

THE MUSIC OF KANT'S *CRITIQUE OF PURE REASON*

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The notion that the *Critique of Pure Reason* is an aesthetic production akin to a work of art will seem paradoxical to many who have tried to read it. Yet in certain aspects of its structure and, more importantly, in its dependence on an evidentiary quality in sensibility, it is analogous to an eighteenth century musical composition. Indeed, Kant himself argued that its conceptual edifice rests on an aesthetic basis: the *Critique's* architectonic design.

The relationship of *The Critique of Pure Reason* to music depends on an adequate definition of "aesthetic." There are two meanings of the term in Kant's *Critiques*: the "Transcendental Aesthetic" in first section of the *Critique of Pure Reason* and the aesthetic 'judgment of taste' in *The Critique of Judgment*.¹ For the purposes of this study I shall add a third: 'aesthetic' data as the evidence of subjective experience, i.e., as in the "thought experiments" discussed below.

The Critique of Pure Reason defines the "aesthetic" as "the sensuous faculty," and sensibility as "the receptivity of the mind for impressions,"² disassociating the term from the 'taste criticism' discovered in *The Critique of Judgment*. In the "Transcendental Aesthetic" [22] Kant points out that German alone uses "aesthetic" to indicate taste criticism: "At the foundation of this term [*Ästhetik*] lies the disappointed hope, which the eminent analyst Baumgarten conceived, of subjecting the criticism of the beautiful to principles of reason, and so of elevating its rules into a science," asserting his own purely theoretical use of the term. Kant then defines "sensibility" as 'the capacity for receiving sense impressions of objects:' the understanding thinks them, and thus arise "conceptions." But all thought must relate directly or indirectly to intuitions, and thus, to sensibility.

I. Aesthetic Evidence in the *Critique of Pure Reason*

Readers of the *Critique of Pure Reason* are often struck by what appears to be a near total absence of empirical evidence. Though *The Critique* is a monument of logical explanation, its lack of factual support seems to betray its central dictum: “Thoughts without content are empty, intuitions without concepts are blind.” Nevertheless, such evidence is at hand: at the outset of the *Critique* Kant presents a series of what may be called thought experiments that serve to confirm his claims that space and time are the two fundamentals of consciousness. These experiments cluster in the first part, in the Transcendental Aesthetic. Since Kant’s theories of space and time underpin the entire work, these proofs are of the utmost importance.

It is Kant’s readers who perform these experiments and who will themselves produce the proof that Kant requires. Furthermore, these experiments ipso facto verify the reader’s consciousness and self-consciousness. And whether or not the experiments turn out as Kant predicts, they demonstrate the ‘transcendental unity’ of self-consciousness he later describes in “Of the Originally Synthetical Unity of Apperception” [76]. Lastly, the “sensibility” required for the experiments is the basis of all aesthetic perception; the domain of a sensible subject whose unique perceptions (i.e., qualia) cannot be adequately transmitted through language or reason. This latter idea is developed at length in *The Critique of Judgment* in its discussion of the perception of ‘the beautiful’ in a work of art.³

Hence, the mind of the reader serves as the laboratory for the verification of Kant’s demonstrations; only the reader’s self-perception and sensations can produce the necessary—subjective--data. The subject who follows Kant’s instructions—for example, who imagines a three-dimensional object and then eradicates it step by step--has demonstrated a distinction between an aesthetic level of consciousness that presents sense data to the mind and a conceptual level that evaluates and rationalizes it.

It is frankly irrelevant whether the reader can in fact eradicate the imagined object. Success and failure both verify the architectonic mentality whose articulation is the

subject of Kant's work. As opposed to evaluating a demonstration of fact in the world available through secondhand report (e.g., atomic weight), Kant's reader must experience the evidence firsthand. It is purposeless to read about another's success or failure. What can it possibly mean to learn that someone else possesses "consciousness" if you are incognizant of your own?

As *The Critique of Judgment* argues, it is precisely the singular subjectivity of the listener (or spectator, etc.) to which an artwork is addressed. Both domains—the philosophical inner laboratory and the concert hall—deal with the qualia of unique aesthetic/psychological experience.

According to the premise of *The Critique of Pure Reason*, space and time are schemata of mental a priori functions that determine the reception and comprehension of sense impressions: "space is a pure intuition," [24] and time is "a pure form of the sensuous intuition." [28] Kant undertakes to strip away all aspects of sensibility to get at the a priori forms themselves. But in doing so, he must work through evidence of the senses, i.e., "sensibility."

The first experiment occurs in the Introduction, just before the section "Of Space" and forms the ground of the subsequent discussion. It runs thus:

Take away from your "experience-idea" of an object all that is empirical [*empirisch*] bit by bit; color, hardness or softness, even impenetrability; yet the space that it occupies remains even though [the object] has completely disappeared; and this you cannot take away. KRV43/CPR 4

Kant then describes how his undertaking shall proceed:

In the transcendental aesthetic we shall first isolate sensibility, in order to disassociate everything that understanding thinks by means of its concepts so that nothing remains but empirical intuition. Secondly, we shall take away from this all that indeed belongs to sensation, so that nothing is left but pure intuition, whose peculiarity [*Einziges*] is that there are two pure forms a priori, namely space and time, the consideration of which we shall now occupy ourselves. KRV62/CPR22]

The reductive operation described above is that of scientific research; Kant sets up an experiment to determine the particular mental qualities of space and time; the evidence is produced by a forensic elimination of contingent data. It is upon this basis that logical assertions are adduced. For example, such claims as the following, which succeed these demonstrations, would perfectly illustrate his dictum "thoughts without content are empty" had the content not been previously supplied by the reader's self-reflection:

- "Time is the formal condition a priori of all phenomena whatsoever.
- Space, as the pure form of external intuition, is limited as a condition a priori to external phenomena alone." [30]

The second experiment concerns time. It stands at the head of Section II ("Of Time") and establishes the basis of further discussion. Its performative aspect is implicit:

Time is 1) not an empirical conception [*Begriff*], which can be stripped away from any experience; because simultaneity [*Zugleichsein*] or succession [*Aufeinanderfolgen*] would not even come to be noticed if the idea of time did have an a priori ground. Only under this condition can one represent to oneself that many things [*einige*] are at one and the same time (simultaneous) or at different times (successive).

2) Time is a necessary representation that lies at the basis of all appearances. One cannot cancel [*aufheben*] time in regard to phenomena, although one can in fact completely take away phenomena from time. Time is thus given a priori. In it alone is the reality of all phenomena possible. These may be totally eliminated, but it itself--the general condition of their possibility--cannot be cancelled. KRV 67-8/CPR 28

In the above, the reader is 1) called upon to imagine a world without simultaneity or succession to demonstrate the necessity of the "representation" of time and 2) challenged to "cancel" (i.e., obliterate) time from phenomena to demonstrate that time perception is a basic condition of perception.⁴

In each of these cases, Kant undertakes to show that space and time are primitives of our mental structure out of which our perceptual world is built. Incidentally, it is not necessary to Kant's arguments that we completely succeed in these experiments. After all, some of us may have much greater or much lesser imaginative faculties than the rest.

These proofs are completely dependent on the reader's "sensibility," which mediates between conceptions and a priori forms. And one must distinguish in one's own mentality between the conceptions and qualia generated by the above experiments. This cannot be an operation of logic; it is completely internal: it would be absurd to claim that the reader can grasp the reality of "sensibility" merely by reading Kant, any more than one could comprehend self-consciousness without being self-conscious. In Kant's analysis of the beautiful referred to above, he shows that art operates under the same constraint: a verbal or written description of, for example, Beethoven's Pastoral symphony would be equally fruitless.

Thus, Kant assumes a reader in possession of an ego capable of self-scrutiny, or else there would be no purpose in the *gedankenexperimente*. But this tactic--assuming consciousness in order to demonstrate it—is circular: it would be a fatal flaw in a work that claims to establish a science of pure reason. Happily, its circularity is broken open when Kant goes on to develop an architectonic of consciousness that results in a scrutinizing ego. He explains in the Transcendental Analytic that--

The 'I think' must accompany all my representations; otherwise something would be represented in me that could not be thought; which is as much to say that the representation would either be impossible, or at least be nothing for me. This representation, which can be given prior to all thought, is called intuition. Thus the entire manifold of intuition has a necessary relation to the 'I think' in the same subject in which this manifold is encountered. [Of the Original-Synthetical Union of Apperception] KRV 111/CPR 76.

--which is as much to say that without self consciousness the registration of perceptions would never rise to the level of consciousness, but merely flow through one's nervous

system as they perhaps do in an insect. Indeed, the reader is again invited to think about one's own thinking. What would a reader without self-consciousness—a patient of Dr. Oliver Sachs, perhaps--make of the above passage?

Our "inner sense" is ordered according to its constraining intuitions of space and time:

..., the determinations of the inner sense must be ordered in time exactly [*gerade*] in the same manner as we order those of the outer sense in space. Consequently, if we admit the latter--that through [the outer sense] we know objects only so far as we are externally affected - -we must also aver [*zustehen*] that we view ourselves only as we are internally affected; that is, what the inner view [*Anschauung*] concerns: we know our own subject only as appearance; not at all according to that which it is in itself. KRV123 /CPR 41

It follows from this extraordinarily provocative passage that intuition of self is given a posteriori; there is no "category" for self-awareness, so we must be aware of ourselves merely through sense data. From this perspective we are no closer to knowing ourselves than we are to knowing an external object in itself. Apparently, we each contain an inaccessible noumenon.

Here is a provocative link with the ontology of music. We derive sense data from a musical work specific to that work and that work alone, received in one's mind and incommunicable in that specific reception. Without entering into Hegel's claims about the relationship of music to consciousness of time, we shall ask whether another, similar kind of mirroring takes place in the relationship between listener and work.⁵ Music presents a hierarchically organized body of sense stimuli to the listener. It resonates with our sensory apparatus. And since music exists solely as a network of receptions in the mind of the listener (not as a score, which is merely paper, or as a recording, which is just another object)-- it would be absurd to say that atmospheric vibrations recorded on an oscilloscope constitute the Pastoral symphony.

Now, it is a commonplace to speak about music's "content." But where does this "content" reside? --nowhere, in fact. Music creates the *illusion* of content. The content of music is something greater than its sense data. Yet it lacks a phenomenal existence; it convinces us that it constitutes the ground of the work even though it is mere epiphenomenon. The content of music is an image of the noumenal; a transcendental pantomime that mirrors the relation between the phenomenal and noumenal existences that *The Critique of Pure Reason* is concerned with explaining.

It is instructive to compare what may be called Kant's "aesthetic of mind" with Descartes' account of consciousness to see whether they concur in their acknowledgement of sensibility, or whether this is an original contribution of Kant's. Since, as we will see below in the discussion of the theorist Johann Mattheson, Descartes was regarded as having "done much in music," it is a point worth considering.

The Cartesian argument at first seems to leave sensibility out of ontology altogether. It would appear that the Cartesian proof is solely a matter of "thinking about thinking:"

At present I am not admitting anything except what is necessarily true. I am, then, in the strict sense only a thing that thinks; that is, I am a mind, or intelligence, or intellect, or reason – words whose meaning I have been ignorant of until now; but for all that I am as thing which is real and which truly exists. But what kind of a thing? As I have just said – a thinking thing.⁶

But he continues:

But what then am I? A thing that thinks. What is that? A thing that doubts, understands, affirms, denies, is willing is unwilling, and also imagines *and has sensory perceptions* [my italics].

Thus, both Kant and Descartes regard the aesthetic as a part of consciousness; to be conscious is to be more than a self-reflecting mind. What is also necessary is self-consciousness whose qualia are particular to it alone.

II. The Architectonic Constitution Of *The Critique of Pure Reason* and its Kinship with the Eighteenth Century Musical Work

A number of commentators have related *The Critique of Judgment* to music. For example, Arden Reed imagines—alarminglly--a unity of Kant and Wagner:

It follows that ... Kant should explicitly connect the universality of music with the universality of the claims made by judgments of taste, because music constitutes precisely the transcendental language to which Kant aspired. Kant's (German) text is forever fated to lag behind the communicability of the music that it both deploys and denigrates, and were Kant's own language ever to match the universality of his categories, he would have had to become a Wagner and turn his Critiques into a cycle of operas. ⁷

It would probably not have been an entirely good thing if Kant had “become a Wagner.” Luckily, he did not have to: there are a number of significant features of the *Critique of Pure Reason* that mirror musical practice and that both Kantians and even Wagnerians can admire.

Aesthetic Purpose

According to Kant, the purpose of a musical work is to produce aesthetic pleasure; while the purpose of the *Critique of Pure Reason* is to produce philosophical and scientific knowledge; sensibility is a means to its end.

In the *Critique of Judgment*, the perception of the beautiful in the reception of a work of art requires a "disinterested pleasure" (another instantiation of the synthetic a priori). What is essential in experiencing a work of art is not merely "reason" but the "aesthetic judgment" that Kant describes as "a component of all judgment." But the combination of reason and subjectivity that Kant sees as requisite for aesthetic experience is also required for a reading of the *Critique of Pure Reason*, as demonstrated by the thought experiments above.

It is from this point of view that the *Critique* appears to bear a familial relation to the Kantian definition of work of art.

Of course, the primary purpose of the *Critique of Pure Reason* is didactic; and this would appear to be completely at odds with the purpose of a musical work. Yet eighteenth century music was preoccupied with the inculcation of 'virtue.' The purpose of music was to serve a moral lesson, as the composer and theorist Johan Mattheson (1681-1765) suggests:

This part [of the treatise] examines the effects of well-disposed sounds on the emotions and the soul. This, as is readily seen, is material that is as far-reaching as it is useful. To the musical practitioner it is of more importance than to the theoretician, despite its primary concern with [theoretical] observation. Of much assistance here is the doctrine of the temperaments and emotions, concerning which Descartes is particularly worthy of study, since he has done much in music. This doctrine teaches us to make a distinction between the minds of the listeners and the sounding forces that have an effect on them. What the passions are, how many there are, how they may be moved, whether they should be eliminated or admitted and cultivated, appear to be questions belonging to the field of the philosopher rather than the musician. The latter must know, however, that the sentiments are the true material of virtue, and that virtue is nought but a well-ordered and wisely moderate sentiment. Where there is no passion or affect, there is no virtue. When our passions are ill they must be healed, not murdered.⁸

For Mattheson, the aesthetic content of music is a vehicle for the delivery of virtue by mimesis. Judging by his frequent citations of philosophers (Descartes, Aristotle, etc.) it is clear that for Mattheson, music is the inculcation of philosophical virtue by other means.

Architectonic

Beyond the fact that the aesthetic sense is a fundament of *The Critique of Pure Reason*, the structure of the work is closely related to the architectonic of tonal music. Architectonic, according to Kant, is the system of his philosophical undertaking: "Human reason is by nature architectonic. That is to say, it regards all cognitions as parts of a possible system,

and hence accepts only such principles, as at least do not incapacitate a cognition to which we may have attained from being placed along with others in a general system." [269]. As he explains in the chapter "The Architectonic of Pure Reason:"

I understand "Architectonic" as "the art of the system." Because a systematic unity is before all else that which makes common knowledge into a science--that is, makes a system out of a naked aggregate--Architectonic is the doctrine of the scientific in our cognition, and belongs necessarily to Methodology.

Under the regulation of reason, our cognitions are permitted no rhapsody, but they must compose a system in which they alone support and advance essential aims. However, I understand by a system a unity of the manifold cognitions under an idea. This is the idea of reason via the form of a totality, so far through the aforesaid the compass of the manifold will be determined a priori as well as the place of the part under one another.

The scientific idea of reason thus contains the aim and the form [Zweck] of the totality that is congruent to that design. The unity of the form, wherein all parts are related to the idea as well as to each other effects that [even] a single part element will be missed given knowledge of the whole; and no arbitrary addition [zufällig Hinzusetzung] can occur that do not have their a priori determined boundaries. The Totality is thus articulated (*articulatio*) and amassed [gehäuft] (*coacervatio*); it can indeed grow inwardly (*per intus susceptionem*) but not outwardly (*per appositionem*), like an animal body whose growth adds no limb, but without change of proportion makes each stronger and fitter for its purpose. KRV 482/CPR 467

Much of the above can serve as a description of musical structure, which is universally acknowledged to be architectonic.⁹ One can find no better description of the eighteenth century's employment of the musical motive than Kant's "system of a unity of the manifold cognitions under an idea," that determines "not only the limits of its content, but the place which each of its parts is to occupy." This idea also determines its unity, where all parts "have a relationship to each other;" and, echoing the Aristotelian definition of aesthetic form, determines "all contingent or arbitrary additions."

The most persuasive architectonic theory of tonal music is that of Heinrich Schenker (1868-1935). Schenker's theory was primarily directed at masterworks of music of the eighteenth and early nineteenth centuries: Bach, Mozart, Haydn, Beethoven; many of them Kant's contemporaries.

Schenker (who, as the reader will see, was not a modest man) writes:

All forms appear in the ultimate foreground; but all of them have their origin in, and derive from, the background. This is the innovational aspect of my explanation of forms ... I have repeatedly referred to form as the ultimate manifestation of that structural coherence which grows out of background, middleground and foreground ... but I here reiterate in order to stress the difference between this new theory and all previous theories of form.¹⁰

Among Schenker's most important contributions was the recognition that motivic unity spanned every level of musical composition. Schenker "expanded the issue of motivic relations into another dimension," so that the surface motives, heretofore considered in many quarters the sum total of analysis, actually reflected "other relationships, involving different motives, on another level."¹¹

In the broadest sense, *The Critique of Pure Reason* is also an organic development of a germinal motive, the synthetic a priori; "a system a unity of the manifold cognitions under an idea ... the idea of reason via the form of a totality;" and as motive, conforms to musical practice. Every argument ultimately hinges on the synthetic a priori; just as the "argument" of an eighteenth century musical composition drew upon motive on every level. As is proper with a motif, the synthetic a priori informs the superstructure of the work as well as its details.

Schenker's achievement was to describe the organic unity of musical architectonic in which motivic development played out over all levels. Organicism greatly informed Schenker's structural thinking. For Schenker,

Wholeness stems from a central generative force to which everything else is subordinate. It is at this juncture that the reliance of Schenker's holistic aesthetic upon traditional concepts of Organicism is most clear; the generative force which brings forth the composition—an entelechy or *élan vital* ... is music's origin in nature, in the major triad or *Naturklang* as found in the overtone series.¹²

Most telling in the passage from the *Critique* quoted above is Kant's invocation of organicism as a determinant of philosophical structure. In the manner of Goethe he argues that the philosophical work "grow inwardly like "an animal body;" and, like a sonata movement, develops proportionately.

Since the truth value of a musical work is equivalent to its esthetic value, musical meaning and the Kantian proof provoke the same process of discernment. The sense content of music and of the *Critique of Pure Reason* are akin; both possess analogous structures.

Rhetoric

Eighteenth century music was a rhetorical art that depended on the same structural and rhetorical topics as works of literature;¹³ and here comparison with the *Critique* would seem to falter, since even Kant himself acknowledged its hasty composition, apologizing for a necessary absence of rhetorical polish.¹⁴ Yet the *Critique of Pure Reason* is indeed a literary work, one that depends on the same rhetorical techniques typical eighteenth-century literary and musical practice.

It is unexceptional that the polemical aspect of the work is built upon a pattern of defense, attack and rebuttal on the Aristotelian model, in which contradictory notions are vanquished; after all, this was common practice.¹⁵ More surprising are Kant's demonstrations of skill in wielding the arms of forensic rhetoric.

"The Discipline of Pure Reason in Polemics" is a set piece; a most eloquent defense of freedom of philosophical thought. Its title is self-reflective: it itself is a polemic. Following the Aristotelian convention, it is based on enthymeme rather than syllogism, unlike the preponderance of the *Critique*:¹⁶ a studied exercise in rhetorical figures based on the

opposition “reason/criticism:” “Reason must be subject in all its operations, to criticism,” so this topos runs [415]. The connection between its “argument from contrast” and classical models is made manifest when Kant states:

If dogmatical assertions are advanced on the negative side, in opposition to those made by reason on the positive side, its justification *κατ’ ανθρωπον* [by means of the individual, i.e., ad hominem] is complete, although the proof of its proposition is *παταληθειαν* [by means of truth] unsatisfactory.

In a clever rhetorical display, Kant advances a "polemic of pure reason." This of course is an oxymoron: "pure reason" and "polemic" are opposing modes of argument, again corresponding to syllogism and enthymeme. But the figure "polemic/pure reason" is developed through the section until it takes on substantive philosophical weight.

Kant describes the uncritical application of reason as akin to a Hobbesian state of nature that requires a legal process to tame:

Without the control of criticism reason is, as it were, in a state of nature, and can only establish its claims and assertions by war. Criticism, on the contrary, deciding all questions according to the fundamental laws of its own institution, secures to us the peace of law and order, and enables us to discuss all differences in the more tranquil manner of a legal process. In the former case, disputes are ended by victory, which both sides may claim, and which is followed by a hollow armistice; in the latter, by a sentence, which, as it strikes at the root of all speculative differences, insures to all concerned a lasting peace. The endless disputes of a dogmatizing reason compel us to look for some mode of arriving at a settled decision by a critical investigation of reason itself ... [415]

The simile introduced in the above—"unrestrained philosophical thought" is to "control of criticism" as "state of nature" is to "rule of law"—is developed over the course of the section. The legal process needed to tame the philosophical state of nature is to be found precisely in the Aristotelian forensic techniques that serve as Kant’s rhetorical strategy.

This is identical to the forensic of musical logic described by Mattheson, where contradiction is "expressed by ... the citation and refutation of apparently foreign passages. ... Everything that goes against the proposition is [to be] resolved and settled."

The appearance of common rhetorical devices in both music and philosophical writing is not in itself surprising. The *Critique of Pure Reason* mirrors the music of its time not only in its dependence on the same tropes, but also in the appearance rhetorical figures in both structure and surface detail. Both domains are architectonic; and both serve didactic purposes

To whatever degree Kant was cognizant of these correspondences (and the expressive means of an epoch are so common that they are often overlooked by even in their use) it is clear that he spoke about structure and rhetoric in the common language of his time. And although the primary purpose of this study is the common aesthetic ground of Kant's work and the music of his time, it is also very worthy of consideration that there are moments of great beauty and eloquence in the *Critique of Pure Reason*.

NOTES

¹ See "1. The Judgment of Taste is 'Aesthetical'" in *The Critique of Judgment* trans. J.H. Bernard (London: Hafner Press, 1951) 37-8.

²*Critique of Pure Reason*, trans. J. M. D. Meiklejohn (Buffalo, Prometheus Books, 1990) 44. Where my own translations appear, page numbers KRV refer to the *Kritik der Reinen Vernunft* and CPR to the Meiklejohn translation for comparison. Page numbers in the Meiklejohn will hereafter be indicated in brackets.

³ Ibid. "There can be no objective rule of taste which shall determine by means of concepts what is beautiful. "For every judgment of this sort is aesthetical, i.e., the feeling of this subject, and not the concept of the object, is its determining ground." 62.

⁴ Another line of reasoning concerns geometry and mathematics. A mental demonstration of these theories is as follows: We cannot think a line without drawing it in thought, or think a circle without inscribing [beschreiben] it; and we can hardly represent the three dimensions of space without setting up three perpendicular lines on each other from the same point; and [we cannot] even [think] time in drawing a straight line (which would be the outer figurative representation of time) without paying attention to the synthetic action [*Handlung der Synthesis*] of the manifold through which we sequentially determine [our] inner sense and also the succession of this determination itself. KRV 122/CPR 89 CF 9-11.

⁵ Hegel develops this link in the *Ästhetik*, where he notes "the connection between (a) subjective feeling and (b) time as such which is the universal element in music." *Hegel's Aesthetics Vol. II*, trans. Knox (Clarendon: Oxford, 1975) 905.

⁶ "The Meditations on First Philosophy" in Descartes: *Selected Philosophical Writings*, trans. John Cottingham, Robert Stoothoff and Dugald Murdoch (Cambridge: Cambridge U Press, 1988) 82. "The Meditations on First Philosophy" present a different aesthetic problem since it is a bildungsroman as well as a philosophical tract. The Meditations begins thusly: "Some years ago I was struck by the large number of falsehoods that I had accepted as true in my childhood, and by the highly doubtful edifice that I had subsequently built on them." And later: "How often, asleep at night, am I convinced of just such familiar events – that I am here in my dressing-gown, sitting by the fire – when in fact I am lying undressed in bed!" Descartes has created a character—"Descartes"—and tells of his self-experimentation; which we, as good readers, replicate in ourselves. Both the Meditations and Proust's *A la recherche de Temps Perdue* begin with a meditative

"author" character in bed, reflecting (although in the case of the recherche, the hero is also masturbating.)

⁷ "The Debt of Disinterest: Kant's Critique of Music." *MLN*, Vol. 95 #3, German Issue, 563-584 (April 1980) 571. See also, "The Kantian Synthesis and Sonata Form," *The Journal of Aesthetics and Art Criticism*, Vol. 37 #4 455-465 (Summer 1979).

⁸ Johann Mattheson 1681-1764): *Der Vollkommene Capellmeister* in Hans Lenneberg, "Johann Mattheson on Affect and Rhetoric" *Journal of Music Theory* (1958) 195

⁹For example, in his "Elements of a Musical Logic" the musicologist Charles Seeger (1886-1979) identifies four elements of musical construction: a) melodic; b) contrapuntal or harmonic; c) gross-formal and d) architectonic (the combination of all three preceding types). *Bulletin of the American Musicological Society* 51-53 (1948) 53.

¹⁰ *Free Composition (Der Freie Satz): Volume III of New Musical Theories and Practices*, trans. and ed. Ernst Oster (New York: Longman 1930) quoted in Jonathan Dunsby and Arnold Whittall, *Music Analysis in Theory and Practice* (New Haven: Yale U Press, 1988) 36.

¹¹ Allen Cadwallader; William Pastille; Schenker, "Schenker's High-Level Motives." *Journal of Music Theory* Vol. 36 #1 119-148 (Spring 1992)123.

¹² Ruth Solie, "The Living Work: Organicism and Musical Analysis," *Nineteenth Century Music*, Vol. 4 #2 1-11 (Autumn 1980) 6.

¹³See Mattheson *ibid.*:

Concerning the Disposition, Elaboration and Decoration of Melodies (excerpts): Even in common conversation nature teaches us to use certain tropes, certain suggested meanings of words, certain arguments or reasons, and to keep them in some order even though the speaker may never have heard of rhetorical rules of

figures. This very natural mental instinct, which causes us to present everything in good order and form, has given certain clever heads the basis for their rules. Up to now the outlook in this respect has been dark in the field of music. We hope that it will gradually grow lighter and we shall try to make a contribution toward this goal.

Mattheson goes on to explain the musical representation of the classical tropes: Exordium, Narratio, Propositio, Confutatio, etc.

¹⁴Kant wrote to Moses Mendelssohn: "Though the Critique [is] the outcome of reflection which had occupied me for a period of at least twelve years, I brought it to completion in the greatest haste within some four to five months, giving the closest attention to the content, but with little thought of the exposition or of rendering it easy of comprehension by the reader." Norman Kemp Smith "Kant's Method of Composing the Critique of Pure Reason." *The Philosophical Review*, Vol. 24 #5 526-532 (Sept 1915) 536.

¹⁵ See, for example the rebuttal of Lock [7]. Also see the concluding chapter, "The History of Pure Reason," which briefly summarizes subsumes other views and ends by affirming Kant's.

¹⁶ "Just as in logic we have induction and the real and apparent syllogism, so it is with rhetoric, where example is induction and enthymeme syllogism." Aristotle, *The Art of Rhetoric*. Hugh Lawson-Tancred, trans. (London: Penguin Books, 1991) 75.