



Design: A Heuristic Strategy, Not Metaphysical Doctrine by Douglas R McGaughey is licensed under a Creative Commons Attribution 4.0 International License.

DESIGN: A HEURISTIC STRATEGY, NOT METAPHYSICAL DOCTRINE

Abstract

Because there's only indirect access to causes, given effects can be understood to have multiple causes, and the same cause can produce multiple effects, the criterion for the evaluation of a causal explanation is neither empirical proof nor disproof. Rather, the evaluation must be in terms of the consequences of holding the cause for an adequate explanation of the event in relationship to laws of relationality necessary for the appearances. The Physico-Theological argument for design as a form of cause in nature cannot serve to give us any information about the noumenon (God) that it presupposes—certainly not any information about anthropomorphic characteristics of that noumenon. Rather, its value is to confirm our confidence in the intelligibility (the rule-governed character) of nature in contrast, for example, to the chaos of nocturnal dreams. Because all our capacities, which include theoretical (science) and practical (religion) reason are dependent upon the material conditions of experience, this criterion of intelligible necessity is important not only for the furtherance of the natural scientific enterprise but also for (moral) religion. Drawing on pre-critical and critical writings of Kant in the spirit of H. Allison, I reject the Naturalistic reading of Kant by P.F. Strawson et al. to argue that Kant's Critical Idealism is beneficial for an investigating of the meaning and role of design in experience without succumbing to anthropomorphic speculations about God.

Introduction

Design here refers to the Physico-Theological argument for God sometimes called the Argument from Design or Special Creation. It is based on the "artisan" model of creativity: the craftsperson must first have a clear idea of what is to be produced before "externalizing" the idea in "matter." The argument for God: just as one can conclude that an "eminent" mental causal agent, a craftsperson, is the cause of a human artifact because nature on its own could not produce the artifact; so, too, one can conclude that an "eminent" mental causal agent, God, is the cause of the incredible, otherwise inexplicable, order in nature.

This understanding of creation is already found in Plato's *Timaeus* (69b f.); it is the model of creation that informs Proverbs 9; it is presupposed in Paul's "Letter to the Romans" (1:20); and as the "two step" model of creation (first, God thinks; then, externalizes into matter), it was used by Philo of Alexandria to explain the presence of two accounts of creation in the opening two chapters of Genesis (*de mundi opificio*. § 1). It is this "two step" model that underlies the account of creation in the Prologue of John's gospel with the Logos (Word) constituting the thoughts of God. Negatively, the Physico-Theological argument is the focus of a strenuous, some would say destructive, analysis in David Hume's *Dialogues Concerning Natural Religion* (1779), and it is the argument of "Special Creation" that is the focus of Darwin's scorn in *The Origin of the Species* (1859). According to Darwin, rather than species being each a "special" or deliberate act of creation by a deity, new species emerge from other species out of the process of adaptation to their environment.

Hence, "Intelligent Design" has become the rallying theme for conservative Christians to attack Darwin, who does not exempt humanity from the evolutionary process and, therefore, threatens conservative Christians' desire to maintain an intelligent divine plan of salvation for humanity. In other words, defense of "design" in nature has come to be synonymous with defense of a theological agenda. However, such a claim draws a (dogmatic) metaphysical conclusion about both what God and the universe is that constitute omniscient claims inappropriate to our human capacities,¹ and a closer examination of Darwin's *The Origin of the Species* finds that even he rejected neither design nor analogy in his theory of natural selection. In fact, he consciously draws on both.

For example, first, the title, *The Origin of the Species*, is actually a misnomer. If it were accurate to the book's content, it should read: *The Origin of the Species out of Other Species*.

Darwin is not making a claim about the ultimate *original* origin of species. All of his "genealogical trees" in the text begin somewhere off the page. In short, there can be natural selection only if there is a species present to begin with to adapt to its environment. Adaptation presupposes the existence of species.

Second, *The Origin of the Species* begins with a long discussion of the breeding of domestic animals. Darwin's theory of evolution would have ended on the trash heap of history along with the 30+ other theories that he acknowledges in his Preface preceded his, were it not for the pioneering work of the Vulcanists and the Uniformitarians.² These geological schools provided an alternative model for the age of the earth and causal explanation of physical events that made it possible for Darwin to defend species adaptation over an unlimited amount of time and as a consequence of physical causal forces that are uniform throughout all time. If the world is only 6,000 years old, a thesis nowhere stated in the Bible but derived from creative calculations based on biblical genealogies, etc., evolution is as miraculous as special creation, and Darwin knew that. His theory presupposes a paradigm revolution with respect to time and physical causality that was prepared by the Vulcanists and Uniformitarians. Why does *The Origin of the Species* begin with a discussion of the breeding of domestic animals? It is because Darwin was cultivating a *substitute analogy* to Special Creation in order to account for the evolution of species from other species. Given for all intents and purposes unlimited time and uniform physical causality, nature can accomplish on its own what domestic breeders do in a short time frame.

In respect to the discussion of "Design," then, Darwin's work presupposes a given order to the physical world, and it presupposes the legitimacy of using analogy based on that order for the understanding of nature. Both presuppositions are dependent upon the assumption of "design" or teleological formation of the physical universe. Of course, Darwin leaves the Cosmological Argument, or Aristotle's Unmoved Mover, out of the discussion. Obviously, he was not so much concerned about ultimate origins as he was secondary origins of species.

Where does that leave "Design" and theology? I propose in what follows that the assumption of a teleological order to the physical universe is necessary, but its assumption allows no conclusions about the nature and/or purpose of the "designer." Such conclusions take us beyond our human limits, and they, ultimately, undermine our pursuit of the understanding of nature as well as our moral vocation. Appreciation of "Design" "within the limits" of human capacities, rejects omniscient claims of conservative Christian Creationists *and* by the Naturalism of scientism. Design encourages the investigation of nature and the cultivation of humanity's highest capacity,

¹ See, for example, *Critique of Judgment* AA V: 441 and 480; see also 437, 438.

² See Neal C. Gillespie, *Charles Darwin and the Problem of Creation* (Chicago: University of Chicago Press, 1979).

morality. Furthermore, it is humanity's capacity of reflecting judgment that does not possess in advance a universal for a set of phenomena, which unites our understanding of nature (the sciences) and freedom (morality) by means of its strategy of goalless goal-orientedness (*zwecklose Zweckmäßigkeit*) to eliminate any conflict between science and religion. Design is part of a heuristic strategy for understanding nature, including ourselves, and it is to be rejected in all dogmatic metaphysical versions whether embraced by conservative Christians or fervent scientists.

Thesis

The following discusses two theses and two corollaries. The two theses are: 1) it is necessary that we employ teleological analogy for our understanding both of nature and the human condition; 2) the issue is not what teleology tells us about God, but what it tells us about nature and ourselves. The two corollaries are: a) when it comes to knowledge claims, it is not a matter of establishing content and causes but rather of establishing conditions and consequences; the first corollary allows for clarification of our understanding both of science and religion. It's not that science provides us absolute contents and causal explanations, nor is it that religion is only concerned with individual salvation. Rather, science is not an absolute "scientism" but an open-ended project of explanatory models. For its part, religion is not an absolute "dogmatism" but humanity's "universal" capacity of morality. In short, science is concerned with the open-ended investigation of nature whereas religion is concerned with creative freedom. The key to both science and religion, which both inappropriately tend toward *determining judgment* (the determination of absolute concepts governing phenomena), is aesthetics, which is concerned with *reflecting judgment* (goalless goal-orientedness; *zwecklose Zweckmäßigkeit*). In other words, aesthetics is not concerned so much with objective contents as it is with subjective capacities. Reflecting judgment, at the heart of aesthetics, is the "epistemological link" between theoretical science (nature) and practical reason (freedom), that is, the link shared by both science and religion. As a consequence, design in the sense of goalless goal-orientedness is crucial to understanding the human condition.

The assumptions informing the paper are the following: 1) We experience neither the world nor ourselves as they are "in themselves" but as they appear to us. In other words, experience is constituted out of appearances.³ 2) Whatever we experience in addition to appearances is something that consciousness must "add to" the appearances (i.e., it is *a priori* "synthetic").⁴ 3) Judgment

³ See Immanuel Kant, *Prolegomena to Any Future Metaphysics* AA III: 342; see as well, Immanuel Kant, *Critique of Pure Reason* B 59, B 512-519, B 567-69; *Metaphysik Morgovius* XXIX: 747-1047. 1783.971-74; as well as Ernst Cassirer, *Kants Leben und Lehre* (Darmstadt: Wissenschaftliche Buchgesellschaft, 1977), 228-29; and Hans Feger, *Die Macht der Einbildungskraft in der Ästhetik Kants und Schillers* (Heidelberg: Universitätsverlag C. Winter, 1995), 73.

⁴ It is common to think of "synthesis" only in the sense of "uniting" or the determination of what a set of phenomena has in common. Such an understanding is what informs Nominalism: concepts are mere names (*nomina*) for concrete things, and the understanding of the name for a concrete thing is a product of individual consciousness that synthesizes or identifies the unity common to a set of concrete things. This form of synthesis is "more" than the concrete things themselves because it occurs at the level of generalization, not particulars. Neither a single object nor a collection of similar objects provides the generalization; the individual must "see" beyond the particulars to constitute the *a posteriori* synthesis.

However, synthesis can also mean "adding to". Here one is not "uniting" phenomena by means of an abstract generalization, but one is "adding to" the phenomena something that is not present or even reducible in some fashion to the phenomena. An example: causal explanation is something that must be "added to" phenomena because the appearances or affects that are phenomena do not include their cause. The law of gravity is not written on the falling apple. It is something that one must "add to" the phenomena of the falling apple. A judgment of cause is a form of *a priori* synthesis.

consists of our ability to subsume a set of appearances under a concept.⁵ This assumption does not maintain that the capacity of judgment exhausts experience. In other words, the assumption does not exclude what Polanyi calls "tacit knowledge," but it could be maintained that most, if not all, of tacit knowledge is a form of reflecting judgment. 4) There are two kinds of judgment: determining and reflecting judgment.⁶ The former is "dogmatic" in that it immediately and already possesses the concept appropriate to the phenomena. The latter, reflecting judgment, is a form of "faith" in that it cannot be certain but believes that confidence in the eventual discernment of a concept for the appearances justifies our efforts in looking for an appropriate concept. In other words, reflecting judgment assumes a goal without possessing it. Hence, it is a judgment that is "goalless," yet "goal-oriented." 5) What distinguishes the experience of dreams and reality is an *assumption* of the lack or presence of order in the experience.⁷ In other words, our confidence that there is an order to the natural world is an assumption of reflecting judgment that justifies our investigating of nature *as if* it were ordered. 6) The "proof" that our assumption of order is correct is not that we have access to substances (things-in-themselves)⁸ or to their efficient causes⁹ (the chain of cause and effect that bring about the appearances) but that we can identify the *conditions* necessary for us to experience whatever order we do and that we can evaluate the validity of our grasp of those conditions in terms of their *consequences* for understanding the appearances.¹⁰ In short, "proofs" are not dependent upon *substances and causes*¹¹ but upon *conditions and consequences*. Our assumptions with respect to conditions and consequences are valid to the extent of the exhaustiveness with which they allow us to understand the appearances. The more that we can *assign* to a law governing phenomena (rather than to assume that we have access to permanent substances) and the more that the assignment occurs within a totality of lawful assignments that is mutually reinforcing and non-contradictory, the more certain we can be that we have grasped the *necessary* law for "explaining" the phenomena. 7) There are two dimensions of efficient causality necessary for us to understand our experience: physical causes and creative freedom.¹² We are incapable of reducing one to the other not because of what John Searle calls the "causal gap" in our explanation of mental phenomena¹³ but because causal explanations are reflective or synthetic, not determining judgments. 8) Freedom does not mean indeterminism but that form of creative causality that must respect the limits of physical

⁵ See Immanuel Kant, *Critique of Pure Reason* B 29 and „IV. On Judgment as an *a priori* Legislative Capacity“ in the *Critique of Judgment* AA V: 179 ff..

⁶ See Kant, *Critique of Judgment* AA V: 179-180.

⁷ See Kant, *Critique of Pure Reason* B 520-21; *Prolegomena* AAA 290-291; *Metaphysik Mrongovius* XXIX: 927; and Cassirer, *Kants Leben und Lehre*, 251.

⁸ See Kant, *Critique of Pure Reason* B 6, 227, 250-51, 289, 300, 321, 553, 724; Kant, *Critique of Judgment* AA V: 447; *On a Discovery, whereby Any New Critique of Pure Reason is to be Made Superfluous by an Older One* AA VIII: 248-251; *Prolegomena* AA III: 207-308, 368; *On the Form and Principles of the Sensible and the Intelligible World* AA II: 407, 408; *Metaphysik Mrongovius* XXIX: 822-23, 1004-05; Cassirer, *Kants Leben und Lehre*, 160f; Feger, *Macht der Einbildungskraft*, 110; Otfried Hoffe, *Kants Kritik der reinen Vernunft. Die Grundlegung der modernen Philosophie* (München: C.H. Beck, 2004), 184.

⁹ See Kant, *Critique of Pure Reason*, B 315; *Prolegomena* AA III: 296, 310-311; *On a Discovery, whereby Any New Critique of Pure Reason is to be Made Superfluous by an Older One* AA VIII: 224-225, especially, 224*; and Cassirer, *Kants Leben und Lehre*, 310.

¹⁰ Kant says that understanding asks: what do I want?, judgment asks: what does it depend upon?, and reason asks: what are the consequences: *Anthropologie* AA VII: 227. See also, *Metaphysik Mrongovius* XXIX, 808.

¹¹ Because conclusions about substance and causes are *a priori* and not empirical, they are crucial elements of "Relation" in the table of categories of the understanding. See Kant, *Critique of Pure Reason* B 106.

¹² See Kant, *Critique of Pure Reason*, B 585; *Groundwork of the Metaphysics of Morals* AA IV: 446 ff., and the discussion of "two domains" in the *Critique of Judgment* AA V: 174-176.

¹³ Searle assumes that we have absolute causal explanations of physical phenomena. His discussion of "freedom" is limited for all intents and purposes to a treatment of "choice", not of "creativity." See John Searle, *Freedom and Neurobiology: Reflections on Free Will, Language, and Political Power* (New York: Columbia University Press, 2007).

efficient causality but can transform the physical world precisely because it is an efficient causality of its own kind.¹⁴ This efficient causality is governed by an order just as is nature. There can be no absolute proof for either system of order whether nature or freedom in terms of direct and unequivocal access to substances and causes.¹⁵ However, *both* systems of order together constitute a necessary assumption,¹⁶ whose validity is confirmed by the success of reflecting judgments to understand our experience. The functional relational necessity in experience is "given" by the appearances to the extent that they "must" be related in a certain fashion¹⁷ in order for them to appear as they do.¹⁸ Rejection of either assumption is catastrophic for understanding and action. 9) There are two different applications of reason that make it possible for us to think about nature and freedom. One, *theoretical reason*, is appropriate to the natural sciences and is concerned not only with understanding *what is* (physical phenomena) but also with illuminating the synthetic structures of understanding that are necessary for us to be able to understand physical phenomena.¹⁹ The form of efficient causality that functions here is "hypothetical" in the sense that "if" this can and does occur, "then"²⁰ these steps of cause and effect must also have occurred. The other, *practical reason*, is appropriate for morality and is concerned not only with *what should be* (moral principles) but also with illuminating the conditions that are necessary for us to be the autonomous creative species that we are.²¹ The form of efficient

¹⁴ See Kant, *Critique of Pure Reason* B 580-82.

¹⁵ See Kant, *Critique of Pure Reason* B 586; Immanuel Kant, *Critique of Practical Reason* AA V: 46-47, 49-50, 72-73, 132-134. Although there is no proof or disproof of freedom for any of the ideas of pure reason, freedom comes closest to being an empirical fact. For this reason, Kant speaks of freedom as the one "fact of reason." See *Critique of Practical Reason* (AA V, 31, 42-43, 55-57) and *Critique of Judgment* (AA V, 473-474).

¹⁶ This assumption of order and the compatibility of the two dimensions of nature and freedom is called a "regulative" idea of reason as opposed to "constitutive" concepts of understanding. (On the difference between constitutive concepts and regulative ideas, see *Critique of Pure Reason* B 438, 674-75.) Both regulative ideas and constitutive concepts are incapable of proof in terms of thing-in-themselves. However, constitutive concepts constitute a system of notions necessary for us to understand our empirical intuitions of phenomena whereas regulative ideas are those notions that are necessary entirely independent of empirical intuitions of phenomena that make it possible for constitutive ideas to make sense of phenomena. The interconnectedness here constitutes a totality: appearances, constitutive concepts of understanding, and regulative ideas (pure) of reason. Without this totality there can be no experience of appearances.

¹⁷ On the "functional" nature of concepts which are necessary to understand objects (not direct perception of substances), see Kant, *Critique of Pure Reason* B 91-116; *Metaphysik Morongovius*, 889; as well as Ernst Cassirer, *Substanzbegriff und Funktionsbegriff* (Berlin: Bruno Cassirer, 1910); *Dritter Teil. Phänomenologie der Erkenntnis*, Bd. 13 of *Philosophie der symbolischen Formen* (Darmstadt: Wissenschaftliche Buchgesellschaft, 2002), 340, 346, 354, 358; and Cassirer, *Die Begriffsform im mythischen Denken* (Leipzig: B.G. Teubner, 1922).

¹⁸ This "must" expresses a form of "contingent" not "absolute" necessity. It is the only kind of necessity that we can know because it is concerned with the identification of the necessary conditions of possibility for us to exercise our (limited) cognitive capacities.

¹⁹ These *a priori* synthetic structures include "pure intuition" (our sense of "space" and "time" in which things are located and events occur -- we experience things "in" space and time, not space and time themselves) and constitutive concepts of the understanding. Neither space nor time can be perceived externally (*Critique of Pure Reason* B 37). For a list of such constitutive concepts, see Kant's *Critique of Pure Reason* B106.

²⁰ Hypothetical here is the "if ... then" nature of explanation driven by and confined to the limits of a particular situation.

²¹ Practical reason is both "positive," that is, stating what must be the case, and "negative," that is, stating what cannot be the case. In either event, practical reason's conclusions occur within the limits of humanity's capacities because those conclusions can be drawn only because we experience the world within those limits. When practical reason maintains, for example, that "salvific grace" is incompatible with morality, this conclusion is drawn not because reason takes a position "above God" but because the assumption of salvific grace undermines the possibility for morality by interjecting pure selfish interest into the moral equation. The individual no longer does something because it is the right thing to do regardless of the consequences but because it will affect one's status before a judging deity. On the positive and negative use of criteria of judgment, see Kant, *Critique of Pure Reason* B xxv.

causality that functions here is “categorical²²” in the sense that it can initiate a sequence of events independent of the efficient causality of (hypothetical) physical situations. 10) A final assumption applies to reflecting judgment itself: the centrality of reflecting judgment is established not because it is a heuristic tool *confirmed* by our experience of physical phenomena and morality but because it is the crucial human capacity that unites our experience of nature and freedom.²³ This central human capacity as link and transition from nature to freedom is illuminated by humanity's aesthetic capacities that extend from sensuous perception, over beauty and our experience of the sublime, to categorical imperatives.²⁴ This aesthetic moment of reflecting judgment is not concerned with the *content* (with respect to pretty or ugly, for example) of the perception but with the *capacity* to formulate a judgment in the absence of a concept. In our experience of free beauty²⁵ in nature, we formulate a judgment ("This 'X' is beautiful!") without a concept because there is nothing "in common" to a flower, a water fall, a sunset, a mountain peak and because our judgment is not dependent upon our personal interest because I am interested in something beautiful because it is beautiful; it is not beautiful because I am interested in it.²⁶ In the case of the sublime, it is *not* a judgment about nature or any object whatsoever. Rather, it is a judgment about the capacity of consciousness.²⁷ Our experience of the expanse of the

The form of "grace" compatible with morality is "transcendental," which consists of the gift of conditions of possibility and capacities, rather than objective grace. Objective prevention, transforming, sustaining, and salvific grace are not only forms of heteronomy, but they undermine, and even discourage our taking responsibility for, our own moral efforts. See *The Conflict of the Faculties* AA VII: 43.44. Kant proposes in *Religion within the Boundaries of Mere Reason* AA VI: 190 that we are better off avoiding the very concept of grace.

²² Categorical here is that the cause extends beyond the limits of the particular physical condition even as it cannot ignore those physical conditions. On "categorical" and "hypothetical," see Kant, *Groundwork* AA IV: 414-421, *Critique of Practical Reason* AA V: 20, and *Metaphysik Moronovius* XXIX, 1018.

²³ See Kant, *Critique of Judgment* AA 5: 175-178.

²⁴ Reflecting judgment is involved in all aesthetic (from the Greek, αἴσθησις, perception) experience, but its centrality is manifest in the "pleasure" (Lust) and "displeasure" (Unlust) of "taste" (Geschmack). The "pleasure" and "displeasure" of taste is not some blind emotion but, rather, the experience associated with reflecting judgment or the "necessity" to search for the appropriate concept for the phenomena one is experiencing. It is the intellectual equivalent of the hunt itself, not the satisfaction of bagging the game. In contrast, there is little that is more boring than determining judgment that immediately locks the phenomena to a given concept. The displeasure of determining judgment is known to all who have had to memorize a list of concepts. Other than the pleasure of discovery of the capacity to memorize determining concepts acquired from others, all that remains with memorization is a pleasure of comparison of one's accomplishment with others. However, the pleasure of reflecting judgment is known to all who have broken through confusion to reach an insight for oneself. We speak of the "light turning on" or the "penny falling" in such situations, and the pleasure is almost palpable.

See Kant's discussion of aesthetic judgment Part I of the *Critique of Judgment*, AA: 3- 264, and the discussion of "taste," reflecting judgment, the beautiful, and the sublime in Karl- Heinz Schwabe, "Kants Asthetik und die Moderne. Überlegungen zum Begriff der Zweckmäßigkeit in der Kritik der Urteilskraft," in *Naturzweckmäßigkeit und ästhetische Kultur. Studien zu Kants Kritik der Urteilskraft* (Sankt Augustin, Germany: Academia Verlag, 1993), 31-61. On the crucial role of the feelings of „desire“ (Lust) and „repulsion“ (Unlust) in transcendental consciousness, see Birgit Recki, *Ästhetik der Sitten. Die Affinität von ästhetischem Gefühl und praktischer Vernunft bei Kant* (Frankfurt a.M.: Vittorio Klostermann, 2001).

²⁵ Kant distinguishes between "free" and "appended" beauty. The former is what is given to us in nature; the latter is associated with a human activity because it requires a specific set of concepts to understand it "adequately" (e.g., a painting of a particular "school," an architectural style, a musical piece, etc.). On the distinction between free (*freie, pulchritudo vaga*) and dependent (*anhängende, pulchritudo adhaerens*) beauty, see Kant, *Critique of Judgment* AA : 229 ff..

²⁶ Interest is driven by concern for whether or not something exists. See *Metaphysik Moronovius* XXIX: 1009 and *Critique of Judgment* AA V: 204-205, 207, 210, 249. In the case of free beauty, it is not interest that determines whether or not something is beautiful. Rather, because it is beautiful, I am interested in it. What distinguishes the good and agreeable from beauty, according to Kant, is that the former are driven by interest and the latter is not. See *Critique of Judgment* AA V: 207-209.

²⁷ See Kant, *Critique of Judgment* AA V: 245, 250.

universe (mathematical sublime) or of the threatening power of nature (dynamical sublime) both illuminate something about the human that is even "greater" than both, that is, consciousness, which is able to experience both mathematical and dynamical sublimity.²⁸ The significance of the sublime for aesthetic judgment is that, like a judgment of free beauty, it involves a universal judgment without a concept of the understanding independent of personal interest, but, unlike a judgment of free beauty, it is a judgment not about anything in nature.²⁹ It is *as if* the functional necessities of *theoretical* reason have the purpose of assisting humanity in *engaging practical* reason. In short, science (hypothetical imperatives) provides the foundation and points to the challenge of religion (categorical imperatives).

Two Theses: Necessity of the Analogy of Design and What the Analogy Says About Us

Because we do not have direct access to substances and causes but must "add them" to our experience of appearances, any understanding of experience that we might acquire depends upon the use of analogy: analogy is the subsumption of new, unknown phenomena under a concept that is "like" a relationship of subsumption of phenomena under a concept with which we are already familiar. For example, scientists will draw a conclusion about the presence of life on Mars not by direct and immediate observation of any "life substance" but on the basis that phenomena on Mars is compatible with (subsumable to) the notion of life. When it comes to determining judgments in which we already possess a concept for classifying the phenomena, we can easily miss the presence of an analogy. However, in the case of reflecting judgments with their goalless goal-orientedness, the dependence upon our capacity for analogical judgment is obvious.

Not only must we necessarily employ analogies for understanding, the presupposition of analogy is order. Phenomena are assumed to be so ordered that our efforts at analogy are justified. This is the crucial presupposition that drives our investigation of nature in general and of organic ("organized") phenomena. Although we can neither prove nor disprove an "intelligent" design behind, for example, the life cycle of the liver fluke with its dependence upon two external hosts, our understanding of the life cycle requires us to assume that there is a design to it because the life cycle is more than the mere sum of its parts. No part of the cycle can cause the other parts much less are they "aware" in any sense of the interrelationship among the parts. This *assumption of order/design*, however, *does not justify any speculation over the nature of a "designer"* because such speculation takes us beyond the limits of our reason and would undermine our ability to understand phenomena much less to be moral agents in the world (see below). In other words, the analogy of design is a necessary presupposition for the understanding of natural phenomena, but the analogy functions as a heuristic strategy of reflecting judgment; by no means does it justify or permit the drawing of conclusions about any designer in itself.

However, analogical judgment teaches us far more than merely about nature. The crucial aspect of analogical judgment illuminated by reflecting judgment is that the judgment occurs in the absence of a concept. Analogy takes us beyond the mere understanding of nature or *theoretical* reason by pointing us in the direction of *practical*

²⁸ See §§ 25 and 28 in the *Critique of Judgment*.

²⁹ Kant proposes that (free) beauty is concerned with an indefinite concept of the understanding whereas the sublime is concerned with an indefinite concept of reason. See *Critique of Judgment* AA V: 244-5. See Hoffe, *Kants Kritik der reinen Vernunft. Die Grundlegung der modernen Philosophie*, 296. For an explicit discussion of technical and pragmatic imperatives, see *ibid.*, 251-252.

reason, that is, in the direction of our moral capacity. Particularly in the case with the judgment of beauty in nature, we experience a capacity to formulate a goalless goal-oriented judgment of a set of phenomena in the absence of a concept. Yet even further, the experience of the mathematical and dynamical sublime illuminates a judgment both without a concept and without subsumption of anything sensuous from physical phenomena. In terms of Kant's discussion of the understanding in the *Critique of Pure Reason*, where "thoughts without content are empty, and content without concepts are blind,"³⁰ our experience of beauty would be "blind," and our experience of the sublime would be "empty." However, the capacity of judgment functioning in aesthetics with respect to beauty and with respect to the sublime is neither a judgment of understanding nor of pure reason. It is a distinct form of reflecting judgment that bridges the gap between nature and freedom.³¹ Just as Kant proposes that "beauty is a symbol of the moral"³² because it is anchored in sensuousness, experience of the sublime pushes humanity "above" sensuous phenomena to consider our higher *a priori* synthetic capacities.³³

Aesthetic reflecting judgment with its goalless goal-orientedness, instructs humanity that it has higher capacities than the mere understanding of physical phenomena. This is the confirmation of our second thesis. It is not merely that reflecting judgment driven by the analogy of design is necessary for our investigating and understanding of physical phenomena, but also, this very capacity of *reflecting judgment tells us something about humanity's highest capacities rather than about an "intelligent designer" or God.*

Design and Hypothetical Imperatives

The assumption of design is inescapable if we are to understand the world in *theoretical* reason.³⁴ It is this assumption that allows us to distinguish between the sometimes extremely coherent, yet nonetheless, capriciousness of dreams and the predictable order of physical phenomena and events. There is a kind of *necessity* that governs physical phenomena.

Hypothetical imperatives are concerned with discernment of *necessity* in phenomena. We can distinguish, for example, between *technical* and *pragmatic* hypothetical imperatives.³⁵ The structure of hypothetical imperatives is *given by its situation*. If I want to understand or do something in a particular situation, I must *necessarily* use certain capacities and do certain things. On the one hand, technical imperatives are the steps necessary to accomplish a task. For example, the construction of a bridge across a river involves certain necessary steps in addition to the necessity that there be a river with two banks. These necessary steps involve a specific sequence for the construction of the bridge. One can't start a bridge by surfacing the road across it. On the other hand, pragmatic imperatives concern the individual. If I want to be able to build a bridge, it is necessary that I gain engineering skills rather than auto mechanic skills.

The temptation is to treat hypothetical imperatives as absolutely established by things in themselves (Naturalism). Rather than grasping the function of analogy and *reflecting judgment* in the understanding of phenomena and the discernment of the appropriate technical and pragmatic imperatives, which are not obvious in the

³⁰ Kritik der reinen Vernunft, B 75.

³¹ See § IX in the „Introduction“ of the *Critique of Judgment* AA V: 195-198.

³² See § 59 in the *Critique of Judgment* AA V: 351-354.

³³ See the *Critique of Judgment*, AA V: 266-276.

³⁴ For a discussion of teleology in both theoretical and practical reason, see "Part Two: Critique of the Power of Teleological Judgment" in the *Critique of Judgment*.

³⁵ One may distinguish among four kinds of imperatives: with respect to the appetites, technical, pragmatic, and practical. The first three are hypothetical; the fourth is categorical.

appearances, one turns the engagement of the physical world into a set of dogmatic *determining judgments* that undermines the very open-ended quest driving further understanding.³⁶ Paradoxically, the physical order that one wishes to understand by means of hypothetical imperatives must always remain a presupposition rather than a confirmed fact or else one is in danger of mis-understanding it to the extent that one is blinded by dogmatism.³⁷

Nonetheless, we should neither take the necessities of hypothetical imperatives to be exhaustive of the notion of necessity in experience nor should we confuse the hypothetical imperatives of efficient causality in the physical world for the categorical imperatives of the supersensuous or "moral world."

Design and Categorical Imperatives

One might be more willing to embrace the notion of design in *theoretical* reason or the natural sciences, if it didn't seem to imply an anthropomorphic designer. Critical Idealism avoids the temptation and danger of anthropomorphic projection because its epistemology is not driven by substances and causes but by capacities and consequences. In other words, *Critical Idealism can embrace a "symbolic" anthropomorphism implied by the language of design without succumbing to the inclination to make claims about the "nature" of God or its causal agency.*³⁸ This is why the religious moment in Critical Idealism is *practical reason* and not *speculative dogmatism*.³⁹ Practical reason shares with theoretical reason not only a dependence upon the physical order of nature as a necessary regulative idea but also an abhorrence over against any and all dogmatism. However, practical reason shares with theoretical reason the recognition of the inescapability of *faith* in experience. Whereas theoretical reason's faith is grounded in the necessary *assumption* of design shaping nature -- otherwise, there would be no incentive for investigating nature, practical reason's faith is concerned not with *what is* but with *what should be*. Once one introduces the theme of morality, though, one immediately encounters the specter of

³⁶ This is the error that drives P.F. Strawson's reading of Kant. Strawson is a pre-critical empiricist/Naturalist. He has the crucial moments of critical thought reversed. According to Kant, appearances demand necessary structures for us to experience them as we do; According to Strawson, the claim that all we experience are appearances means that mind produces nature, and there's "nothing but appearances" (for Strawson means "nothing is real"). When it comes to morality, however, Strawson maintains that "morality" demands freedom. For Kant, it is precisely the reverse: freedom demands morality. The difference between the issues of appearances and freedom is that the former is concerned with theoretical reason whereas the latter is concerned with the regulative ideas of pure reason. Theoretical reason seeks the a priori structures that make it possible for us to understand given appearances. Pure reason describes the ideas that are necessary even if neither provable nor unprovable for us to possess the kind of theoretical reason that we have. Critical Idealism with respect to theoretical reason is concerned with the conditions of possibility demanded by appearances whereas Critical Idealism with respect to pure reason is concerned with the conditions of possibility independent of appearances for there to be any experience of theoretical reason. For Strawson's reading of Kant, see P. F. Strawson, *The Bounds of Sense* (London: Methuen, 1975). For a Kantian response that rejects Strawson's reading, see Henry E. Allison, *Kant's Transcendental Idealism: An Interpretation and Defense* (New Haven: Yale University Press, 1983).

³⁷ Kant warned already in the *Critique of Pure Reason* that treating regulative ideas as constitutive concepts not only is a form of laziness (B 717), but it also destroys science (B 722).

³⁸ See Kant, *Prolegomena* AA III: 357.

³⁹ Kant's project can be understood as a rejection of such speculation. Already in his so-called "pre-critical" period, Kant saw the danger in speculative dogmatism. See, *Vorlesung zur Moralphilosophie*, (1774/1775), ed. Werner Stark and Manfred Killin (Berlin: Walter de Gruyter, 2004), 102, 116, 127-29, 137; see as well, *Critique of Pure Reason* B xxv, 9, 421, 492; *The Metaphysics of Morals* AA VI: 375-376; *Prolegomena* AA III: 278-9, 293, 316. A crucial observation by Kant is that speculation cannot eliminate freedom (creativity). See Karl Vorländer's "Einleitung" to the *Kritik der praktischen Vernunft* (Hamburg: Verlag von Felix Meiner, 1974): xxx.

moralization with its substance and causal claims. Moralization maintains that morality is driven by an absolute set of objective moral laws, whose authority is determined by an absolute source (e.g., God or the State). This objective and absolute status, then, allows for the claim in moralization that the moral system can be imposed on oneself and/or the other dogmatically.

Critical Idealism, however, embraces capacities and consequences (rather than substance and causes) not only as the only non-dogmatic strategy for understanding the physical world but also as the only non-dogmatic strategy for understanding morality. In short, *design is a necessary presupposition for both theoretical and practical reason, but this presupposition serves as a heuristic strategy for our understanding of physical and moral phenomena and must avoid stepping beyond human limits to make dogmatic claims about the nature of God or any other noumenal aspect of experience.*

Design functions in *theoretical* reason to encourage the open-ended quest of reflecting judgment to understand the physical *order*. Theoretical reason permits no conclusions about the nature of any designer because that not only involves speculative leaps but also involves an undermining of the very theoretical reason that would make the speculative leap. The analogy of design, taken literally, would mean the possibility of the disruption of the physical *order* by the designer initiating a miracle. Although one can neither prove nor disprove that a miracle has in fact occurred, its assumption is more dangerous than it is beneficial. Not only would it discourage our investigation of nature to seek discernment of the order governing its events by encouraging us to "fold our hands" and wait for God, but it would also undermine our confidence that there was a predictable order in nature capable of being understood.

Design functions in *practical* reason to encourage the adherence to self-legislated moral principles for discernment of what *should be*. Practical reason, as well, permits no conclusions about the nature of any designer because that not only involves speculative leaps but also involves an undermining of the very practical reason that would make the speculative leap. The analogy of design, taken literally, would mean that both moral principles *and* their *authority* come from the designer, and it would mean that the incentive to act morally would not be based on doing something *because it is right* but on doing something in order to please the designer. In other words, self-interest would dominate morality rather than moral principles. Just as in the case of free beauty in which I am interested in the beautiful because it is beautiful -- it is not beautiful because I am interested in it, so also with a moral principle: I am interested in a moral principle because it is right, it is not right because it serves my interest. The authority of a moral principle occurs exclusively by the individual's self-legislation of the principle to govern her/his action *now* because it is what allows her/him to say that this is what I must do *here*.

One might identify the creative freedom of practical reason as the highest expression of the natural order except that this freedom involves an efficient causality not limited by the natural order. It represents a *categorical* moment to humanity independent (at least to a degree) of the *hypothetical* situations of nature.⁴⁰ It is precisely this categorical or *autonomous* moment to the human condition that makes morality necessary just as it establishes parameters for understanding of morality. For example, any *authority* possessed by a moral principle comes from the self-legislation on the part of the individual, not on the *origin* of the moral principle. One can acquire moral principles

⁴⁰ Already in 1774, Kant suggested that in principle this efficient causality provides humanity with the capacity to destroy the world. See *Vorlesung zur Moralphilosophie*, 177

from any number of sources (family, society, religion), but the authority of the moral principle occurs only when the individual acknowledges it. In short, the weight of morality is on the shoulders of the individual, and only s/he knows whether or not s/he has acted on the basis of a self-legislated moral principle. Morality is not heteronomous: it cannot be legislated for the other! It can and does occur only by means of self-legislation.

Nonetheless, there is a crucial *communal* moment to morality. Morality is aided by a community that encourages the exercising by the individual of her/his moral capacity. This cannot be in the sense of heteronomous moralization, however. One cannot legislate morality. Rather, what morality requires is the communal commitment to the individual to provide support her/his moral efforts -- even when the individual chooses to act on the basis of a moral principle "contrary to the individual's own interest." This unusual kind of community that encourages the highest moral effort on the part of the individual and is capable of allowing itself to be placed into question is what Kant calls "culture"⁴¹ or the "Kingdom of God."⁴²

Furthermore, practical reason does not need to *explain* the origin of evil any more than it needs to *explain* the origin of design in nature or the origin of freedom. Such attempts at explanation are driven by a desire for omniscience: by a desire to grasp and to speak for absolute origins (substances) and causes in themselves. Religion, on the contrary, is concerned *with faith* and our mutual obligation to one another to encourage the exercising of our highest and most rigorous capacities according to the most stringent moral principles: self-legislated moral principles. In other words, we are not human by birth, we must *become* human by means of the exercising of our capacities. Furthermore, the goalless goal-orientation of becoming human is *not* something limited to the privileged; it is a goal for everyone. To be sure, a desperate physical condition can make becoming human impossible. Therefore, alleviating physical desperation is one of the crucial moral obligations that we have not only for the sake of the other but for our own sake.

If practical reason does not need to explain the origin of evil, it does need to understand what it is and to develop strategies for combating it. A working definition (reflective judgment) for evil is that it involves the subordination of moral principles to sensuousness whereas a working definition for good is that it involves the subordination of sensuousness to moral principles. The necessary condition for the possibility of this alternative of subordination is creative freedom. Humanity's extraordinary efficient causality is the basis for the moral subordination that must occur prior to any action. Hence, the moral struggle is imperceptible not only with respect to discernment of whether or not one has in fact acted on the basis of a moral principle, but also whether that action is good or evil is established prior to the action in the subordination or elevation or a moral

⁴¹ See *Critique of Pure Reason*, B 878-79; *Critique of Practical Reason* AA V: 153; *Critique of Judgment* AA V: 176-77, 185, 297, 299-300; "On the Common Saying: 'That may be correct in theory, but it is of no use in practice'." AA VIII: 308-310; *The Metaphysics of Morals* AA VI: 386-387, 391-392; *Anthropology* AAVII: 327-328, 329-330; *On Pedagogy* AA IX: 449.

⁴² Already in his so-called "pre-critical" period, Kant spoke in this fashion of the Kingdom of God as the cultivation of moral culture. See *Vorlesung zur Moralphilosophie*, 356, 367-68, 367 n. 244. He also realized that there was no guarantee of success and that it can/will require centuries. See *ibid.*, 368. Explicitly on the communal nature of the Kingdom of God necessary for the encouragement of moral elevation, see his discussion of "crooked wook" in *Religion* AA VI: 100-101. In his *Reflections on Anthropology*, Kant emphasizes the social (that is, moral cultural) importance for the encouraging of straight wood as the effect of the forest on the individual tree. See *Reflections* 674 and 676 in *Reflexionen Kants zur Anthropologie* (Leipzig: Fues's Verlag (R. Reisland).

principle over against sensuousness.

Freedom's efficient causality is the key to human dignity. There is nothing in nature (in sensuousness) that can be substituted for it, and it is the condition for the manifestation of the highest moment in the physical order: moral obligation and responsibility. Not only may this dignity not be removed as long as the individual exists, but also it confronts the individual with her/his moral obligation and responsibility.

If there can be no absolute, objective list of authoritative moral principles because any list can be misused for immoral purposes, the discernment of a moral principle requires a set of criteria of reflecting rather than the memorization of determining judgment. Helpful criteria are either 1) *categorical*, not *hypothetical* or 2) derived from *reflecting judgment*. We can identify these criteria as the three modes of the 1) *categorical imperative* and 2) the three maxims of the understanding based on the capacity of *reflecting judgment*.

*The three modes of the categorical imperative are:*⁴³ 1) *self-legislate a moral principle to govern one's actions that one would want to be universal analogous to a law of nature*; 2) *always treat the other and oneself as an ends and never as a mere means*; 3) *acknowledge the other as an autonomous self-legislating moral being*. The three maxims of the understanding are a consequence of our capacity for reflecting judgment:⁴⁴ 1) *think for oneself*; 2) *think from the perspective of the other*;⁴⁵ and 3) *be consistent with one's highest capacity, freedom, in the application of one's reflecting judgment*.⁴⁶

Design and Religion

The assumption of design is, hopefully, obvious with respect to the natural sciences. Were there to be no order in nature, there would be no reason to investigate it, and, were there to be the possibility of the miraculous disruption of the natural order, we would not be able to depend upon the order that we understand and we would not need to investigate nature for the order that governs events. The danger that design represents for the natural sciences is its siren call to believe that nature provides us with an omniscient grasp of its order.⁴⁷ Blind dogmatism is as threatening to science, however, as it is to religion.

More crucial is the need to carefully discern the role of design in religion. Here the danger of succumbing to omniscient claims is tempting not only to address insecurities in physical life but also to substitute chimeras for concrete, historical obligations and responsibilities. Religion in Critical Idealism is the exercising of humanity's highest capacities. These consist in the exercising of creative freedom in conformity with self-legislated moral principles that are followed because they are right and not because of the benefits or harm that they give to the self or others.⁴⁸ Hence, religion is not in any sense of

⁴³ See Kant, *Groundwork* AA IV: 421, 429, 434.

⁴⁴ See Kant, *Critique of Judgment* AA V: 294.

⁴⁵ Thinking from the perspective of the other involves more than mere empathy for the circumstance of the other. It means to recognize that reflecting judgment depends upon alternative perspectives and that one's own perspective can be corrected and enriched by that of the other. If all there were determining judgments, there would be no need to take the perspective of the other into account.

⁴⁶ On the notion of consistency, Kant already proposed in his "pre-critical" period that the individual is to be consistent with her/his creative freedom and not to follow mere blind logical consistency. See *Vorlesung zur Moralphilosophie*, 180 and 182.

⁴⁷ On the dangerous assumption of omniscience in the teleological argument for design in nature, see Kant, *Critique of Judgment* AA V: 441, 480.

⁴⁸ Kant warned against the claim for omniscience implied if not required by consequentialist ethics (Utilitarianism) just as he warned against the temptation toward a claim for omniscience in the teleological argument for design in

the word an escape from the physical world because anything and everything with which religion is concerned is experienced only under the conditions of the physical world.⁴⁹ Given the limits to humanity's capacity, religion is also not concerned with perfect actions. We could not be perfect and be human. The expectation that our actions can be perfect destroys humanity's capacities as much as material determinism. Religion is concerned with the individual's doing her/his best,⁵⁰ not with being perfect. Only the individual knows whether or not s/he has acted on the basis of a moral principle. Such a determination can never be made on anything that is manifest in an action. In fact, the possibility of deception belongs to the conditions for morality so that appearances can be used to conceal one's *real* intention.

Religion is universal to humanity not in terms of the contents of its manifestation but in terms of the capacities that make us human. Rather than "wisdom," doctrines, rituals, and/or institutions defining religion, religion for Critical Idealism is concerned with the extraordinary *efficient causality* of creative freedom and the capacity for *reflecting judgment* that makes it possible for us to become human. *How* we exercise this causality and capacity makes all the difference in the (physical) world.

In short, religion as well as the natural sciences are dependent upon design. However, this is a design that is discerned by open-ended reflecting judgment and that confronts us with the obligation and responsibility for self-legislating moral principles to govern our actions. The "two kingdoms" of nature and freedom are united by reflecting judgment (goalless goal-orientedness). Because the conditions for religion are imperceptible and *a priori* synthetic, humanity is a spiritual odyssey in a material world in pursuit of *becoming* human⁵¹ by exercising its extraordinary creative causality and our capacity to self-legislate moral principles to govern what *should* be.⁵²

nature. On omniscience in consequentialism, see *Groundwork* AA IV: 443-445. There is at least an "advantage" to the Physico-teleological argument for God is that it includes the notion of "perfection" in the sense of principles, not the perfection of actions. See *ibid.* AA IV: 443.

⁴⁹ Kant insists that we should commence all attempts at understanding events by investigating the physical causality ("mechanical causality") of nature before looking for any "supersensible" forms of explanation because there is no supersensible experience without the physical order. See *Critique of Judgment* AA V: 383, 387-388, 415, 418, 429.

⁵⁰ See *Critique of Pure Reason* B 847.

⁵¹ Kant suggests that „Humanity is the only creature that requires education.“ [“Der Mensch ist das einzige Geschöpf, das erzogen werden muß.“] *On Pedagogy* AA IX: 441. See as well: “The most important issue is to know how one properly fulfills one’s place in creation and correctly understands what one must be in order to be a human being.” [Trans. McG] (Immanuel Kant, *Bemerkungen in den ‘Beobachtungen über das Gefühl des Schönen und Erhabenen’*, neu herausgegeben und kommentiert von Maria Rischmüller (Hamburg: Felix Meiner Verlag, 1991): 36. See also, *ibid.*, 39.

⁵² Long before writing the third *Critique* with its elevation of aesthetic judgment to its central role between nature and freedom, Kant wrote in the *Critique of Pure Reason* B 844- 845: "What use can we make of our understanding, even in respect of experience, if we do not propose ends to ourselves? But the highest ends are those of morality, and these we can know only as they are given us by pure reason. But though provided with these, and employing them as a clue, we cannot make use of the knowledge of nature in any serviceable manner in the building up of knowledge, unless nature has itself show unity of design. For without this unity we should ourselves have no reason, inasmuch as there would be no school for reason, and no fertilization through objects such as might afford materials for the necessary concepts. But the former purposive unity is necessary, and founded on the will's own essential nature, and this latter unity [of design in nature] which contains the condition of its application *in concreto*, must be so likewise. And thus the transcendental enlargement of our knowledge, as secured through reason, is not to be regarded as the cause, but merely as the effect of the practical purposiveness which pure reason imposes upon us." (Trans. Norman Kemp Smith)

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