11] According to Kant, thought–entities (*Gedankendinge*) do not belong to the realm of the given, but to the realm where reason can think and invent (*dichten*), this means that they are not tied to the testimony of nature. (A469/B497).

[12] Adopting Hortsmann's interpretation, 'the demand of the system is valid because only the form of the system preserves the necessary unity of a domain of knowledge, and that means permitting us to specify determinate realm of objects, as well as to characterize the logical and argumentative (deductive or inductive) relations between the claims to knowledge referring to that same realm of objects.' (*The Unity of Reason and the Diversity of Life*, in p. 61).

1.3. Technical Unity: The Structure of Purposiveness

Broadly seen, the *Critique of Judgement* prolonged the Kantian worry over the unity of experience, and therefore the unity of nature. Kant set out this project by exploring the possibilities of unification of what is absolutely necessary with that which is merely contingent into one *articulated* whole. (CJ, 5:359). This anti-dualistic tendency represented an attempt of bridging the gap between nature, seen as a plane of efficient causes, and the possibility of the realisation of ends therein. The challenge thus implied sidestepping the contradiction between acting on free will in a world ruled by mechanical laws.[13] With this, Kant carried on with the desideratum of systematic philosophy in the *Critique of Judgement* (CJ): securing an a priori justification for the more elusive array of empirical laws as well as for non-cognitive dimensions of human experience.[14] This aim involved reaching a deeper level of experience where nature exhibited the same structure as art, namely, one that unfolds according to purposes.[15] The question then was to show how the laws of nature, which came about independently of volition, could run parallel to the laws of freedom, so any individual agency and her doings, especially those unconditioned by the sensible, could unfold in the world. This worry becomes clear in the following consideration expressed by Kant:

> 'For the will, as the power of desire, is one of the many natural causes in the world, namely the one that acts in accordance with concepts; and whatever we think of as possible (or necessary) through a will we call practically possible (or necessary), as distinguished from the physical possibility or necessity of an event whose cause is not determined to exercise its causality through concepts (but through mechanism, as in the case of lifeless matter, or through instinct, as in the case of animals).' (CJ, 5:172).

[13] Concerning this point, Horstmann agrees with Reinhold and Fichte that Kant failed to offer a common principle for the practical and theoretical uses of reason at a more fundamental level. Accordingly, the missing principle of unity would extend its flaw to the whole system of science which, as far as it was left ungrounded, lacked real completeness. (*The Unity of Reason and the Diversity of Life*, Horstmann, 2012, p. 72).

[14] I am here largely following the account of John H. Zammito in *The Genesis of Kant's Critique of Judgement*. (Zammito, 1992).

[15] Barry Allen argues that the *CJ* is an attempt to neutralise radical contingency by subordinating it to the idea of purposiveness. (Allen, 2003).

This paragraph contains a glimpse of the puzzling contrast Kant established between the power of desire and mechanism, whilst conflating them both under the concept of natural causes.[16] Before turning to this issue, however, it will be necessary to analyse briefly Kant's concepts of purposiveness and of organism, particularly their development in the *Critique of Judgement*.

To be sure, the categories established the principles for the possibility of experience in general. Yet, their scope fell short in giving an account of the peculiarities and contingent behavioural aspects of particular objects that cannot be rendered fully into concepts, since pure concepts only targeted the most abstract requirement of universality in them. In words of John Zammito, as far as concepts remained universal, they could not entail the individuality of the intuition, which at last, came down as one of the main senses of 'contingency' in the third *Critique*. (1992, p. 160). Thus far, Kant set out to validate the lawfulness of the contingent, which is precisely how Kant defines purposiveness (KU 5: 404), as part of the system of knowledge. (B860). For inasmuch as we can agree that there are observable frequencies in behaviour across specific ranges of data, such particular characteristics seem to us to be governed by rules, yet different from those whose necessity we think a priori. Kant in fact ascribed these empirical concepts with the status of empirical laws in both *Critiques*.[17] Putatively, empirical *laws* conformed to the system of science, so the challenge rested on showing how reason could legitimate their scientific basis. (Cf. A654/B682). In the CPR the idea of nature only marginally provided the link between pure concepts and empirical data. Reason's merely methodological function, plus its inability to deal with contents of experience, compelled for another solution.

Kant found such a solution in the special operation of reflective judgement, the main discovery of the CJ.[18] It was a significant breakthrough to the extent that it

[16] Henry Allison notes, in his paper on Kant's Antinomy of Teleological Judgement, that, indeed, both external causes and psychological modifications fall under the class of natural causes, and that the contrast between them lies in whether the causes are either material or non-material and therefore external or internal. (2007, pp. 25-26).

[17] See, for example, A720-3/B748-51. In A92/B124 Kant holds that '[…] empirical rules can, through induction, acquire none but comparative universality, i.e., extensive usability.' Similarly, in CJ Kant maintains that, despite their contingency, empirical laws are called laws because: 'they must be regarded as necessary by virtue of some principle of the unity of what is diverse […].' (5:180).

[18] Rolf-Peter Hostmann and John Zammito provide compelling evidence in support of the idea that the theory of reflective judgement was a late discovery brought up on the occasion of the preparation of the *Critique of Taste*. Zammito's well-known interpretation of the genesis of the *Third Critique* based his analysis on Giorgio Tonelli's chronology of Kant's text, who

provided the prospect for closing of the gap Kant thought the CPR fell short of filling regarding the validation of the empirical.[19] Completing the system would signify linking empirical science to the transcendental system, justify free agency by showing how the order of mechanical causality could be influenced by intentional action, in other words, making the lawfulness of nature 'harmonise with at least the possibility of the purposes that we are to achieve in nature according to laws of freedom.' (CJ, 5:175-6). In this context, the realisation of ends implied that Kant had to plunge into the realm of existence without leaving the terrain of transcendental philosophy. He wanted to give transcendental grounding to the more or less insecure dominion of contingent natural phenomena and the psychological features of human consciousness, like the feeling of pleasure and displeasure, taste, virtue and choice.[20] But most importantly, contingency signifies the possibility to represent intentional activity, an attribute that inheres in the concept of purpose.

Accordingly, reflective judgement is a sub-function of judgement in general. Since judgement is the mediating link between understanding and reason, and between understanding and individuality in intuition, it can search for laws, proceed according to inferences of reason and subsume the particular under the universal. Let us go over Kant's division very briefly. Judgement's function is either determinative or reflective. The former operated only under the government of the categories, under which it specifies the conditions of sensible intuition. (CJ, 5:179, 385). This means that it only pins down non-empirical relations presupposed as possibilities of experience; and they are characterised for exhibiting relations of homogeneity and necessity. When determinative judgement subsumes intuitions under the categories, their necessity determines a priori the form of particular instances in nature which fall entirely under them. Reflective judgement, on the other hand, implies that the particulars found in nature do not have a corresponding non-empirical concept

connected the discovery with the composition of the *First Introduction to the CJ*. (Zammito, 1992).

[19] Zammito called this inadequacy 'the empirical entailment'. This problem involves Kant's 'concern that even within his strictly cognitive philosophy there remained a certain indeterminacy, a "gap" in the system.' (1992, p. 60). To this claim, Zammito adds that, inasmuch as the CPR did not completely validated empirical science in the specification of its particular objects, Kant pursued in the CJ the challenge of 'establishing the ground whereby the singular judgement could be recognised as universal and necessary, a priori [...].' (Ibid, p. 92).

[20] In reference to this point, Zammito shows that for Kant this implied that reason's governance had to be widened in order to allow more human faculties. And, under these circumstances, the system of reason could be extended beyond theoretical aspects and thus secure Kant's 'rationalistic commitments'. (Ibid, p. 63).

presupposing their meaning and possibility; instead, reflection has to find an adequate non-objective rule, which is a reflection on a collection of cases, so the particular can be classified within that conceptual network. (Ibid, 5:385) The subsumption of empirical principles to one another as in a hierarchy provides the form of a certain order for natural laws that makes them suitable for the understanding's empirical use, namely, concept formation.[21] Kant found that reflective judgement had a transcendental principle of its own: the concept of purposiveness of nature. This was defined by him as a form according to which 'things of nature serve one another as means to purposes.' (5:359). Thus although natural things are still understood under the scheme of causality, in reflection the subordination unfolds as a series consisting of purposes.

In sum, by subordinating the empirical to the principle of purposiveness, judgement attributes a purpose to nature, and this makes it commensurate with our cognitive faculties. In this context, the principle that concerns the form that things of nature have in terms of empirical laws in general is 'the *purposiveness of nature* in its diversity.' (5:180). This gives place to a 'teleological *way of judging*' that in turn serves as a principle of natural science for the investigation of a 'special class of objects', presumably, the organic beings. (5:382). Ultimately, the principle becomes a necessary condition, in Kant's outlook, to work out the unity of experience. (Ibid, 5:187). For this unity is necessarily presupposed in empirical cognition to make possible a law-governed combination of what is diverse and contingent whilst maintaining the form of the system. (Ibid, 5:184). It certainly has the quasi-constitutive role of turning empirical regularities into laws, ascribing to them the demand of necessity, but then again, it has no attribution within the boundaries of constitution. Kant's strategy to keep it under the class of regulative principles was to typify the necessity it assigns as a normative means of entailment. (CJ, 5:184). This indeed makes sense, so far as Kant saw that attributing a constitutive role to judgement would lead to the search for yet another faculty that may act as judgement itself does, i.e., providing syntax and subsuming concepts under higher rules. (Cf. CJ, 5:169). Coupled with this, Kant pictured a major danger to basing teleology on a

[21] In section 5 of the First Introduction to CJ, Kant claims that this principle, albeit not constitutive of nature, does not have a psychological origin. However, as it is a necessary rule not established in concepts, but still concerns the possibility of nature 'as determined by a diversity of particular laws' (CJ, 5:180), and so it must be linked somehow to their objective content, it has a cognitive assembling function that some commentators have construed as an a priori 'criterion for truth-claims'. See Section 2 notes 7 and 13.

constitutive principle. For it would imply that natural causes are taken to be real intentional actions and purposiveness had to be raised to the level of rational concepts. Such a demand would then require from nature an indubitable evidence for the structure of purposes in objects which, as far as their phenomenal presentation concern, preclude any way of conceiving of them in terms of intentions. (CJ, 5:361, Cf. §§78-84).

So far, we have examined the role of reflective judgement under the rule of its transcendental principle. Let us now move on to the structure of purposiveness itself, so we can recognise the essential feature implied in our notion of an organised being. In section 10 of the Critique of Aesthetic Judgement Kant presented a stripped-down account of purposiveness to understand its pure transcendental structure. This is thought in terms of the form that purposiveness gives to the relations it makes possible. In this sense, its form projects a *special type of causality* (CJ, 5:360) fixed in the concept's a priori capacity to determine the existence of an object, such that it is possible for an agent to become the cause of the object of her representation. In this respect, what is determined to modify the faculty of desire is the will according to either the concepts of nature or the concept of freedom. Previously, in the Second Introduction and in §5, Kant defined the will as an agency that acts in accordance to concepts, and the act of willing as a relationship where the faculty of desire stands to the object.[22] (5:178; 5:222). With this, Kant made it clear that such a causality, insofar as is determined through concepts of reason, is contrasted to the mechanical causation effected amongst objects of experience, which implies blind necessity. (5:221-2).[23] So it is solely the possibility of determining the existence of an object through its concept what concerns the pure form of purposiveness as a special causality. Back in §10, Kant shows this transcendental form in abstracting the psychological element of the feeling of pleasure, so he is able to specify it as a relation in which the object stands as the concept's purpose and the concept's causality has a purposive form, a *forma finalis*. (5:220). This type of causation can thus be seen as a reciprocal or circular relation where (1) the effect triggers the cause and (2) the cause has a *visible* end as its effect (the object's existence). In other words, the concept, as determining the cause of the existence of the object, already carries the effect towards

[22] More accurately, the power of desire determined by concepts amounts, according to Kant, to the will. (CJ, 5:220, also 5:178).
[23] Although, the actual effecting something through action falls under the laws of mechanical causality.

which it tends in the first place. And it is precisely within the span of the two terms' relation where the self-determination of the will to act by means of a concept occurs.

Kant broke down reflection's principle into formal-subjective and material-objective depending on its relation to a presentation, whether it be a concept or an intuitive reference to our cognitive faculties.[24] Given the scope of this discussion, I will focus on the material objective character of purposiveness of nature which, as shown above, calls into play the causality that has the form of a purpose by virtue of the concepts of nature, the sort of causality that we found in the dynamical conception of nature according to ends, or *nexus finalis*, and the structure of living forms. Other forms of objective purposiveness include the experiences of the agreeable, the good, perfection, usefulness. But for now, it suffices to say that the subjective character of purposiveness was thought by Kant to be involved in the free interplay of faculties of reason when they evoke the beautiful. And in any case, what must be remembered, is that judgements of taste and teleological judgements bear an isomorphic structure in virtue of their both being judgements of reflection.[25]

Kant dealt with objective purposiveness by appealing to conceptual reference. In this case, the thing's purposiveness is a subjective feature that is not fit to be an element of knowledge: it is coupled only with sensible presentations. Yet, in this operation, reflection refers the presentation to a concept of nature. Hence, this presentation has an objective basis because it reflects 'the harmony of the form of the object with the possibility of the thing itself according to a prior concept of the thing that contains the basis of that form.' (5:192). In this operation, reflective judgement descends to the base of intuition and finds a corresponding concept for the presentation, either in the sources of imagination as in art or in 'nature's power to produce things in terms of purposes' –the so-called technic of nature. (5:390).

To exemplify, imagine I come across a silky shell attached to a leaf. Very quickly I connect it with a concept of a purpose: it is a chrysalis whose form and function has the purpose of nourishing a larva whilst it goes through the process of

[24] To be more precise, Kant included a third alternative, namely, the formal objective purposiveness manifested in geometrical figures' 'relative perfection'. This concept involves the apprehension in pure intuition (space) of a form that accounts for the purposive harmony to which our cognitive faculties conform. In the absence of any definite cognitive content, i.e., a constructed concept and/or further empirical concepts attached, it amounts to its immaterialness, but it is still objective due to the involvement of pure sensibility in its presentation. (CJ, 5364-5).

[25] From these two, Kant derived respectively a critique of aesthetic judgement and a critique of teleological judgement.

transforming itself into a butterfly. Here the circularity of purposiveness lies in *the concept of a chrysalis* insofar as it is *for us* a *forma finalis*: the caterpillar is drawn to its metamorphosis *as if* by the effect the concept—by the very form it projects—is expected to bring about. Furthermore, as soon as I detect the shell's *utility*, I am, according to Kant, spelling out the 'extrinsic' character of objective purposiveness. Let us imagine an entomologist is next to me. In examining the specimen, she concludes that it is the shell of a Ulysses butterfly. To her expertise, what we are perceiving is a *perfect* instantiation of the concept of a Ulysses butterfly's chrysalis because, using Kant's words, it has 'everything that is required for being a thing of this kind'. (CJ, 5:227). Now, suppose we are lucky enough to spot one of these butterflies. We both feel enthralled by the experience of seeing one and agree that: 'this specimen is truly beautiful'.

Kant maintained that in an aesthetic judgement like this, the determining basis is not the concept of the butterfly or the perfection of the chrysalis instantiation. For the aesthetic reflection contains no cognition whatsoever. (Ibid, 5:228). Thus, what was actually evoked in the aesthetic experience is, according to Kant's characterisation, an underlying intuitive form that is, as it were, unleashed by the form's arrangement of colour and shape in the butterfly. Its beauty, albeit purposeful has no purpose. Otherwise said, when we observe attentively, all the parts of this organism, the rich black stripes bordering the electric blue of the butterfly's wings, the vibrancy of the wings' shape or the delicate and tint variations and twists of its flight do not point to any explicit or implicit end. However, the arrangement as a whole seems to us to be a product of design, and since design evokes an intention-like idea, the form appears purposeful, although without a purpose. (Ibid. 5:236). This is then a presentation of formal, purely subjective, purposiveness: a beautiful object.

In taking the example of organised beings, it is manifest that the will is not in fact a condition of possibility for purposiveness, neither is the explicit positing of a purpose. Instead, Kant shows that purposiveness, insofar as it is itself an a priori structure, influences in the case of reasoned beings their will, but is presupposed in all their purposive acts. And given that for Kant living beings are not endowed with reason, but can only be thought in terms of purposes, in virtue of this transcendental structure it is possible to 'abstract entirely from the question as to whether natural

things –for example –are purposes intentionally or unintentionally.' (5:382)[26]. This principle, when applied to some natural products, relieves us from the need to resort to a real or ideal agency that accounts for the intentional production or production according to rational design, distinctive of some teleological arguments that posit organic beings as mere artefacts. In any case, the alternative of the technic of nature, and therefore the application of the problematic concept of intention to nature, complies with a 'critical treatment' provided only by reflective judgement, for it is impossible to justify it as a relation that has objective reality. (CJ, 5:395-6).

However, what is noteworthy regarding teleology is that for Kant all teleological arguments have their basis on reason. And also, that they must be put to good use for the sake of science, employing their unifying propensity for the heuristic investigation of contingent empirical laws. That is one of the aims of the *Critique of Teleological Judgement*, as he argues in the Critique of Teleological Judgement: '[teleology only proves that] in connecting experience with the supreme principles of reason, we are absolutely unable to form a concept of how such a world is possible except by thinking of it as brought about by a supreme cause that *acts intentionally*.' (CJ, 5:399). The CPR provides an antecedent of this critique, where Kant grants nature the appearance of purposiveness in virtue of its connexion with the idea of a supreme being, which common reason supplants for the idea of the unconditioned. The supreme being will be associated with the field of the supersensible in the Critique of Reason, and in both works displays the same function, namely, to establish a normatively 'the purposive unity of things', which is aimed at giving rational support to the notion of the world '*as if* it had sprung from the intention of a most supreme reason.' (A687/B715). The expansion performed by the idea upon the bounds of the empirical results in our belief that such an order must have been the teleological work of a supreme intelligence. In this context, the illusion serves a primordial function:

[26] In other words, as this is only a normative application of a maxim of reason seen from the perspective of its conceptual structure, *judging* the relation of natural products to an agent that endows them with intentionality is not necessary, but only contingent, so we can either apply it to the whole of nature or not, or to things that appear organised and thus imply the idea of intentional production. For the reflection on the technical attribution of nature only results meaningful when the presentation comes across as something 'commensurate' with our cognitive powers. (Cf. CJ, 5:398-99). A similar interpretation is provided by H Ginsborg, who explains that for Kant, 'even if an object is not in fact intentionally produced, or produced in accordance with a design, it nonetheless can qualify as a purpose. All that is required is that we be unable to understand its possibility except on the assumption that it was produced according to design.' (Kant on Understanding Organisms as Natural Purposes, in Watkins et al., 2001, p. 232).

the integration of the world into a teleological connexion (*nexus finalis*) that is in accord with the unity of reason. Similarly, the notion of the world as a teleological whole had a further function, namely, to project the type of 'unity characteristic of a purpose' on empirical laws in order to achieve the integration of knowledge into an *architectonic* that minimises the uncertainty due to the vastness of contingent events.[27] More specifically, within this sort of whole the parts are organised according to a purpose, says Kant:

> 'to which all the parts refer and to which in the idea of the purpose they also refer amongst one another, mak[ing] possible the fact that every part can be missed if the remaining parts are familiar, and the fact that there is no place for any contingent addition or indeterminate magnitude of the whole's perfection –i.e., a magnitude that does not have it's a priori determined bounds.' (A833/B861).

This type of whole, he adds, is analogous to an 'animal body' whose form is structured rather than merely stacked like an aggregate manifold. Each part is in relation to the others and to the whole, such that its growth does not equate with the mere addition of homogeneous units, but builds up efficiency and strength in virtue of its purposes 'without any change of proportion'. In consequence, under the idea of purposiveness the systematic unity of the world appears to us *as if* it was 'an organism'. The order of the manifoldness of cognitions is thus applied in accordance with the idea of purpose yielding a 'technical unit', namely, the unity characteristic of a purpose, one that Kant associated with art. (Ibid).

In the third *Critique,* Kant went on to elaborate in more detail the so-called technical unity, by enlarging the extension of the principles to reach the realm of particular empirical laws, specifically, to 'what the universal laws have left undetermined in them', such that this unity can be viewed as 'if they too had been given by an understanding'. (CJ, 5:180-2). Furthermore, the technical unit refers to the organic whole as something woven together by reflective judgement via its subsuming operations. (Ibid, 5:359, 385). Judgement reflects on nature's causality as

[27] This interpretation goes along the lines of Barry Allen's in *The Abys of Contingency*, where he claims that the concept of *Zweckmäßigkeit* in the CJ serves to overcome 'the two faces of radical contingency in the system of knowledge, first in empirical concepts and then in natural systems. (p. 375).

an ability to produce things either in terms of final causes (technic of nature) or on the basis of mechanism, two maxims which combined by reason in a normative way lead to the unification of empirical phenomena. (CJ, 390-91, Cf. 5:406). Accordingly, when judgement reflects, it achieves the unity of particular properties in an individual entity through the recognition of specificity despite the prominence of the relative universality of the principle of reflection. Under the maxim of *nexus finalis*, judgement descends on the terrain of empirical particularities in nature and subordinates one another as purposes under a principle that Kant called the 'law of specification of nature' regarding empirical laws. (Ibid, 5:186). This alternative plays down the view that the mechanism of nature is the only valid explicative basis for the scientific investigation of some natural products, whilst at the same time allowing that the link between the use of the concept of purposiveness and a divine principle be so cancelled. Nature then can be conceived to be normatively purposeful and mechanical in itself and then science can talk about *products or creations of nature* being compatible with empirical laws administered by reason.

This sets the stage for the antinomy of teleological judgement. As noted earlier, Kant granted nature the semblance of purposiveness, this would allow us to see nature as an intelligent producer of things. However, as nothing in experience impels us to the conclusion that nature is an intelligent being, the question of such an assumption was transferred to the rational justification for the purposive relations we attribute to nature, and especially, to certain natural products. This assumption did not come without problems, since this rationalisation is concerned with keeping the stricture of science intact despite the introduction of a lawfulness different to that of universal laws of the understanding. Altogether, where reflective judgement's job concerns the investigation of nature, it draws an analogy between the latter and reason's purposive architecture. In fact, nature's displays of contingent chains of events makes it suitable to adapt to reason's patterns. Kant found this, as it were, plasticity to be the proof of nature's original contingency.

Even the connexion between the categorial structure of the system and the subsystems of empirical laws remained contingent in Kant's view. (CJ, 5:187). And precisely because the order of contingency is not completely reducible to laws under the system, there is a vast number of nomological subsystems that cannot be scientifically determined. Especially, the abyss of contingency in organic forms, to use Barry Allen's characterisation, makes it impossible for biology to become a science

under the Kantian universally apodeictic standards of truth. (Allen, 2003). The inherent chasm allowed by the system of science in Kant's approach opened up the path to contingent series of events that admit alternative non-demonstrative accounts. However, he thought that the purposive nature of organised beings was able to be transcendentally deduced. This implies the presupposition that organised beings are purposive because we observe in them a certain structure that I will describe in the next section.

1.4. The Antinomy of the Teleological Judgement.

With the *Critique of Judgement* Kant provided an unprecedented framework in terms of which biological theories could be conducted.[28] It justified the introduction of the concept of purpose as a methodological guideline that could put science closer to the understanding of living beings without having to resort to impossible demonstrations about their origin and real nature. This breakthrough in Kant's critical work came out in a time when a controversy was held between the advocates of the theological conception of the universe and those who saw in materialistic principles a way to escape teleological thinking. Biology, however, kept underscoring the limits of mechanical explanatory models. Something about the structure of organic beings, their behavioural features and whole make-up, did not quite adapt to the mathematical quantification of matter and the type of causality of mechanical relations, viz., all those alterations in a body, including movement, that are applied from without. Yet, it was largely agreed that the mechanical model was the most reliable conceptual framework for securing scientific knowledge.

The mechanistic paradigm, promoted by Descartes in the seventeenth century and then reinforced by the powerful advent of Newtonian science, was still

[28] Though it is sensible to note that Kant's influence did not irrupt straightforwardly into the German biological circles, his contribution to biology through teleological theory and heuristic explanation is undeniable. According to Timothy Lenoir, Kant's biological theories were rather passed on by Johhann Friedrich Blumenbach and Georg Christoph Lichtenberg in the beginning of the nineteenth century. (*The Strategy of Life*, 1982, p. 3). Others who were Kantians in their naturalism were Christoph Girtanner, *Über das kantishsche Prinzip für die Naturgeschichte* (1796), Markus Herz *Versuch über den Schwindel* (1786), and Johann Christian Reil, *on der Lebenskraft* (1795). For a detailed account of how these different movements were influenced respectively by Schelling and Kant, see *Mécanism ou organicism? Schelling et la "cause positive" de la vie*. (Schelling and Schmitt, 2007).

reigning in the late eighteenth century.[29] Mechanistic causation, a notion that can be traced back to the Aristotelian principle of efficient causes, rapidly became a reductive strategy that explained almost everything; even the human mind was seen as 'an engine for producing ideas'.[30] This approach, still employed in present-day scientific discourse, was also embraced by the Enlightenment 'as the model to explain all phenomena of matter, life and mind.' (Richards, 2002, p. 308). Kant, being himself a sympathiser of the *Aufklärung* programme in Europe, was not immune to its influence. Actually, scholars agree that the first *Critique* strongly advocated the Enlightenment's rejection of teleology in favour of machinery-type explanations of nature and the rational part of the mind. (Beiser, 1987, p. 13). However, in spite of the privilege he granted to mechanistic principles, Kant sought to extend the rigour of the scientific discourse to biological organisation. Particularly, he aimed at limiting the pretensions of the mystics of metaphysics, the "aestheticists of science' and the rationalist tendency to lure into vitalism and transcendent theories of design. (Zammito, 1992, p. 180).[31] John Zammito argues that Kant sought to consummate the hegemony of the *Aufklärung* whilst dismantling the metaphysical aspirations of the *Sturm und Drang* led by Herder, whose formulations descended in 'excesses' espousing pantheistic views grounded on the vindication of Spinoza's philosophy in the Germany of the 1780s. (Zammito, 1992).[32]

Kant did not deny that living nature appeared organised in terms of purposeful activity, but to assert that there is an invisible universal force that works

[29] This is evidenced by Timothy Lenoir, who claims that a number of biologists at that time were seeking a foundation for a unified theory of life that could be adapted to the methods and conceptual framework of Newtonian science. (Ibid, p. 2). Even Darwin in the mid-nineteenth century, 'wanted to make his theory as Newtonian as possible', that is, unify organic processes under unbroken natural law. (M. Ruse, *The Darwinian Revolution*, 1979, pp. 199, 239.)

[30] The outset of mechanistic reductionism is often connected with Descartes' parsing of the wealth of existence into *res cogitans* and *res extensa*. Going onwards everything that was associated with the notion of body had to be understood in terms of machinery behaviour, and since Descartes, the behaviour of organic beings was trated as a branch of physics. (Richards, 2002, p. 308).

[31] John Zammito debatably conflates two different groups of investigators of nature: On the one hand, Herder and Goethe, who were called the 'aestheticists of science' and were accounted members of the *Sturm und Drang* movement, and the pantheist *Naturphilosophen*, who develop their theories in direct response to Schelling, like Carl Friedrich Kielmayer and Karl August Eschenmayer.

[32] Actually, he claims that 'the Third Critique was a continuous attack on Herder', especially the third moment of the CJ, the *Critique of Teleological Judgement*, and that 'Kant's hostility to the *Sturm und Drang* was one of the most important motives behind his entire enterprise of a treatise on aesthetics.' (Ibid, 10; Cf. Introduction pp. 1-8).

within matter and animates it, as Herder claimed, to the extent that all creation is a gradient organisation towards perfection of that same animating force, was odious to his cause. As the baseline argument in Herder's *Ideen zur Philosophie der Geschichte der Menschheit*, the assumption of 'an invisible realm of forces' relied heavily on the analogy of nature to postulate the thesis of the continuity between organic and inorganic forms by means of a *spiritualised matter* that ultimately strives for perfection in the completed form of human kind. Evidently, this was for Kant the result of dogmatic speculations and scholastic abstractions that have no place in philosophy, not in the least in science. (*Anthrop.*, 8:54, CJ, 5:391). So as expressed in his *Review of Herder's Ideas*, the philosopher should force herself to constraint before 'monstrous ideas' and if need be follow the expansive guidelines of reason but with caution. (*Anthrop.*, 8:50-56). But regardless of his antipathy towards hylozoism and dogmatic teleological thinking, Kant could not overlook the fact that Herder urged his theoretical attempt upon an onerous question resurgent at that time, viz., the impossibility of reducing life to the laws of inert matter.[33] And although the mechanisation of life was desirable, it implied the reduction of its complexity to physical and chemical laws and, therefore, the forceful elimination of the purposive facet we see in organic beings. On this account, Kant sought a restricted integration of biology into the system by means of the transcendental principle of teleology, which accounts for purposeful activity without overstepping experience's boundaries.[34]

Broadly taken, Kant's critical strategy lied in the imposition of normative standards to the concepts of purpose and architectonic design in order to make them suitable for physical theorising. Teleological judging could become a principle of natural science as long as it were used not to constitute concepts—given that reason is unable to prove the objective reality of natural purposes—but 'to discover many further laws of nature that would otherwise remain hidden for us since our insights into the inner nature of its mechanism is so limited.'[35] (Cf. 5:396-7). With this

[33] D. Henrich "The search for a philosophy that could overcome alienation from life was widespread at that time." (2008, 17).

[34] In this context, biology was classified as a branch of natural history, which Kant viewed with suspicion due to its propensity to throw up 'shaky hypothesis', while scientific description was crowned as 'a science with the splendour of a great system'. (*Anthrop.*, 8:162).

[35] Thus, for example, in §72 of CJ, Kant holds that 'no one has doubted the correctness of the principle which says that we must judge certain things in nature (organised beings) and their possibility in terms of the concept of final causes, even if we demand to use this principle only

attribution, the rule of purposes would then provide the corresponding concept for making organised phenomena *explicable* to some extent. (CJ, 5:383). Nonetheless, the concept of purposiveness remained a 'stranger in science'. Whilst the emphasis on its normative character put biology inside the range of natural science, it did not make it reach the status of authentic pure science. This limitation was a deliberate methodological step that need be taken, in Kant's view, to advance the claim that although not strictly scientific, teleological judging could be combined with mechanistic maxims to further the aims of mechanistic science.[36]

Kant's position was that living organisms should be construed as neither artefacts nor machines, but rather as natural products implying a purpose. If science introduce the idea of a *technic of nature*, otherwise regarded as the analogical reflection according to which nature's products harmonise with our concept of purpose (CJ, 5:393), it would be possible to propose a new type of causality that unfolds according to concepts. In this way, one could come up with the notion that the conditions attached to the natural product's form and necessity stem from a paradigm *peculiar to our human cognitive powers*. (Cf. 5:398). Moreover, in Kant's view, the sheer fact of nature's contingency makes its products' form viable for the conjecture that they 'had come about through a causality that only reason can have.' (CJ, 5:370). This resolution, however, did not dodge the contradiction implied in biological organisation, viz., while we cannot deny that an organic being is a natural product, and therefore contains natural necessity, when we judge it to be at the same time a natural purpose, we admit it contains a contingency relative to its empirical relation. (5:396). According to Kant, this is actually only a specious problem that calls for a critique of teleological judgement when reason strays itself in a dialectical deviation. To make sense of the antinomy that arises when we judge the possibility of organic beings, let us review briefly Kant's concepts of mechanism and of organic being.

When a natural product is judged to be purposive, Kant holds, it is considered in terms of a *natural purpose*, that is, it is assumed to exist as '*both cause and effect of itself*'. (CJ, 5:370). Accordingly, organic beings are possible only as natural purposes

as a guide for observing these things so as to become acquainted with their character, without presuming to investigate their first origin.' (5:389).

[36] Indeed, as Richards evidences, for Kant 'only mechanistic principles or laws involving mechanistic causes could really serve to explain natural phenomena, organic or otherwise. Principles that jumped the world to come, leaping over the limits of mechanism, simply landed beyond the range of sober science." (Richards, 2002)

because only through this concept we are able to make sense of their inner form. (5:683). It was noted earlier that the *idea of the form of the whole*, with its telic character, reproduces a functional relation between the whole and its parts, such that it makes us think of it as if it were 'an animal body'. Such a unity is referred to the concept of species as cause and effect of itself, so the entailment of a purpose yields a real technic which involves, according to Kant, 'the concept of things as natural purposes.' (CJ, 5:421). A reciprocity forms the circular structure of causality that is manifested through the self-generation of the species without appealing to its concept as the only cause. In other words, Kant wants to dismiss the idea that organic beings are artefacts or creations of a rational agent whose concept acts as the cause of the species by means of its will.[37] To clarify, the idea of technical unity determines the interdependence between the parts and the whole to the extent that the whole of an organic being is not the effect of the constitutive parts, but at the same time, cause and effect of the parts, and the same is established, *mutatis mutandis*, of the parts.[38] (5:373).

In §64, Kant uses the example of a tree which acts both as cause of itself in 'generating itself', and as effect of itself in 'being generated by itself ceaselessly'. (5:371). Here the circuit of purpose obtains at two different levels. One is the iteration of the concept of the species in the process of reproduction: the tree gives birth to another tree. A second one refers to the preservation of individuality through the preservation of the concept of the species in the process of 'growth': the tree remains a tree regardless of the modifications that come with its development. Since this type of augmentation is not the mechanical aggregation of units that results in size increment, Kant identifies it with a process of self-generation of the ontological substrate of the species whereby some material ingredients are assimilated 'until they have the quality peculiar to the species'. Thus, through this process of 'separation and recombination' of the raw materials we become aware of the 'very great originality' of

[37] This is the basis of Kant's rejection to the theory of *individual preformation* over *epigenesis*. (CJ, 5:423-4).

[38] In consequence, H. Ginsborg explains that it is not our concept of the organic being, the particular species, what is responsible for the unity of the organism, otherwise it would be an artefact of our own, rather it is responsible 'for our ability to grasp the organism in a unified way.' (*Kant on Understanding Organisms as Natural Purposes*, 2001, p.235). The question arises, however, as to whether there is an inner concept to the organism that serves both as the ground for our cognition and as ground of itself. However, as we can only take the grasped concept only as a guiding principle, Kant suggests that we should not try to explain its origin in attempting to find an object for it. (CJ, 5:390).

the 'hidden mechanism' of the organic. (CJ, 5:371). And what we can judge from it is that the "formative force that propagates itself" is directed as if that were its purpose, whereas mere mechanism implies an involuntary force that simply effects movement externally in another thing. (CJ, 5:374).

To illustrate Kant's idea of organised beings, let us compare it with a rock. A rock is a composite of sediments gradually deposited and compacted in a given period of time. Here the formation process reveals, first, that the accumulation of its components was randomly produced, and second, that the components themselves do not share a functional relation with the whole of the rock since it is merely the aggregation or disaggregation of bits of material and not a role each bit would perform within the whole of the rock. Now let us think of a plant in a very simple way. A plant has different organs or parts that perform their unique roles. This means that they do not seem randomly added parts that have an extrinsic relation to the rest of the aggregation, like the rock. For example, the leaves have the function of promoting photosynthesis, which fuels the plant with enough energy for its activities. If we cut all the leaves out, the suppression of these parts' function has an impact on the overall subsistence of the plant. So, the appearance of self-subsisting functionality gives us a sense that nothing in the organic world is gratuitous, purposeless or attributed to blind mechanism, because, Kant claims, "an organized product of nature is one in which everything is a purpose and also reciprocally also a means." (CJ, 5:376, Cf. 5:426).[39] From this it is conclusive that an organism appear as a system of purposes generated by its intrinsic purposiveness. (CJ, 5:420).

Albeit it is true that Kant highlighted the pre-eminence of the physico-mechanical model for natural science, he in fact endorsed a concept of mechanism different from the mechanistic conception of matter. The mechanisation of the world implied an idea of the world based on inert matter and the impact model of force.

[39] Kant's narrow definition of life is problematical when one attempts to use it to define living organisms in general. First, Kant makes it inherent to the self-production of ends, because the latter is said to be 'a causality intrinsically connected with the feeling of life', which in turn is aligned with the feeling of pleasure or displeasure. (CJ, 5:204). Now, given that in desire the individual is the cause of the object of her representation, consequently, life is the faculty of a being to act in accordance with her representations. (CJ, 5:211). But neither animals nor plants are endowed with a specific faculty of representation. Animals, according to Kant, *do reflect*, not through the acquisition of a concept, but rather through an 'inclination'. (20:211). In either case, the requirement for the feeling of life seems to be intrinsic to the circuit of purposiveness which requires a concept. In any event, if one is to apply this concept of life to living beings it seems necessary to use it normatively 'as if' all living beings were endowed with a faculty of representation.

Kant not only rejected this notion which he associated with the realistic conviction of the access to things in themselves, but also explicitly attacked its introduction in the biological sciences as the so-called 'iatromechanical' approach (Zammito, 1991, pp. 195-197). The model of inert matter was best represented by the atomistic approach, which was characterised on the basis of the realistic doctrine of primary qualities. Against the consensus of his time that forces could be only properly justified by Newtonian mechanics,[40] that is, restricted to whatever can be tested by observation and quantification, Kant turned to dynamics in his early studies, thus depicting 'the communication of motion in terms of substances, accidents, and the exercise of forces, concerns that stem from the Leibnizian-Wolffian tradition.' (Watkins, 1998).[41] Further on, in his critical years, his metaphysical investigations on force continued feeding from the sources and methods, although generally discredited as "unscientific and arbitrary", of the metaphysical way of reasoning.[42] The result was the metaphysico-dynamical approach submitted in his *Metaphysical Investigation of Natural Science*, a novel stipulation that attempted to deduce the obscure concept of matter from transcendental principles. This work had important logical implications that took him to conceive matter as a space-filling property within a relational field determined by the action of forces.[43]

Kant's dynamic account of mechanism is developed in §65 of the *Critique of Judgement*. Here he derives the concept of mechanism from the causality that makes up "a descending series of causes and effects", a linear sequence of changes such that the effects never reciprocate their own causes with change (CJ, 5:372). This series involves a linear causation in which change is blindly spread across things. Kant calls

[40] However, Kant thought 'Newton was the first who suspended the mechanical mode of explanation and attempted to explain by physical powers.' (*Metaphysik L*$_1$, 28:210).

[41] M Schönfeld argues that this was the consideration of British Newtonians, who deemed metaphysical studies of force as "unscientific and arbitrary", while their Continental peers feared that the inquiries about the nature of forces could eventually call into doubt doctrinal authority (p. 34). In his paper, *Kant's Early Dynamics*, Schönfeld claims that Kant's reflections on dynamics go further back to the 1740s, and although his interest on dynamic perspectives of nature, freedom and matter faded into the background during the juncture of his critical project, they never quite disappeared, motivating a renewed effort to conjoin metaphysics and physics later in Kant's *Opus postumum*, (Bird, 2006).

[42] According to Watkins, Kant's interpretation of Newton's mechanics, implied a reformulation of the laws of motion in terms of forces and substances. (543-545)

[43] D. Warren, in his paper *Kant's Dynamics*, contends that Kant's rejection of the mechanistic model involved the intention of characterising matter in terms of its (dynamic) relational properties rather than conceiving it as an impenetrable aggregation of atoms. In this sense, inert matter portrays more an idealistic concept which is far from its phenomenal nature. (Watkins, 1998).

it "efficient causes" or *nexus effectivus*, and it stands in stark contrast to the circular type of causal connexion we reviewed in the section on the structure of purposiveness, which here again Kant denominates "final causes" or *nexus finalis*. (CJ, Ibid.). The latter corresponds, he contends, to 'ideal causes', the former to 'real causes'. (Ibid, 5:373). The mechanism involved in the *nexus effectivus* series implies a blind necessity whereby the connexion of things is presented as external to one another: a course of action like 'the one seen in lifeless matter.' (CJ, 5:393, 5:172).

For Kant, it is impossible for mechanical laws to account for the organisation of matter in a living being. The origin of this limitation lies according to him in the character of the structure of our own understanding. (CJ, 5:417-18). Furthermore, Kant objects to the reduction of life to machinery-type explanations partly for the access of contingency to systematisation, but also on the ground of the non-continuity between the organic and the inorganic. The ultimate goal seemed to be the affirmation of the uniqueness of life and the preservation of the hidden mystery Kant saw in it.[44] For example, in his *Review of Herder's Ideas*, Kant went on to affirm that 'the mysterious obscurity in which nature itself conceals its business of the organisation and the division of its creatures into classes bears a part of the responsibility for the obscurity and uncertainty that attaches to this first part of a philosophical history of humanity.' (Anthropology, 8:55). Altogether, Kant's claim helps us connect the systematicity of nature with, to pick Barry Allen's words, 'the reassertion of the medieval view that the contingency of nature reveals its supernatural ground.' (Op. cit. p. 374). Such a tenet consistently takes up the critical doctrine of the impossibility of knowing things as they are in themselves, which ultimately gives rise to illusions that have the appearance of antinomies.

In any case, when we study organic beings, Kant suggests in §81, we 'must regard mechanism as originally subordinated to a cause that acts intentionally'. (CJ, 5:422). This means that although mechanism is insufficient to explain organic beings, it is also in part necessary to understand them as products of nature and therefore as *de facto* existing in the world. Besides, at the backdrop of the obscurity of the originality of organisms, the need to combine these two apparent contradictory tenets lay on the pressing concern of the unity of experience. Kant's prescription for this unity was the heuristic supposition of mechanism 'as the instrument of the cause that

[44] Zammito claims that Kant 'wished to secure the distinction of life from the inorganic, affirming the uniqueness and mystery of organisms as phenomena of empirical nature, and upholding the utter inexplicability of the origins of life.' (1992, p. 189).

acts intentionally.' A cause that can be found in a supersensible ground, which, albeit inaccessible to us theoretically, can be represented in the world of sense through reason's normative guidelines, that is, by harmonising our practical endeavours with the purposiveness we assign to the world according to the laws of freedom.[45] We thus confirm that the quasi-reconciliation of opposite principles, however, highlights a contradiction when one attempts to posit it at the level of understanding, that is, for theoretical cognition, but then it turns useful even in its conflict when we recognise the involvement of the ideas of reason in its articulation. Kant presents this opposition of principles, the so-called Antinomy of Teleological Judgement, in §70 and then its resolution in §71.

According to Kant, two maxims are required in order to construe organic beings in natural science. Since these two principles are contradictory, a conflict arises from judgement reflecting on them.

The first maxim reads as follows:

'All production of material things and their forms must be judged possible in terms of mechanical laws.' (CJ, 5:387).

The second maxim goes this way:

'Some products of material nature cannot be judged to be possible in terms of merely mechanical laws.' (Ibid).

The first of this maxims, the "thesis", regards all possible connexions in the whole of nature under the model of mechanical laws, where matter amounts to inertia, or lifelessness, and is governed by efficient causes. The "antithesis", on the other hand, states that some natural products cannot be judged to be possible in terms of mechanical laws. (CJ, 5:386). Because it seems to elude the deterministic interlocking of material causes and effects, the second maxim calls into play a certain kind of existence that renders its activity not as a series of blind, directionless outcomes, but mainly as a self-reference that implies the circular causality involved in intentionality: the form of purposiveness.

Kant explicitly mentions in §70, that these maxims are 'regulative principles for our investigation of nature.' (5:387). He promptly makes reference to principles of

[45] It is odd, though, that Kant speaks in this passage from the second Introduction of 'a basis' that 'after all' *unites* 'the supersensible that underlies nature and the supersensible that the concept of freedom contains practically.' As if he were trying to assert that our world is necessarily grounded on the supersensible and that the proof of the link between the latter and the former is in the isomorphism they share. (5: 176).

reason for two reasons. One is that these principles cannot be present in the determination of natural laws simply because determinative judgement does not have principles of its own. The other reason is that Kant is referring to the composition of nature as a systematic whole. Here we can pick up again the notions of mathematical whole or *nexus effectivus* and the dynamical whole or *nexus finalis*.[46] The dialectic of regulative maxims thus appeals to a sense of mechanism springing from the teleological mode of explanation of the idea of the whole. (Allison, 1992, p. 27). Such a whole is the *nexus effectivus* or the mathematical whole of nature where the possibility of the whole is dependent on the parts. Since the possibility of nature itself is grounded on constitutive principles, the material whole or *nexus effectivus* must be presupposed in our claims about nature, whether these are regulative or not. (Cf. 5:387). But since in our investigation of nature as a system some products appear to have a contingency not reducible to the causality of mechanism, thus 'our understanding *must consider*' their production according to a causality in terms of purposes. (5:405). Then we must consider the study of nature in its fashion of a dynamical whole, where the parts are dependent on the whole and the forces implied in this *normatively* considered *composition* is construed according to the causality of purposes.

Indeed, we must proceed this way. Given that our understanding's grasping of the particular must, according to Kant, always proceed from the *analytical universal*, the diversity of the particular is underdetermined and the resulting contingency 'makes it so difficult for our understanding to unify the manifold in nature' to give rise to a thoroughly determinate cognition. (CJ, 5:407, 406). This limitation forces us to resort to mediating principles, like those of the architectonic of nature and a supersensible unity, in order to produce by reflection or analogy empirical concepts under which empirical intuitions can be subsumed so our *discursive* understanding can find them meaningful. Hence, when we try to gain theoretical knowledge valid for all possible empirical cognition, determinative judgement comes into play demonstrating the pure part of natural science. Such an

[46] Apparently, this was a sustained belief throughout Kant's work. One indicative is in his Lectures on Metaphysics of the mid-1770s where it is believed he said something along the lines of: 'if something is explained from these general properties of bodies by means of a communicated motion, then that is the *mechanical* mode of explanation. But when something is explained by the powers of nature, which we do not comprehend, but of which experience teaches us, then this is a physical or *dynamic* mode of explanation.' (*Metaphysik* L_1, 28:210).

understanding of nature is rendered by Kant as the material meaning of nature. Appearances here simply 'designate an object' that has been constructed in the pure synthesis of understanding and intuition. (A190/B235). Conversely, we arrive at laws of experience through reflection, and judgement gives a principle under which the heterogeneous in nature can be compared and classified: it then turns lawful. However, the underdetermination that results from reflection's insufficiency to perform the rule *adaequatio rei et intellectus*, leaves a margin of contingency that can bring together opposite maxims of equal necessity, a difficulty that arises when attempting to subsume biological phenomena under lawlike generalisations.

What is noteworthy is that insofar as there are regulative principles, both maxims also leave a margin of underdetermination that does not exclude the possibility to think of a different type of causality from one another. Therefore, whilst the first maxim lets us consider all products of nature as being subject to mechanical laws, the second maxim lets us consider a different type of causality to construe the natural products that appear to be systematic. It follows from this that Kant combines the mechanistic and teleological maxims to bring unity to the study of nature.[47] Hence, the second maxim does not preclude the possibility of things in terms of mechanical laws, but only that a different form of causality must be called for their basis as natural purposes, one that 'human reason', predisposed by its discursive nature, 'will never be able to discover'. (5:388). Kant contends that this opposition need not be construed as a contradiction. Its regulative conformation only widens the scope of possibilities beyond constitutive principles pointing to empirical laws derived from experience, whose criterion of truth does not conflict with the necessity of constitutive concepts. That is why Kant holds that from the opposition of these two maxims a dialectic arises leaving judgement perplexed. Still, this does not imply a contradiction because they do not exclude each other. For organic beings suggest that the origin of their possibility could be in something other than external causes. But whether this inner basis is in connexion to physical-mechanical causes, Kant thinks, is necessarily left undecided inasmuch as human reason is determined by its discursive intellect and therefore unable to unveil the origin of nature's productivity.

However, a question arises as to why mechanism should not be considered instead in its constitutive fashion; after all, the concept of 'production of material

[47] Let us remember that the categorial definition of contingency is 'that whose contradictory opposite is possible.' (A459/B488). It is important to note, however, that the category cannot be inferred from empirical contingency.

things' is derived from constitutive principles determining the possibility of knowledge. Some specialists have recommended the demotion of the constitutive principle of mechanism to a regulative status.[48] Allison, on the contrary, thinks this reading is untenable. Appealing to a regulative status of the 'apparently conflicting principles', he says, suggests that Kant underwent an important change of mind regarding the principle of causation, such that it would not be a necessary condition of possibility of experience, losing its validity in gaining only a methodological assignment. Allison points out that the confusion arises when the interpreter muddles up the several connotations and cognates of the concept of mechanism, which can accept ambiguous connotations when it is not specified by determinative judgement.[49] He then goes on to characterise the problem raised by the Antinomy in virtue of only the concept of 'material mechanism' which he spells as 'the narrow sense' of the term. (Kant's Antinomy of Teleological Judgement, 1992, p. 27).[50] Conversely, there is a broad sense of mechanism which he identifies with 'transcendental mechanism', and leaves open the possibility to think of a supersensible ground for the hidden mechanism of nature where mechanism and teleology reconcile or spring from a similar origin. (5:412).

Yet, it results odd that Kant, denying the possibility of falling into the antinomy from the perspective of determinative judgement, had to 'convert' the maxims into constitutive principles to imply directly our understanding in the conflict. So if judgement were to slip over the antinomy, it would read:

Thesis: 'All production of material things is possible in terms of merely mechanical laws'

Antithesis: 'Some production of material things is not possible in terms of mechanical laws.' (CJ, 5:387).

This determination demands pure principles of natural science. From their synthesis with pure intuitions we know that all nature is materially based according to efficient causality, then if we assert that some of its material products are not possible in terms of mechanical laws, then we affirm that material products are not

[48] Allison cites A. C. Ewin and Peter McLaughlin among the defenders of this theory. (1992, p. 40, n.1).

[49] H. Allison, for example, holds that from this semantic flexibility stems an 'extended sense of mechanism' that admits the idea of the natural production of an intelligent causality, which can also be termed 'transcendental mechanism'. (2007, p. 28).

[50] Henry Allison comes up with this distinction and adds that this is precisely the sense which serves as the basic principle of the science of mechanics that Kant renders in the *Metaphysical Foundations of Natural Science* as 'every change in matter has an external cause.' (MF, 4:543).

ruled by mechanical laws and we fall prey to contradiction and an antinomy obtains. According to Kant, one way in which the perplexity can be removed is by revealing the realistic assumptions that lie at the bottom of the idea of an organised nature, that is unveiling the fact that when we judge natural purposes and agree with the statement of the irreducibility of the organic to mechanic principles, we are just appealing to principles of reason and thus developing a heuristic approach of the idea of nature. In contrast, if we take organic beings in themselves to be bearers of "matter endowed with life", we face a contradiction because 'the essential character of matter is lifelessness –*inertia*. (5:394).

In Kantian terms, our intellect is discursive because it is restricted to the mediation of concepts. This important distinction, he holds, is due to the fact that we have no immediate a priori insight into things, but rather, we rely on sensible intuitions to access objects. By the same token, we are in a way blind to the inner nature of the organic because we lack a category coincidental to the concept of life. Indeed, Kant declares: 'it is beyond our reason's grasp how this reconciliation of two wholly different kinds of causality is possible: the causality of nature in its universal lawfulness, with the causality of an idea that confines nature to a particular form for which nature itself contains no basis.' (5:422). According to Kant, only an intuitive intellect, that is, an intellect that could posit, not objectual presentations, but rather things in themselves would be in absolute possession of things' true nature. Attempting to have an insight into this *possession* would be quite difficult for us, considering that this intellect has no objects. Given that an intuitive understanding would have neither concepts nor sensibility, the modes of possibility and actuality are nullified as well. In this respect, Kant writes, 'all objects cognised by [this intellect] *are* (exist).' (5: 402). Only in this absolutely homogeneous mind, where the several divisions between objective and subjective, possible and actual, sensible or intelligible do not obtain, the access to the original basis of everything that is would be disclosed. This original basis is, Kant holds, the absolute unity of being, a ground existing with unconditioned necessity, where there is no longer any distinction between possibility and actuality. (Ibid). The world considered theoretically as it may be in itself is the supersensible: an immediate truth for a being that is totally in possession of itself. For us, this supersensible ground is merely a noumenon. By the same token, the striving for the unconditioned unity can only reproduced by reason's normative devices in order to bring all appearances together into one principle. Reason's desire is granted

by means of the concept of freedom. In other words, reason is able to think *as if* there was a supersensible cause of the world and a ground of experience where everything is connected as in an organic whole. Indeed, we can take hold of these ideas as long as we do not take them to be constitutive concepts. In this respect Kant writes,

> '[…] there is a realm that is unbounded, but that is also inaccessible to our entire cognitive power: the realm of the supersensible. In this realm we cannot find for ourselves a territory on which to set up a domain for theoretical cognition, whether for the concepts of the understanding or for those of reason. It is a realm that we must indeed occupy with ideas that will assist us in both the theoretical and the practical use of reason.' (CJ, 5:175).

But because practical reality cannot extend our theoretical cognition into the supersensible, Kant adds, the question of the intelligibility of the organic can only be resolved using the methodological avenues that reason provides to make the exploration of causes a much easier task. Reason seeks to integrate all appearances by means of the idea that underlies all this diversity of phenomena, namely, the idea of the world as a system. Kant thinks that despite the nominal contradiction between mechanism and teleology, the principle of reason that connects the unconditioned with the noumenal cause of the world brings a nominal unity where these two principles can be reconciled. Probably, the aim of the antinomy is to reinforce the idea that there is an imminent contradiction in our determination of things when we try to conceive them outside the bounds of the proper nature of our understanding. This might be an indication of Kant's belief that reality does not end where human cognition begins, and therefore that it cannot be reduced to constitutive concepts. Perhaps it is also an allusion to a higher order of being where supposedly all unification would actually obtain. This dimension underlying our cognitive limitations is the supersensible ground of existence, a completely indeterminate principle that cannot be used to determine nature, but Kant regards as a normative guideline, a subjective confirmation of the unity of experience and the unity of the world in one principle. (5:412, 418).

In spite of Kant's efforts, the tempting question about the origin of all organisation resurged in vital, young and bold thinkers guided by the impetus

instilled by the ideal of the human's own 'supersensible destination' as 'the final purpose of creation', an idea revived by Kant himself and shortly after picked up by the best minds of Germany to its ultimate consequences. (CJ, 5:435). But the aim now rests in assessing whether Schelling, in his pursuit of the ultimate unifying principle of nature, might not end up being a 'hypermetaphysician' going on conquests that 'recoil from everything which unhitches reason from its first principles and permits it to wander about in unbounded imaginings.' (*Anthrop*., 8:180).

Part II

Schelling's Metaphysics of Organic Nature as a Solution to the Antinomy of Mechanism and Teleology.

2.1. Schelling's Rejection of Kant's Dualism and the Route of the Unconditioned towards the Real Unification of Mechanism and Teleology.

Is there any grounds to speak of something like an antinomy of mechanism and teleology in Schelling's *Naturphilosophie*[51]? As I will argue in the following sections, the answer is no; at least not as an antinomical relation in the manner in which Kant presented the opposition. For as some authors suggest, the Kantian antinomies are grounded in the definitive exclusion of realism (Ameriks, 1992), that is, Kant certainly wants us to avoid turning '*mere representations* into things in themselves.' (A491/B519). But Schelling's treatment of mechanism and teleology does not even require the idea of the thing in-itself to make sense of it. Moreover, such a treatment implies a philosophy that reshapes the meaning of realism and idealism, mechanism and teleology on the basis of a primordial identity of subjectivity and objectivity from which the necessary union of opposites follows and which reveals for us that:

> 'There exists in us no distinction between the real and the ideal, between what is sensed and what is acted upon (*gehandelt*), between what we call (from the standpoint of consciousness) a priori and a posteriori, and finally, [...] between intuition and concept.' (AA, I/4: 153).

In this article from 1797, *Abhandlungen zur Erläuterung des Idealismus der Wissenschaftlehre*, Schelling's departing point does not arrive precisely at a realism,

[51] From now on I will use the German term *Naturphilosophie* to refer to Schelling's idea of a philosophy of nature, that is, an idea following a disposition to develop a program that attempted, as Stéphane Schmitt recounts, "a total interpenetration of philosophy and science." In this respect, the term "philosophy of nature" is too general and does not reflect the particular conception that Schelling wanted to instil in it. It is worth mentioning here Schmitt's note that the special character of the term *Naturphilosophie* has no equivalent in other languages and also that it denotes a certain scientific practice that was guided by a general vision of the world. (Friedrich Wilhelm Joseph von Schelling & Schmitt, 2007).

but rather a real-idealism, or as he called it elsewhere 'unconditioned empiricism' (SW I/4: 82), an empiricism extended to include unconditionedness in the empirical (AA I/7: 87). Consequently, rather than resorting to a formal solution to the opposition of mechanism and teleology, Schelling's system sets out from the unconditioned to find the real unity of all opposites, and thus, a solution to the contradiction between mechanism and teleology without propping it up either with the idea of things in themselves or by means of a transcendental realism; two alternatives that put the problem of purposiveness out of reach, the former by negating it as a property of natural products and placing it in a transcendent domain, the latter by negating its very existence.

But before we examine how Schelling carried out the real unification of the natural world, let us summon up why Kant's unification of mechanism and teleology is merely formal. We said that the antinomies played a fundamental role in Kant's transcendental idealism, for they represent (1) a conflict of laws of pure reason (A407/B434) that (2) proves realism is false—in other words, it is false that appearances are things in-themselves or unconditioned or mind-independent. The antinomy of teleological judgement (ATJ from now onwards) is for Kant no exception to this two determinations because when it arises, it reminds us that we can access the domain of purposiveness only through the mediation of our ideas rather than through an insight into the *real* source of ideal purposiveness—conceivably in the realm of things in themselves. For, as we mentioned before, when this antinomy occurs, we have a contradiction of maxims (KU 5: 386) rather than a contradiction in experience. (Bxxvii, n. 103). Indeed, for Kant logical contradictions are not a constitutive part of our experience of reality, and only arise when we try to think the unconditioned as an objective thing (Cf. Bxx); therefore, if one is faced with the emergence of incompatible concepts, say, that nature is both mechanical and teleological, the source must be found in a dissonance between the faculties of reason in their attempt to aim at the unconditioned by means of ideas.

Let us see the problem more closely. Ideas, maxims and regulative principles are mere formal and functional cognitions, products of reason's laws. (Cf. A339/B397). Such is the case with purposiveness, which conforms to the intentional structure of reason rather than to the objective concept of nature. So, in the particular case of ATJ, if reason, by means of regulative judgement, attempts to apply the principle of a coherent whole to appearances using the idea of purposiveness as a rule, i.e. that

natural things are teleological—implying as such that they are so in virtue of a final purpose supplied by a supreme intelligent cause (KU, 5:444)—then the antinomy arises because nature's concept only fits the constitutive principle of efficient causes, which implies no concept of ends whatsoever. In this case, as in all cases involving antinomies, the idea of a supreme intelligent cause, of which we have no concept at all and is therefore completely indeterminable, 'holds only as a condition of things in themselves [that] has been applied to appearances' (A506/B534), appearances which, Kant had shown, only accept the concept of mechanical laws as constitutive. In consequence, the conflict is found "within the legislation of reason" because it confuses regulative principles with constitutive ones. (KU 5: 387). Thus, from the standpoint of Kant's critical philosophy, if one is to think the existence of organic beings, then it should be evident that, since they are natural products, their purposiveness must be our idea projected upon them and not something that it is in themselves.

Within the Kantian framework, revealing the illusion behind the antinomies could make sense, but when we move on to Schelling's account of nature, the exposition of purposiveness and mechanism as something merely formal is a completely unsatisfactory solution which he considers to be built on a latent presupposition, namely, that there must be a limitation that separates us from what we want to understand, that is to say, from the realm of noumena where the principle of purposiveness seems to reside; and here seems to lie the difference between Kant's and Schelling's consideration of an outlook where natural purposes are conceived in a mechanically constitutive world. For according to Schelling, we do have the means to overcome the limitations that Kant set in us and ended up impeding the real determination of the principles of purposiveness and mechanism. What is more, Schelling's unification claim gets around the consequence of mechanism and purposiveness being constitutive principles, which place a real opposition in nature. But let us proceed with the exposition as to why Kant arrived at irreconcilable divisions.

In the present work we want to understand how mechanism and teleology can coexist in nature. In this respect, the Kantian account does not seem to help us out because when we look at living beings from the point of view of critical philosophy and then go about defining them *objectively*, that is, in terms physico-mathematical relations, something essential to them is always left out, and although the idea of

teleology is more fitted to explain their behaviour, Kant tells us that it is not really *constitutive to them* as existing beings and, for the same reason, neither is in us as concrete biological individuals.[52] So, again, we are confronted with an antithetical account that fails to unite the rule of purposiveness and the material body that is subjected to mechanical laws. Put it differently, purposiveness in nature is always a marginal and heuristic resource to the extent that it is only an ideal function *independent* from reality.

Furthermore, this fracture appears to be located at the very heart of the transcendental subject where the stark difference between sensation and the scope of the conceptual is necessary to make sense of the whole structure. As G. Di Giovanni states, Kant justified the necessity of two dimensions, one conceptual, where the object "might have already been declared possible on reflective standards", and another existential or non-reflective, where the object still has to be "judged with respect to its 'reality'." (Di Giovanni, 1979, p. 199). This differentiation secured the basis for the real and logical possibilities, but it still had to work out the link between them, namely, the famous transition (*der Übergang*) from transcendental to particular principles.[53] Certainly, a transition was not a problem when it came down to the a priori synthetic judgements—as in mathematics—but rather when we are concerned with the synthesis between concepts and existence. The fact that the relation between concept and existence is merely approximate, or never fully adequate, seems to demarcate two separate domains: the real and the ideal. The inability to determine the ideal in Kant's system was, in Schelling's eyes, an obstacle in the path of finding not only the aforementioned coincidence but also the constitutive principles that place organic beings as natural purposes in nature. As

[52] Interestingly, in *Ideen zu einer Philosophie der Natur* of 1797, Schelling notes that while the constitution of matter is explained in reference to the divisibility of space, sensed matter remains in the dark. For it is placed in an 'outside' that unexplainably reaches the mind in the form of "impressions", and the qualitative empirical properties of things, like sour and sweet are nothing more than mere words with no content: "However many intervening factors you insert between the effects on your nerves, brain, etc., and the idea of an external thing, you only deceive yourself; for the transition from the body to the soul, according to your own submissions, cannot occur continuously, but only by a leap, which you profess you would rather avoid." (AA I/5: 83; p. 20).

[53] Kant's last attempt to address this problem is compiled under the title *Opus postumum*, selections of a manuscript Kant had worked on over the last decade of his life but left incomplete and unpublished. (Kant, Förster, 2000). Recovered from a long history of concealment and misinterpretation, the *Opus postumum* finally saw the light through the work of E. Adickes, who heralded it as 'a keystone' of Kant's entire system. (Förster, 2000, p. 5).

Schelling remarks in one of his first treaties on *Naturphilosophie*, a work dated in 1978, *Von der Weltseele –Eine Hypothese der höhern Physik zur Erklärung des allgemeinen Organismus*:

> "It is an old illusion that organisation and life cannot be explained from natural principles. –If it were thus to be said: the *first* origins of organic nature are physically inscrutable, then this unproven assertion serves only to discourage investigators." (AA I/6: 67; trans. Hamilton, I., 2010, p. 61).

The consequences of leaving one side of the division, namely the noumena, undetermined is twofold: First, we have no way of finding the principle that unites all our cognition, and second, without a first principle we end up with two, so to speak, uncommunicated worlds. Let us examine the latter. On the one hand, we have the transcendental subject and his ideal functions, the categories and sensibility, which enclose and determine the totality of his experience, and on the other, a negative concept of the absolute, the unconditioned, which insofar as it marks the limit of our experience outstrips the former so to speak, *from without*, because the thing in-itself is *what is* unknowable beyond experience. Then, this non-existent, formless and non-categorizable domain ends up being considered as a logical antecedent of the unexplained origin of our ideas, which hovers, as it were, as *that which is before all form*. So, the thought of an isolated, empty domain of ideas that has a limited correspondence with reality presses us to wonder about the origin of ideality and reality, and also raises the question as to whether the lack of relation between them means that these domains stand alone as different totalities in their own sphere; something that seems utterly inconsistent for Schelling, because on the one hand, both coincide in us—"real and ideal (thought and object) are most intimately united in our nature" (AA I/5: 90, p. 27), and on the other, there cannot be two absolutes. With respect to this, Schelling writes:

> 'It is impossible that two absolutes stand side by side, if the not-I is posited as absolutely antecedent to the I, the I can be contrasted with it only as an absolute negation. Two absolutes cannot possibly be contained *as such* in any synthesis, whether it proceeds or

supplements them. For that reason, also, if the I is posited as antecedent to all not-I, the latter cannot be posited in any synthesis as absolute (as thing in itself.)" (AA I/2: 172, n. O).

Now, this criticism to Kant's philosophy is intimately correlated to the approach from which these results generally obtain, namely, that philosophy separates hypothetically what is originally united in order to explain it. (Cf. AA I/4: 83; p. 76). This means that the operation of differentiation takes place when we analyse something in reflection.[54] As a result, the decomposition we end up with is the breakdown of a thing rather than the thing itself plus its inherent connection, especially if the whole that philosophy is attempting to analyse is a self-organising totality that should comprise both the ideal and the real. In this particular case, when philosophy or science reflects on an object, for example, the whole of reason, it lays down, as it were, only *its visible* parts, say, understanding and sensibility, but since its active unity is not one of its parts—otherwise, it would be a part and not the self-organising whole—it is not *visible* to speculation, and when speculation cannot objectify what it is at stake, it needs to appeal to limiting concepts that make up for the unity it could not find. This is why in *Ideen zu einer Philosophie der Natur* of 1797, Schelling claims that what we thought was "an original divorce" is but an echo of the negative exercise of philosophy when it embarks itself in a kind of reflection that is an "endless dichotomizing" (AA I/5: 70, p. 11), one that "makes that separation between man and the world *permanent*, because it treats the latter as a *thing-in-itself*, which neither intuition nor negation, neither understanding nor reason, can reach." (AA I/5: 72).

This is what Schelling thought happened when Kant reflected on the whole of cognition, namely, that the Kantian analysis laid down the parts of a whole that resulted as something made up of parts, whereas its cohesive activity, which is impossible to grasp in reflection, was left undetermined. In a way, Kant himself realised the necessity of a principle that completes the unity of the understanding's conditioned cognition (A307/B364), and therefore makes the whole of cognition's unity possible. Likewise, he also regarded it as that which cannot itself be objectified,

[54] This type of analysis is clear in the *KrV*. One of its central parts, that which analyses the whole of cognition in abstraction from sensibility, is the transcendental analytic: "the dissection of our entire cognitions a priori in the elements of pure understanding (*Verstandeserkenntniss*)." (A64/B89)

something "which never makes up a member of the empirical synthesis." (A311/B367). Kant saw the unconditioned as such a logical principle, however, he saw it as a maxim, something that it is absolutely indeterminable and that reason merely finds *in the idea* to provide a subjective synthesis "with absolute completeness." (A409/B436).

For Schelling, however, it was clear that this division between the unconditioned and the understanding's conditioned cognition, and the subsequent analysis of the components of the mind, is a late product of "*the dismembering activities of reflection*" because reflection is not suited for grasping the prior and real unity of the world. As I pointed out above, such a division would imply that reason, with its faculties, rules and representations, is *transcended* by a domain of things in themselves which are devoid of spatiotemporal properties, a realm to which our experiential cognition cannot conform precisely because the forms of intuition are subject-dependent. Let us remember that in Kant's system, it is precisely the dimension of sensibility that obstructs any relation of the subject, who is finite, with the things in themselves, which are infinite and, in some sense, denote the dimension of the unconditioned. And whether the infinite has any reality or whether it is what is behind our regulative idea of the infinite is something that is beyond the human understanding, even if the unconditioned itself, in idea, demands reason to place it in the limiting concept of the things in themselves (Bxx).

Again, one can infer that there is a *beyond*, an *outside*, something that the subject cannot access but draws us to think of it as linked, so to speak, *externally* to our ideas and even to our own faculties. According to this picture, the unconditioned is only a negative concept, something that reason demands to itself in its limitations because it functions as a logical antecedent to the subject's cognitive limitations. So here we are talking about an irreconcilable distinction that has no hope of being united other than in a formal way. And if a philosopher attempts to find a real unity between them, when it is clear that one of the extremes is unreachable and the link will never be established, what happens then is that:

> "The analysis of the metaphysician has divided pure a priori cognition into two very heterogeneous elements, viz., such cognition of things as appearances, and of things in themselves. The *dialectic* recombines the two as to yield an agreement with reason's necessary idea of the unconditioned and finds that this agreement can never be obtained

except through that distinction, which is therefore a true one." (Bxxi, n. 87).

To be sure, Schelling sees some consistency in the results of Kant's critical philosophy, but only to the extent that they are yielded within the perspective of a finite and common understanding which dissects concepts in reflection in order to understand them:

> "Anyone maintaining the standpoint of mere consciousness must necessarily claim that our knowledge is partly ideal, partly real; such claims are likely to lead to a fantastic system that can never explain how the ideal could have become real and vice versa." (AA I/4: 90; p. 82).

Indeed, in *Ideen* Schelling emphasised that reflection, even with its negative function of dissection, is a fundamental step in the emergence and development of philosophy, but the mistake is to halt there and think that reflective or speculative thinking is the means and the end of philosophy. In his view, true philosophy has to aim at the unconditioned as immanent rather than transcendent to the world and to cognition:

> "Anyone who has attained a superior perspective will find that *originally* there is no difference between ideality and reality, and that consequently our knowledge is not *partly* but *completely* and *thoroughly* ideal and real *at once*." (Ibid.)

Precisely the consequence of reflection, the point of view of finite consciousness, is that two parallel domains seem to be inexplicably connected: on the one hand, the conditioned experience of sensible and conceptual synthesis and, on the other, the unconditioned itself, making possible the unity and organisation of all our cognitions. In the same line of reasoning, we could say that we in fact are in possession of the totality of our conditioned cognitions, but with this duality, Schelling points out, we are unable to know how these cognitions got into our minds in the first place. (Cf. AA I/5: 74; p. 12). Indeed, the inability to determine the

unconditioned and its relation to the conditioned derives into a dualism that is even more evident in the *Critique of Judgement* when Kant talks about a hypothetical supersensible unity of mechanism and teleology. Here Kant goes on to admit that a possible unity of these principles is not possible unless we go beyond our human reason 'and judge them as based in terms of the connection of final causes, on a supreme understanding, so that nothing is taken away from the teleological kind of explanation.' (KU, 5:414). Kant thus seems to be directing us to an 'original basis', the necessary idea of the supersensible, an 'unconditioned necessity where there is no longer any distinction between possibility and actuality' (CJ, 5:402). Despite the illuminative role of the latter "contemplation", as Kant himself put it in the §76 remark, the idea of an original ground or cause, or as Schelling says in his early essay of 1974 *Vom Ich als Prinzip der Philosophie*, "some ultimate point on which the whole depends", evolves into inferences that either "can go ad infinitum" —because the dependency between the conditioned and the false unconditioned makes the latter conditioned—or serve as principle for numerous uncommunicated worlds—for "in the chain of knowledge", as Schelling calls it, everything becomes a thing, an object, and one can infer that each parallel world has a first cause and mask it as an ultimate halt when it is clear that, again, the chain of dependency can go ad infinitum. (AA I/2: 88-89; pp. 72-73).

From this it follows that Kant limited himself to think of an architectonic unification of all cognition but failed to consolidate the unification of the architectonic. Schelling thus set out to find this unification and with it the transition from the unconditioned to the conditioned, and then from our concepts to existence. Between the years of 1794 and 1800, a period that saw the gestation and development of Schelling's *Naturphilosophie*, Schelling attacked Kant and his followers in various places, and one fundamental reason in this attack is present every time: Kant's dualisms and criticism's one-sidedness (those followers of Kant that made of criticism an established doctrine, prominently Fichte)[55], makes it unable to solve systematically the notorious conflicts (*Widerstreite*) of philosophy, starting from the antagonism of

[55] In the *Abhandlung*, Schelling identifies the antithesis he thinks is always presupposed by the supporters of critical philosophy: "The *form* [*Form*] of our knowledge originates within *ourselves* whereas its matter is given to us *from the outside*." (AA I/4: 82; p. 76). The key issue that Schelling uncovers in this statement is precisely the one-sidedness that follows from assuming the position of either extreme of the antithesis, namely, form or matter. In the case of critical philosophy, the idea of matter coming "from the outside" has only, if anything, an abstract connection with objectivity. In this essay, Schelling construes critical philosophy as a system of thought that exhibits an *object* that possesses no intrinsic reality. (AA I/4: 76).

subjectivity and objectivity, and then moving on to the real and the ideal, mind and matter, teleology and mechanism, among others. (Cf. SW I/1: 303, I/2: 293, I/6: 5; AA I/5: 108, p. 43). To a large extent, therein lies the crux of Schelling's criticism of Kantian philosophy. In Schelling's own words:

> "I am well aware that Kant's theoretical philosophy leaves the supersensible principle, in accordance with which all representations are to be constructed, completely undetermined. Elsewhere he polemically opposes materialism with this hypothetical claim: that it might well be that the intelligible substrate of matter and thinking were the same. [...] In developing the system of his theoretical philosophy, Kant also leaves unexplained all that could be explained only through this primordial, inner principle of all representations (which he nowhere attempts to determine). Of this I merely wish to provide one instance." (AA I/4: 134; p. 107).

However, criticism's reflection, Schelling points out, is not the end of philosophy but only a means (AA I/4: 70; p. 11), the doorstep before reaching a higher form of knowledge, one that is found in the dominion of freedom where the whole of being is presented in its original unity. When one, contrarily, halts at the level of reflection, the outcome is mere idealistic speculation, a method that Schelling accused Kant's followers, from Reinhold, Beck to Fichte—"the Kantians", of exploiting and with it bringing about endless divisions that produce chimeras, dead and abstract concepts and bottomless abysses. (Cf. AA I/4:69,71; 5:72, n. 5). Schelling certainly recognises Kant's analytic ability, but charges him with failing to overcome the fracture towards a point of a real unity of the whole system of knowledge:

> "He had to dissect human knowledge and concepts into their individual components, such was his purpose, whereas he left it to his heirs to delineate with one stroke the great, remarkable whole of our nature that is composed of these parts as it has always existed and always will exist." (AA I/4: 78; p. 74).

In view of this, Schelling thought that we still needed to move forward and beyond mere reflection, to get to understand that it is possible to meet the original self-organising productivity that keeps difference in its necessary unity. We thus need a special activity to be in identity with the self-organising whole in its original unity and from that *locus* make sense of it. In other words, Schelling thought that the unconditioned needs not be unreachable, because, as an original productivity, it is productive in ourselves, living individuals who primordially act on purposes *in* the world, and since this productivity is active in us, then it is possible to determine it:

> 'Soon it was discovered that matter was the ultimate substratum of all our explanations [...]. Something else, however, was noticed in things, something that matter itself was not able to illuminate [*erklären*], something one feels obliged to explain (e.g. that appearances succeed one another with regularity, that there is purposiveness in individual things, that the entire system of the external world [*Außenwelt*] coheres through a universal nexus according to means and causes.).' (AA I/4: 83; p. 77).

In compass with this idea of a universal nexus, we move into the next section, where I will attempt to show that Schelling pushes for a philosophy of nature that sees the opposition of mechanism and purposiveness as something reconcilable in the face of the absolute unity of the totality of nature, for mechanism is a derivative approach that results from the divisions established by the analyses of the understanding. More original, thus, is both the higher stand of intellectual intuition and its direct and immediate access to the unconditioned, from which the whole organisation of nature appears as constitutively purposive. Now, within this absolute totality, the *primordial opposition* of subject and object is overcome by means of the identity of the real and the ideal, an identity that is possible because no third *external, limiting and transcendent thing* surreptitiously supplants one of the terms of the opposition between the real and the ideal. We may even advance here the idea that the original formation of the conceptual domain is unified with the original formation of the natural world. The activity that keeps cognition with all its parts in a living cohesion is a productivity that makes possible the nexus of things and cognitions as two dimensions of the same totality.

2.2. Schelling's Epistemic Shift to Intellectual Intuition and the Determination of Nature as an Original Productivity.

To be sure, Schelling and the other main figures of German Idealism were convinced that Kant's critical programme achieved the most significant progress in philosophy in the modern times, and under this belief they considered themselves to be Kantians.[56] But despite Schelling's affiliations to Kantian idealism, in his early work he went on to make persuasive metaphysical claims about the possibility of the determination of the true nature of God, freedom and the origin of all reality, a metaphysical perspective that seemed to be informed by his admiration and dedicated study of Plato and Spinoza.[57] Indeed, it is commonly agreed that Spinoza, like Kant, was a fundamental figure for the uprising of German Idealism. In the recent trends of scholarship there is a growing consensus that Spinoza played a decisive role in Schelling's philosophical development, especially in his earliest philosophical writings.[58] This influence strongly wielded the shape of Schelling's metaphysical and speculative interests, which, as it is generally held, were invested in delivering, at least in his early reflections, the most indubitable proof of the possibility of access to the absolute principle of knowledge and reality, which he, in his earliest philosophy,

[56] A very cogent synopsis of the divergences and connexions between the projects of Fichte, Schelling and Hegel and their critical assessments of Kant's transcendental idealism is in R-Peter Hostmann, *The Early Philosophy of Fichte and Schelling*, (Horstmann, 2000). In his paper, Horstmann holds that Hölderlin, Hegel and Schelling, while still students at the Tübingen Stift became interested in Kantian philosophy in their attempt to give religion a rational foundation. (Ibid, p. 128).

[57] B. Matthews in his book *Schelling's Organic Form of Philosophy* has a detailed discussion of the influence of Plato's philosophy in Schelling's early treatises. Especially relevant is Matthews' analysis of Schelling's *Timaeus Commentary*, where Schelling reveals his early attempts to integrate the natural world and the realm of the divine through the application of the concept of a pure and original form. Moreover, Matthews makes out an interesting case for Schelling's method of playing Kant against Plato and Plato against Kant to account for the type of unified system that the young philosopher was looking for. (Matthews, 2011, pp. 103-135.)

[58] As a matter of fact, there is a variety of suggestions as what figures had the most impact in Schelling's philosophy. Scholars name, among others, Hölderlin, Jacobi, Reinhold and Fichte. For the purposes of this work I am only tracking the influence that Kant had on specific points of Schelling's *Naturphilosophie*, and rather superficially, Schelling's borrowing from Spinoza and Plato. Scholarly studies of Kant's and Plato's influence on Schelling are respectively in E. Watkins, *The Early Schelling on the Unconditioned* (Oštarić, 2014), where he develops Schelling's concept of the unconditioned in contrast to Kant's, and in *The Legacy of Neoplatonism in Schelling's Work* (Beierwaltes, 2002). For a wider list of influences over Schelling's philosophical work, see *Existenz denken: Schellings Philosophie von ihren Anfängen bis zum Spätwerk*. (Schmied-Kowarzik, 2016).

thought was the unconditional and most original positing of the pure I.[59] The parallelisms between the former's concept of substance and the latter's concept of the absolute have led some commentators to claim that Schelling's conception of the I is only a mere substitute for Spinoza's idea of substance.[60] This of course is highly disputable if, after a close reading of *Vom Ich*, one notes that the superior principle Schelling was after cannot be a substantial all-encompassing *thing*, which remains a conditioned element in the chain of knowledge, but necessarily "the direct opposite of all that falls in the sphere of the conditional, that is, it must be not only unconditional but altogether *unconditionable* (*unbedingbar*)." (AA I/2: 87; p. 72).

This is particularly explicit in Schelling's essay *Vom Ich als Prinzip der Philosophie*, published in 1795, when he was only twenty years old. This work attempts to deliver an account of the determination of the absolute principle of philosophy, revealing the impact that Spinoza had on Schelling's ambition to provide an ontological unity to contrasting principles: "Spinoza, too, wanted mechanism and finality of causes [*Teleologie*] to be thought of, in the absolute principle, as contained in the same unity." (Cf. AA I/2: 175, n R; p. 127, n.**; also, AA I/5: 76; p. 15). Now, it is worth mentioning that, despite Schelling's Spinozist commitments to achieving the unification of all reality in this early work, he emphatically rejected Spinoza's objectivistic conception of substance due to what Schelling thought was Spinoza's mistaken start. In other words, Schelling charged Spinoza with being in allegiance to the thing in-itself in his positing of the absolute substance, mainly because Spinoza's determination of the absolute remained in the sphere of the conditioned. In Schelling's view, Spinoza got closer to the unconditioned when he delivered his concept of substantiality, but ultimately, the latter not only could not discover the

[59] Most experts now agree that Schelling was wrongly considered disciple of Fichte and they stress the fact that Schelling developed his own ideas on the I very early in his career. One of the proofs of his original conception of the absolute I is in his *Timeaeus Commentary* when he was not yet exposed to Fichte's philosophy. In this regard, Dale E. Snow attributes the similarities in Fichte's and Schelling's early writings 'to their shared fascination with Kant's ambiguous legacy'. Similarly, Snow argues that while Fichte's concern with the first principle was a response to Reinhold's principle of consciousness, Schelling took his inspiration from issues raised by the Spinoza renaissance of the 1790s. (Snow, 1996, p. 45).

[60] D. Nassar offers a list of authors who consider that Schelling's *I* was only a '"place-holder" for Spinoza's substance' in her paper *Spinoza in Schelling's Early Conception of Intellectual Intuition*. She agrees with some of them that Schelling relies on Fichtean terminology to put forward a conception of the I and of freedom more similar to Spinoza's idea of substance. However, she notes it would be a mistake to see it as a plain substitution, for although both concepts share similar properties, the I of Schelling is fundamentally excluded from the sphere of the conditioned and therefore is not a determinate being like Spinoza's substance. (Nassar, 2012, p. 138, esp. n. 6, in Eckart and Melamed).

unconditioned, he just provided a "derivative and transferred concept of a substantiality of appearances [that] was merely an abstract concept *[abstrahierten Begriff*]." (AA I/2: 121; p. 94).[61] Of necessity, Schelling contended, philosophy must begin with the unconditioned, that is, an original something that is: "a pure, immutable archbeing [*Ursein*], a basis for everything that comes about and passes away, something that had to exist by itself, in which and through which everything in existence had to attain the unity of existence." (Ibid.) According to this, a highest principle—already foreseen, although imperfectly, by Spinoza—is the rationale under which purposiveness and mechanism coincide in its absolute being, i.e., as contained in the same unity. (AA I/2: 175; p. 126-7). To be sure, Schelling argued for the attainment of a first principle that was truly absolute and unconditioned, and in contrast to Kant's idea of this concept, 'neither a merely formal principle, nor an idea (*Idee*), nor an object (*Object*), but a pure I determined by intellectual intuition as absolute reality.' (AA I/2:136, p. 104). In short, *Vom Ich* sought to emphasise the non-substantiality of the first principle as an absolutely unconditional and immanent self, in a word, a spontaneous activity that makes possible subjectivity and objectivity and their necessary and immanent relation; from this it follows that, once in possession of this postulate, we no longer need the idea of a transcendent other inscribed in the so-called *das Übersinnliche*.[62]

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[61] Accordingly, Schelling admits that Spinoza conceived, up to that point, the archconcept [*Urbegriff*] in its utmost purity, that is, as that which makes existence possible, and transcends mutable or caused things. But when Spinoza placed the first principle as a substantiality within the chain of appearances, he demoted it to the level of empirical concepts of experience. The literal abstraction of the unconditioned and its placement into the sphere of nature, or the not-I as Schelling points out in §4, led Spinoza to the reification of the system's absolute: "[dogmatism] presupposes an unconditional thing (ein unbedingtes Ding), that is, a thing that is not a thing [and] that which is I should become not-I in the case of Spinoza." (AA I/2: 94; p. 77).

[62] I consider *Vom Ich* to be relevant for our discussion for two reasons. First, because here Schelling introduces a determination of the unconditioned, an essential concept for the outlining of his *Naturphilosophie*. Second, in this work Schelling also provides the logic under which those a priori principles required for the determination of the system of nature can also be deduced and determined in its relation to the unconditioned. Subsequently, however, I will move a bit further and make reference to the *Abhandlung zur Erläuterung des Idealismus der Wissenschaftlehre* to complement the presentation of the logical structure of the unconditioned in intellectual intuition. More specifically, I will attempt an interpretation of Schelling's construction of the principles of mechanism and teleology from the unconditioned. That is, I believe that by using the immanent principle of identity, the form of the unconditioned, we can see how Schelling justifies the inclusion of concepts of reason, specifically the concept of purposiveness, as concepts of nature. It will be clearer then that this new scheme of the concepts of nature reveals the new place that the principles of mechanism and teleology will take.

By aiming at the discovery of the unconditioned, Schelling not only moved away from Spinoza, but also from Critical philosophy. And albeit Schelling believed, at least in the beginning, that transcendental idealism was heading in the right direction of attempting to bring into unity the opposites of philosophy, his overall view was that Kant only achieved a methodological systematisation that prolonged the already established schisms of philosophy through his heterogeneous conception of the mind and his postulation of the thing in itself.[63] To begin with, Schelling attributed Kant the miscalculation of setting a *fact* (*Thatsache*), a phenomenon, as the start of the system, which left it confined to the sphere of the conditioned. (AA I/2: 95, 96; p. 78, 79). Indeed, Schelling thought that the mistake of Critical philosophy was again its wrong start, viz. from facts, and promoted by a wrong approach, namely, reflection. For the point of view of reflection only gives facts, and from facts the system in its fullest extension cannot be achieved, and early on Schelling realised that this achievement is only possible if philosophy ascended to the realm of the thing in-itself, the unconditioned.[64] This is especially evident when one pays close attention to Schelling's later texts on *Naturphilosophie*, where the absolute totality presents itself as a productive whole, an ongoing activity that can only be intuited as the self-positing of acts, the highest one being the absolute self-positing of the unconditioned, from which the positing of all reality results, a positing that is contrary to the mere observation of given facts. (Cf. AA I/2: 86, 150; pp. 72, 113). The reason why Kant could not ascend to the true first principle of philosophy, *die ursprüngliche Einheit*, Schelling notes, is that he restricted his search for the original synthesis whereby being is an absolute whole, to a given fact, namely, a synthesis within the cognitive faculty. (AA I/3: 60; p. 164). According to Schelling, upon deducing the categories of understanding and the determinations of pure thinking from the fact of the *I think*, the result carried more the essence of reflection than the essence of the pure activity that brings about the whole system of philosophy: intellectual intuition. In Schelling's perspective, if the system manifests only a partial

[63] Nonetheless, Schelling does credit Kant for being 'the first who established the absolute I as the ultimate substrate of all being and all identity'; however, he goes on, 'he established it nowhere directly but at least everywhere indirectly.' (AA I/2: 167, p. 120).

[64] For example, in his early essay, *Über die Möglichkeit einer Form der Philosophie überhaupt*, Schelling is already reproaching Kant that he could not deduce the particular forms of thinking from the original unity because of the point of view of departure Kant took. (Cf. AA I/2: 292; p. 51)

account of the fundamentals of all knowledge, that is, solely either its objective or its subjective aspect, the system as a whole remains a contested issue.[65]

Additionally, to make the matter more abstruse, Kant's followers, specifically Fichte, in an attempt make the *I think* the principle of philosophy—positing it absolutely—they cancelled the simultaneous positing of its counterpart, the not-I, or what can be otherwise considered as nature. And when the not-I is 'cancelled in its very origin', Schelling goes on, it can only be 'posited as a mere negation', viz., the thing in itself. (AA I/2: 96, p. 79).[66] Now, since Kant's system failed to come to terms with the source of the idea and reality itself, he ended up construing the first principle as a set of limiting *entia rationis*, the so-called ideas of reason. Upon this development, Schelling, drawn by what he believed was the most compelling evidence of the incompleteness of Kant's attempt, set out to restore philosophy's systematic dignity by providing a purer, absolute first principle. This absolute start seemed to guarantee the deduction not only of the possibility of the system of reason, but more audaciously, of the very existence of the whole of nature. The original principle of all reality, Schelling states in *Vom Ich*, is that 'in which and through which everything that is reaches existence (*Daseyn*), everything that is being thought reaches reality (*Realität*), and thought itself reaches the form of unity and immutability (*Form der Einheit und Unwandelbarkeit*).' (AA I/2:85, p. 71).

Schelling's aim to find the ultimate unifying principle in order to present consciousness and nature in their own just and right dimension evinces from his frequent references to Spinoza, commending the latter's attempts to grasp the unifying principle behind mind and matter, thought and extension.[67] (AA I/5:76, p.

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[65] This argument is in line with Schelling's criticism of the opposition of systems in his *Letters on Dogmatism and Criticism*, where he contends that positing either one of the extremes of the opposition as absolute, the subject or the object, one descends on the conditioned already with a partial view: all reality as either absolutely objective or absolutely subjective; the former is the dogmatic view, the latter is false criticism. The only solution to overcome this absolute opposition is the absolute unity of the unconditioned: "If we had had to deal with the absolute alone, the strife of different systems would never have arisen. Only as we come forth from the absolute does opposition to it originate, and only through this *original* opposition in the human does any opposition between philosophers originate." (*Briefe*, SW I/I: 293, p. 163).

[66] In this respect, Matthews rightly notes: "Initiated by Descartes, formulated by Kant, and perfected by Fichte, the subjective idealism of modernity denies the objective reality and intrinsic value of nature, since as "a product of the I" the world of nature becomes nothing but a '*Gedankending*'." (Matthews, 2011). Along the same lines, Schmied-Kowarzik writes: "Es gibt für Fichte keine wirkliche Natur jenseits der wissenschaftlichen Naturerkenntnis, so bemerkt er in *Über den Begriff* […] „und daß es nicht sowohl Gesetze für die von uns unabhängige Natur, als Gesetze für uns selbst sind, wie wir die Natur zu beobachten haben." (2016, p. 57).

[67] According to F. Beiser, in his erudite study on German philosophy in the eighteenth century, *The Fate of Reason*, Spinozism appealed to the early free-thinkers of the *Aufklärung* in the late

15). But perhaps he also felt inspired by Kant's suggestive claim in the *Critique of Judgement* where the latter admits that there is no way in which the principles of teleology and mechanism could be fused in a unity unless we go beyond our human reason "and judge them as based in terms of the connection of final causes, on a supreme understanding." (KU, 5: 414). However, the unconditioned will no longer be placed in a hypothetical supersensible domain, but as an immanent and necessary condition for the possibility of a philosophy of nature or *Naturphilosophie*.[68] In words of Robert Richards, Schelling was attempting to move beyond Kant's set of categories and their determinative power, in order to extend this determinative power to the domain of the ideas, which for Schelling had to be from now on considered 'the free, if hidden, decisions of the absolute ego.' (2002, p. 136).

Let us see more closely now how Schelling approaches the concept of the unconditioned. In §2 of *Vom Ich* Schelling notes, in consonance with his criticism of Spinoza's substance, that: "we must not look for [the unconditioned] in the sphere of objects at all, not even within the sphere of that subject which is also determinable as an object." (AA I/2: 89; p. 74). Strictly speaking, nothing that is subject to conditions can be the first principle of philosophy, hence of all reality, because this pure and absolute spontaneity cannot be reified without losing it forever. Since the unconditioned cannot be made an object or be posited as an object, it follows that it cannot be subject to proofs; however, it is possible to infer it, as Kant did, as that which is required for the positing of a totality of conditions of experience and, in this process, represent it, although imperfectly and always necessarily losing its essence. (Cf. AA I/3: 63; p. 166). Again, in §2 of the same work, Schelling tried to represent it by drawing on its etymological roots in the German language. Here Schelling observes that the activity of conditioning, *Bedingen*, by which anything becomes a thing, *Ding,* belongs to the sphere of the conditioned, *Bedingt*; yet, he adds, nothing that is a thing

seventeenth and early eighteenth centuries in Germany, precisely because of his account on the direct relationship with God. They learnt from Spinoza that the only true and sure means of access to God was 'our own immediate experience, our own direct awareness of God within ourselves.' (Beiser, 1987, pp. 51-52). This unorthodox via of access thus set aside the mediation of human or divine books. They realised from Spinoza's third kind of knowledge that 'The God of pantheism is within me and everyone else, so that, in order to experience him, it is necessary for me to reflect upon myself.' (Ibid, p. 52). Schelling must have taken up the same sense from this tradition.

[68] Nassar notes that for Schelling the fundamental question of *Naturphilosophie* was 'the question of finitude, or of the emergence of objects.' She informs us that in later texts this problem was put in terms of productivity and movement (*natura naturans*) and apparently permanent nature (*natura naturata*), the latter being the aim of *Naturphilosophie*. (2014, p. 128).

can posit itself as a thing, for the positing of the unconditioned as itself—that is, not as an object—implies "what has not been turned into a thing, and cannot at all become a thing", but something unconditional and unconditioned, *Unbedingt*. (AA I/2: 89, p. 74). So, we infer that there must be an absolute cause that necessarily transcends the chain of conditions hence not being a thing at all. Certainly, this play of words serves as an elusive representation of the unconditioned, and although helpful, it cannot be a positive determination of it:

> "Because this principle is *everywhere* present, it is nowhere; and because it is everything, it cannot be anything determinate or particular; language has no appropriate term for it, and the earliest philosophies [...] have handed down to us an idea of it only in a figurative guise." (AA I/6: 67; p. 67).

However, Schelling sought such a determination in the only possible way: in intellectual intuition. Indeed, according to this approach, the scope of the understanding is not absolutely constrictive to the possibilities of human mind because the latter can perform the special free act of intellectual intuition insofar as it participates of absolute freedom, which through absolute causality produced the mind as an I. In agreement with this Schelling says: "The empirical I exists only with and through objects. But objects alone can never produce an *I*. The empirical I owes the fact that it is empirical to objects, but it owes the fact that it is an I at all to a higher causality." (AA I/2: 168; p. 123). It follows then that in order to determine the unconditioned one needs to determine intellectual intuition and the way in which the former is eternally, immutably and unconditionally in identity with the latter. But now the question arises: How does Schelling determine the unconditioned? In an excerpt from §9 of *Vom Ich*, Schelling provides a very important cautionary note that the unconditioned, although found via the mind, it is not itself a product of, or a term involved in, self-consciousness:

> "I call subject that which is determinable only by contrast with but also in relation to a previously posited object. Object is that which is determinable only in contrast with but also in relation to a subject. Thus, in the first place, the object as such cannot be unconditional

at all, because it necessarily presupposes a subject which determines the object's existence by going beyond the sphere of merely thinking the object." (AA I/2: 88; p. 74).[69]

Once it is evident that the unconditioned can be neither objectified nor reified, we can conclude with Schelling that "*the I is determined for itself as a mere I in intellectual intuition*." (AA I/2: 106; p. 85). More importantly, Schelling notes that in intellectual intuition the unconditioned posits itself immediately as being in identity to its thinking: "And *it is not at all thinkable except insofar as it thinks itself, that is, insofar it is* (AA I/2:91, p. 75); that is, it posits itself in accordance to its principle of absolute identity, therefore relying on no sort of dependency; in consequence, the absolute I, in being in absolute identity with itself, cannot but be equal to its absolute freedom: "The I is determined only by its freedom, hence everything we say of the pure I must be determined by its freedom." (Ibid.) Correspondingly, intellectual intuition is this immediate and absolutely free spontaneity in which the absolute I posits itself as equal to itself, rather than in a relation to another, and because no conditional relativity of time or space touches this sphere, the unconditioned remains unconditioned and, thus posited, it is positively determined. Furthermore, this absolute *being* in absolute identity with itself will be exhibited by Schelling in posterior works precisely as an eternal and immutable spontaneity that manifests itself in its continuing productivity. Consequently, the "simple unity" that pertains to the unity in identity of the unconditioned, i.e. the simple positing of itself, falls out of self-consciousness' scope.

Up to this point, Schelling and Kant seem to agree. For one reason, Schelling too considered that the unconditioned cannot be represented by common understanding, even if the latter pursues the determination of a totalities. To illustrate the understanding's limitations, let us place it in the context of the concept of generality. A generality is an imperfect totality, for it implies the feature of

[69]Remarkably, Kant addressed the same consequence in thinking of the possibility of an intuitive understanding. In a note of the introduction to the Critique of Pure reason, Kant says: ", where he says: "the conception of *I am*, which accompanies all my judgements and acts of understanding" is the intellectual consciousness of my existence "but the inner intuition in which alone my existence can be determined is sensible intuition and is tied to the condition of time." (Bxli, n. 144). Accordingly, consciousness of my existence is therefore empirical and "can be determined only by reference to something linked with my existence that is *outside* me." Moreover, this consciousness is in time and it is linked "by way of identity, with the consciousness of a relation to something outside me." (Bxl).

inclusiveness, but it never reaches the totality of the intended class of things. Moreover, this kind of *totality* implies the synthesis of an existing whole, which can only be understood by means of the individual things it entails, or it depends on its ability to comprise individual things. To use Schelling's own words: "*Allgemeinheit* ist empirische"; that is to say, generality designates always a whole that is conditioned by time hence is necessarily grasped in experience. For this whole is "a unity produced by multiplicity [...]. Multiplicity is posited because one item is posited several times and not because it is simply posited." (AA I/2: 150; p. 113, 112). According to this, one can relate the concept of generality to the understanding, not only in virtue of its ability to realise the categories, but also in its capacity to exemplify them in synthetic judgements—via the understanding's ability to instantiate concepts in sensibility; in brief, outside of its relation to sensibility, understanding cannot operate. And to the extent that the unconditioned is nothing that can be conditioned by space and time, and therefore nothing that can be divided and individuated, the understanding always misses it and the kind of totality sought in the unconditioned cannot be circumscribed by the category of generality. Ultimately, if a claim of the inaccessibility of the unconditioned arises, it is, in Schelling's view, because we have been seeking it in the wrong places.[70]

For another reason, Schelling's *das Unbedingte* is somewhat following Kant's own concept of the *unconditioned* with the exception noted above: Kant expressly denied that the human intellect can actually attain intellectual intuition or "*intuitus originarus*", a kind of intuition that could be thought of as in the original being. (Cf. Bxl, n. 144; B72; B139)—the definitory character of which Schelling also takes from Kant. To recall some passages of the *Critique of Pure Reason*, the unconditioned can be more or less described as the thought of a set of conditions that is conditioned by something that is itself not a condition. Originally a reason's concept, Kant formulated the unconditioned as that which draws us to pursue "the *totality of conditions* for a given conditioned" (A322/B379), but insofar as it itself is not a part of

[70] The main objection to this interpretation results from the epistemological problem that arises with the intent to access an unconditioned, that is, an absolute, non-finite substance, identical to itself, outside of time, and in which matter and mind are indifferent, something that in its indeterminacy is simply unconceivable for a finite mind. This problem is also emphasised by D. E. Snow in his study *Schelling and the End of Idealism*, where he indicates that in Schelling's exposition of intellectual intuition, the connexion between the empirical self and the absolute self is at stake because the indeterminateness of the absolute restricts its objectification in empirical consciousness, thus, the attempt 'to establish the absolute self from the viewpoint of consciousness is doomed to failure.' (Snow, 1996, p. 50).

the totality of conditions and springs up with the spontaneity of our thinking: "if concepts of reason contain the unconditioned, then they concern something to which all experience is subject but which itself is never an object of experience." (A311/B368). Kant further established that since the unconditioned never makes up a member of the empirical synthesis, *a fortiori*, it cannot be determined.

Schelling, on the other hand, justified intellectual intuition as an aspect of the human mind. A cogent, albeit indirect, proof of the intellection of the unconditioned is given by Schelling two years later in the *Abhandlungen zur Erläuterung des Idealismus der Wissenschaftslehre*, written in the *Philosophisches Journal* in 1797, as a contribution to the ongoing survey of the recent history of philosophy at that time[71] (T. Pfau, in Schelling, 1994, p. 61):

> "If all our knowledge remained strictly *empirical*, we could never transcend the stage of mere intuition. *Primordially*, however, our knowledge is strictly empirical. That we may distinguish the *object* of intuition from the *latter* [and] the product from the *activity* whereby it originates implies, therefore, a *subsequent* activity of the spirit." (AA I/4: 390)

In other words, if we can posit our understanding in its determinative relation to the contents of sensibility, and we can move up further, in an exercise of meta-thinking, in order to posit the possibility of such a relation as conditioned itself by a higher unifying principle—whereby the object is identical to the nexus of knowledge—we realise, on the one hand, that the difference between the object and the empirical subject necessitates a third term that makes possible their bond, and on the other, that the unifying principle must always be present as the perpetual productive intuition whereby what was different in understanding's reflective analysis is actually identical in intellectual intuition: the object here is no longer *an object* but "the product of the original spontaneous activity of the spirit." (AA I/4: ; p.

[71]As a matter of fact, this text is directed chiefly to "the Kantians" and what Schelling thought was an extreme form of idealism that went beyond the mere limiting function of the idea of a thing in-itself to propose a clear-cut reification of it, that is, "things in addition to the actual things that are also already supposed to exist, to affect us always and to lend substance to our representations." (AA I/4: 75; p.72). To be sure, Kant did present some arguments that can admit a reading of something *additional*, or something that underlies the matter of sensibility (A49/B66, A30/B45, B428, A674/B702), but it is not possible for me to delve into this problem here. For a very interesting discussion of the problem of the thing in-itself, see Westphal, 1968.

357). In a nutshell, when we ascend to the domain of intellectual intuition, we access the products of the *Unbedingte*'s productivity, that is the ideas that are identical to the real structures of nature. According to the *Einleitung zu seinem Entwurf eines Systems der Naturphilosophie*, a text from 1799 that was meant to present the concept of speculative physics, this spontaneous activity of the unconditioned is described as a "productive intelligence" with a twofold characterisation, the real activity identical to the ideal activity, such that "the most complete fusion of the ideal and the real [...] is perceived." (AA I/8: 29; p. 193). From this it follows that the purely subjective idea of time is identical to reality's form of time itself, or the idea of purposiveness is the real purposiveness of nature; the former characterisation gives rise to transcendental philosophy, following its "tendency" of "bring[ing] back everywhere the real to the ideal" (Ibid.), and the latter is the task of *Naturphilosophie*, that is "Nature thought as independent and real [...] *therefore, conversely, the ideal must arise out of the real and admit an explanation from it*." (Ibid, I/8: 30; p. 194). Hence one can determine that the unconditioned constitutes the highest principle from which one can perform a true deduction of, on the one hand, all forms of reason, and on the other, all the categories of nature, both corresponding to one another. This outlook results in a more comprehensive conceptual structure that expands its constitutive capacity to those concepts that in Kant's system were merely regulative; and this is achieved by means of a derivation of the identity between subjectivity and objectivity from the absolute self-positing of the absolute. It is only when one reflects on these deduced principles as unfolded in the domain of the conditioned, that they maintain their difference in opposition. Going back to the *Abhandlung*, Schelling here notes the difference between our knowledge when it is tied to the empirical, and thus we have a stark opposition between the ideal and the real, and an originally productive or intuitive knowledge where reality and ideality are simultaneous:

> "There is in our knowledge nothing immediate (and hence nothing certain), unless the representation is simultaneously both, the original and the copy, and unless our knowledge is original and exists by virtue of a simultaneous ideality and reality. The object is nothing but our own proper synthesis, and the spirit does not intuit anything in it but its own product." (AA I/4: 104; p. 87).

Thus, contrary to Kant, Schelling concludes that we can have intellectual intuition of the absolute I as a self-positing act: 'there is an I only by its act of positing all reality'. (AA I/2:150, p. 113). And what in Kant's perspective was only the normative concept of the transcendental ideal, in Schelling turned to be 'the ultimate principle of being and thinking which is one and the same.' (AA I/2:86, p. 72). This discovered access to the unconditioned presented to Schelling new challenges that would impact strongly the ontological relation of the unconditioned with the world of nature in his *Naturphilosophie*; for if it is true that there is such a thing as an intellectual intuition, which gives us the whole in identity, that is, the real and the ideal as two aspects of the same totality, the principle of purposiveness, being a characteristic feature of reason, must be, in consequence, also a constitutive feature of reality, since the ideal and the real are identical. With this, it is clear that Schelling is going beyond Kant, changing the status of purposiveness with his proposed epistemic shift, mainly because from the position of totality, purposiveness is not only a possibility restricted to the human mind's architecture, but genuinely a validly objective fact too; and now it remains to be seen what the real role of the principle of mechanism is according to this presentation of totality.

That the whole of nature is purposive is a tenet that was already in development when Schelling was only 19 years old. Still at the Tübinger Stift, Schelling composed a commentary to Plato's *Timaeus*, which he seemingly wrote between the months of January and May of 1794 (Schmied-Kowarzik, 2016). First, from the *Kommentar* we can pick up the unmistakable influence that Plato exerted on Schelling's philosophy. Second, it is proof that Schelling showed an early conviction that the ideas in the mind are fully adequate to the ideal forms that constitute the world. In one passage he says:

> "These forms are not only forms of our understanding but rather universal concepts of the world, through which the existence of the whole world must be rendered explicable… [they] are not only present in the individual objects that appear to us, rather, they are present in the universe as a whole, such that these concepts must be universal world-concepts." (AA II/5: 185; p. 233).

In this commentary, Schelling revealed the strong influence that Kant's and Plato's philosophies exerted on him.[72] And so, by executing a sort of synthesis between these two systems, whereby Platonic ideas have the status of a priori constitutive concepts, it was clear to him that there was also a parallelism between nature and the world of ideas, between the unbounded, empirical generality (ἄπειρον, *Allgemeine*) and that which is determinate and has form (το πέρας, *die Einheit*). (Cf. AA II/8: 161, 166; p. 215, 219). In this interpretation, the full access to the idea, το πέρας, which will be interpreted later as the unconditioned, "is a gift from the gods to humans." (Ibid.); hence the possibility that the human intellect were intuitive was already well established in Schelling's mind at this early stage. In Schelling's view, Plato attributed to the Demiurge's creative activity the cause from which the visible world was brought about after the invisible ideal archetype of the divine ideas, because in Plato's theodicy in the Timaeus, the created world is only the sensible impression of the higher world of the Idea.

It is important to note, however, that here Schelling did not have in mind the unity of the two polarities of reality, the ideal and the real. For example, in one passage he says: "Plato *everywhere carries the subjective over to the objective* [...] the principle arose in Plato that *the visible world is nothing but a copy of the invisible world.*" (AA II/8: 157; p. 212). Indeed, the young philosopher was rather closer to Plato in thinking that the world of existence is subordinate to the archetype of the world: "das Urbild der sichtbaren Welt nur Eines war" (AA II/8: 163; p. 216), where the *Urbild* was eternal, invisible and one, and therefore the ground of the copy; and the sensible world, insofar as its existence had the attribute of being merely present to the senses, was visible and heterogeneous. (Cf. AA II/8: 174, p. 226). Now, from this point of view it is clear for Schelling that the lawfulness and order that are invisible but make a visible order in nature must have its cause in the archetypical intellect—which is not inherent in matter or has its origin in matter itself:

> "The whole of nature, as it appears to us, is not only a product of our empirical receptivity, but is rather actually the work of our power of representation—to the extent that this power contains within itself

[72] W. Beierwaltes makes a significant annotation that is worth considering when we conceive Schelling's synthesis of Plato and Kant, he thus writes: "Schelling does use this dimension of Kantian (transcendental) discourse, but with radically "Kantianizing" Plato or using Plato as a "witness" to the truth of the Kantian notion of the idea." (Reydams-Schils & Plato, 2003).

> a pure and original foundational form (of nature)—and insofar as the world belongs in representation to a power that is higher than mere sensibility and nature is exhibited as the stamp of a higher world which the pure laws of this world express." (AA II/8: 157; p. 212).

It follows, then, that nature's invisible essence/form (πέρας—the bounded) is modelled after the intellect's invisible idea, and what keeps the world unified in a lawful order is its being modelled after τὸ λόγῳ καὶ φρονήσει περιληπτὸν καὶ κατὰ ταὐτὰ—a purposive and intellectual form identical to itself—or a form given after the image of the original and pure form of understanding. (AA II/8: 153, p. 209). The product modelled by the Demiurge after the ideal is a creation that is placed in the region where everything only comes to be. In Plato's terms, this world belongs to γιγνόμενον: 'what comes to be but never really is' because it is in a perpetual state of change", or in Schelling terms, here we confront the empirical that has arisen for experience. And because of this instability, "the empirical" is independent of the ideas which are eternally set by necessity (ἀνάγκης). (AA II/8: 151, p. 207). Furthermore, throughout the *Kommentar*, Schelling underscores Plato's notion that since the world was created after the image of the archetype, the way it becomes has an orderly outlook, that is, because it is a ὅλον νοῦν ἔχον, a whole held together by the intellect. This pre-established intelligible order would then explain that we discover in nature hidden universal laws, as Schelling notes: "The world, with respect to its lawfulness, is an expression of a higher lawfulness." (AA II/8: 157; p. 212). This idea that the world is organized in a preestablished harmony expressed by its laws and unity will be preserved in Schelling's interpretation of the unconditioned and also later in his construction of *Naturphilosophie*. For example, near the end of *Vom Ich*, Schelling thinks of the unconditioned as "a principle of preestablished harmony which, however, is only immanent, and is determined only in the absolute I." (AA I/2: 173; p. 126). Another expression of the a priori harmony unfolded as a product of the absolute activity of the unconditioned is also present in Schelling's work of 1797, *Ideen zu einer Philosophie der Natur*; here he maintains that the things we perceive as independent and *outside* of us are purposive in themselves, and that the only way in which we can prove they tally with our ideas of purposiveness is to:

> "take refuge in a preestablished harmony, [...] assume that a mind, analogous to [our own], reigns in the very things outside [us]. For only in a mind able to create can concept and actuality, ideal and real, so interpenetrate and unite that no separation is possible between them." (AA I/5: 99; p. 35).

The unconditioned thus denotes a realm similar to Plato's divine form: "Such a discovery of a supersensible principle of the form and harmony of the world in ourselves necessarily had to give rise to this inspiration [...] *the inspired insight into this noble principle that lies beyond all sensibility*." (AA II/8: 159; p. 214). Admittedly, in this early commentary Schelling also seemed to aim at an ideal of completeness that he even attributed to Plato: "a philosophy in which the sensible and supersensible are both subsumed under the form of a single and most complete unity." (AA II/8: 185; 233). But even more striking is that Schelling sees the consolidation of such a unity in Plato's claim that the created world has an organisation that can be compared to that of a living animal, that is, that visible nature is a living animal (ζῷον ἔμψυχον) whose unity and significance is grounded in the invisible idea of the world as an animal (ζώοις νοητοῖς). (Cf. AA II/8: 157; p. 211):

> "Plato viewed the entire world as a ζῷον, that is, as an organized being whose parts are possible only through their relation to the whole, whose parts are reciprocally related against each other as means and end, and thus which reciprocally bring themselves forth according both to their form and connectedness." (AA II/8: 158; p. 213).

This early attempt at justifying the organisation of nature as purposive will see a more mature development a few years later in his *Naturphilosophie*. Schelling's initial consideration of an invisible supreme understanding that imparts its teleological reason to nature, will suffer some important changes that, I will show, justify the idea of regarding the teleological productivity of nature as a constitutive visibility. As a hint, let me say now that what while here Schelling's concept of being is conceived as the divine cause of a visible nature that has a lesser ontological status, later in his *Naturphilosophie*, Schelling will conceive this being as the unconditioned,

or original productivity, that it is not a transcendent cause of the world, but expresses itself and brings about through absolute causality the necessary duality in identity of the idea of nature and real nature. In virtue of the point of view we take, be it intellectual intuition or reflection, we will have visibility of either term. So, from the common point of view of understanding, that starts and sees facts only, "the original productivity of nature [as teleological] disappears behind its product", and *mutatis mutandis* for the point of view of intellectual intuition. So, in the next section I will explain what the structure of teleology looks like in the productivity of nature.

Thus far, we have seen that Schelling reformulated the framework of Critical philosophy in his early steps to put forward a more comprehensive system of philosophy based on the unconditioned and its immanent principle of identity, that is, an absolute conceived as the identity of subjectivity and objectivity, whose two-fold essence unfolds under different forms organised according to categories of nature and forms of reason, each of which relate to each other in a constitutive manner. Moreover, we could have a brief look at Schelling's influences, so that in adhering to Spinoza, the last ground of all reality was fundamentally *causa sui*, and inspired by Plato, the architectonic of the whole had to be purposive, for it exhibits the structure of *an organism*. Up to now, it is fair to say that for Schelling nature has to be constitutively purposive and so, the principle of teleology, should be more original than those which abstract from the whole.

2.3. Mechanism and Teleology and their Coincidence in the Totality of Nature.

The main two works that concern this section, *Ideen zur einer Philosophy der Natur* published in 1797 and *Von der Weltseele –Eine Hypothese der höhern Physik zur Erklärung des allgemeinen Organismus* of 1798, are the texts where Schelling was most(Baum, 2000) intensively committed to the development of *Naturphilosophie*.[73] Although, prima facie, Schelling recognises in these pieces the necessity of the

[73] Due to the restrictions of space and time, I will only touch upon the *Entwurf eines Systems der Naturphilosophie* and the *Einleitung* in order to show the perseverance of the characterisation of reflection and intuition that Schelling maintains and how this characterisation keeps supporting the idea of nature as an organic whole. For an overview of the debate on the issue of the beginning of Schelling's interest in the philosophy of nature, see Baum, 2000, Schmied-Kowarzik, 2016, D. Nassar, 2014.

deduction of the possibility of nature from first principles (Cf. *Ideen*, AA I/5:70, p. 9), and later on appeals to the method of induction in order to lay bare the 'common principle' that flows back and forth between the progression and permanence of the organic world and the general changes of inorganic nature (*anorgischer Natur*), he places the dominion of *Naturphilosophie*, not in the ambit of reflection, where a 'unity of artificial principles' (*erkünstelte Einheit der Principien*) arises, but in the point of view of *the immediate experience of reality of nature*, where such a common principle, he says, 'is present everywhere and nowhere, and because it is everything, nothing determinate or particular it could be.' (*Von der Weltseele*, AA I/6:67).

Thus, we see that the idea of a grounding principle is again present in these early developments of *Naturphilosophie*, for it is clear that the unconditioned need be attained as "the ground and principle [*Grund und Prinzip*] of all demonstration", the highest insight from which our ideas of nature can be deduced. (AA I/13). Indeed, in *Ideen* and *Von der Weltseele* alike, Schelling intends to find the principles of our knowledge of nature in order to construct the science of nature or *Naturphilosophie*, for it is only when philosophy arises to this perspective that one knows the absolute of the objects themselves. (Ibid.) He so turned down the strategy of departing from facts, that he is now focused on revealing the true constitutive aspects of nature. For example, in the Supplement to the Introduction of *Ideen*, Schelling writes:

> "The first step to philosophy and the condition without which it cannot be entered, is the insight that the absolute ideal is also the absolute-real, and that without this there is only sensible and conditioned, but no absolute and unconditioned, reality." (AA I/13: 98; p. 44).

The indifference between absolute ideality and absolute reality is the presupposition from which Schelling starts his philosophical investigation on nature, and so this implies that the principles he finds therein pertain to the ideal domain, but insofar as we presuppose them as truly constitutive of the real nature: "We have proceeded from this idea of the absolute-ideal; we define it as absolute knowing, the absolute act of cognition (*Erkenntnißakt*)." (AA I/13: 100; p. 46). This conclusion and onset, I think, draws a path that agrees with what we have been discussing in the previous sections, where we saw that in intellectual intuition, the absolute is actually

intuited, and that from this point of view those erstwhile opposites, like subjectivity and objectivity, form and matter, real and ideal, can now be seen as originally or absolutely one, such that what makes them two necessary sides or terms of the originally one unconditioned is also the intrinsic bond between them. In consequence, such traditional opposites that have worried philosophy since its beginnings have taken on a new ontological meaning in Schelling's perspective, for he recognises that there is a self-differentiation within the unconditioned that brings about necessary opposites whose relation is that of identity, and this identity is the necessary bond that prevents us from thinking one without the other or one connected only contingently to the other. Owing to this characterisation, then one can proceed by positing the idea of purposiveness in nature but only as far as it is the purposiveness of nature *in itself*.

Now, in *Ideen*, Schelling has made clear that we cannot raise to the perspective of absolute knowing, i.e. intellectual intuition, when we start an investigation within the domain of conditioned. Ascending to the unconditioned puts us in a scientific attitude, whereas the conditioned only gives us empirical knowledge preceded by reflective thinking, the narrative of which appears dissected and rends itself in abstract terms. He will keep maintaining this particular view in the , a text written in 1799, a time when he was already consolidated as a *Naturphilosoph*. In a passage from the introductory part of this text Schelling says that: "for the philosophy of nature: 'the unconditioned of nature *as such* cannot be sought in any individual object." (AA I/7: 77; p. 13). Accordingly, reflection, out of force of habit, gives us antithetical appearances, for "prior to them mankind had lived in a (philosophical) state of nature. At that time man was still at one with itself and the world about him." (AA I/5: 70; p. 10). So, if philosophy so far has relied blindly on the capacity to reflect, an operation that has become "a spiritual sickness" for humanity (Ibid. 71; p. 11), then the question arises: Is the antithesis that Kant and previous philosophers have found between mechanism and teleology a real and necessary opposition? Put it differently, are they *sided* determinations of reality or is this contradiction just an illusion projected by human cognition? There is not a straightforward answer to these questions in Schelling´s *Naturphilosophie*. Especially in *Weltseele* and *Ideen*, Schelling seem to support the idea that the principle of purposiveness is more original than mechanism, for the latter is depicted as a merely derivative concept that results from the constraints we put on our investigations of nature, namely, whether we

study it empirically or philosophically. Further considerations of mechanism and purposiveness and the point of view of investigation in the *Entwurf* and the *Einleitung zum Entwurf*, are also carried over along the same lines, however, the former text will put an emphasis on the original opposition between organic and inorganic nature. In the *Entwurf*, both terms are usually associated with purposiveness and mechanism respectively, however, let us not forget that mechanism, just as Kant characterised it with respect to purposiveness: (a) negatively, helps determine a natural causality that does not involve the concept of a purpose (KU, 5: 246), or (b) inversely, helps determine the causality of a whole that has been brought about as an effect of its parts. (KU, 5: 408). In line with this, one can observe mechanical causality at work in both organic and inorganic beings, but the causality of a purpose is not something that is inherent in the causality of inorganic beings, so the correspondence is not rigorous. In any case, the correlation that is in fact persistent in these texts is that of reflection/mechanism and intuition/organisation of the whole, which I will argue, takes the structure of the concept of purpose. With this in mind, let us pin down the characterisation of organicism and mechanism and its relationship with reflective understanding in *Ideen zu einer Philosophie der Natur* and *Von der Weltseele*.

Ideen was a text published in 1797. At this time Schelling was still philosophically tied to Fichte and his questions are very much like the questions Kant set out for his metaphysics of nature, in terms of the *possibility of nature*, a theme that has prompted some experts to see *Ideen* as a work still departing from the framework of transcendental philosophy.[74] However, as these experts note, and as I have tried to show in the previous sections, Schelling embarked in a new agenda that raised philosophy to the level of a science that provides knowledge of nature *in itself*. Similarly, with this shift in attitude, Schelling explained the role of mechanism in nature, but often in the context of a criticism of the level of cognition in which we find it, viz. reflection. A similar approach is found in his next work on *Naturphilosophie*, *Von der Weltseele* appeared in 1798; here Schelling approaches nature from the point of view of the unconditioned, now termed world-soul—very much a reminiscence of Plato's idea of a divine cause that imprints its form upon the world of becoming—that essentially carries the principle of nature as a self-organising

[74] For example, Di Giovanni says: "*Ideas* is in actual fact very close to Kant" (1979, p. 215); S. Gardner's view is that "at one level, Schelling is merely re-posing Kant's question of the metaphysical foundations of natural science" (*Fichte and Schelling: The Limitations of the Wissenschaftslehre?*, 2018, unpublished, p. 8). Also see Schmied-Kowarzik, 2016, p. 56-8.

whole. This study no longer provides questions about the possibility of nature, as *Ideen*, but rather lays out the way in which the structure of nature is constituted by the two fundamental forces of nature, one repulsive and one attractive, the former expressing the positive quality of things, the latter the negative. Like in the deduction of opposites by means of the absolute identity of the first principle, Schelling also maintains the necessity of the opposition of these forces under the self-identity of the world-soul. And precisely this organisation of opposition in identity of fundamental forces sets the stage for Schelling's extended criticism of the mechanistic paradigm.

It is worth mentioning that Schelling's criticism of mechanism was not an isolated view. He was the leading figure of an intellectual movement, principally based in Germany, that gathered heterogeneous views about the methods and concepts scientists should carry over into the investigation of nature and that came to be known as *Naturphilosophie*.[75] Schelling and the rest of the *Naturphilosophen* were in turn immersed in an anti-mechanistic atmosphere in part created by Kant's dynamical conception of matter, in part by Blumenbach's description of non-mechanistic forces.[76] (Richards, 2002, p. 310). The general view of *Naturphilosophie*, very much influenced by Schelling's theories, was that nature had an organic structure, a whole that was teleologically ordered and whose archetypal structure unified within fundamental organic types.[77] Therefore, their view was in stark contrast to the programme of mechanism, which they saw as the result of the systematic legacy of Newton and Descartes. Stéphane Schmitt, in his essay "*Mécanisme ou organicism?"* puts the essence of their critique in this words: "the disseminated belief was the mechanistic science only allowed an access to the surface of things, that it could not attain their profound reality and that it was unable to demonstrate the intimate relations that underlie them." (Schmitt, 2007).

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[75] R. Richards mentions Carl Gustav Carus, Lorenz Oken Karl Burdach, Ignaz Dölliger and Karl Ernst von Baer as biologists who considered themselves *Naturphilosophen*.

[76] Schelling's theories put him closer to the spirit of the *Sturm und Drang*, shaped after the belief that nature appeared as a 'living unity and an organic being, which realised itself in an eternal becoming and passing away in ceaseless creation and metamorphosis.' Their movement explicitly impugned the 'soulless materialism' of the *Aufklärung* and read nature 'in the figure of their own creativity and restless freedom, i.e., in analogy to genius,' while also granting a sense for coherence and a dynamic vision of order. (H. Koff, *Geist der Goethezeit*, cited in Zammito, 1992, p. 183). See also notes 28 and 51 of this work for more on figures of *Sturm und Drang* and 19th century biology.

[77] Carl Friedrich Kilemayer, for example, discovered biological relationships that were governed by principles of balance, that Richards explains, "deified mechanistic reconstruction." (Richards, 2002, p. 310).

By and large, Schelling seems to lead and follow this programme in *Ideen* and *Weltseele*, and to a certain extent also in the *Entwurf*. For in his view, mechanism involved a basic assumption, i.e. in the dominion of mechanism everything is always dragged along the stream of causes and effects, and since both terms of this relation are external to each other, and therefore connected arbitrarily, they are essentially divisible and there cannot be a place for the relation of one to oneself, or the causality of purpose. (AA I/5: 33, 93; pp. 14, 30). In consequence, mechanism, first, has to deny the existence of purposive natures and, second, does not account for the fact that the progressive divisibility of parts ad infinitum that it involves cannot account for the existence of wholes. As Schelling points out: 'you can divide endlessly and yet come no farther than to the surfaces of the bodies.' (HKA I/5: 83, p. 20). Upon closer examination, what mechanism gives us is aggregates of particles that, to be considered wholes, require a conditioning limitation, and Schelling thinks this condition is more original than the mere causality of aggregation. For example, in Weltseele he says:

> "In the mechanism of nature (as long as we do not consider it as a self-returning whole), we recognize a simple succession of causes and effects, none of which is in itself something constitutive, permanent or persistent, nothing, in short, which would form a proper world, but rather what would be a simple phenomenon, appearing according to a certain law and disappearing again according to another law."

Indeed, in several places, Schelling will directly or indirectly point out to the idea that mechanism is not constitutive or an original principle of nature: "mechanism alone is far from being what constitutes nature," Schelling writes in *Ideen*. Or in *Weltseele*, he affirms that the primitive limitation of mechanism, that which makes possible the explanation of mechanism, is more original and therefore antecedent to it. (AA I/5: 93; p. 30, AA I/6: 68). Such a condition is the structure of organism. More specifically, Schelling defines mechanism as the negative of organism, where organism is something that involves "a succession of causes and effects that is enclosed within given boundaries", most importantly, these boundaries are formed by the flowing back on itself of the succession as "in a circular line". (Ibid.)

And only, Schelling continues, when this stream "is not inhibited", that is, when the process of "turning back into itself" is arrested, and it "flie[s] forward (in a straight line)" we find the linear causality of the *nexus effectivus*. (Ibid.). The specific kind of motion produced by impact, for example, agrees with mechanical motion, but this is a derived phenomenon insofar as all the rest of movement is produced by the dynamical play of forces of nature. These determinations of the concept of mechanism seem to portray an idea of nature where mechanical processes are sections cut out from the whole. And this separation from the whole seems to be, from what we discussed previously, a result under the finitude of representation, or reflection, a low-status knowledge that gives us fragmentary views of reality and that has the detrimental consequence of making us believe that we are not able to be in touch with reality itself. This is in conformity with Schelling's argument that: 'concepts are mere silhouettes of reality (*Wirklichkeit*). They are projected by a subservient faculty, the understanding, which enters only when reality is already present, which apprehends, grasps and retains what only a creative faculty was in a position to engender.' (AA I/5:209, p. 172).

For Schelling, the epistemological consequences of reflection are very clear. Specifically, he thinks that what follows from the understanding's analysis of wholes as aggregates of discrete units is a partial image that deliberately abstracts from the whole; and in doing so, it turns the philosophical dynamics of reality into static, passive and finite objects: 'If all or knowing depended on concepts [of reflection]—Schelling observes—there would be no possibility of persuading ourselves of any *reality*.' (AA I/5:210, p. 173). As he will sustain, shortly after, in the *Einleitung*, empiricism only gives us "collections of facts", but a mere aggregation cannot be a truthful account of reality because, as Schelling has spelled out in different forms since his *Kommentar*, nature as an absolute whole is organised and, to the extent that this organisation unconditioned corresponds to the self-identity of the unconditioned, "itself must everywhere become manifest to itself." (AA I/8: 39; p. 201; I/7: 77; p. 13). This is the same circular structure that is essential to purposiveness. This structure is ascribed to nature and its different process repeatedly. For example, in the *Einleitung*, Schelling observes that nature's "play of higher and necessarily unknown forces" is a "producing and reproducing" that is similar to that of thinking, "the same activity by which nature reproduces itself anew in each successive phase." (AA I/8: 31; p. 195). Even matter is organised according to this circularity, because it

obeys the universal return of nature to itself and 'the specific diversity of matter', which Schelling thinks is constituted by 'the degrees of relationship among attractive and repulsive forces', is a nexus that responds to such an organisation. (HKA I/5: 200, p. 163).[78] A particular organism, on the other hand, is "the graduated series [...] formed from a gradual evolution of one and the same organisation." (AA I/6: 68; p. 68). Another telling argument about this is Schelling's deduction of 'the first origin of organic nature.' He believed that it was possible to show that the succession of all organic beings descends from the progressive modifications of one and the same ancestral organism.[79] So, the emergence of organic beings obeys the same progressive but enclosed organisation of nature and depends on the evolving complexity in play of forces of repulsion and attraction, and although this comes across as an approach that is perfectly physicalist, it is, however, levelled down to the organisation of matter, so it is not exclusive of organicism.[80]

But let us remember that this synoptic view of nature *in itself* is the result of the scientific attitude of intellectual intuition: "Nature speaks to us the more intelligibly [*verständlicher*] the less we think of her in a merely reflective way." (AA I/13: 88; p. 35). In effect, Matthews' reading of this approach is that Schelling has solved the problem Kant's multidimensionality of cognition by advancing intellectual intuition as the common ground that unifies *Sinn* and *Verstand*: 'Overlooked by Kant, [Schelling] sees in this faculty the source of a productive model of knowing which will enable him to conceive of how the dualities of reflection can be mediated; a model that informs what Schelling calls the "standpoint of Production," in contrast to the Kantian "standpoint of Reflection." (Matthews, 2011, p. 196). Schelling maintains that through absolute knowing organic beings show their intimate essence, whereby they embody 'an absolute unification of nature and freedom in one and the same being.' (AA I/5:101, p. 36). So, the absolute simultaneity and reciprocity of freedom and nature

[78] The concept of matter is a case in point of this distortion of the mind. Schelling argues that matter, also springing from the eternal essence, 'represents in appearance an effect, albeit indirect and mediate only, of the eternal dichotomising into subject and object.' (HKA I/5:192, p. 154).

[79] Ironically, Kant dissented against the idea of the evolution from an original form: if natural history were a 'narrative of events in nature not to be reached by any human reason, e.g., the first origin of the plants and animals, then indeed that would be, as Hr. F. puts it, a science for gods, who were present then or were even the authors, and not one for human beings.' (*Anthrop.*, 8:161).

[80] In this regard, I. Hamilton Grant writes: "Schelling's physicalism regarding the genesis of organic matter, organism—or organisation—results simply from matter acting on its self-reconstruction, or from increasingly complex organizations of the inorganic." (Grant, 2006).

is instantiated in the structure of organic beings. In sum, reflective understanding gives us endless divisions and intuition an organised absolute totality. The former is thus artificial, derivative and, above all, not constitutive of nature:

> "To philosophize about nature means to have it out of the dead mechanism to which it seems predisposed, to quicken it with freedom and to set it into its own free development—to philosophy about nature means, in other words, to tear yourself away from the common view which discerns in nature only what "happens"—and which at most views the act as *factum, not the action itself* in its acting." (AA I/7: 78; p. 15).

After pondering over the roles that mechanism and purposiveness take in Schelling's theory of nature, I tend to conclude that Schelling overturns the approach of those philosophies that assing mechanism a constitutive status by making the organic more primitive and fundamental, while demoting mechanism to a consequence of finite representation. He presents several arguments to do so. I call the first, the isomorphism argument. This argument states that if the whole of nature were originally mechanic, our mind, which is a product of nature, would not have the structure of purposiveness and neither the idea nor the presentations of wholes in nature would be possible. That is not the case, and the evidence is that, as soon as the realm of organic nature reclaims an explanation, and an account of unity and organisation is required, 'the dogmatist finds himself completely deserted by her system. Here it no longer avails to separate concept and object, form and matter, as it pleases us.' (AA I/5: 95, p. 31).

The second is a claim of constitution. Accordingly, if mechanism were in effect the fundamental principle that constitutes the whole of nature, it would not have left the constitution of organic beings unexplained, rather the contrary is the case, 'for as soon as we enter the realm of organic nature, all mechanical linkage of cause and effect ceases for us.' (AA I/5:93, p. 30). When we perceive an organic being, it presents itself as whole whose unity lies in itself, not depending on our choice of whether we think it is a whole whose parts are reciprocal and products of the whole. Upon the testimony of this experience, it is clear that the purposiveness we find in them

evanesces when we attempt to explain them on the basis of mechanistic principles. (AA I/5: 93, p. 31).

The third argument is an ontological claim. It goes like this: Thus far, the concept of mechanism has been wrongly postulated as a positive determination. This idea has been so dominant that is very much seen as if it were the solid basis that makes up the whole of nature. However, Schelling argues, this is a misconception and the opposite is the case, that is, mechanism presupposes organisation. The negative, he writes, comes after the positive, and the positive is the organic. This means that mechanism is the negative and is only explicable in virtue of the organism and not the other way around. (AA I/6: 68). The pre-eminence of the organic is, thus, due to the originality of organisation over the finiteness of representation. Reflection is thus behind the artificial oppositions in our theories about nature. Schelling derived from reflection the emergence of the ideas of *appearance*, *thing in itself* and, as it is evident in the passages we analysed, also the antithesis between mechanism and teleology. The original dualisms, in contrast, are so in virtue of the identity that dwells within each one and binds them together unconditionally, and under this category concepts like subjectivity and objectivity, reality and ideality, positive and negative, fall perfectly. And while Kant paid to reflective judgement the highest regards because of its special ability to place the universal in close proximity to the particular in nature, Schelling discovered a rather problematic side to it, it cannot close the gap between essence and existence: 'How affections and determinations are and can exist in an Absolute external to me, I do not understand. But I do understand that even within me there could be nothing infinite unless there were at the same time a finite." (AA I/2, 5: 91, p. 28).

The rationale behind the inability of our knowledge to disentangle the inner mechanism of living beings is, thus, the finite representation we make of them. Indeed, this is why, Schelling notes, when we analyse living beings from the point of view of reflective understanding, then we get their concept of purposiveness lying at the base but giving no indication that is has *a reality in itself*. And when we separate the concept from the *matter*, we only see a "particular matter [that] is not *organised matter*." (AA I/13: 85; p.33). Instead, Schelling sees organic beings as purposes in themselves. It is true that he regards organic nature as primitive as the inorganic, but the rationale for this is that he conceives organisation as something more general and original and not restricted only to living things proper. For this reason, Schelling

surmises, 'philosophy must accept, therefore, that there is a hierarchy of life in Nature. Even in mere organised matter there is *life*, but a life of a more restricted kind.' (AA I/5: 99, p.35). Moreover, since Schelling argues that the concept of purposiveness lies at the base of every organisation, therefore claiming an objectively real relation between the parts and the whole. Put it differently, purposiveness in every organic being is not a projection of the intellectual structure of the mind because a 'concept dwells (*wohnt*) in the organisation itself.' This means according to him that living beings are predisposed to organise external matter by assimilation because their structure is already organised, that is, it itself is a concept, incarnated meaning, as it were. Hence 'not only its form but its *existence* (*Dasein*) is purposive.' (AA I/5: 94, p. 31; also, AA I/5: 105; p. 40).

Accordingly, living beings[81] can only be understood from the point of view of the absolute, *die Weltseele* or, as Schelling describes it in the *Entwurf*, the absolute productivity of nature, because of the isomorphism of their structure. This structure is the structure of purposiveness: "this absolute purposiveness of the whole of nature is an idea which we do not think arbitrarily, but necessarily. We feel ourselves forced to relate every individual to such a purposiveness of the whole." (AA I/5: 106; p. 41). Indeed, purposiveness is constitutive to unconditioned nature, by virtue of its absolute identity, and to the same extent constitutive of natural purposes. Schelling shares with Kant the concept of purposiveness—the concept as cause and effect of itself—and by means of the principle of identity upon which is based, it could be defined as: *the concept determines everything that the concept is to contain*. "Every organic product—Schelling says—carries the reason of its existence in *itself*." (AA I/5: 94; p. 31). And he adds: "The form and matter of [organic products] could never be separated; both come into being only together and reciprocally, each through the other." (Ibid.). Applying this structure to our example: the (*matter*) particular being "Ulysses butterfly' which, along with each and every one of its essential properties, is, *within its concept identical* with the lineage exhibited in the (*form*) whole species.

I have attempted to establish that (1) absolute nature is purposive in virtue of its structure, (2) organic beings, by virtue of their structure, share the structure of

[81] It is not possible for me to develop here Schelling's complex and evolving theory of organic beings throughout the works I have been referencing so far. A synoptic explanation of living beings, specifically in the *Entwurf*, is offered in *Schelling on Understanding Organisms in the Entwurf*, (Kabeshkin, 2017); there is also a discussion about Schelling's inquiry about the origins of life in *Die Produktivität der Natur* (Heuser-Kessler, 1986).

purposiveness. Now, if we look closely at the concept of purposiveness, keeping in mind that it is constitutive not only of organic beings but of unconditioned nature, we can deduce an absolute visibility of nature to itself. A determination that makes possible the visibility of a particular goal or purpose as the very essence of organic beings.

Let me move on to the *Entwurf* to clarify the principle that "the original [*visibility*/]*productivity* of nature disappears behind the product." (AA I/7: 79; p. 15). In this work, Schelling assigns to *Naturphilosophie* the task of positing nature "at once [as] productive and product" (AA I/8: 30; p. 194); the products are not the goal of science, but only means to grasp the principles of unconditioned productivity. To be able to have knowledge of the highest principles that are active in productive nature, Schelling says, we need to have "a glimpse into the internal construction of nature", which is not finite and is not at the level of the products, so we must perform, through freedom, "an invasion of nature." (AA I/8: 33; p. 196). What lays before us after this invasion is the active structure of nature that "a mere seeing", directed to an abstract, finite product cannot grasp, but only the higher visibility that makes possible the finite can obtain—this is rather the sensible visibility that Plato attached to the *world of becoming*. Again, the structure itself is purposive, it has a teleological structure, not because there are foreseen ends, which are necessarily finite as their means are, but because nature's own unconditioned concept is at the same time absolute cause and absolute effect of itself, nature thus is productive through itself and by means of its products. We have seen this same structure of self-acknowledgment, being both cause and effect of oneself, is the purposive structure that dwells in the mind, in organic beings and ultimately in the absolute productivity/products of nature. In this identity the absolute I is visible to oneself as a cause and as a means. In a derivative relation, even the particular visibility of an object as a means, to us, purposive beings, not just as an impression that has an effect upon the anatomic substrate of my eyes, but as something that is *in content* different from the agent within the relation of identity of subject and object, visibility is opposition. Ends and means in their interrelation become in the dialectic of opposition in identity, one. And most importantly, since absolute nature is itself a self-organised productivity in identity with its products, and nature as a totality only speaks to us through our intelligible mind, it is invisible nature when we look at it not as the productive ideal structure of the world, but as what is behind the visible product of finite representation; but the

latter becomes invisible when we raise above the particular and see the absolute structure of nature in its own splendour. With this, Schelling reaches his goal of turning the entire system into an absolute incarnated concept of purposiveness, and the natural purposes into a concept of purposiveness. With this proposed identity between purposiveness and visibility, I will finish with Schelling's illuminating words:

> "Das Absolut expandiert sich in dem ewigen Erkenntnisakt in das Besondere nur, um in der absoluten Einbildung seiner Unendlichkeit in das Endliche selbst dieses in sich zurückzunehmen, und beides ist ihm ein Akt." (AA I/13: 103; p. 49).

Concluding Remarks

In the present work I intended to describe how, in Kant's *Critique of Judgement*, the conflicting maxims of mechanism and teleology are ultimately unified by means of the transcendental ideal, the concept of reason whose regulative demand deploys the unconditional unity of the world as a dynamical whole. The possibility of a systematic whole, we saw, is based on this principle that enables the connexion of the parts of a whole in conformity with a single principle, viz. the principle of systematicity. Thus, the cornerstone of the systematic unity of reason was this transcendental *Grundsatz* to which Kant assigned the highest and purest form, the principle of principles, *die Urform*. Within this framework, however, it became clear that the nominal unification of principles says nothing about the inner nature of particular things, especially those that Kant called *natural purposes*, upon which we only formally apply the principle of purposiveness. In consequence, the real coincidence of mechanism and purposiveness in nature remained an open question. Furthermore, with respect to the essence of nature, two determinations were warranted: (1) the constitutive principle of mechanism arises necessarily in synthetic judgements a priori, and we are closer to the truth of particular nature when we apply principles of mathematics and physics to the investigations of nature, whereas the idea of the system provides a cohesive and inviting unity for the heuristics of scientific investigation; (2) the principle of purposiveness only helps us determine reason's limitations, and in virtue of the finiteness of the human mind, hints at the possibility of a metaphysical ground, a supersensible mind, that remains hidden from us. This principle and its potential implications were made explicit by Kant himself in the famous paragraph §76 of the *Critique of Judgement*. The idea of such a supersensible ground set the stage for our discussion of Schelling's meditations on the opposition of mechanism and purposiveness.

In the second part of this dissertation I tried to show that, on the one hand, Schelling, not at all satisfied with the dualisms established by philosophical traditions and Kant's Criticism, moved on to prove, inspired by Spinoza, that nature was an absolute and monistic totality whose many opposing determinations are unified in one whole. On the other, not at all content with Kant's '*as if*' solutions, Schelling intended to demonstrate that it is possible for human cognition to have epistemic

access to the thing in-itself and make the unconditioned, this apparent *beyond* of human limitations, the uncaused cause of his unitary conception of reality.

Very early on influenced by Plato, Schelling provided an account of the isomorphic structure between the absolute mind and the human mind that justified the idea that the human mind has a divine aspect which makes possible the intuitive understanding of the whole of reality and, from there, that is, by consolidating the possibility of our epistemic access to the unconditioned, Schelling proceeded to demonstrate that its determination is precisely the very principle of absolute identity, whereby the traditional opposites—subjectivity and objectivity, ideal and real, mind and matter, positive and negative—are but expressions of two necessarily linked sides of the same reality. Such a principle, which expresses the return of absolute nature to itself in a circularity, allows Schelling to assert that the opposition in identity is not a mere abstraction, that is, that the terms are not related contingently or arbitrarily, but that their unity is necessary and each term by itself is seen as containing in itself its very opposite, hence the fact that, in thinking necessary opposites, each term cannot be thought separately from the other.

It is only within the framework of the absolute identity of the unconditioned, Schelling thinks, that we become aware of the real unity between our ideas of nature and nature *in itself*. In comprehending everything as united in this type of whole, Schelling points out, even between the idea and the object, 'there is originally no separation'. (AA I/5: 76, p.13). In view of this, Schelling's approach offers the very determinations of reality that unfold within the absolute productivity of nature itself. Thus, access to the real constitutive determinations of nature are warranted. This comprehensive vision of nature leaves no place for a transcendent supersensible domain, and in virtue of this, the philosopher can positively determine the nature of purposiveness and the role of mechanism in nature. Compared to Kant's critique, Schelling's deliberation after the vision of the whole has a very different outcome regarding the antinomy of mechanism and purposiveness. His examination is that organicism is more original than mechanism and, therefore, purposiveness is truly a constitutive category of nature. Accordingly, mechanism is only a derivative approach necessarily related to the point of view of finite knowledge. Indeed, Schelling showed that we can either comprehend the whole of nature in its absoluteness or remain in the finiteness of our representations and define facts, collect data and provide partial and abstract elucidations of phenomena. The former, given its epistemic and

ontological status, is necessary and forms the attitude of philosophical thinking, that is, the source of the true science of things, for one obtains knowledge in an unconditioned and absolute way. (AA I/5: p. 44). The latter is posterior and abstract, for it cuts out facts that are disconnected from the whole.

Now, in choosing the view of totality, the dichotomies imposed by the schematisation of the understanding take the background position, whereas the structure of the whole that appears before us is that of the absolute identity of the whole with itself, a structure that can be in turn identified to the structure of purposiveness, namely, that which denotes the absolute circularity of cause and effect of itself. In this dissertation, I tried to show that the structure of absolute identity that is immanent to the unconditioned can also be seen as taking the structure of purposiveness because the absolute I is both cause and effect of itself. In sum, the result of my investigation is that, within the scope of *Von der Weltseele*, *Ideen zu einer Philosophie der Natur*, and to some extent, in *Erster Entwurf eines Systems der Naturphilosophie*, the principle that governs the whole of nature is purposiveness. Indeed, Schelling contended that the 'absolute purposiveness of the whole of nature is an idea which we do not think arbitrarily, but necessarily.' (AA I/5:106, p. 41).

Accordingly, I showed that Schelling distances from Kant. Fundamentally because rather than attempting, as Kant did, to leave the concept of the unconditioned undetermined, Schelling determines it positively by means of finding in human reason an epistemic route to the unconditioned. In other words, Kant denies that one can actually perform an intellectual intuition of the whole (esp. A280/B336, A286/B342) because our intellect's discursive nature "is *not original*", i.e. does not belong to the original being (*Urwesen*), rather, the intellect's discursivity is "*derivative*" and so depends on concepts and sensibility to present objects. Contrarily, Schelling thinks that intellectual intuition is a gift to the human mind, and past philosophers have performed it as "a free inspiration, which elevated them into a sphere where [common ways of thinking (*gemeinen Vorstellungsarten*)] no longer even understand their task." (AA I/5: 76; p. 15).

From this it follows that Schelling's model and Kant's system of the mind render opposite results. (1) Kant describes a transcendental mind that can only be understood by means of its limited possibilities and therefore presents itself as a multidimensionality that corresponds to the finiteness of its correlates; this model gives a higher scientific status to discursive understanding and the principle of

mechanism. In contrast, (2) Schelling describes the structure of totality, of which subjectivity and objectivity are two sides of one and the same whole thus, both ontologically identical. He argues that the absolute identity of the uncaused cause justifies that in nature itself everything is united originally. Since the mind itself has access to the unconditioned, the true scientific point of view is the infinite vision of intellectual intuition whereby the absolute whole presents itself as purposive and, thus, the principle of purposiveness is original.

In conclusion, Schelling's ideas concerning nature ponder about the stark opposition between intellectual intuition and reflective understanding. The dissections of what is originally united are effects produced by the unnatural activity of reflection, which Schelling thinks is only a stage within a process of discovery of the noblest activity, viz., that which is in identity with the unconditioned. Above all, as long as discursive understanding is the point of view we take when we construct theories about nature, the antinomy between mechanism and teleology will keep popping up. For Schelling, the only alternative to know the inner nature of things in themselves is to raise ourselves to science, that is, to step back and give a lower epistemological status to the finiteness of reflection and with it to the abstract analyses of empirical knowledge. I agree with Schelling that, at least logically, only through an absolute knowing, that is, when we place ourselves before the testimony of the unconditioned, the true and constitutive nature of reality arises as a purposive whole. The remaining question, however, is whether we can get the infinitude of the absolute down with us as ideas that have more than a regulative status within our theories about nature.

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