THE TRADITIONAL FORM OF A COMPLETE SCIENCE: BAUMGARTEN’S *METAPHYSICA* IN KANT’S ARCHITECTONIC OF PURE REASON

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[The Architectonic of Pure Reason] is of slight scientific importance, and is chiefly of interest for the light which it casts upon Kant’s personality. Moreover the distinctions which Kant here draws are for the most part not his own philosophical property, but are taken over from the Wolffian system.

Norman Kemp Smith, *A Commentary to Kant’s ‘Critique of Pure Reason’* 579.

Though a part of the Doctrine of Method, which follows the Transcendental Dialectic, the Architectonic is distinct from its broader context in the image of metaphysics it offers. Whereas the general tenor of the Dialectic is anti-metaphysical in the sense that throughout Kant is concerned to deny the claims of traditional metaphysics – by curbing the transcendent pretensions of reason – the Architectonic instead considers the positive possibility of metaphysics opened up by the critical results of the first half of the first Critique.

Consider in this regard Kant’s concluding reflection in the History chapter: Kant’s “critical path [kritische Weg]” remains the sole path reason might follow to sate its “lust for knowledge [Wißbegierde]” (A855/B883); what Kant here envisions is a complete reason, i.e., a reason fully sated in its wanderlust. Despite the unfruitful efforts of “many centuries [viele Jahrhunderte]” of philosophy to bring reason to this point, Kant anticipates that a fulfilled reason might be realizable, “even before the end [noch vor Ablauf]” of the 18th century. The intimations of completeness in this closing remark recall the beginning of

the same paragraph: in offering his critical philosophy as the only alternative to dogmatism and skepticism, Kant still commends the latter for their attempt to be “scientific [sziertifischen],” and “systematic [systematisch]” (A855/B883).

This constellation of concepts – systematicity, science, and completeness – reappears at the head of the Architectonic chapter, now expressly linked to metaphysics. In its “widest sense [im weiten Sinn]” metaphysics is:

[T]he system of pure reason (science), the whole (true as well as apparent) philosophical cognition from pure reason in systematic interconnection [das System der reinen Vernunft (Wissenschaft), die ganze (wahre sowohl als scheinbare) philosophische Erkenntnis aus reiner Vernunft im systematischen Zusammenhange] (A841/B869).^1

More overtly than in the History chapter, Kant here organizes the terminology of “systematicity,” “science,” and “completeness” under the heading of metaphysics: metaphysics, Kant explains, is a scientific “System der reinen Vernunft”; “systematicity,” Kant continues, consists in exhaustively “connecting together [zusammenhängen]” all philosophical cognition. An exhaustive interconnecting of philosophical cognition is then linked, in the definition, to completeness – to the “whole [ganze]” – of the metaphysical coordination of philosophical cognition. If we are to make sense of Kant’s understanding of a science of metaphysics in the context of his theoretical philosophy, completeness, systematicity, and the coordinated inter-connectedness of cognition must serve as guiding threads into this more embracing issue.

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^1 There is, in Baumgarten’s Metaphysica, the idea of a “veritas metaphysica [true metaphysics]” as the “ordo plurium in uno [order of a plurality in a singularity]” (Baumgarten §89). Noteworthy of the Kantian notion of a metaphysics of “true [wahre]” philosophical cognition is, then, the way it locates the truth of the science of metaphysics in the truth of the cognition it systematically coordinates into a rational unity. We should also note that the Baumgartian use of “ordo” in reference to veritas metaphysica implies a general adherence to the idea that the elements of the science are already identified; the sole remaining task of metaphysics is to array such elements into their proper order. By using “ordo” rather than “methodus” to refer to the science of metaphysics, Baumgarten implicitly adopts the idea that science does not involve a productive – or “methodical” – aspect. Science in general, and the science of metaphysics in particular, is for Baumgarten a programmatic organization of an already identified manifold. Given Kant’s emphasis on methodus throughout the first Critique, and particularly in the closing chapters on the “Doctrine of Method,” there is an indication from the outset that his understanding of the scientificity of metaphysics is to be contrasted with the same in Baumgarten.
From the science of metaphysics generally defined, Kant proceeds in the Architectonic by dividing the science according to a scheme borrowed from Alexander Baumgarten’s *Metaphysica* (1739). Baumgarten’s procedure in the text is to begin each section with a definition of a particular branch of metaphysics, and then to detail that definition throughout the remainder of the section. The *Cosmologia* section, for instance, begins with the general definition, “*Cosmologia generalis est scientia praedicatorum mundi generalium* [general cosmology is the science of the general predicates of the world]”; Baumgarten then uses the concepts, “*mundus*,” “*monadum*,” and “*corporum*” to specify further this general definition (Baumgarten §351-§430). A similar structure appears in the other main sections of Baumgarten’s text: *Theologia* and *Psychologia* are first generally defined, and then subsequently classified into the particularities of *Theologia rationalis* and *Theologia naturalis*, and *Psychologia rationalis* and *Psychologia empirica*, respectively.

As with the three special metaphysical sciences of cosmology, theology, and psychology, so with the general metaphysics of ontology: Baumgarten begins with a general definition – “*Ontologia est scientia praedicatorum entis generaliorum* [ontology is the science of the general predicates of being]” (§4) – and then specifies it using the concepts of “*possibile*,” “*connexium*,” and “*ens.*”. The scheme we find articulated through each particular branch of metaphysics is the micrological correlate of the macrological articulation of the whole of the science of metaphysics. The four-fold division of metaphysics into three special sciences and one general science, into, that is, cosmology, theology, and psychology on the one hand and ontology on the other, reproduces at the level of metaphysics generally the internal articulation of each particular division of the science. Accordingly, metaphysics in its most general form is defined in Baumgarten’s *Prolegomena* as, “*scientia primorum in humana cognitione principiorum* [science of the first principles of human cognition]” (§1); subsequently, Baumgarten divides this definition into its four main branches through the “first principles” of human cognition.

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2 In his *Erläuterungen* to the *Metaphysica*, Kant insists that the „*realgrund der Wirklichkeit* [real ground of actuality]” is „*die Wirkende Ursache* [the actual cause]” (R 3500); this in contrast to Baumgarten’s wholly logical construal of “*ratio* [ground]” (Baumgarten §14). Since the analysis of *ratio* serves Baumgarten to specify the more general ontological predicate of *possible*, it follows that while Kant retains the importance of “*possibility [Möglichkeit]*” as an aspect of ontology, he parts ways with the Wolffian metaphysical tradition as to how possibility, and thus how ontology in general, is to be specified. We will return to this point below.
In reviewing the general plan of Baumgarten’s *Metaphysica*, I have purposely highlighted its arboreal – its tree-like – layout. I.e., the specific *branches* of cosmology, psychology, theology, and ontology articulate the general science of metaphysics; each branch of the science *branches* further according to the specific concepts of possibility, being, intellect, etc. What this arboreal scheme suggests, in part, is the influence of Descartes on Baumgarten; the former, we recall, presents the relationship between metaphysics and the particular natural and physical sciences in the *Principles of Philosophy* as a root system securing the foundation of a tree-like trunk and upper arbor. *Schulmetaphysik*, which for Kant is exemplified in Baumgarten’s work, might be read accordingly as a collective effort to fill out the metaphysical root system whose seedbed Descartes provides in the “I think [*cogito*].”

Generally, Kant in his writings and lectures on metaphysics adheres to the same arboreal scheme: he divides the general science of metaphysics into its particular cosmological, theological, and ontological branches. What is novel in Kant’s provisional appeal to this framework is the reversal he effects in the relationship between metaphysics and other claims of knowledge: *it is the discursive conditions under which the tree and its branches grow that determine the extent of the underlying metaphysical root system*. Note, in this regard, the following from the B-edition Preface: “Through this [critique] alone can we cut the very root of materialism, fatalism, atheism, of free thinking unbelief, of enthusiasm and superstition [Durch diese [Kritik] kann nun allein dem Materialism, Fatalism, Atheism, dem freigeisterischen Unglauben, der Schwämmeri und Aberglauben [...] selbst die Wurzel abgeschnitten werden]” (Bxxxiv; translation modified).

But, the arboreal scheme of Kant’s presentation of metaphysics is telling in another respect. It is by way of this scheme, I will argue, that Kant is able to realize in his theoretical plan for a scientific metaphysics what the tradition before him could not, namely, completeness and systematicity. Thus, it is significant that Kant’s presentation of metaphysics in the lecture courses, as well as his presentation of the same in the penultimate chapter of the first *Critique*, coincides with the form given the science in the *Metaphysica*: without this form, Kant could not realize completeness in a scientific metaphysics.

In the Mrongovius notes (1782-1783), Kant begins his introductory overview of metaphysics with the general definition, “[metaphysics is] the science of the first principles of the entirety of human cognition” (Ak. 29:749). This general definition is then specified through a discussion of the different modes of cognition, i.e., rational/philosophical and mathematical; through such specification, Kant is able to sketch in outline
The traditional form of a complete science

the general metaphysical science of ontology. Continuing, Kant applies the same procedure in moving from a general account of each of the special sciences of metaphysics to their particular details according to their constituent concepts. The L2 notes (1790-1791) and the Vigilantius notes (1794-1795) follow the same structure: from defining metaphysics, generally, Kant proceeds in each set of lectures to divide metaphysics into its branches and sub-branches.

While the form the lecture courses take might be explained simply by the format of the state-mandated source material, namely, Baumgarten’s Metaphysica, the same cannot be said of Kant’s procedure in the first Critique. As we have seen, Kant’s presentation of metaphysics in the Architectonic adheres to the form given the science by Baumgarten; in the chapter, Kant divides general metaphysics into its specific branches. Moreover, the first Critique as a whole follows the same form: it begins with the general metaphysical science of ontology and proceeds through the special metaphysics of rational psychology, cosmology and theology – all, of course, under different critical headings. It is this coincidence in form between Baumgarten’s Metaphysica and the first Critique – the latter free from the pedagogical constraints on Kant’s metaphysics lectures – that motivates the present inquiry into the Architectonic: the form of metaphysics as presented in its penultimate chapter is in this way treated as a synecdoche for the form of the text as a whole.

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Kant’s point of departure in the Architectonic is the above-cited general definition of metaphysics: “[T]he system of pure reason (science), the whole (true as well as apparent) philosophical cognition from pure reason in systematic interconnection.” Such a conception of metaphysics is “widest [weitern]” in including a propaedeutic transcendental critique as well as apparent philosophical cognition, i.e., the “transcendental illusion [transzendentalen Scheine]” (B352) presented in the Transcendental Dialectic. From metaphysics defined “wide[ly],” Kant proceeds by dividing the science into its particular branches. Kant’s “architectonic” method is, as noted above, delimiting rather than amplifying: the underlying roots of metaphysical cognition are

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3 The sequence of the Mrongovius lectures is: Introduction, Ontology, Cosmology, and Psychology. However, because of the peculiar standing of ontology relative to the science of metaphysics – a peculiarity considered below – we can, for now, simplify the general framework of metaphysics into an Introduction and subsequent considerations of the special metaphysical sciences.
pruned; warranted knowledge-claims are cut back so that a complete metaphysical system might grow from them.

“Apparent philosophical cognition [scheinbare philosophische Erkenntnis]” and transcendental critique, the latter of which is unmentioned in Kant’s initial architectonic definition of metaphysics, are first cut away to reveal the two highest employments of reason: “[M]etaphysics is itself divided into the speculative and the practical use of pure reason [die Metaphysik teilt sich in die spekulativen und praktischen Gebrauchs der reinen Vernunft],” i.e., a metaphysics of nature and a metaphysics of morals (A841/B869; translation modified). Given Kant’s interest in the first Critique in speculative reason, little more is said in the text of the second of these two main divisions, namely, metaphysics as the science of the “practical use of pure reason.” Instead, Kant remains with theoretical reason, and describes a metaphysics of nature as focused on “everything insofar as it is [alles, so fern es ist]” rather than on what “ought to be [was sein soll]” (A845/B873). Metaphysics “in its narrowest sense [im engeren Verstande],” i.e., in the narrow sense of reason in its employment relative to everything that is, is then divided between transcendental philosophy and a physiology of pure reason.

Metaphysics “narrowly understood [im engeren Verstande]” as a transcendental philosophy is concerned with the understanding and with reason as the “system of all concepts and principles that are related to objects in general [System aller Begriffe und Grundsätze, die sich auf Gegenstände überhaupt beziehen].” The other branch of metaphysics in the narrow sense, Kant continues, is a “physiology of pure reason [der Physiologie der reinen Vernunft],” which “considers nature, i.e., the sum total of given objects [betrachtet Natur, d.i. den Inbegriff gegebener Gegenstände].” The domain of a physiology of pure reason is delimited according to “the use of reason in [its] rational consideration of nature [der Gebrauch der Vernunft in dieser rationalen Naturbetrachtung]” (A845/B873).

Once more, Kant sets aside for consideration elsewhere a particular division of metaphysics. Kant offers a metaphysical physiology of reason; he does so, though, outside of the context of the first Critique in the Metaphysical Foundations of Natural Science (1786). Given this textual division of labor, I will note only that Kant organizes a physiology of pure reason around the same focus as he does a transcendental philosophy, namely, the possibility of objectivity in general. This focus on general objectivity is prompted by Kant’s translation of traditional ontological predicates into rules of discursive thought. Within the framework of traditional metaphysics, this translation converts general
ontology into an analytic of the understanding – a transformation of metaphysical ontology that Kant first announces in the *Phenomena* and *Noumena* chapter of the Analytic of Principles.

The Transcendental Analytic, Kant here explains, accomplishes the “important result [*wichtige Resultat*]” of showing the understanding *a priori* to be able to accomplish nothing more than anticipate the “form of a possible experience in general [*die Form einer möglichen Erfahrung überhaupt*].” The understanding, bound to the “limits of sensibility [*die Schranken der Sinnlichkeit*]” in operating only under the conditions of objectivity provided by sensibility, is the principled “exposition of appearances [*der Exposition der Erscheinungen*].” From this, Kant concludes:

> [T]he proud name of ontology, which presumes to offer synthetic *a priori* cognitions of things in general in a systematic doctrine [...] must give way to the modest one of a mere analytic of the pure understanding [[*D*]er stolze Name einer Ontologie, welche sich anmaßt, von Dingen überhaupt synthetische Erkenntnisse *a priori* in einer systematischen Doktrin zu geben [...] muß dem bescheidenen, einer bloßen Analytik des reinen Verstandes, Platz machen].

(A247/B303)

Ontology as a metaphysics of the predicates of things as they are in themselves, must give way to an analytic of the possibility of objectivity in general – and, this if metaphysics is to attain scientific completeness.

As Kant presents it in the initial chapters of the first *Critique*, an analytic of the understanding is a principled exposition of the transcendental conditions of the possibility of experience. Further, in the Transcendental Deduction Kant argues that the conditions of the possibility of experience are the conditions of the possibility of the objects of experience (Cf. B161). The significance of these analytic findings for traditional metaphysics, and particularly the significance of the objective validity of the categories for such a science, is what remains to be shown in the second half of the first *Critique*.

Consider, once more, Baumgarten’s general definition of metaphysics: “*scientia primorum in humana cognitione principiorum* [science of the first principles of human cognition].” In the *Metaphysik Mrongovius*, Kant reproduces Baumgarten’s definition with one noteworthy addition: metaphysics is “the science of the first principles of the *entirety* of human cognition” (Ak. 29:749; emphasis added). Where Baumgarten refers to the principles of human cognition in general, Kant insists that such principles be *exhaustive* of human cognition. Accordingly, Kant charges Baumgarten with overlooking the key
metaphysical issue of completeness: “But this concept [of metaphysics] is not determinate enough as to how much or how little belongs to it. For if I give a concept of science, then it must be determined what belongs to it and what not” (Ak. 29:749).

The Baumgartian definition of metaphysics with which Kant inaugurates the Mrongovius lectures is found lacking because to define a science one must both measure its full scope as well as identify all that falls within its purview. Metaphysics as Baumgarten conceives it is lacking in completeness because its principles do not allow reason to exercise itself speculatively; or, what is the same, the principles of traditional metaphysics do not bound the pure activity of reason to a determinate field. In Kantian terms, the principles of a complete metaphysics, which Baumgarten lacks, are those provided by ontology once it is remade as an analytic of the understanding. Kant intimates this point in the Mrongovius lectures by moving from the traditional definition of metaphysics through his complaint of its incompleteness to a discussion of an analytic of the understanding as the means to “acquaint myself with [reason’s] whole faculty, and its sources, and become acquainted with how far they reach, and their boundaries” (Ak. 29:752; emphasis added).

The principles that enable Kant’s success where the metaphysical tradition before him failed are the transcendental conditions of experienceable objects, i.e., the spatio-temporal form of human sensibility; the determinants of objects as appearances; and, most fundamentally, the transcendental unity of apperception as the principle of objectivity in general. As this last transcendental aspect of experience suggests, crucial to Kant’s broader metaphysical success is the critical turn from the cognition of “the nature of things [die Natur der Dinge]” to the understanding as cognition “about the nature of things [über die Natur der Dinge]” (A12-13/B26). Objectivity is still of central moment in Kant’s transcendentalized ontology; but, it is “objectivity in general” – „Gegenständlichkeit überhaupt” – rather than objects per se. What this means it that regardless of the particularities of the empirical manifold, the conditions that determine sensible givens as objects are fully articulable from a transcendental perspective.

It is in this sense that Kant’s critical reworking of an ontology into an analytic of the understanding enables him to realize what Baumgarten before him failed to attain. Baumgarten’s metaphysics is incomplete – and, necessarily so – because it is grounded in an ontology of things in themselves: the conditions of objects per se can never be fully catalogued because of the manifold determinants of such objects. Rather, only the conditions of cognition “about [über]” things, as Kant puts it, can be
completely catalogued. Such a complete catalogue is what Kant claims to have secured in the table of categories as the conditions of objectivity in general insofar as they are metaphysically deduced from the complete list of the logical function of the understanding in judgment (A67/B92) – leaving aside, in the present context, questions of the viability of Kant’s claims to completeness in reference to the categories.

Completeness, which is one of the hallmarks of Kant’s architectonic definition of the science of metaphysics, is thus secured by Kant’s transcendentalization of Baumgarten’s objective ontology: where the latter is incomplete because of the manifold empirical determinants of objects per se, the former is complete in the metaphysical derivation of the conditions of objectivity in general from the logical functions of the understanding in judgment. The other features of Kant’s architectonic metaphysics – systematicity, and the complete inter-connectedness of cognition – are realized through the same insight; showing the link between completeness through transcendental objectivity in general, and systematicity and thoroughgoing interconnectedness of cognition is the task of the remainder of my paper. Kant provides the key to this connection in the notion of an “idea [Idee]” – a concept Kant discusses in the Architectonic in the process of refocusing the particular sciences of Baumgarten’s metaphysics onto objectivity in general.

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Having divided metaphysics in its narrow sense between a transcendental philosophy and a physiology of pure reason, Kant continues in the Architectonic chapter of the first Critique by dividing the latter according to whether the use of reason “pertains to nature so far as its cognition can be applied in experience (in concreto),” or, to “that connection of the objects of experience [Verknüpfung der Gegenstände der Erfahrung] which surpasses all experience” (A845/B873). The former Kant calls the “physical [physisch]” or “immanent” use of reason; the latter Kant calls the “hyperphysical [hyperphysisch]” or “transcendent” use of reason. Next, employing a distinction familiar from the Amphiboly chapter of the text of whether a representation has an “inner [innere]” or “outer [äußere]” relation to its object (A261/B317), Kant identifies a transcendent physiology of pure reason with an inner relation to its object, and calls this “the transcendental cognition of the world [die transzendentale Weltwissen].” Correspondingly, a transcendent physiology with an outer relation to its object is classified as “the transcendent cognition of God [die transzendentale Gotteswissen]” (A846/B874). The other branch of a physiology of
pure reason, the physical or immanent form of such a physiology, is followed out in like manner: rational psychology is the immanent physiology of reason with an *inner relation to its object*; rational physics is the immanent physiology of reason with an *outer relation to its object* (A846/B874).

Though implicit throughout this discussion of metaphysics, Kant next turns explicitly to the four-fold classificatory scheme of Baumgarten in the *Metaphysica*. The scheme into which Baumgarten divides the science of metaphysics is in the Architectonic transformed through the lens of objectivity in general, which Kant provides in his analytic of the understanding. Note, in this regard, the central place objectivity occupies in each of Kant’s reconfigurations of the particular sciences of metaphysics. Baumgarten’s definition of rational cosmology as the, “scientia praedicatorum mundi generalium [science of the predicates of the world in general]” (Baumgarten §351)⁴ becomes in the Architectonic the pure activity of thinking as a physiology of pure reason with an *outer relation to its object*. The *metaphysica specialis* of rational psychology, which for Baumgarten is the “scientia praedicatorum animae generalium [science of the predicates of the soul in general]” (§501), is likewise framed in terms of objectivity in general. What is for Baumgarten “the cognition of the objects of inner sense insofar as it is obtained from experience” (Ak. 28:222), is for Kant an immanent physiology of pure reason whose *object* is that of inner sense, i.e., “thinking nature” (A846/B874).

Restated as it is through the topic of objectivity in general, Kant is able to present Baumgarten’s traditional map of the four-branched science of metaphysics under the designation of “complete systemativity”: “[T]he entire system of metaphysics consists of four main parts. 1. Ontology. 2. Rational Physiology. 3. Rational Cosmology. 4. Rational Theology [be...]

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⁴ In the *Metaphysik Mrongoviis* Kant rephrases Baumgarten’s definition of rational cosmology as follows: “The concept of a world in general determined through limitation of the sensible world by reason” (Ak. 29:848).
the link between analytic completeness and rational systematic interconnectedness through an idea, we must consider, briefly, Kant’s logical presentation of an idea in the second and third sections of the first book of the Dialectic.

Here, Kant explains that just as discursive thought in judgment brings forth “categories that direct all use of the understanding in experience [welche allen Verstandesgebrauch in der Erfahrung leiten],” so reason in operating syllogistically brings forth various transcendental ideas, which “determine the use of the understanding according to principle in the whole of an entire experience [den Verstandesgebrauch im Ganzen der gesamten Erfahrung nach Prinzipien bestimmen werden]” (A321/B378).

In a “rational syllogism [Vernunftschluß]” the major premise is a “rule (major),” which is thought “through the understanding [eine Regel (major) durch den Verstand].” Continuing, Kant explains that through the power of judgment [Urteilskraft] the cognition is “subsume[d] [subsumiere]” under the “condition of the rule (minor) [die Bedingung der Regel (minor)].” This two-step discursive operation is then followed by inference, properly speaking: “Finally, I determine my cognition through the predicate of the rule (conclusio), hence a priori through reason [Endlich bestimme ich mein Erkenntnis durch das Prädikat der Regel (conclusio), mithin a priori durch die Vernunft]” (A304/B360-361).

From the forms of rational syllogism, Kant turns to a topic of greater import for a metaphysics of reason, namely, reason in its “pure use [reinen Gebrauche].” The latter is the logical, syllogistic functioning of reason – and this is key – under the assumption of the givenness of the conditions of objectivity in general in the major premise as a rule of the understanding (A307-308/B364). Such “pure use” of reason under the conditions of the understanding given in the major premise is the source of the dialectical illusions into which reason falls; these are the illusions

5 Kant uses the “proposition [Satz],” “Caius is mortal [Cajus ist sterblich],” to exemplify the categorical form of rational syllogism.
I seek a concept containing the condition under which the predicate (the assertion in general) of this judgment is given (i.e., here, the concept “human”); and, after I have subsumed [the predicate] under this condition, taken in its whole domain (“all humans are mortal”), I determine the cognition of my object according to it (“Caius is mortal”) [Allein ich suche einen Begriff, der die Bedingung enthält, unter welcher das Prädikat (Assertion überhaupt) diese Urteils gegeben wird, (d.i. hier, den Begriff des Menschen); und nachdem ich unter diese Bedingung, in ihrem ganzen Umfange genommen, (alle Menschen sind sterblich) subsumiert habe: so bestimme ich dannach die Erkenntnis meines Gegenstandes (Cajus ist sterblich)]. (A322/B378)
that Kant corrects in the Dialectic under the headings of the “paralogisms,” “antinomies,” and “ideal” of reason. Further, reason cannot help but succumb to these dialectical pitfalls (A297/B353), for in its pure use it functions according to the discursive rules of objectivity; without critical correction, reason thus cannot help but assume that the ideas it concludes through its syllogistic inferences have objective significance.

Given my interest in the positive possibility of a science of metaphysics outlined in the Architectonic, I leave aside Kant’s critical solutions to the problems of the Antinomies, Paralogisms, etc.; that is, I leave aside Kant’s negative critique of traditional metaphysics. Rather, I am interested in a pure use of reason which remains determinate in operating under the discursive conditions of objectivity in general in its major premise, but which avoids the illusory thought that its conclusions have actual objective significance. Such a use of reason would, according to Kant in the first book of the Dialectic, establish a “thoroughgoing interconnection [durchgängigen Zusammenhang]” within reason’s manifold cognition (A305/B362); in the Architectonic, Kant makes the same point: when operating according to an idea, reason accomplishes a coordinated and systematic “articulation [gegliedert]” of its cognition (A833/B861). The idea in question, here, is the principle that reason seek the “unconditioned [Unbedingte]” for every “conditioned cognition [bedingten Erkenntnisse]” (A307/B364); or, more simply, it is the idea of the pure systematic use of reason as the architectonic “rational concept of the form of the whole [der Vernunftbegriff von der Form eines Ganzen]” (A832/B860).

The “rational concept of the form of the whole” is the idea of reason itself in accordance with its highest “ends [Zwecke]” – “ends,” which Kant presents in the ethical, political, and religious works of the critical project. Thus, we seem to reach an impasse in our efforts to describe a complete and systematic science of metaphysics within the context of speculative reason alone. While an account of the completeness of a science of metaphysics is secured through the provision of the conditions of objectivity in general to reason in the major premise of its inferences, a similar account of the systematic interconnectedness of the cognition that results from such inferences is determinate only in reference to “ends” that stand outside of the domain of speculative reason. Thus, the pure – or, real – use of reason in the first Critique is merely regulative, and the science of metaphysics on offer in the text is complete but not determinately systematic.

What we overlook in reaching this conclusion is how Kant’s architectonic idea of the “transcendental concept of the form of the
whole” compares to Baumgarten’s formal presentation of metaphysics in his *Metaphysica*: How, in short, does an architectonic idea of the pure use of reason relate to the arboreal scheme that figures prominently in the form of the Architectonic? Consider, in this regard, the following description of “the form of the whole,” which Kant explains is systematically “articulated (articulatio)” rather than merely being “heaped together (coacervatio).”

[The whole] can, to be sure, grow internally (*per intus susceptionem*) but not externally (*per appositionem*), like an animal body, whose growth does not add a limb but rather makes each limb stronger and fitted for its end [[Das Ganze] kann zwar innerlich (*per intus susceptionem*), aber nicht äußerlich (*per appositionem*) wachsen, wie ein tierischer Körper, dessen Wachstum kein Glied hinzusetzt, sondern, ohne Veränderung der Proportion, ein jedes zu seinen Zwecken stärker und tüchtiger macht]. (A833/B861)

Though here cast in terms of the body of an animal, Kant’s description of the form of the whole accords with how he would have us conceive the “tree” of metaphysics: the root system of such a tree is curtailed from above through excision of its non-viable limbs and branches. Kant, in fact, makes just this comparison a page later. The architectonic articulation of all metaphysical cognition “begins only at the point where the general root of our cognitive power divides and branches out into two stems [fangen nur von dem Punkte an, wo sich die allgemeine Wurzel unserer Erkenntniskraft teilt und zwei Stämme auswirft]” (A835/B863).

Significantly, Kant describes in overtly organic terms the pure use of reason in accordance with the architectonic idea of the form of the whole; this description immediately precedes Kant’s presentation of the four-fold classificatory scheme of the science of metaphysics. From the arboreal scheme of the pure use of reason according to the idea of the form of the whole at the beginning of the Architectonic, Kant, several *Akademie* pages later, reproduces Baumgarten’s traditional science of metaphysics: the science in general is divided between its four main branches of natural theology, rational psychology, and rational cosmology (A846-847/B874-875).

What, though, do these special metaphysical sciences present if not the “ends” of reason? Natural theology presents the idea of the existence of God; rational psychology, in turn, covers the existence and nature of the human soul; finally, rational cosmology countenances the origin and nature of the universe. Thus, in Baumgarten’s scheme for the science of metaphysics, which is grafted intact into the middle of Kant’s
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Architectonic, the highest ends of reason appear in a wholly theoretical context. Reason can think these “ends” in determinate fashion under the rule of objectivity in general supplied by the understanding in the major premise of its real syllogistic use without falling into error about their actual objective significance – after all, the rule given in the major premise is (merely) the rule for objectivity in general; and, it can systematically interconnect this cognition according to the architectonic idea of the “transcendental form of the whole.”

Kant has assured this last critical correction of reason’s pure speculative use by making over traditional ontology, which considers objects as they are in themselves, into an analytic of the understanding, which offers only the conditions of objectivity in general. Thus, when reason thinks through Baumgarten’s science of theology, for example, it is able to do so in the form of a science as a whole without thereby treating the idea of “God” as corresponding to a determinate object. To the extent that speculative reason thinks the idea of God, it does so in terms of objectivity in general, i.e., as a constituent part of the whole of theology as a special metaphysical science. By applying the same architectonic idea to each of the special metaphysical sciences of the rationalist tradition, reason grasps the whole of the science of metaphysics in outline, i.e., in complete and systematically interconnected form.

Herein lies the significance of Kant’s continued adherence to the traditional metaphysical scheme of the science of metaphysics in a text where such an account is no longer in force. It is by way of the traditional metaphysical framework provided in Baumgarten’s Metaphysica, and, more specifically, in the delimited four-fold branch system of the science of metaphysics, that Kant provides reason the “objects” of its pure architectonic use. Like Baumgarten before him, Kant privileges ontology as the sole general metaphysical science. Kant takes advantage of the traditional privilege afforded ontology in order to recast it as an analytic of the understanding through which reason in its pure speculative use is provided the conditions of objectivity in general. By such conditions, recast late in Kant’s text as the principle of the architectonic idea of the form of the whole, reason is able to think metaphysics in complete and systematic form. Thus, speculative reason is provided the plan by which it can accomplish in Kant what Baumgarten failed to provide – and this by means of Baumgarten’s own scheme – namely, a complete and systematic science of metaphysics.
The traditional form of a complete science

References


KANT, Immanuel,


ABSTRACT

The article treats as significant the formal coincidence between Kant’s presentation of the science of metaphysics in the “Architectonic of Pure Reason” chapter of the first *Critique* and Alexander Baumgarten’s presentation of the same in the *Metaphysica*. From his comments on Baumgarten in the metaphysics lectures, the article shows that for Kant metaphysics in its traditional form lacked completeness and systematic order. Kant fits completeness into his architectonic plan of a scientific metaphysics by converting Baumgartian ontology into an “analytic of the understanding”; Kant achieves the systematicity by modeling a rational “idea of the form of the whole” after Baumgarten’s tree-like ordering of the special sciences of metaphysics. Thus, Kant realizes the completeness and systematicity in a theoretical presentation of the science of metaphysics that he
finds lacking in Baumgarten precisely by borrowing from the latter his scheme for metaphysics.

**Keywords:** metaphysics, architectonic, completeness, systematicity, ontology

**RESUMO**

Este artigo considera significante a coincidência formal entre a apresentação kantiana da ciência da metafísica no capítulo da “Arquitectónica da Razão Pura” da primeira *Crítica* e a apresentação da mesma feita por Alexander Baumgarten na *Metaphysica*. A partir dos seus comentários sobre Baumgarten nas conferências sobre metafísica, o artigo mostra que, para Kant, falta completude e ordem sistemática à metafísica na sua forma tradicional. Kant encaixa a completude no seu plano arquitectónico de uma metafísica científica convertendo a ontologia baumgarteniana numa “analítica do entendimento”; Kant alcança a sistematicidade modelando uma racional “ideia da forma do todo” após a ordenação arborescente feita por Baumgarten a propósito das ciências especiais da metafísica. Assim, Kant concretiza a completude e a sistematicidade numa apresentação teórica da ciência da metafísica que considera faltar em Baumgarten, precisamente ao adaptar deste último o seu esquema para a metafísica.

**Palavras-chave:** metafísica, arquitectónica, completude, sistematicidade, ontologia