

Exploring the Limits: the Tonal, the Gestural, and the Allegorical in Bach's *Musical Offering*¹

RUTH HACOHEN

Analogies and alternatives

Analogies are powerful cognitive mechanisms for adapting, constructing, and generating knowledge. Their power lies in their ability to transfer structured information from a familiar to an unfamiliar domain, helping us to explore new contexts, craft new tools, and accustom ourselves to new experiences. An elaborate scheme of relations, functions, and trajectories, studied in relation to a certain object, programme, or process, enables us 'to see through' an opaque target, while articulating its logic and form. Explicating the tacit, analogies often bounce back on their original, 'modelling' object, revealing in it, through comparative wisdom, unfathomed configurations and hidden tendencies. Analogies thus resemble metaphors, but are more deliberate and systematic, open to criticism as well as revision.²

As object, programme, and process, music has always been a fertile ground for fruitful and compelling analogies. Whether scientific, linguistic, or emotional, analogies have assisted in the perception and conception of musical strategies and structures. At the same time internal musical schemes have been replanted onto the original modelling realms, facilitating in them new modes of understanding

¹ This article was completed at a distance of few kilometres from Potsdam, during my stay at the Wissenschaftskolleg zu Berlin, in the academic year 2004-05. I am grateful to Galit Hasan-Rokem and to Lydia Liu for their inspiring comments on this paper.

² The literature on this subject, in relation to cognition and science, is vast. For a recent, rich publication dealing with the advantages and limitations of analogies, see: Dedre Gentner, Keith J. Holyoak and Boicho K. Kokinov, *The Analogical Mind, Perspectives from Cognitive Science* (MIT Press, 2001). Max Black, already in *Models and Metaphors* (Ithaca: Cornell University Press, 1962), sensitised us to the difference between models and metaphors in this respect.

and inference.³ In general, music – semantically under-coded and syntactically over-articulate – seems to evoke contextually free isomorphic correlations more readily than her sister arts. Semiotic structures of various kinds – religious, pictorial, or dramatic – are easily mapped onto musical configurations, exerting on them their seemingly heuristic power. Musical analogies are attractive to the creative imagination; they guide multimedia coordination of music with texts, choreographies, or animation, with aim of inducing simultaneities, while privileging music with a ‘generative’ status. However, used as a hermeneutic tool and applied to pieces of music with a claim to historical validity, analogies often turn into a trap for their users. The reason is simple: the lack of a theory of constraints grounded in text and context, which bounds the range of legitimate structured correlations. Analogical exegeses of music, while matching a piece of music with an extra musical referent, are often perceived as contrived or superfluous. Even if historically more pertinent, musical analogies almost unavoidably tend to appear ideologically and methodologically suspicious. This is true for feminist, neo-Marxist, or anti-colonialist analogical interpretations of musical works, as well as for certain narrative readings of them in terms of such ‘plots’.⁴ Once, general theological and metaphysical notions guaranteed musical analogues, but with the secularisation of beliefs and fragmentation of methods, these resources have been impoverished.

Bach’s works are overburdened by analogies, both artistic and interpretative. Whereas many tolerate, and even appreciate, a Walt Disney animation of a famous toccata, or a Mark Morris choreography of a cello suite, suspicions are aroused by erudite attempts at an allegorical deciphering of a certain piece or movement. This holds true for scholastic works as different as those of Schweitzer, Kirkendale, or McClary, which entertain rather contrasting sets of assumptions and diverging intellectual goals. Directly or indirectly deriving from a certain ideological agenda, they apparently fall into similar snares, evoking reactions of a similar epistemological type.

In the following, I will briefly examine whether additional constraints, or an independent perspective, could validate what seems questionable in analogical analyses or whether there is something fundamentally wrong with this method. If

³ Kepler’s way into his discovery of the three planetary laws is a case in point, embodying a most fascinating development in the long-lived modelling Pythagorean-Platonic analogy of the music of the spheres. Aristotelian trends, on the other hand, encouraged minute isomorphic modelling of music on emotional movement, profoundly discussed already in 1769 by Daniel Webb, in *Observations on the Correspondence between Poetry and Music*. See Ruth Katz and Ruth HaCohen (eds.), *The Arts in Mind* (New Brunswick: Transaction Publishers, 2003), pp. 251-324.

⁴ Leo Treitler’s criticism of certain feminist readings of music goes in this direction, see his ‘Gender and Other Dualities of Music History’, in Ruth Solie (ed.), *Musicology and Difference: Gender and Sexuality in Music Scholarship* (Berkeley: University of California Press, 1993), pp. 23-45. Gary Tomlinson, in his interpretation of *Parsifal* in his *Metaphysical Song* (Princeton: Princeton University Press, 1999), pp. 127-42, is an example of a speculative analogical neo-Marxist reading. Needless to say that uncovering ideological layers in certain musical texts and contexts is of prime importance and relevance, once a relevant scheme of constraints is specifically constructed.

this is the case, the further question of a musical-semiotic-aesthetic alternative to the hermeneutic edifices that analogous exegeses uphold should be raised. I will try to explore such an alternative framework inspired by the *Musical Offering* and some of the interpretations – both scholarly and creative – it gave rise to in the course of the twentieth century. This framework, I argue, may go beyond the territories of the work under discussion, extending to other works, composers, and styles.

Analogical reading of Bach's works

I start with Ursula Kirkendale's 1980 'analogical' interpretation of the work,⁵ which since its publication has caused both admiration and irritation.⁶ Kirkendale's argument was framed in relation to the work's cyclical order – a musicologists' Columbus' egg – which she conceived as relying on a deliberate, analogical rendition of Quintilian's ordering of forensic speech. Her careful reading of Quintilian's *Institutio oratoria* (92-95 CE) for the sake of this interpretation seems to be guided by interrelated intuitions and assumptions, related to both text and context.

To take context first: unlike other cyclical, instrumental works of Bach, this one lacks a pre-determined organising principle, prompting a search for one beyond the immediate stylistic and generic norms dominating other works. Kirkendale located this order in the context of ancient rhetoric, which, since the late renaissance and especially in Germany, has become a basic source for musical inspiration and explication. Relying on research, she claimed that this context provides modern researchers with a musico-rhetorical dictionary and with modes of borrowing and translation that seemed normative at the time. More specifically, rhetorical activity is especially pertinent to Bach in this period in his life, in which he became

⁵ Ursula Kirkendale, 'The Source for Bach's Musical Offering: The Institutio oratoria of Quintilian', in *Journal of the American Musicological Society* 33 (1980), 88-141.

⁶ The various languages in which it appears, its respectable hosts, the awards and honours it received, and its uses by performers through the years are all testimonies to this awe. See, for example, Albert Dunning, 'Exordium' in Siegfried Gemeinwieser, David Hiley, and Jörg Riedlbauer (eds.), *Musicologia Humana, Studies in Honor of Warren and Ursula Kirkendale* (Firenze: Leo S. Olschki, 1994), pp. 9-10. Among the critics one finds: Peter Williams in his article 'The Snares and Delusions of Musical Rhetoric: Some Examples from Recent Writings on J. S. Bach', in Peter Reidemeister and Veronika Gutmann (eds.), *Alte Musik: Praxis und Reflexion* (Winterthur, 1983), pp. 230-40, and Christoph Wolff, *Bach: Essays on His Life and Music* (Cambridge, MA: Harvard Univ. Press, 1991) pp. 421-23. More recently Joshua Rifkin expressed similar views, in Bernard D. Sherman, *Inside Early Music: Conversations with Performers* (New York: Oxford University Press, 1997). See also Paul Walker, 'Rhetoric, the Ricercar, and J. S. Bach's *Musical Offering*', in Daniel R. Melamed (ed.), *Bach Studies II*, (Cambridge: Cambridge University Press, 1995), pp. 175-91 and Michael Marissen, 'The Theological Character of J. S. Bach's *Musical Offering*', in *Bach Studies II*, pp. 85-106. Warren Kirkendale, in 'On the Rhetorical Interpretation of the Ricercar and J. S. Bach's *Musical Offering*', *Studi Musicali* 26 (1997), 331-71, tried to have the final say in this debate.

connected with an exclusive group – the *Correspondirende Societät der musikalischen Wissenschaften in Deutschland*, initiated by Lorenz Mizler, which aimed at a deliberate association of music with classical, rhetorical sources and encouraged actual musical contributions in this direction. Warren Kirkendale later added to this evidence related to an important personal connection of Bach at the time: the rector of St Thomas, Matthias Gesner, the publisher of a monumental edition of Quintilian (1738) which includes a long footnote in praise of Bach.⁷

Secondly, text: the model suggested by Quintilian in his *Institutio* seems appropriate for solving the basic query of order in this particular work, since its main preoccupation is *dispositio*: the construction of the content and order of the various parts of a rhetorical deliberation. More particularly, a musical work based on a variety of embellishment of one, substantial musical theme could indeed find its inspiration in a series of instructions highlighting the elaboration of a major idea or claim. Moreover, thematic elaboration in this work goes beyond the regular types of musical variation, giving rise to different modes and dimensions of extension and ‘invention’. No less importantly, the work’s special ‘commission’ circumstances – a kind of trial put forward by a ruler to a subject, which ended, in the first round, in a sort of ‘failure’ on behalf of the subject-artist – called for extended defence – the main object of the *Institutio*’s instruction, engaging further personal, reciprocal ‘trials’.⁸

All this seems plausible enough, and yet scepticism abounds with regard to the validity of Kirkendale’s interpretation, extending from suspicion related to technical matters such as the engraved autographs, through the overburdening of the signification of certain musical configurations with too-specific semantic designations, to the relevance of rhetorical theory to a meticulous musical exegesis. Summarising and rebutting eighteen years of endless polemics around the essay, Warren Kirkendale seems to be shooting in all directions, while bringing to the fore heavy questions of methodology and intellectual orientation that go beyond the scope of the debated essay, work, or school. It should be said that Kirkendale himself is aware of the fallacy of a too-literal analogy, maintaining that ‘composers did not necessarily copy rhetoricians to the letter, but freely *selected* their analogies’.⁹ Acknowledging all along the limits of musical semantics, while defending their vital historical role, he nevertheless unnecessarily attacks semiotics, aesthetics, and deconstruction as a-historical, while ignoring their underlying epistemological basis. It is not my intention to go back to this bitter controversy, or defend any of its main contenders, for it seems to divert our attention from more profound and interesting questions. Whether Quintilian’s essay was an important

⁷ W. Kirkendale, ‘On the Rhetorical Interpretation’, 361.

⁸ There are two main historical reports of the event, the difference between them is telling, for it is only that of Wilhelm Friedemann Bach (as documented in Forkel), rather than that of the German newspapers, that might appear apologetic at this point. See Hans T. David and Arthur Mendel (eds.), *The New Bach Reader: A Life of Johann Sebastian Bach in Letters and Documents*, revised and expanded by Christoph Wolff (New York: W. W. Norton & Company, 1998), pp. 429, 239.

⁹ W. Kirkendale, ‘On the Rhetorical Interpretation’, compare 351, 368, 369.

source of inspiration for Bach in this composition or not, emphasising too strongly the 'antiquarian' orientation and meaning of the work leads to neglect of the subversive elements it embodies, as well as the appeal it continues to exert beyond its time and place. This antiquarian or at least classicist orientation is, in the case of Kirkendale, highly conservative, if not dogmatic.¹⁰ Like other analogical readings of music, it does not take account of the fact that artistic works can abide by contradictory paradigms and models and can be the site for conflicting social and cultural orientations, having meaning for audiences far apart in time and context.¹¹ Deconstructing works of art in such a way could turn them into historical documents of much higher importance than their seemingly harmonious, deferential compliance with ancient, hallowed models suggests.

This, of course, does not mean that extensive and accurate historical research in archives, texts, and social-cultural environments is unwarranted. Quite the opposite, in fact; such research should be 'the very stuff our musical interpretive dreams should be made of', to paraphrase a famous Shakespearean line.¹² And yet a work of art cannot be pinned down by adherence to reductionist methodology. The range of historical evidence should not be confined to one arena or context, nor interpretation to deliberative intentions alone, without also taking into consideration the dialectical and dialogical elements inherent in all human communications, which are even more relevant in the realm of art.

The underlying premise

I would argue that, no matter how much historical evidence one brings to bear on such analogical cases, there is something fundamentally questionable in the basic approach. This applies to cases as different as Kirkendale's analogical reading of the *Musical Offering* and McClary's analysis of the 5th *Brandenburg Concerto*.¹³ My

¹⁰ This is revealed e.g. in his reference to Allan Bloom's 1987 controversial *The Closing of the American Mind: How Higher Education has Failed Democracy and Impoverished the Souls of Today's Students* (p. 332) as well as in his deep contempt for the liturgical and cultural world of Lutheranism (pp. 340-43).

¹¹ For a possible philosophical base to such a dynamic approach to semiotic analysis of music, see Eero Tarasti, *Existential Semiotics* (Bloomington: Indiana University Press, 2000), especially pp. 17-36.

¹² *The Tempest* IV. 1. 155. That all interpretations are 'dreams' of sorts, i.e. imaginative constructions of various theoretical standing and explanatory power, is a shared starting point for many non-realistic epistemologies and hermeneutics, in both sciences and the humanities.

¹³ 'The Blasphemy of Talking Politics During Bach Year', in Richard Leppert and Susan McClary (eds.), *Music and Society: The Politics of Composition, Performance and Reception*, (Cambridge: Cambridge University Press, 1987), pp. 13-62. McClary's interpretation, framed within an apt criticism of the still predominant Platonist-autonomist ideology surrounding the cult of Bach, is itself carried in terms of an analogical interpretation of the social reality this piece was partially meant to challenge. Thus she views the unexpected emergence of the harpsichord in the 'finale' of the first movement of the 5th *Brandenburg concerto*, and the huge, unprecedented role it is granted, in terms of 'the dilemma of an ideology that wants to encourage freedom of expression while preserving social harmony'

criticism is of the underlying conception of artistic works as monolithic symbolic wholes, reflecting or projecting a homogeneous network of relations onto a symbolised reality. This aesthetic premise had proponents from the Renaissance through enlightened classicism and romanticism to modernism. For Alberti and other Renaissance artists and theorists, it was intertwined with the idea of art as a mirror, or reflection, of given or ideal objects and realities. Perspective served as both the emblem and the means of this conception, i.e. of viewing a reflected reality through a grid of invariable proportional dimensions, grafted onto the artistic canvas. 'Enlightened' and romantic thinkers, whether guided by empirical or idealist notions, likewise emphasised the integrity of artworks in terms of parts and wholes.¹⁴ Some modern thinkers, like the American philosopher Susan Langer, stress the notion that the artwork – 'art symbol' as she terms it – does not simply stand for something else – some object or reality 'out there' – but has the power of *formulating* experience and presenting it objectively for contemplation.¹⁵ However crucial the change of mimetic direction (from work to world instead of world to work) is in her modernist theory of aesthetics and in similar theories known for their emphasis on well-made artistic worlds, it still adheres to a similar monadic mode of thought. In the context of Bach, this view achieved a special expression in the analogy Edward Lowinsky drew in 1965 between Bach's ('pre-ordered') polyphonic musical work and a ('pre-established') harmonious Leibnizian universe, in which interrelated motifs behave like mutually influencing monads, each of which reflects the musical whole.¹⁶

The classical and neo-Platonic roots of this premise – of the artwork as perfection, symbolising reality, or a meta-reality, as a totality – are obvious, in the many variations to which it gives rise. The ideological presupposition on which it relies is so deeply ingrained in western musical culture that, at least for works and theories formed before 1950, it seems difficult to conceive of an alternative

(p. 41). Adopting the dialectical approach of Adorno, she similarly preserves a monadic notion of the work of art, without constraining the analogy itself in more rigorous methodological terms.

¹⁴ As far as enlightened thinkers and artists are concerned, it could relate to the ordering impulse prevalent in what Foucault terms the 'classical age' – the pre-Kantian intellectual world (in *The Order of Things: An Archaeology of the Human Sciences* (New York: Vintage Books, 1972)), and as such, seems appropriately ascribed also to the problem of ordering in Bach's work. But this Foucaultian 'episteme' is itself a problematic historical notion, especially when applied to contemporary music, see Ruth HaCohen, 'The Music of Sympathy in the Arts of the Baroque: Or the Use of Difference to Overcome Indifference', *Poetics Today* 22:3, (Fall 2001) 607-50. In any event, ideology, even here, does not necessarily coincide with artistic reality.

¹⁵ See Susanne Langer, 'The Art Symbol and the Symbol in Art', in *Problems of Art* (New York: Charles Scribner's Sons, 1957), pp. 132-33.

¹⁶ Edward E. Lowinsky, 'Taste, Style, and Ideology in the Eighteenth-Century Music', in E. R. Wasserman (ed.), *Aspects of the Eighteenth Century*, (Baltimore: The Johns Hopkins University Press, 1965), pp. 179-82. Inaccurate interpretation of Leibniz's ideas renders this analogy even more problematic.

¹⁷ For a critical discussion of these options and traditions and a sound basis for an interpretative approach beyond analogism and allegorism in literature and art see the now classical study of Fredric Jameson, *The Political Unconscious Narrative as a Socially Symbolic Act* (London: Methuen, 1981). <can't get rid of extra line!>

structural-aesthetic model. Yet there were other options, which call for a rethinking of this entire tradition, long before postmodernism and post-structuralism made inroads into academic circles.¹⁷

Musical Offering lying at thresholds

What is the alternative to the analogical approach, and what does it have to do with the *Musical Offering*? Speaking from a socio-anthropological point of view, *Musical Offering* is a work of thresholds, or liminalities, to use the famous and fruitful concept of the anthropologist Victor Turner.¹⁸ For the work, in its unique history of becoming, stands between periods and generations, authorities and classes. It renders problematic the line separating royalty and royalties (the work, as a pledge of a 'humble servant' to an 'illustrious king', was also one of the few to be published in Bach's time, at a period that started to show sensitivity to copyright matters);¹⁹ between a king and his courtiers (the king doubly plays a courtier's role, both in showing off his erudition – in offering the theme, and in his eventual playing of the flute part, while Bach stresses his 'authority' [of the piece] in an unprecedented way); between a servant and an expert, a craftsman and an artist, and between regal and artistic dynasties (the Hohenzollerns vs the Bachs).²⁰

The work then makes us wonder where a hosting begins (does it require an invitation? what are the appropriate gestures toward an uninvited guest, important as he may be?) and where it ends (in a grand salute? in a gift given afterwards? does such an offering necessitate a further gesture from the recipient?). It confuses us about the borders between a present and a sacrifice (as a present, it puts Bach on a par with the king, as a sacrifice he grants the king the status of a deity). It sensitises us to the chain of gifts involved in each 'declared' gift (for it was the king, in the first place, who furnished the composer with 'his' royal theme,²¹ but this was already preceded by Bach 'granting' him his son [Carl

¹⁸ See Victor W. Turner, *The Ritual Process, Structure and Anti-Structure* (London: Routledge & Kegan Paul, 1969), pp. 94-130.

¹⁹ The work was published with the explicit intention (as announced in the newspapers) of making real profit (it cost 1 imperial Taler). The transition from a feudalistic to a more liberal-capitalistic system in relation to music authorship was discussed, among others, by Jacques Attali, in *Noise, the Political Economy of Music*, trans. by Brian Massumi (Minneapolis: University of Minnesota Press, 1996), pp. 47-9, using Bach as a 'liminal' case in this history, which becomes even more salient when the ambiguity regarding his double patronage in his Leipzig period is taken into account.

²⁰ In her apocryphal journal, Anna Magdalena Bach is supposed to have written: 'And so Sebastian sat down, began to play, and perhaps several listeners realised that for at least one evening there were two kings in the palace.' ('So setzte sich Sebastian nieder und musizierte, und es mochte manch einer fühlen, daß von nun ab zwei Könige im Schlosse waren', *Die Kleine Chronik der Anna Magdalena Bach*, nachempfunden von Esther Meynell (Prag: Vitalis, 2003), p. 181.)

²¹ The sources are again not unanimous on this point, with Forkel's account (relying on

Philip Emanuel, who in 1738 joined Fredrick's musical entourage]; and it was Bach who bequeathed the king his final work; but then the king became committed to the family even beyond J. S.'s lifetime) and asks at whom such presents or sacrifices are really aimed (the king, Bach, his sons, the courtly audience, posterity?). It takes us into the realms in which the boundaries between a play, a riddle, and an artistic declaration are erased and where the lines separating listening/reflection and active participation are obscured (the king, for one, was an addressee of all three). It is no less intriguing that, while appearing as a secular work addressed to a gallant, progressive king, *Musical Offering* cannot hide its theological religious layers, appearing, above all, in connection with the double ricercars, especially with the second one and its strong associations with the entire compositional gesture – that of offertory, offering, *Opfer*.²²

Moving into a stricter aesthetic-stylistic realm, the work seems to vacillate, in rather an encyclopaedic way, between the miniature and the colossal, exhaustion and expansion. It seems (or seemed) to reveal strict cyclical intentions but then to collapse into a more haphazard arrangement. Likewise, its governing principles seem, at first blush, to be mathematical and architectonic, but then to reveal a rhetorical and even theatrical bent, conveying both an abstract and an allegorical message (as is clearly proposed by Bach's acrostic). It is constrained and deliberative, but also discloses improvisatory and experimental layers. Beyond and along these continuities and between these polarities, *Musical Offering* uniquely sensitises us to the gap between the limits of the period's own cultural/intellectual horizon and our ability to envision such a horizon and at the same time transcend it.

Loops and holes

Wilhelm Friedemann Bach's testimony) that Bach asked the king to provide him a subject for a fugue and the German newspapers of the time not reporting any such request. See David and Mendel (eds.) *The New Bach Reader*, pp. 429, 239. See also Bach's letter to the king, in Hans T. David, *J. S. Bach's Musical Offering* (New York: Dover, 1945), pp. 6-7.

- ²² In his attempt to prove the preludial nature of the imitative, six-part ricercar (as an opening for the second part of the musical-rhetorical delivery), W. Kirkendale hints at a highly suggestive allegory, (which could stand independently of the Quintilian analogy), regarding the traditional role of such ricercar as an exordium for the second main section of the Catholic mass, the 'Mass of the Eucharist', more particularly, the Offertory itself (pp. 340-41). I leave it to the reader to dwell on the rich worlds of meaning, both religious and sacrilegious, that it could open in connection with a secular offering (a connection which escaped Kirkendale). See also Marissen, 'The Theological Character of J. S. Bach's Musical Offering', in Daniel R. Melamed (ed.), *Bach-Studies 2* (Cambridge: Cambridge University Press, 1995), pp. 85-106. 'The Theological Character', for a sound theological-subversive interpretation of the work, that is, however, too analogous. From Marcel Mauss to Jacques Derrida, theorists were engaged in the interrelated cultural practices and meanings associated with gift, hospitality, transgression and sacrifice. Music invites a special discussion in the connection, beyond the scope of the present essay.

Is there a model, or a theory of any sort, that can account for such heterogeneity and for the relations between the social-anthropological-political level and the tonal-aesthetic one? Douglas Hofstadter's 'peroration' to his famous *Gödel, Escher, Bach* – the 'Six-Part Ricercar' – may furnish us with a first clue.²³ This verbal Six-Part Ricercar moves back and forth, in and out of the musical text, to which it points, which it realises, allegorises, deciphers, and discusses. Achilles, Tortoise (from Zeno's famous Paradox), Crab (from the Crab Canon), and later the author himself ('Douglas Hofstadter'), are gathered to play the *Musical Offering* trio sonata. But 'Turing' (modelled on Alan Turing, the famous British mathematician) and 'Old Ba. Ch.' (modelled on Charles Babbage, the well-known nineteenth-century calculating-machine inventor) are interfering, as they were invited – among other things – to play on the 'smart-stupids', the new PCs (cybernetic analogues of the new seven 'pianofortes' made by Gottfried Silbermann that Bach was summoned to try out upon entering the royal palace). The occurrences and ensuing discussion address, again and again, recursive networks and self-referentiality. This is done, first and foremost, by an actual account of the history of Bach's *Offering* and the 'analogical' representation of the Six-Part Ricercar in the verbal dialogue. At a certain point the Crab asks the author:

'And how do you represent the King's theme (that is, in the literary work)?'

'Compose Ever Greater Artificial Brain (By and By)' answers the Author.²⁴

Through the initials (C E G A B – AND B WITH MORDENT), the first part of the Thema Regium is 'heard' also in the fictional plan. After a while, it is 'said' or 'heard' again, as a reply by the Author to Turing's question about the subject of the Author's intended book (in which he is at the same time contained, presently writing, and about to write):

Combining Escher Gödel And Bach Beyond All Belief. (C E G A B – AND B WITH MORDENT)

The dialogue continues:

Achilles: I would like to know how to combine those three. They seem an unlikely threesome, at first thought. My favorite artist, Mr T's favorite composer, and –

Crab: My favorite logician

Tortoise: A harmonious triad, I'd say.

Babbage: A major triad, I'd say.

Turing: A minor triad, I'd say.

Author: I guess it all depends on how you look at it. But major and minor, I'd be most pleased to tell you how I braid the three together, Achilles.²⁵

There is, of course, no direct or accurate analogy with the musical source. True, towards the end of Bach's Ricercar, there is a double exposition of the theme (Example 1a-b, b.48-52; 58-62; 5th and 3rd voices) and immediately following (b. 61),

²³ Douglas R. Hofstadter, *Gödel, Escher, Bach: An Eternal Golden Braid* (New York: Basic Books, 1979), pp. 720-42.

²⁴ *ibid.* p. 740.

²⁵ *ibid.*

a stretto of major and minor triads, which, due to a diminution operation, can also function as a 'harmonious triad'. This could inspire Hofstadter's dialogue above. On the level of the bass (b. 64) one can even identify a 'subsuming' reply ('corresponding' to Douglas' replica) including descending versions of triads – major, diminished, major, and two ascending minors that are embedded in them, all depending 'on how you look at them [listen to them, *sic*]'. They might also embody, via the rising sequences, the idea of the Endlessly Rising Canon (the Canon 5 à 2 per Tonos), likewise referred to in the text.

The image displays a musical score for Example 1a, consisting of two systems of six staves each. The first system is labeled with the number 48 at the beginning. The second system is labeled with the number 51. The music is written in G minor (three flats) and 3/4 time. The notation includes various rhythmic values, accidentals, and phrasing slurs across all six staves, illustrating the complex harmonic and melodic relationships discussed in the text.

Example 1a: bars 48-52 of Ricercar à 6 by Bach

The image displays a musical score for Example 1b, covering bars 58 to 65 of the Ricercar à 6 by J.S. Bach. The score is written in G minor (three flats) and 3/4 time. It consists of six staves, each representing a different voice. The notation includes various rhythmic values, accidentals, and phrasing slurs. The first system (bars 58-60) shows the initial entries of the voices. The second system (bars 61-63) continues the development of the musical ideas. The third system (bars 64-65) concludes the excerpt with sustained notes and final rhythmic figures.

Example 1b: bars 58-65 of Ricercar à 6 by Bach

But there are details that do not fit into this scheme, many of which are rather obvious.²⁶ Moreover, the above parallelism relates only to one layer, one dimension in the complex structure of Hofstadter's text. Other dimensions are related to verbal puns ('major and minor'), to reference via the two acrostics to the work's well known original RICERCAR acrostics;²⁷ to knowledge of computers and the machines that preceded them; to the personal relations among the virtual personae (as they have developed throughout the book); to the story of old Bach coming to Potsdam isomorphically enacted by old Ba. Ch. coming to the Crab's residence; to the music that is both heard, being played, and being written; and more. All these presuppose the inadequacy of one-to-one analogous relations. Instead, they exemplify in various ways the idea of recursive loops, the main theme and basic strategy of the entire book.²⁸ They also convey an understanding of the limitations of translation from one media to another, the multivalent nature of rich symbolic messages, their inherent openness, and their semantic density, to use the terminology of Nelson Goodman (that is, that between two characters in a system there is always a third one).²⁹

Yet how this can help us in our search for an alternative interpretative theory? While we have no problem entertaining such a literary *ricercar* in the realm of the creative imagination, we may be at a loss in an attempt to harness such a brilliant text to a more rigorous attempt at a historical-semiotic account of the original musical piece. This challenge brings me to another creative exegesis of the work: Anton Webern's famous *Ricercar à 6* of 1935. As Dahlhaus argued, Webern's brilliant instrumentation was intended to unmask the work's motivic dimension along with its various rhythmical, symmetrical, and structural dimensions, compromising its vocal-contrapuntal texture. Defending Webern against his opponents, Dahlhaus is replying to a question similar to the one I have just posed in connection with Hofstadter: what is the historical standing of this special adaptation? I find his answer revealing:

Contrary to one of the prejudices of the philosophy of history, not every period had at its disposal the means to express everything that is contained within it; much remains inarticulate and undeveloped. But what has been neglected cannot be made up for in a later epoch... Webern's instrumentation must not, then, be regarded as a completion; what it makes us aware of in fact, is that the idea of a truly satisfactory instrumental presentation of the *ricercar* is located in the no-man's land

²⁶ For example, (1) the *thema regium* is literally represented only by its first part; (2) if the author is represented in relation to this, by the third voice, he then 'jumps' to the bass; (3) there is no intermediate part in the music between the exposition in the third voice and the stretto (existing in the dialogue). But such meticulous parallelism is of course at odds with the basic premise of the book.

²⁷ Receiving from Bach himself one 'solution' – an inscription in the frontispiece: *Regis Iussu Cantio Et Reliqua Canonica Arte Resoluta* (At the King's Command, the Song and the Remainder Resolved with Canonic Art) that proliferates in Hofstadter's literary 'Six-Part Ricercar'.

²⁸ See on this matter Hofstadter's own preface to the book's 2nd edition, published on the occasion of its twentieth anniversary.

²⁹ Nelson Goodman, *Languages of Art* (Indianapolis: Bobbs Merrill Company, 1968), p. 153.

between what was not yet possible in Bach's time and what is no longer possible in our own.³⁰

What do we hear, then, when we listen to the same 'place' in the *ricercar* we have just 'visited' through Hofstadter's text, in the no-man's world created by Anton Webern? And how is his structural analysis related to the more 'thematic' analysis of Hofstadter (especially b. 62-65 in Bach as related to b. 124-130 in Webern [See Example 2]; while the dropping triads become even more salient, the 'all depends of how you look at/hear it' – the descending/ascending following triads – is pretty much lost in its division between the trombone and the cello)? The logic of well-made worlds, which can account for each work separately, will not help us to understand their relations to the original work and its liminal-enigmatic character.³¹

³⁰ Carl Dahlhaus, 'Bach's six-part *Ricercar* as orchestrated by Anton Webern', in *Schoenberg and the New Music*, trans. by Derrick Puffett and Alfred Clayton (Cambridge: Cambridge University Press, 1987) pp. 190-91. In a recent article, James Robert Currie ('Splinters in the Eye: Interpreting Webern's Bach Transcription', *Journal of Musicological Research* 20 (2002), 167-95) extensively discusses the ideological basis that seems to give rise to Webern's enterprise, which is in fact contained in Dahlhaus' poignant statement.

³¹ In that they are following the same fallacy of simple adaptation of the Leibnizian logic to artistic work, which was dismissed earlier in the article.

123 **noch fließender**

Fl.
Ob.
E. H.
Kl.
B.
Bskl.
B.
Fg.
Hr.
Tpt.
Pos.
Pk.
Hrf.
1. Gg.
2. Gg.
Br.
Vic.
Kbs.

127

Fl.
Ob.
E. H.
Kl.
B.
Bskl.
B.
Fg.
Hr.
Tpt.
Pos.
Pk.
Hrf.
1. Gg.
2. Gg.
Br.
Vic.
Kbs.

f, *pizz.*, *f*, *mf*, *p*, *f*, *mp*, *p*, *arco*, *p*, *pizz.*, *f*, *p*, *Solo* (on Dpf)

Example 2: b. 123-130 of Ricercar à 6 by Anton Webern

Tonal scripts and poietic networks

For assistance in this difficult undertaking, I would like to invite another important guest to this more-than-six-part party: Walter Benjamin, the author of *Ursprung des deutschen Trauerspiels* (1916-1925).³² Benjamin conceived of the Baroque Melancholy Drama in terms of allegory, which he strongly opposes to that of 'symbolic poetics'. Allegory, for him, is constituted through script (Schrift), or scripts, that gives or give rise to intricate histories of kings and martyrs.³³ In contrast to the classical-romantic *simultaneous totality* of the symbol, German baroque dramas, argues Benjamin, embody the idea of the *fragmentary unfolding* of history, nature, mankind, and the individual. As such, they sought mainly to instruct people with mysterious knowledge which had political implications, providing a refuge for the many ideas that people were reluctant to voice openly before princes. Unlike the poet of symbols, that of allegory is not supposed to conceal the seams of his activity, but rather display them as *ars inveniendi*. His fabric finally consists of sequences of scriptograms – heterogeneous 'leftovers', or ruins, of past cultural times – chained together into secular, 'passion' allegories – in which history and parable, reality and myth, are intermingled to create non-analogical messages, transcending both the fictional and the real.

Form is related to content; the monarch – a main hero – is both outside and inside the drama: as an absolute dictator, he is responsible for stability and prosperity ('Notulis crecentibus crescat Fortuna Regis' [as the notes grow may the fortune of the king grow] – allegorises Johann Sebastian in an inscription to the Canon 4 à 2 per Augmentationem contrario Motu), but he could, nevertheless, turn into the subject of catastrophe, which might render him a martyr. The causal relations inside the created allegory are dull; salvation stories are replaced by apotheoses. Games are always central, the transcendental is only obliquely embodied. Space and choreography are indispensable, while time is repeated, recycled. Some of these attributes pertain to the *Musical Offering* as they do to other works of the composer; historically, these works were part and parcel of the same environment Benjamin describes. But Bach and, to a much greater extent, Frederick the Great, were also at the brink of another period, which went beyond baroque allegories, again aspiring to symbolic wholes. Bach himself performed a political mission on behalf of this dawning new world when he made his pilgrimage to Potsdam in May 1747: he acted as an ambassador of peace and reconciliation on behalf of the defeated authorities in Saxony.³⁴ On the whole, it is the complex integer of baroque

³² See Walter Benjamin, 'Ursprung des deutschen Trauerspiels', in Rolf Tiedemann und Hermann Schweppenhäuser (eds.) *Gesammelte Schriften I i* (Frankfurt: Suhrkamp, 1978), pp. 203-430, trans. into English by John Osborne as *The Origin of German Tragic Drama* (New York: Verso, 1988).

³³ See Benjamin *Ursprung*, pp. 242-248, and *The Origin* pp. 62-68; 78-80; and for the theory of allegory the 'Allegory und Trauerspiel' chapter.

³⁴ For the political circumstances, see Christoph Wolff, *Johann Sebastian Bach, the Learned*

melancholism and enlightened optimism that the work materialises and that should guide its interpretation as a historical document.

In terms of Benjamin's theory, both Webern and Hofstadter are allegories of sorts. For they concatenate various uncompleted 'scripts' in their respective 'essays', which mingle signifiers and signifieds in various ways. Of the two, we find in Webern the emphasis on script – the working out of 'letters', 'hieroglyphs', or 'sonograms' – the basic signs that build up the original work. Hofstadter, in this connection, furnishes us with the possible syntagmatic networks that such scripts engender. Script and syntagmatic networks determine each other here as elsewhere, although not exclusively.

This script, Webern's script (and, to a certain extent, Bach's), is homogeneous, that is *tonal*, in its constitutive characters. The status of the characters, that is, the basic motivic units, is rather indeterminate, unlike that of verbal script; different orchestral analysis will yield different units. In other words, various 'tonal scripts' inhere in the work's texture, though yet they are not arbitrary; they are bounded by a variety of tonal and cognitive constraints. To give an example, b. 19-24 in Webern's score sensitises us to myriad figurations of musical fall within a short contrapuntal span with only few upward contours, which magnifies the given chromaticism of the theme (what seems hidden in the more continuous line of Bach's original [b. 9-12], relating to a larger span of melodic unfolding, see Examples 3a and 3b). Moving beyond Webern, *Musical Offering* as a whole, through its diverse canons and counterpoints, makes salient, in an unprecedented way, the process of generation, configuration, and deconstruction of its basic constitutive scripts and their various possible combinations.

The image shows a musical score for six staves, likely representing different instruments in a six-part setting. The music is in G major (one sharp) and 3/4 time. The first staff is a treble clef, and the others are bass clefs. The score shows measures 9, 10, 11, and 12. The melody in the first staff is highly chromatic, with many descending intervals. The other staves provide harmonic support with various rhythmic patterns.

Example 3a: b. 9-12 of Ricercar à 6 by Bach

19 *poco rubato* *poco allargando* - - -

Fl.
 Ob.
 E. H.
 Kl.
 BsKl.
 Fg.
 Hr.
 Trp.
 Pos.
 Pk.
 Hrf.
 1. Gg.
 2. Gg.
 Br.
 Vlc.
 Kbs.

[Solo] *poco rubato* *pizz.* *poco allargando* *arco*

[pizz.] *arco* *p* *pizz.*

[mit Dämpfer] *p* *pizz.* *p*

Solo mit Dämpfer *p* *pizz.* *p* Alle mit Dpf

Example 3b: b. 19-24 of *Ricercar à 6* by Webern

The possible syntagmatic networks disclosed in Hofstadter's essay include the basic strategies and resources involved in the work's genesis, performance, and

reception. In the various combinations they yield, they make significant use of the kind of underlying syntax and possible combinations by which its script, that is, its basic tonal units – motifs, themes, and gestures – is governed. It goes beyond verbal strettis and linguistic fugues to thematise and structuralise more crucial poietic networks (from the Greek work *poiein*, to make, bring about) that the work embodies and highlights. Four major poietic networks can be discerned in this connection.

- 1) The formative-performative network: this includes the ambiguous demarcations in general, and in music in particular, separating event and work, happening and gift, that is, the process of ‘bringing about’ an art work and the object it yields or produces.
- 2) The inter- and intra-personal network: this relates to the reciprocal relations between giver and receiver, author and performer, inventor and operator, their related staff and audience, and the various embodiments, even of the same figure, in the frame-within-frame structure the works implicate through their embodied gestures.
- 3) The cognitive-operative network: this refers to the intricate relations between a calculus and a machine, a tonal language and the processing mind, and the extent to which they can be shared to create a system of communication and adaptation. (What Christoph Wolff taught us about the possible generation of the Royal Theme and the term *ricercar* pertains here.³⁵)
- 4) The political-scientific network: this involves distinctions and interactions between trials and experiments, riddles and solutions, programmes and improvisations, and the proficiencies and power relations they rely on. Holy and unholy interrelations of power/knowledge pertain here, in terms of their roots in ancient cultures and mythologies, as well as their presence in proximities between modern polities and scientific authorities, in discourses and practices they both share and exchange.³⁶

Playing allegories

³⁵ Christoph Wolff, ‘Apropos the *Musical Offering*: The Thema Regium and the Term *Ricercar*’, in *Bach: Essays on His Life and Music* (Cambridge: Harvard University Press, 1991), pp. 324-31. (The term *ricercar* was more substantially treated by Warren Kirkendale’s ‘Ciceronians versus Aristotelians on the Ricercar as Exordium from Bembo to Bach’, *Journal of the American Musicological Society* 32 [1979], 3-54.) Wolff emphasised the communicative infrastructure that enables the drama of musical gifts and riddles. This includes the ‘invention’ of the Royal Theme by the king, a paradigm for musical shareability, as well as the tacit understanding of the term *ricercar*, in terms of its double generic meaning. For the intricate relations between the musician’s mind and the computational ‘mind’ of the machine, see Hofstadter, *Gödel, Escher Bach*, p. 739.

³⁶ These proximities, as they emerged in early modernity up until the twentieth century, are extensively discussed by Yaron Ezrahi in *The Descent of Icarus: Science and the Transformation of Contemporary Democracy* (Cambridge: Harvard University Press, 1990).

These poietic networks, some more dialogic, some more dialectic, are floating; they consist of functions, rather than entities, and thus can be inversely applied and reapplied. Hofstadter's work and Bach's *Opfer* are constituted by these relations, which render them encyclopædic compositions or universes, yielding various possible successions (narratives), compilations (spatial relations), and constellations that 'make sense'. Even more important is their correlation with the outside world on various levels, with parts of the referred-to reality embedded in the work, reflected by it, projected through it, and further changed by it. In Bach's *Opfer*, the opening *ricercar* is both a part of the event that gave rise to the work and an item within it. The canons are 'riposte' to the king's challenge and 'scripts' (also in the cinematic sense) to be fulfilled further. The trio sonata is the main part of the gift, an invitation to a further event, a recasting of the personal position relations, and more. Most of these syntagms embody gestures of various kinds; grafted onto the tonal-scriptural level, they give rise to the allegorical. This allegorical level, in turn, transcends baroque melancholic dramas, envisaging new states of artistic and political affairs.³⁷

Do these insights prove helpful when we turn back to the score? For the purpose of illustrating how they could work, let us observe the relations between the *aria-da-capo* form of the trio-sonata *allegro* and the appearances of the Royal Theme within their polyphonic context. Semiotically, I see in the movement at least three distinct traditions: rhetorical-expressive, through soloist-soliloquy [operatic] forms; dialogical-sympathetic, through the trio-sonata setting;³⁸ and hierarchical-generative, through its polyphonic texture. The opening theme of the movement thematically evolves from the previous *adagio* and appears novel and unique, right from the beginning. Starting with the violin, it typically activates a quasi-fugal reply by the flute, forcefully modulating to the dominant, to predominate the sonoric space.³⁹ Its retinue of counter-subjects gradually appears, and only towards the end of its first part (A, in the overall ABA form) do we notice that it also 'generates' the Royal Theme (b. 47). It appears in the bass, as a surprise but also as a hidden knowledge of what has been always there, a validation of the seriousness

³⁷ Tarasti's fascinating 'existential semiotics' are again relevant here (see fn. 11), as they point to the 'will to transcend' (e.g. through negation) a *Dasein's* (given) system of signification, by projecting signs beyond its horizons, to be affirmed and integrated in a later *Dasein*. One can argue that this is true of the baroque drama's signification system, by and large, as it was 'redeemed' by Benjamin himself. But it had itself (if historically a valid phenomenon) necessarily become a restricting system, at the time, generating subsequent phases of semiotic emancipation, of which the *Musical Offering* is an instance.

³⁸ For the way trio-sonata texture relates to a tradition of sympathetic echoing, see HaCohen, 'The Music of Sympathy', p. 633.

³⁹ The reply should have started with D; instead, the fifth created between C and G does not avoid 'real answer' (modulation), and hints, perhaps, to the tacit association of the king with his own theme. This is indeed 'corrected' when this allusion is no more needed, in the *da capo* section, b. 170. For a different, although compatible, interpretation of these interrelated themes see Marissen, 'The Theological Character', p. 98.

of the 'galant' happening of the surface or identification of what upholds it. Surprises and inevitability go together when the theme reappears, in the second A (b. 61), together with the opening allegro theme, now however in the flute (see Example 4).

The image shows a musical score for Example 4, which is a section from Bach's Sonata for Soprano. The score is in G minor, 3/4 time, and marked 'allegro'. It consists of two systems of three staves each (treble, middle, and bass clefs). The first system (measures 159-164) shows a complex interplay of themes. The second system (measures 165-169) features trills and more intricate rhythmic patterns. Fingerings are indicated by numbers 1-7 below notes.

Example 4: Bach, b. 159-169 of Sonata Sopr'Il Sogetto Reale by Bach

At this moment it confuses us as to primary and secondary, opening and continuation. It also functions as announcement of what arrives too late, as a self-reference or self-assertion (of the king, in relation to his fellow players), as both a response (to the violin player in a similar configuration in the middle of the B section, b. 117) and a takeover in relation to him, and finally as the enclosure of a secret, a musical secret - about who generates whom in the contrapuntal play. The allegorical meanings to which this gives rise are many, themselves open to various interpretations, related to the above. And the play, of course, has just begun.