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December, 2017

THE SEVEN PLANETS IN BACH, BUXTEHUDE, AND A DRESDEN BALLET OF 1678

A Document

Presented to

The Faculty of the

Moores School of Music

University of Houston

In Partial Fulfillment

Of the Requirements for the Degree of

Doctor of Musical Arts

By

Jeffrey Cooper

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ABSTRACT

Dieterich Buxtehude wrote seven suites on the Planets that have not survived; we know them only from a commendation by Johann Mattheson. Other seven-planet works of the time include a Dresden opera-ballet of 1678 whose composer is unknown, and a 1719 serenata by Johann David Heinichen written in contemporary Italian style. The 1678 opera-ballet is examined as a possible relative of the lost Buxtehude suites, alongside other astronomy-themed works of the time, such as J. C. F. Fischer's "Uranie" Passacaglia from *Musicalischer Parnassus*. A complete score of the 1678 opera-ballet is included in the appendix. The probable acquaintance of J. S. Bach with the Buxtehude suites from a relatively young age prompts a search for the seven-planet schema in his early works, and in fact, the two cantatas Christ lag in Todesbanden, BWV 4, and Gott ist *mein König*, BWV 71 fit this schema. Rhetorical types abstracted from these cantatas, including the Saturn-Mercury pair and the Mars-Venus pair, can be found among Bach's later chorale-based works. The analysis results in a valuable new understanding of the structure of Bach's two major early cantatas as well as a tentative account of what the Buxtehude suites themselves might have been like.

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For My Parents

Introduction

"But if—fie of such a but!—you be born so near the dull-making cataract of Nilus, that you cannot hear the planet-like music of poetry..."

— Sir Philip Sidney, *The Defence of Poetry*

Dieterich Buxtehude's seven suites on the planets, known only through Johann Mattheson's passing reference in 1739, constitute one of the most interesting lacunae in Buxtehude's output. These suites for keyboard impressed Mattheson enough to provoke a lament that they had never been printed. If he esteemed them so highly—as it seems, higher than any other works of Buxtehude available to him—and moreover, if Johann Sebastian Bach was acquainted with them from early on, then it is likely that their importance has been underestimated in modern times. How then is one to characterize the most probable musical contents of these lost suites? There are other musical works of the time that use the seven-planet schema; a Dresden opera-ballet of 1678 is probably the nearest available antecedent to the lost Buxtehude suites. The appendix to this document contains this opera-ballet in printed score for the first time. Of works that might themselves have been influenced by the suites, J. S. Bach's Cantata 4 and Cantata 71 are the most important. The use of a seven-planet schema in these two cantatas has hitherto gone unrecognized.

But the best place to begin is the French ballet tradition, including the *Ballet Royal de la Nuit* of 1653 and Lully's 1662 music for Cavalli's *Ercole amante*. Both of these contain significant references to the planets: in the latter case, a brief "Ballet of the Seven Planets." These are the seven planets of the geocentric Ptolemaic system, including the Sun and Moon alongside the five planets visible to the naked eye: Mercury, Venus, Mars, Jupiter, and

Johann Mattheson, *Der vollkommene Capellmeister*, trans. Ernest Charles Harriss (Ann Arbor, MI: UMI Research Press, 1981), 296.

² Jean-Baptiste Lully, Œuvres Complètes, ed. Jérôme de La Gorce et al (Hildesheim: G. Olms, 2001).

Saturn. Indeed, the invention of the *ballet de cour* genre in 1581 was itself inspired by an artistic impulse to imitate the endless dance of the planets above using a synthesis of dance, music, poetry, and painting, following in large part the thought of Jean Antoine de Baïf and the Académie de musique et de poésie.³

The year 1663 saw a German opera-ballet at the court of Wolfenbüttel, the *Ballet der Gestirne*. Of this work only the text survives.⁴ Another opera-ballet, first performed at the Dresden court of the Elector of Saxony Johann Georg II in 1678, survives in its entirety: *Die sieben Planeten*. This work is especially worthy of attention for its kinship of style with the German-speaking composers of Buxtehude's generation, as well its possible association with Christoph Bernhard. As a large-scale work based on the schema of seven planets, it is probably the nearest available prototype of the schema in relation to the lost Buxtehude suites. Chapter One will comprise an analysis of this work. A complete score, newly transcribed from the extant manuscripts, ⁵ appears in the appendix.

The symbolic significances of the planets, as established in Antiquity through their association with various Greco-Roman deities, correspond with the list of musical topics in common use from the sixteenth century onward: Mars has his military music, Venus her love songs, Jupiter his regal overtures and processionals, Saturn his sighs and laments, and Mercury his learned hermetic counterpoint. The Sun, as Apollo or Helios, is associated with pastoral music—one might think back to the sheep of Helios in Homer's *Odyssey*. The Moon, as Artemis or Selene, is associated with nighttime and the hunt, but also with cycles of

³ Marie-Claude Canova-Green, "Le Ballet de Cour en France," *Spectaculum Europaeum: Theatre and Spectacle in Europe (1580-1750)* (Wiesbaden: Harrassowitz, 1999), 488.

⁴ Gerhard Bittrich, "Ein deutsches Opernballett des siebzehnten Jahrhunderts: ein Beitrag zur Frühgeschichte der deutschen Oper" (PhD diss., Universität Leipzig, 1929), 76.

⁵ Sächsische Landesbibliothek – Staats- und Universitätsbibliothek Dresden: Mus.2-F-31, a score of the first performance in quarto, and Mus.2-F-31a, a nearly complete set of parts for a later performance.

change (as in the phases of the physical moon) instability, and even madness.⁶ The seven-planet schema, then, is inherently attractive to composers for its ability to maximize variety of topic and gesture over a large-scale work, while at the same time obtaining unity and coherence through sheer comprehensiveness.

The succeeding chapters will examine other Baroque compositions containing astronomical themes and associations. The most prominent example is Johann David Heinichen's serenata *La gara degli Dei*, composed for a grand festival of the planets in Dresden in 1719 and echoing the themes of the 1678 opera-ballet though written in the novel Italian style of Vivaldi and Lotti. Despite the common subject matter, Heinichen's music would seem to have very little to do with anything Buxtehude could have written, for keyboard or otherwise. More promising is Johann Caspar Ferdinand Fischer's *Musicalischer Parnassus*, a set of nine keyboard suites each named after one of the classical Muses. Chapter Two will include an examination of this work alongside Buxtehude's surviving *Passacaglia in D minor*. Also relevant is the proliferation of collections organized according to mode or key. The complex relationship between the increasingly frequent practice of schematizing by key and the special case of the seven-planet schema will be illuminated with the help of two seventeenth-century theorists, Abraham Bartolus and Conrad Matthaei.

Among the early works of Bach there are two well-known cantatas that unexpectedly fit the seven-planet schema: *Christ lag in Todesbanden*, BWV 4, and *Gott ist mein König*, BWV 71. Both were written within a few years of Bach's visit to Buxtehude in Lübeck in the winter of 1705–06. If indeed Bach intentionally used the seven planets in the structure of these, his earliest major choral works, the implications will be of great significance to Bach

Richard Kay, *Dante's Christian Astrology* (Philadelphia, PA: University of Pennsylvania Press, 1994), 24–25.

scholarship in general. In Chapter Three, I will argue to that effect, and also attempt to elucidate Bach's approach to rhetorical *dispositio* as exemplified in the two cantatas—specifically, how he (with the help of the librettist) used the seven-planet schema to structurally unify movements based on widely varying musical topics. Of help will be Robert Hatten's theory of musical signification by means of gestures marked by their opposition to the musical background—gestures which Bach deploys in unmistakably dramatic ways.

Chapter Four will trace the further development of the planetary topics and their rhetorical combinations in Bach's organ chorale preludes, beginning with three of the earliest that eventually reached their final form among the eighteen "Leipzig" chorales, and going on to consider the later chorale preludes that make up the interior of *Clavier-Übung III*.

Returning to the Buxtehude suites, I will put forward several ways in which they might be related to the six keyboard partitas that make up Bach's *Clavier-Übung I*. The partitas were, essentially, Bach's opportunity to publish a set of keyboard suites of his own in the tradition of Buxtehude's planet-suites, though on a considerably larger scale. The curious variety of both title and style among their first movements is telling; doubtless a similar variety characterized Buxtehude's suites, and the inclusion of freely composed preludes would have allowed Buxtehude to use the planetary topics without the constraints of dance type.

So long as the Buxtehude planet-suites remain undiscovered, we can look to their successors among the works of Bach and Fischer as well as to the Dresden ballet of 1678 to form some idea of what they might have been like. In the end, we can be totally certain only of the bare fact that Buxtehude used the seven-planet schema for an important keyboard work, but for us it is more than enough that the schema provides a new key to the castle of Bach's mind.

Chapter 1. Die sieben Planeten: The Opera-ballet of 1678

Johann Georg II, who was the Elector of Saxony from 1656 to 1680, was known as a patron of the arts and organizer of state festivals even before his accession. As Elector, he supported a large *kapelle* at great expense, and recruited numerous Italian musicians to serve in it, including Marco Giuseppe Peranda, Vincenzo Albrici, and Giovanni Andrea Bontempi, all three of whom were listed as *kapellmeister* at various times. The most eminent Germans of the Dresden kapelle, Heinrich Schütz and Christoph Bernhard, were somewhat less esteemed by the elector, with Bernhard only becoming kapellmeister after the elector's death in 1680.

Many of the festivals organized by Johann Georg II involved a grand mythological theme, and often he presented himself as a central character of the mythology: Jason (of Golden Fleece fame) in 1650, Mars in 1653, Hercules in 1671, and on numerous occasions, Nimrod, the "mighty hunter" mentioned in the biblical book of Genesis and regarded as the first monarch. It was as Nimrod that he presided over the tournament celebrating the wedding of his daughter in 1662, and he appeared again in the same guise at the opening of the festival of February 1678.

The theme of the seven planets adopted for the festival of 1678 was most likely inspired by the "Procession of Time and the Seven Planets," which marked the beginning of a three-day festival on the occasion of Johann Georg's christening in 1613.⁹ A large painting

⁷ Mary Frandsen, Crossing Confessional Boundaries: the Patronage of Italian Sacred Music in seventeenth-century Dresden (Oxford: Oxford University Press, 2012), 61, 71.

⁸ Helen Watanabe-O'Kelly, Court Culture in Dresden (Basingstoke: Palgrave, 2002), 131, 134, 143, 152.

The seven planets made earlier appearances at Dresden festivals in 1587 and 1604. See Watanabe-O'Kelly, *Court Culture in Dresden*, 123.

of this event hung in the stables in Dresden.¹⁰ His grandson Friedrich August I would later adopt the planetary theme for his own festival of 1719. The production of a planet-ballet to begin the festival of 1678 fits the broader tradition of the *ballet de cour*, with exemplars in Wolfenbüttel and France.

The festival of 1678 is well documented thanks to Gabriel Tzschimmer's massive festival-book of 1680, which reviews every detail of the Dresden festival down to the seating charts at the banquet, and uses these as points of departure for oblique moralistic mediations. The book includes the libretto of the opera as well as lengthy discussions on the meanings of the planets. The occasion of the festival was the state visit of Johann Georg's three younger brothers, all dukes in their own right.

The Ballet of the Planets was performed on the first day of the festival, following a Procession of the Seven Planets and a banquet. The ballet itself was fully staged with sets by Johann Oswald Harms. The singers were drawn from the kapelle: Ephraim Biener, Johann Füssel, Johann Jäger, a "Herr Wohltag," Johann Jacob Linder, and two choirboys are indicated in the score from the first performance. The ballet is in seven acts with a prologue and a concluding grand ballet. Each act features one of the singers as a planet-god suspended on a theatrical crane. A sinfonia, recitative, and aria with ritornellos make up the operatic section of each act, followed by three entreés for the dancers. The operatic sections are scored for five-part string ensemble while the dances are scored for four parts. The music survives in a score, and in a set of string and cembalo parts from a later performance with a newly composed prologue. There does not seem to be any other record of this later performance.

The question of this music's attribution is particularly difficult. The possible

¹⁰ Watanabe-O'Kelly, Court Culture in Dresden, 153.

composers include Kapellmeister Giovanni Albrici or one of the other Italians, one of the French dancing masters (as suggested by Wolfram Steude), ¹¹ or one of the Germans, of whom Bernhard is the most probable candidate. Gerhard Bittrich's 1929 attribution of this music to Bernhard based on the quality of German text-setting is not particularly convincing in itself, ¹² for he seems to have been unaware of the German-texted dramatic works of Bontempi and Perenda. ¹³ Their *Drama oder Musicalishes Schauspiel von der Dafne* of 1671, together with *Jupiter and Io* of 1672, is enough to demonstrate their competence in this regard.

However, there remain a few bits of evidence that point to Bernhard, if only tentatively. The text of the planet-ballet of 1678 as given by Tzschimmer does not match the text in the score in several places. These small but significant variants may point to the involvement of a native German-speaker in the compositional process, which again would most likely have been Bernhard. Additionally, a somewhat stronger case can be made for Bernhard's authorship of the replacement prologue. This longer prologue replaces Cupid with Victoria; its militaristic character accords more with the personality and experience of Johann Georg III, who succeeded his father as elector in 1680. With most of the Italians dismissed and Bernhard sole Kapellmeister, the new prologue can now be ascribed to him with a little more confidence. Unfortunately, it is preserved only in two violin parts, leaving it practically impervious to style criticism in comparison to the rest of the work.

In the original prologue, a choir boy sings the role of Cupid. The opening arioso finds him proclaiming, "I move the world"; as the personification of desire, he claims precedence

¹¹ Wolfram Steude, *Annäherung durch Distanz*: *Texte zur älteren mitteldeutschen Musik und Musikgeschichte* (Altenburg: Kamprad, 2001), 115.

¹² Bittrich, "Ein deutsches Opernballett," 16–18.

¹³ Watanabe-O'Kelly, Court Culture in Dresden, 191.

over the other planetary gods, each of whom can rule over only one specific class of human desires. Cupid's aria elaborates on what he offers Saxony:

Though [the planets'] influence grows
As their fiery glow approaches,
Wherever I am not, they go there in vain.
Through me the Saxon nation endures,
And through them obtains such good fortune
As will enable the Rue [Raute] to glitter indeed.

Rue, a common herb, composes a wreath or crown on the coat of arms of Saxony.¹⁴ The music of the later alternative prologue has a relevant moment of highly active string writing under the heading "Most beautiful Rue."

What follows is a somewhat cursory analysis of the entire work, with particular attention to gestures and structural aspects that relate specifically to the musical topics associated with the planets. The order of the planets' appearance is simply that of the Ptolmaic system, from highest to lowest. There is no hint of the new heliocentric model either in the libretto or in Tzschimmer's festival book. At one point Tzschimmer even discusses astronomy as one of the seven liberal arts, but here as elsewhere he simply multiplies classical allusions and citations, apparently ignoring works on astronomy after Averroes. Apparently, heliocentrism had no value for the moralistic and propagandistic purposes of Tzschimmer's work and the ballet itself.

Cupid's music is in D major and, except for the recitative, in triple meter. The seven subsequent acts each adopt the same basic order of sinfonia, recitative, aria, and ritornello, omitting Cupid's opening arioso. Each operatic section is followed by three entreés, each usually composed of one dance in duple meter and one in triple meter. The poetry, too, is

¹⁴ Julian Franklyn and John Tanner, *An Encyclopaedic Dictionary of Heraldry* (Oxford: Pergamon Press, 1970), s.v. "rue, crown of."

¹⁵ Gabriel Tzschimmer, Die Durchlauchtigste Zusammenkunfft, vol. 2 (Nürnberg: Hoffman, 1680), 159.

congruent with Cupid's: each planet introduces himself or herself, expounds upon his or her particular realm of authority and tendency of influence, and finally promises some benefit upon the noble heroes of Saxony.

Cupid's music ends without any dances, so a transition of some sort is necessary before Saturn can be introduced. For this reason, Saturn's sinfonia (Ex. 1) begins with three measures of D major, and uses an echo effect to set up a bold arrival of G major in measure 4. With rests on the downbeats of measures 1, 2, and 4, and a strong upward leap in the bass line on beat 2 of measure 3, the triple meter of the notation is difficult to hear clearly until the middle of measure 5, already the halfway point of the sinfonia. The appearance of G major is also puzzling; it would seem to be an unlikely key for the most menacing of the planets, normally thought to bring old age, decay, and death.

But Saturn instead brings reassurance—a message underlined by the emergence of a continuous melody in triple meter in the second half of the sinfonia. His lead is a protective metal, able to bind the heroes of Saxony together; his mines are a nest where the poor people of Saxony can grow up safe from sorrow, time, and "false sorcery." Accordingly, the dances feature first a sorcerer, then a crowd of beggars, and finally a crew of miners. The encouraging G major of the operatic music is balanced by the G minor of the dances. Harms' background set shows the dancing miners emerging from beneath a mountain.

Mining was of great importance to the local economy, and it had played a significant role in numerous Dresden festivals as far back as 1561. From 1574, mining was associated with Mercury in particular, ¹⁶ and so it is surprising that the ballet has its miners appear under Saturn instead of Mercury. Later in the same month, Johann Georg II was to present himself

¹⁶ Watanabe-O'Kelly, Court Culture in Dresden, 121.

Example 1. Die sieben Planeten, Act I: "Saturn," Sinfonia



in the elaborate costume of a miner riding in procession behind Mercury. Giving the miners to Saturn may well have been a momentary exigency specific to the rhetorical requirements of the ballet's structure: given that the Ptolmaic order of the planets requires Saturn to appear first, the ballet moves one of Saxony's key industries to the front of the line along with him.

Jupiter, although King of the Planets, comes second in the order. Following him in the dances are two Romans and an astrologer, a Moorish king, and the four great monarchs of history: Nimrod, Cyrus, Alexander the Great, and Julius Caesar. The Elector himself had appeared as Nimrod in the procession of Nimrod and the Seven Planets through the streets of Dresden; he had previously taken on this persona in festivals of 1662 and 1672. While the characters of the Four Monarchs are lifted directly from his own christening festival of 1613; it seems that in this context the three "younger" monarchs are meant to correspond to the Elector's three younger brothers.

Nimrod, moreover, has a connection with Saturn, as Tzschimmer's own translation of Sleidanus avers. ²⁰ Nimrod's position in the Book of Genesis is analogous to that of Kronos/Saturn in Greek mythology, insofar as both are presented as powerful monarchs in a nearly forgotten archaic era. The implication is that just as Nimrod's bravery and monarchal power have kept his memory alive throughout the ages, Johann Georg's patronage of art, music, and spectacle will gain him a similar timelessness.

Jupiter's music begins with a brief sinfonia recognizably in the style of a French entreé. The entire act is characterized by an irregular pattern of cadences that makes it difficult to speak of this act as being simply in the key of B-flat major. Of course, using the

¹⁷ Tzschimmer, Die Durchlauchtigste Zusammenkunfft, vol. 2, 70.

¹⁸ Watanabe-O'Kelly, Court Culture in Dresden, 151–152.

¹⁹ Watanabe-O'Kelly, Court Culture in Dresden, 153–154.

²⁰ Johann Sleidani, *Vier Monarchien Worinnen kurtz alles verfasset*, was nach Erschaffung der Welt *denckwürdig befunden*, trans. Gabriel Tzschimmer (Dresden: Löffler, 1682), 3.

Example 2. Die sieben Planeten, Act II: "Jupiter," mm. 16-26





language of major and minor key for any of this music is somewhat anachronistic; contemporary theory was still mostly bound to the modal system of Glarean and Zarlino.²¹ But most unusual even in this broad context is the contradiction between the ritornello and the strophic aria which it frames: the recitative and aria both cadence on B-flat (Ex. 2, m. 21), but the ritornello on G (m. 26).

There seems to be a curious collision of modal and proto-tonal thinking here: the ritornello and aria modulate back and forth between the relative major and minor keys, with their respective interior cadences functioning as a typical tonal dominant. Meanwhile the sinfonia, recitative, and most of the dances seem to fit into a transposed C-mode with E as the alternative half-cadence point—Bernhard's first or second mode as laid out in the

²¹ Harold Powers, "From Psalmody to Tonality," in *Tonal Structures in Early Music* (New York: Garland, 1998), 280–282.

*Tractatus compositionis augmentatis.*²² While such a structure would not have been unusual in the late seventeenth century, the consistency of its application here is striking.

Table 1. Cadences in *Die sieben Planeten*, Act II: Jupiter

	Interior cadence(s)	Final cadence		
Sinfonia	D	B-flat		
Recitative	D	B-flat		
Ritornello	D	G		
Aria	F	B-flat		
Dances	D, (C in a single case)	B-flat		

In all likelihood, the effect of the false relation between F-sharp and F-natural influenced the decision to use a modal B-flat/D polarity. The B sections of most of the dances begin with a B-flat major chord, a chord made particularly pungent by its contradiction of the cadential D major chord that precedes it. Perhaps the composer had Jupiter's lightning bolts in mind. At the same time, the aria's insistence on B-flat despite the ritornello's G minor cadences may have something to do with Jupiter's promises to "lighten your burdens," and "make your prosperity eternal." Perhaps Jupiter is in an implicit dialogue with Saturn's role as Father Time; if so, the ritornello's momentary return to the G minor of Saturn's music would reinforce the rhetorical pairing of opposites.

Mars appears next, accompanied by trumpets and kettledrums that possibly played from a stock repertoire; no music for the trumpets or percussion survives in the existing score or parts. The ritornello for the aria lacks any part for the strings, and might have featured

²² Richard Streetman, "Christoph Bernhard" (PhD diss., North Texas State University, 1967), 175.

²³ Act II, mm. 32–34 and 44–46 (See appendix).

brass instead. It seems also that the band played for the third entreé, as no music for it survives.

The bass solo for Mars uses many triadic figures typical of the military topic. The recitative begins in C major but cadences in F. An aria begins in A minor but closes in C major, with the accompaniment of the full string ensemble. A strophic recitative-aria pair follows, with more martial imagery in the voice. The dances are in F major and eschew triple meter entirely. Both entreés begin with allemandes: one for two fencing-masters, and the other for a troop of soldiers and Amazons, i.e. female warriors. The suite of the second entreé has an interior cadence on the third degree of the scale, just as in the Jupiter dances.

The sinfonia for the Sun is in the French entreé style—similar to Jupiter, but in E minor. The text for the Sun mostly focuses on the seasons and their concomitant blessings of agriculture and horticulture. The concise aria for countertenor is accompanied by the two violas with a strophic repetition. In the string parts for the later performance, the music is transposed down one whole-step, probably to accommodate the lower vocal range of a different soloist. The dances are all in G major, beginning with an entreé for two Spaniards (apparently chasing the sun across the ocean to the New World). The four seasons appear in the second entreé, and the four continents of the world appear in the third.²⁴

The G minor sinfonia for Venus is clearly in the time-honored "languishing" style, beginning with a descending melodic diminished fourth in the first violin part (Ex. 3). The extensive use of rests between very short phrases intensifies the sense of tentative longing perennially associated with the topic of yearning romantic love.

15

²⁴ Tzschimmer, Die Durchlauchtigste Zusammenkunfft, vol. 1, 165.

Example 3. Die sieben Planeten, Act V: "Venus," Sinfonia, mm. 1–10



Example 4. Die sieben Planeten, Act V: "Venus," mm. 41–43



The recitative includes two arioso passages in triple meter and G major. The aria begins with an instance of the *pianto* half-step between the fifth and sixth scale degrees (Ex. 4). The lower strings accompany throughout, while the upper strings punctuate the first cadence in addition to the usual ritornello.

While remaining in G minor, the dances set aside the languishing *affekt* to present instead the lively, sporting side of love. They feature cupids, a cavalier and matchmaker, and finally three cavaliers and ladies whose entreé is in an unusual triple meter, and whose entire set contains three dances rather than the usual two. Harms' set shows a fabulously overgrown pleasure-garden, which together with the vivacity of the dances evokes the fertility that Venus commands.

Mercury's sinfonia (Ex. 5) is in C major and triple meter. It relies largely on the unpredictable placement of rests on the second beat, beginning with the very first measure. Unexpected silences seem to be a recurring device in connection with Mercury, as we shall see. The recitative for countertenor includes uses a similar device at measure 24, with rests on the strong beats: "... Ich ... der Merkur." Shortly after this phrase, on the word *Lily* at measure 26, comes a striking use of Bernhard's *heterolepsis*, ²⁵ in which a dissonance is approached by leap from above (Ex. 6). The strophic aria contains a scrap of imitation between the voice and bass line at measure 41.

²⁵ Streetman, "Christoph Bernhard," 163.



Example 6. Die sieben Planeten, Act VI: "Mercury," mm. 24–27



The ritornello (Ex. 7) uses a motif of falling fourths always followed by a rest, causing even more metrical ambiguity than we saw in Saturn's sinfonia. Persistent syncopations give the impression of metric displacement leading up to the cadence in measure 53. The statement of the motif immediately after the cadence is followed by two half rests instead of one. It would be easy for the listener to perceive this music in duple meter everywhere but near the cadence points (Ex. 7b).

The dances perpetuate the unpredictability in ever more striking ways. The entreé of the alchemists moves from C major to a peculiarly weak midpoint cadence on D, while the suite suddenly employs gasping pickup figures in the lower strings at measure 22 (Ex. 8), inverting the usual expectation of shorter note values in the upper parts. The second entreé, for four fools, threatens a premature authentic cadence in its B section at measure 11 before lurching forward after a rest (Ex. 9). Most drastic of all is the suite's replacement of the expected final chord with a two-measure rest, leaving the harmony and rhythm dangling without closure (Ex. 10). The absent final chord may well have been replaced by a comical sound effect from the stage. The third entreé features the traditional seven Liberal Arts, which Tzschimmer discusses in detail.²⁶

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²⁶ Tzschimmer, Die Durchlauchtigste Zusammenkunfft, vol. 2, 143–160.

Example 7a. Die sieben Planeten, Act VI: "Mercury," Ritornello, mm. 50–57



Example 7b. *Die sieben Planeten*, Act VI: "Mercury," Ritornello, mm. 50–57 One possible perception of the meter



Example 8. Die sieben Planeten, Act VI: "Mercury," First Entreé, mm. 22–23, reduction



Example 9. Die sieben Planeten, Act VI: "Mercury," Second Entreé, mm. 8–17, reduction



Mercury's text largely concerns alchemy, particularly the alchemical production of gold from other materials. The association of Mercury with language and trickery goes back at least as far as Plato's *Cratylus*, in which Socrates says, "The name Hermes has to do with speech, and signifies that he is the interpreter *[ermeneus]*, or messenger, wily and deceptive in speech, and oratorical. All this activity is concerned with the power of speech." The use of such curious musical devices as heterolepsis, imitation, unexpected rests, and metrical

²⁷ Plato, "Cratylus" in *Plato*, *vol.* 4, trans. Harold N. Fowler (Cambridge, MA: Harvard University Press, 1926), 84–87.

ambiguity all seem to reflect the theme of verbal trickery and crafty manipulation of materials. Tzschimmer's reproduction of Harms' set shows an amphitheatre or marketplace with stalls representing various trades and crafts, with representatives of the seven Liberal Arts poised in the center.

Finally, the Moon appears as Diana, patroness of the hunt. The sinfonia and ritornello, both in E major, are filled with frantic string writing, evocative of the chase. Diana mentions hunters and fishers, both of whom appear in the E minor dances after the first entreé for three shepherds. In Tzschimmer's print of Harms' set, the hunters are shown surrounding a bear in a forest clearing. The grand ballet that concludes the work features Saturn rising up out of the

earth, surrounded by all the other planets. ²⁸ This final set of three dances remains in E minor.

On the whole, this ballet provides a useful window into the significance of the seven planets in the German-speaking cultural milleu of the late seventeenth century. While it is unlikely that this music was known to Buxtehude, he may well have come across Tzschimmer's festival book at some point in his life. A secure attribution of the ballet to Bernhard would be attractive insofar as it would bring it one degree closer to Buxtehude in terms of potential stylistic influence, ²⁹ but we lack sufficient evidence to rule out the participation of one of Dresden's Italian composers.

In any case, we can reasonably expect that many of the musical devices and characteristics in Buxtehude's planet-suites would have resembled those we have see in the Dresden ballet. A suite for Venus would deploy the languishing style; for Mars, the trumpet and kettledrum music of a *battaglia*; for Mercury, recherché contrapuntal and metrical devices, perhaps used to humorous effect. Instances of all three topics within a work or set of works would be a useful clue toward the identification of a seven-planet schema, in Buxtehude's oeuvre and beyond. On the other hand, a composer in a less celebratory context might be more free to explore the negative sides of Saturn and Luna, delving into melancholic despair in the one case, and into instability and madness in the other. Therefore, the ballet's particular treatment of at least these two planets (and their major keys) need not obtain in other seven-planet works.

Finally, an untexted work would be more likely to use unique modes or keys for each planet. Only a few keys are absolutely unique to one act of the Dresden ballet: D major, B-

²⁸ Tzschimmer, Die Durchlauchtigste Zusammenkunfft, vol. 1, 75.

²⁹ Especially in light of the connection between Bernhard's *Prudentia prudentiana* and Buxtehude's *Mit Fried und Freud ich fahr dahin*, documented by Kerala Snyder in *Dieterich Buxtehude: Organist in Lübeck* (Rochester, NY: University of Rochester Press, 2007), 215–216.

flat major, and E major. However, considering the operatic sections separately, only C major is repeated; likewise, the ballet repeats only G minor. In seven-planet works with unique keys that deviate from the Ptolemaic order, the keys themselves might determine the order of the movements or suites instead; or, if no key schema can be identified, the order might be the result of specific rhetorical strategies.

Table 2. Key areas in Die sieben Planeten

	Cupido	Saturn	Jupiter	Mars	Sol	Venus	Mercur	Luna
Opera	D major	G major	B-flat major / G minor	C major	E minor / later, D minor	G minor	C major	E major
Ballet		G minor	B-flat major	F major	G major	G minor	C major	E minor

Chapter 2. Schematized Keyboard Suites and Collections between Buxtehude and Bach

Before searching for seven-planet pieces from other Baroque composers, it is worth pausing to ask whether any of Buxtehude's surviving work bears some relation to the lost planet-suites, or indeed if any fragments of the suites themselves might survive. One admittedly hypothetical possibility of the latter is the D minor suite, BuxWV 233, preserved in the Ryge manuscript. Among its five movements are an "Allemande d'Amour" and a "Sarabande d'Amour," suggesting a link to Venus. However, the music itself lacks any obvious gestures that could point beyond the topical character of the dance forms toward anything like a programmatic representation.

Supposing that these are surviving dances from a planet-suite, or at any rate, that the planet dances had a similar lack of topical specificity, Buxtehude may well have prefaced the dances with a relatively free programmatic movement in the manner of Froberger. In such a case, the dances would not need to contain any gestures pointing to one of the planets; their topical significance could be entirely subsumed under the various dance types and key areas. Buxtehude's habit of writing suites with unusual degrees of thematic unity, such that the same basic material is often worked out in multiple dance forms, would surely be a sensible compositional strategy in this context. Such a rhetorical shape (dispositio) would resemble that of the Dresden planet-ballet, with its alternation between elaborate operatic sections and lighter dances, most rather ordinary and not particularly specific with respect to the planet's topic.

If indeed the D minor suite gives us a hint of the kind of dance writing that might fill out a planet suite, the Passacaglia in D minor, BuxWV 161, might spark an idea of what kind

³⁰ Copenhagen, Det Kongelige Bibliotek, Mu 6806.1399.

of large-scale movements would be suitable for making the planetary references relatively explicit. Piet Kee has hypothesized that the series of transpositions of the ground bass is a reference to the phases of the moon: one transposition for each week of the lunar month, and one varation for each of the twenty-eight days.³¹ The ground bass is four times transposed, starting from D minor, moving to F major, A minor, and finally back to D minor. Buxtehude would most likely have understood the structure in terms of mode, rather than key area; in these terms, the piece as a whole has a *final* of D, with the inner sections based on the plagal dominant (from mode 3) and the authentic dominant (from mode 4), respectively.³² Kee's hypothesis is plausible enough; it would have been easy for any composer to seize upon the inherent resemblance of a repetitive ground bass to the constantly reiterated rotations and orbits of the planets.

One later composer to do exactly that was Johann Caspar Ferdinand Fischer, in the astronomical "Uranie" passacaglia found at the end of his *Musicalischer Parnassus*. This highly systematized set of nine suites, each named after one of the classical muses, was composed in 1736 at the latest. ³³ Each suite begins with a short free movement, titled variously as Praeludia, Ouverture, and Toccata, among others. Some of the muses overlap with one or other of the planets: most obviously, Erato (the muse of erotic poetry) with Venus. Polyhymnia, the muse of sacred hymnody, appears to have a martial association for Fischer, for he includes a Marche, Combattement, and Air des Triomphans in her suite. The last suite, named for the muse of astronomy Uranie, closes with a lengthy passacaglia that recalls Buxtehude's D minor Passacaglia in several important ways. First, both are in D

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³¹ Piet Kee, "Astronomy in Buxtehude's Passacaglia," The Diapason (December 1984), 19–20.

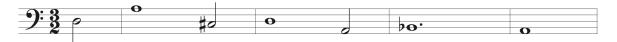
³² The D-modes are 3 and 4 according to Bernhard but 1 and 2 in the older eight-mode system.

³³ Rudolf Walter, "Fischer, Johann Caspar Ferdinand," in *Grove Music Online* (Oxford: Oxford University Press, accessed October 1, 2017) http://www.oxfordmusiconline.com/subscriber/article/grove/music/09726.

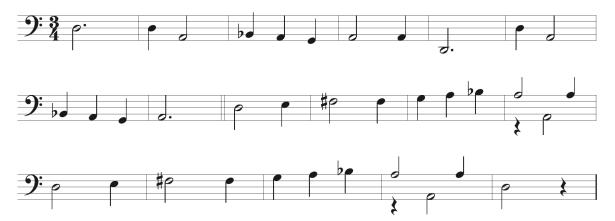
minor with internal modulations to F major and A minor. Whereas Buxtehude retains the same seven-note bass throughout, Fischer alters the details of his with each succeeding variation. Buxtehude's bass, a textbook demonstration of species of fifth and fourth in the Glaeran tradition, is geometrically simple by comparison to Fischer's continually developing line. Buxtehude's structure is impeccably regular: seven variations in each of four sections, joined together by a three-measure modulating splice. Fischer, in contrast, has nine variations in D minor, seven in F major, three in A minor, and two again in D minor, with the first variation of each section serving to modulate to the next key.

Example 11.

a. Buxtehude, Passacaglia in D minor, BuxWV 161, first iteration of the ground bass.



b. Fischer, Musicalischer Parnassus, "Uranie" Passacaglia, bass in first two variations



Kee's basic hypothesis, that astronomical considerations are at work in Buxtehude's passacaglia, is borne out by the similarities between it and Fischer's passacaglia, whether or not Fischer actually knew any of Buxtehude's music. Fischer was heavily influenced by Lully

and the French ballet tradition, and Buxtehude's own French affinities are evident in his extant keyboard suites. The use of ground bass for an astronomical evocation would have made just as much sense to Buxtehude as it evidently did to Fischer.

However, given the reliance of Buxtehude's passacaglia on obbligato pedal, it is unlikely that it is actually part of the planet-suites mentioned by Mattheson, which presumably were based on the core sequence of allemande, courante, sarabande, and gigue. Any ground bass movements that Buxtehude added to these would probably bear some resemblance to Fischer's Passacaglia in texture. Moreover, we can expect that each of the seven Buxtehude suites would be in a unique key, as are the nine Fischer suites. The ordering of the keys in Fischer does not seem to have any significance apart from fitting the character of the muses, though starting with the second suite they do happen to alternate between minor and major.

Another work worth mentioning as a possible contemporary influence on Buxtehude is Matthias Weckmann's organ cycle on the chorale *O lux beata Trinitas*. This work is carefully worked out according to a pre-existing schema, though without any variation in key or mode. Hans Davidsson has shown a link between its six verses and Athanasius Kircher's vivid analogical account of the six days of creation as the Creator's improvisation on the "Welt-Orgel." The fourth verse is unexpectedly expanded into four canonic variations; in Davidsson's explication, this corresponds to the creation of the sun, moon, and stars on the fourth day, and the working out of each canon reflects the architecture of each celestial

³⁴ Hans Davidsson, *Matthias Weckmann: the Interpretation of his Organ Music*, vol. 1 (Stockholm: Carl Gehrmans Musikförlag, 1991), 145–146. Davidsson makes much of there being six verses rather than the expected three. But in the seventeenth century, a version of the chorale was in use that added four newer verses to the medieval three. Samuel Scheidt, for one, wrote a strictly practical seven-verse setting of *O Lux Beata Trinitas* in his *Tabulatura Nova III*. Weckmann's reduction from seven to six verses is still significant, however, since the seventh day commemorates the Sabbath rest of God at the completion of the work of creation: it is perhaps fitting that the music too should fall silent at this point.

sphere. In Buxtehude's context, canon or other contrapuntal devices would have been particularly useful in a planet-suite dedicated to Mercury.

David Yearsley has evinced some of the imaginative connections between contrapuntal artifice and alchemy in the musical culture inhabited by Buxtehude and Bach. Johann Theile's *Musicalisches Kunstbuch* is an important example of such a connection, in that the title employs hermetic imagery (*Kunstbuch* can be translated as *magic spell-book*) while the contents are unified by their use of double counterpoint. Such theorists as Andreas Werckmeister followed the Italian Athanasius Kircher in linking music theory to hermetic philosophy, and this lingering "nimbus of magic" around counterpoint became the subject of serious controversy between the eighteenth-century musicians Johann Mattheson and Heinrich Bokemeyer, among many others. Mercury, as the namesake and embodiment of hermetic pursuits, would have been an obvious patron of abstruse contrapuntal artifices in the minds of all these musicians. These artifices might include canon, fugue (especially permutation fugue, as first found in Theile's music), or imitation in general.

One further collection employing a putatively astronomical schema is the *Zodiaci musici* of Johann Abraham Schmierer, another German imitator of Lully. Under this title were published twelve orchestral suites in Augsburg, half in 1698 and half in 1710. Only the former publication survives.³⁷ Based on qualities and gestures of the music itself, it does not seem possible to definitively match any of the untitled suites with a particular sign of the zodiac. The more evident schema at work here is according to key: each successive suite is in

³⁵ David Yearsley, *Bach and the Meanings of Counterpoint* (Cambridge: Cambridge University Press, 2002), 73–74.

³⁶ Yearsley, Bach and the Meanings, 57–58.

³⁷ Die Musik in Geschichte und Gegenwarten (Kassel: Bärenreiter, 2005), s. v. Schmierer, Abraham.

the relative minor or parallel major of its predecessor,³⁸ so as to cover the twelve most frequently used keys. Thus, F major is followed by D minor, and continuing on through D major, B minor, B-flat major, and G minor. The lost second half would have continued accordingly with G major, E minor, E-flat major, C minor, C major, and A minor.

It seems that this clever sequence is the real basis for the zodiacal title of the suites—the zodiac is invoked to explain a variety of keys rather than a variety of musical topics. For Schmierer, it was a comprehensive variety, covering the whole musical universe as he knew it. Later composers would omit his reference to the heavens while single-mindedly pursuing increasing levels of comprehension in their key-schematized collections, none more famously than J.S. Bach in the two books of *Das Wohltempierte Clavier*. Schmierer may as well be included among Bach's frequently cited predecessors in this regard.

Fischer's *Ariadne musica*, Johann Pachelbel's *Hexachordum Apollinis*, and Johann Kuhnau's *Neuer Clavier-Übung* are probably the most oft-mentioned of these precursors. Kuhnau's sets of seven suites use keys based on the seven pitches of the diatonic scale: C, D, and so on until B. The first set uses all major keys, and the second all minor keys. A single set of suites in freely mingled minor and major keys might have raised the suspicion of a seven-planet or other topic-based schema at work, especially given Kuhnau's predilection for programmatic adventures as seen in the Biblical Sonatas. But the strict separation of keys into major and minor and the absence of consistently developed topical indexes within the music both belie such a possibility in favor of a straightforward catalogue of keys. Kuhnau moreover opts for a more practical designation than Schmierer: "Keyboard-Practice."

Related questions arise from reading seventeenth-century theorists who include the planets in their discussions of the properties of modes. The most important of these are

³⁸ Or nearest parallel major, as in B minor and B-flat major, and (presumably) E minor and E-flat major.

Abraham Bartolus and Conrad Matthaei; the latter's work may have been known to both Bernhard and Buxtehude. In his *Musica Mathematica*, Bartolus lays out a pitch sequence of F G A B-flat C D E and matches it with the planets in their Ptolmaic order, such that F is matched with the Moon, G with Mercury, A with Venus, B-flat with the Sun, and so on.³⁹ Matthaei reproduces some, but not all of Bartolus' schema, including and sometimes preferring Hermann Finck's account of the modes and planets.⁴⁰

Finck's account is ultimately derived from Cicero via Boethius, Ramis, and Gaffurius, and is based on the degrees of the greater perfect system. Cicero's *Somnium Scipionis* identifies the highest and lowest heavens with the highest and lowest pitches in the music of the spheres, ⁴¹ hence, the Moon with the *proslambanomenos*. Boethius provides an explicit enumeration of the planets, ⁴² which Ramis in 1482 expands into a list of modes arranged according to the lowest scale degree of each. ⁴³ Ramis also introduces the nine Muses alongside the planets. ⁴⁴ Ramis' diagram is later plagiarized by Gaffurius for the famous frontispiece of his *Practica Musicae* of 1496, ⁴⁵ which appears to be Finck's main source.

It would seem then that Finck's schema of planets and modes is not based on observation of the qualities of actual music so much as on speculative classicism—it is really a "key" schema in disguise, lacking any necessary correlation with the characteristics of actual music, except insofar as it may have influenced certain compositions *a priori*. Bartolus

³⁹ Abraham Bartolus, *Musica Mathematica* (Leipzig: Henning Grosse, 1614), 108.

⁴⁰ Conrad Matthaei, *Kurtzer doch ausführlicher Bericht von den Modis Musicis* (Königsberg: Reusnern, 1658), 78–116.

⁴¹ Cicero, "Somnium Scipionis" in Selected Works of Cicero (Roslyn, NY: Walter J. Black), 210–211.

⁴² Boethius, *Fundamentals of Music*, trans. Calvin M. Bower (New Haven, CT: Yale University Press, 1989), 47.

⁴³ Bartolomeus Ramis, Musica Practica (Bologna: Baltasar de Hiriberia, 1482), 47.

⁴⁴ Athanasius Kircher has a similar table in which the muses are supplanted by the nine choirs of angels, the degrees of the lesser perfect system are given rather than the greater, and columns are added for metals, rocks, plants, trees, fish, birds, quadrupeds, and colors. See *Musurgia Universalis*, trans. Andreas Hirsch (Kassel: Bärenreiter, 2006), 281.

⁴⁵ James Haar, "The Frontispiece of Gafori's *Practica Musicae* (1496)," *Renaissance Quarterly* 20, no. 2 (Spring 1974), 7–22.

comes up with his schema in much the same way, though he is motivated by a new desire to expand the Guidonian hexachord into the seven notes of the diatonic pitch set. He takes a different starting point as well, assigning the earth to E, (i.e. the E-mode) the moon to F, Mercury to G, and so on through the Ptolemaic order.⁴⁶

Matthaei follows Bartolus in dropping the distinction between authentic and plagal modes for purposes of discussing the modes' affective properties, including planetary assignations. While he definitely prefers Bartolus with respect to Mercury and Venus, for Jupiter he follows Finck. The other planets appear under multiple modes, but the section on the Dorian mode mentions only the moon (Finck), and the section on Ionian mode mentions only Mars (Bartolus). In the section on Phrygian mode, Mercury appears in quotation from Finck without comment, but Saturn is elaborated upon for a slight length. Likewise, Mercury is discussed at greater length in the section on Mixolydian mode. It seems that Matthaei feels obliged to report both alternatives in these cases. He omits any mention of the Sun. Matthaei supports some of his decisions by adducing musical and organological data. For instance, he cites the natural fundamental tone of the trumpet in support of associating the Ionian mode with Mars. He also includes a list of chorales and compositions under the heading of each of the twelve modes he discusses, similar to the lists included in Bernhard's discussion of modes in the *Tractatus*. ⁴⁷ Matthaei's enumeration is less of a Ciceronian artifact than those of his predecessors. Its proximity to Bernhard and Buxtehude strengthens the case for the possibility of lunar references in a Dorian mode work like the Passacaglia, as Geoffrey Webber has noted.⁴⁸ During and after the time of practical solidification of the

⁴⁶ Rolf Dammann, "Die 'Musica Mathematica' Von Bartolus," *Archiv Für Musikwissenschaft* 26, no. 2 (1969), 148

⁴⁷ Streetman, "Christoph Bernhard," 174.

⁴⁸ Geoffrey Webber, "Modes and Tones in Buxtehude's Organ Works," *Early Music* 35, no. 3 (Oxford:

dichotomy between minor and major, we can expect to see the minor mode more often representing Venus, Saturn, and the Moon; and the major mode representing their opposites: Mars, Jupiter, and the Sun. Matthaei, confronted with two incommensurable schemas, used something like this pattern to choose between them and arrive at a schema of his own, one of a less speculative character than either of its parents.

Table 3. Correspondences between the Planets and the Modes or Scale Degrees

Planet	Cicero, Boethius	Ramis, Finck, et al	Bartolus	Matthaei	
The Moon	Proslambanomenos	Hypodorian (A–a)	F	Dorian (Lydian)	
Mercury	Hypate hypaton	Hypophrygian (B–b)	G	Mixolydian (Phrygian)	
Venus	Parhypate hypaton	Hypolydian (C–c)	A	Aeolian	
The Sun	Lichanos hypaton	Dorian (D–d)	B(-flat?)	[not mentioned]	
Mars	Hypate meson	Phrygian (E–e)	С	Ionian	
Jupiter	Parhypate meson	Lydian (F–f)	D	Lydian	
Saturn	Lichanos meson	Mixolydian (G–g)	E	Phrygian (Mixolydian)	
Fixed stars	Mese	Hypermixolydian (d–d') [displaced up an octave by Dorian]			

Can a carefully ordered schema of keys coincide with a seven-planet schema in actual compositions or collections? Simple uniqueness of key would be useful in framing and reinforcing topical distinctions among movements, as in Fischer's *Musicalischer Parnassus*. The Dresden ballet of 1678, on the other hand, re-uses the same key for several different planets, as we have seen. On the furthest end of the spectrum would fall works based on a *cantus firmus*, thereby bound to a single key or mode throughout, like Weckmann's *O lux beata trinitas*. In this case, much would depend on the composer's ingenuity.

Oxford University Press, August 2007), 355.

Chapter 3. The Two Planet-Cantatas of J. S. Bach

The two most important choral works from the time after the young J. S. Bach's visit to Lübeck, 1705–06, are the cantatas *Christ lag in Todesbanden*, BWV 4, and *Gott ist mein König*, BWV 71. It seems safe to take 1706 as the latest probable date for Bach's acquaintance with Buxtehude's seven suites on the planets. Further, assuming he held them in as much esteem as Mattheson did, he would likely have found in them inspiration and stimulus for his own compositional efforts. And indeed, both of the early cantatas are in seven movements (disregarding the brief introductory sinfonia of Cantata 4), and both are characterized by an unmistakable sevenfold topical variety analogous to that of the Dresden ballet of 1678 and doubtless that of the Buxtehude suites as well.

One must consider at the outset how much of a putative planetary schema derives from the librettist and how much derives from the composer, as difficult as that may be. In the case of Cantata 4, the librettist is Martin Luther; in the case of Cantata 71, the librettist is unknown but functions mainly as an assembler of biblical texts. Only two of the movements are furnished with original verse: "Durch mächtige Kraft" and "Das neue Regiment." Of course, Luther's text was already more than one hundred eighty years old at the time, and Bach's musical exegesis puts the seven-planet features of the poetry into higher relief. One may assume a certain mingling of intention, concomitant with the mixing of semantic and musical speech involved in the composer's exegesis, so as to avoid being unduly distracted by questions of which author's initiative introduced a schema into the work analogous to that of the seven planets. For Cantata 71, the identity of the librettist must be established before such questions can be meaningfully addressed.

Luther, the librettist of BWV 4, based the text of his chorale *Christ lag in Todesbanden* on the medieval sequence hymn for Easter, *Vicitmae paschali laudes*, with the melody modeled on the medieval leise *Christ ist erstanden*, itself another adaptation of the same sequence. Themes from the original sequence text can be traced in the core of Luther's seven stanzas in reversed order: the sacrificial lamb of the opening appears in Luther's verse 5, the battle of death and life (*Mors et vitae duello*) appears in verse 4, and Mary's delivery of the news of Christ's resurrection (*Dic nobis Maria*) in verse 3. Luther's verse 1 is based on *Christ ist erstanden*, while verse 2, 6, and 7 are essentially original.

Bach's use of planetary topics is most evident in the three middle verses, 3, 4, and 5. Verse 3, *Jesus Christus Gottes Sohn*, features a solo violin line in continuous sixteenth notes, evoking the loquacity of Mercury, patron of language (Ex. 12). The tenor runs with the news of Christ's having overthrown death and despair. The sudden arrival of silence in measure 26 is an arresting gesture in every sense. In fact, it is a classic oppositional gesture, contrasting the freely flowing speech of the messenger-violin with the dumbfounded silence of defeated Death. Death's sorry state is underlined by the use of a falling melodic diminished fourth in the violin during the brief adagio that follows. The flow of sixteenth-notes resumes on the cadence, and is taken up by the tenor for the concluding alleluia, further clarifying the markedness of the silencing gesture by intensifying the loquacity of the background.

The influence of warlike Mars is evident in verse 4. The soprano, tenor, and bass voices wage an imitative battle against one another, culminating at measure 29 with a canon on "wie ein Tod den andern fraß," in which each voice seems to devour the next (Ex. 13). The alto bears a cantus firmus from which all the melodic material is derived, ruling out the possibility of a casual evocation of the military topic through trumpet calls and the like.

Example 12. Christ lag in Todesbanden, BWV 4, Versus 3, mm. 23–29



Example 13. Christ lag in Todesbanden, BWV 4, Versus 4, mm. 29–35 (choral parts only)



Mars is succeeded by Venus in verse 5 (Ex. 14). A bare descending chromatic fourth (*passus duriusculus*) is supplanted by a meandering diatonic bass line, while the warm bass solo is accompanied by smooth harmony in the strings. The gentle triple meter is the first divergence from duple meter in the work. The text speaks of the sacrificial Lamb as being "roasted in burning Love." The opening passus duriusculus, which might seem inimical to

Example 14. Christ lag in Todesbanden, BWV 4, Versus 5, mm. 1–11



Love, is in reality a recontextualized figure from verse 1, where it initially appears at measure 9 with the words *für unser Sünd* (Ex. 15). In verse 5, the dysphoric sin-gesture is transformed into a gesture longing for union with the beloved. All these elements establish a musical background in keeping with the Venus topic.

Example 15. *Christ lag in Todesbanden*, BWV 4, Versus 1, mm. 8–11 (choral parts only)



An oppositional gesture occurs at measure 71, with the appearance of the Strangler, the pitiless foe of all love (Ex. 16). The music marks him with frantic sixteenth notes on the violin, a sustained high note from the bass soloist, and the silencing of the chordal accompaniment on the downbeats. Equilibrium is restored by the return of steady scalar eighth-notes in the bass, as the soloist explains that "The Strangler can no longer harm us." The lush chordal accompaniment returns for the hallelujahs, while the soloist attains a new ebullience with leaping eighth-note figures. Again, the background of yearning love is intensified after its interruption, clarifying the markedness of the interrupting gesture.

There are striking similarities between verse 3 and 5 and their corresponding movements in the Dresden ballet of 1678, Mercury and Venus. Mercury's opera and ballet music relies heavily on unexpected silences, including the remarkable dropped cadence in the dance of the fools. Meanwhile, Venus's sinfonia begins with a falling diminished fourth, a "dysphoric" gesture repurposed in much the same manner as verse 5's initial passus

Example 16. Christ lag in Todesbanden, BWV 4, Versus 5, mm. 70–81



duriusculus. However, Bach goes beyond the Dresden ballet in his use of especially purposeful oppositional gestures, availing himself of the *locus oppositorum*, as Mattheson calls it.⁴⁹ Mattheson's discussion of the sources of melodic invention, or *loci topici*, also includes the *locus adjunctorum*, which involves the elaboration of certain endowments or qualities of spirit, body, or fortune ascribed to particular characters or persons.⁵⁰ It is under this heading that Buxtehude's planet suites are mentioned. Mattheson mentions two other musicians as excelling at the use of *locus adjunctorum*: Froberger and Weckmann. Bach surely made as much use of it as these forebears.

As a man of letters in German and Latin, Bach would have doubtless understood the seven-planet schema and his oppositional gestures in terms similar to Heinichen and Mattheson's topic theory with its *locus adjunctorum* and *locus oppositorum*.⁵¹ More recently, Robert Hatten has developed a concept of *markedness* in relation to oppositional gestures, one that is eminently applicable to many of the gestures and structural features of Bach's early cantatas. For Hatten, markedness arises from the asymmetry between two sides of an oppositional difference. The marked term is specific in ways that the unmarked term is not, and so conveys expressive content in a more concentrated way, with a "narrower range of meaning." The two marked oppositional gestures discussed so far carry just such a narrow range of meaning.

Verses 2 and 6 seem at first to lack the kind of intense oppositional gestures found in verse 3 and 5, but their planetary topics are not the less obvious for that. Verse 2 is plainly

49 Mattheson, Der vollkommene Capellmeister, 298.

⁵⁰ Mattheson, Der vollkommene Capellmeister, 296.

⁵¹ Mattheson commends Johann David Heinichen as a writer on topic theory in *Der Volkommene Capellmeister*, 285.

⁵² Hatten, *Musical Meaning in Beethoven: Markedness, Correlation, and Interpretation* (Bloomington, IN: Indiana University Press, 1994), 63.

Example 17. Christ lag in Todesbanden, BWV 4, Versus 2, mm. 1–8



Example 18. *Christ lag in Todesbanden*, BWV 4, Sinfonia, mm. 1–6 (Brackets show half-step figure and its inversion.)



Saturn's verse, beginning with the two-note pianto figure derived from the first two notes of the chorale (Ex. 17). The text itself could not be any bleaker: no one can overcome Death; he holds everyone in prison. It is notable that the sinfonia also opens with the *pianto* figure, where it is answered with its inversion in the lower voices (Ex. 18). No such inversion occurs in verse 2 until the rising chromatic lines of the concluding Hallelujah. Even then, the voices can scarcely rouse themselves from despair as the bass-line marches heedlessly on beneath them (Ex. 19). The fundamental opposition occurs at a higher level, between this entire verse and Mercury's verse 3. This higher level is that of the rhetorical *dispositio* or basic structure, ordering, and arrangement of the work.⁵³

In Hatten's terms, the structural opposition between the two movements correlates with the significance of the oppositional gestures within them. The gestures partake of "privative," that is, assymetrical oppositions, but the structural opposition between Saturn and Mercury is "equipollent," or based on a pair of explicitly contradictory assertions. ⁵⁴ The symmetry between the movements is reflected in the oppositional gestures themselves: in Saturn's coda, the rising chromatic gesture of Life is thwarted by the bass line's unrelenting march to the coda; midway through Mercury's abgesang, the gesture of silent and forlorn Death is defeated by the Gospel-speech of the violin's sixteenth-notes. Oppositions are thus intertwined at both the gestural and structural level, and Bach's compositional decisions culminate in an explosion of expression and stylistic growth far beyond any merely conventional recourse to Mattheson's *locus oppositorum*.

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⁵³ Mattheson, Der vollkommene Capellmeister, 283.

⁵⁴ Hatten, Musical Meaning, 34–35.

Example 19. Christ lag in Todesbanden, BWV 4, Versus 2, mm. 48–53



Example 20. Christ lag in Todesbanden, BWV 4, Versus 6, mm. 12–15



Verse 6 is the Sun's verse; the second stollen of the text ends with the words "He himself is the Sun." Bach's music uses triple subdivision and a constant dotted rhythm in the bass line to evoke something of the pastoral (Ex. 20). The bouncing effect is light-hearted, innocent, and even a little rustic in comparison to the sophisticated lovemaking of the previous verse. While this verse lacks the clear structural pairing of verses 2–3 and 4–5, it can be understood as finding out yet another topical means of opposing Saturn/Death. At this point in the sequence, the menace of Saturn is so remote that the jollity of the Sun need not be interrupted by yet another oppositional gesture.

The outer verses of Cantata 4 pose a problem, since it seems that both verses were originally performed to the same music. The homophonic chorale setting of verse 7 is probably from around 1724. The text points clearly enough to Jupiter as presiding over a royal feast, leaving verse 1 to the Moon, if only by process of elimination. A closer examination shows that both text and music of verse 1 do have certain lunar properties. The text opens on the night before the dawn of the Resurrection, with Christ lying in the bonds of Death, and speaks of an essential change of his condition, and finally of the consequent joy that the believing community may now experience. The music, too, experiences a fundamental change with the *alla breve* quickening the tempo at measure 68 (Ex. 21).

From Aristotle through the Middle Ages, the heavens had been held to have been eternally in motion, without susceptibility to change in motion such as obtains on earth. The sole exception is the Moon, which partially shares in the earth's mutability. ⁵⁶ The Moon appears as the overseer of change in verse 1, with the tempo alteration serving as the

⁵⁵ Alfred Dürr, *The Cantatas of J.S. Bach*, trans. Richard D.P. Jones (Oxford: Oxford University Press, 2005), 265.

⁵⁶ C. S. Lewis, *The Discarded Image: An Introduction to Medieval and Renaissance Literature* (Cambridge: Cambridge University Press, 1964) 108–109.

Example 21. Christ lag in Todesbanden, BWV 4, Versus 1, mm. 65–71 (choral parts only)



indexical gesture in the music. Partly for this reason, the music fits the text of verse 7 not half so well. The seven-planet schema remained incomplete in terms of the music until Bach added, for the Leipzig liturgy, the homophonic chorale harmonization to serve verse 7. In this later version, the music reflects the social unity realized by the Church as a result of Christ's resurrection.

Taking the cantata as a whole, it seems that the planet schema could be derived independently from either text or music; both point to the same planetary qualities. Is it possible, then, to see Bach as basically engaging in an act of interpretation, influenced but not altogether determined by Luther's intentions? What is certain is that Bach discerned a potential for sevenfold topical variety in setting the chorale *Christ lag in Todesbanden* that other composers, Johann Pachelbel for instance, seemed not to.⁵⁷

Table 4. The Seven Planet Schema in Cantata 4, Christ lag in Todesbanden

Verse	Planet	Quality	Distinctive Gesture(s)	
1	The Moon	Mutability	Tempo alteration	
2	Saturn	Despair	Pianto unopposed; unyielding bass motion	
3	Mercury	Bearing good news	Loquacity oppossing sudden silence	
4	Mars	War	Imitative contest among voices	
5	Venus	Love	Gentle, steady motion opposing panic and breathlessness	
6	The Sun	Pastoral	Triple subdivision, ostinato rhythm in bass	
7	Jupiter	Royal feast	Conclusive homophony	

Cantata 71, *Gott ist mein König*, shares the seven-movement *dispositio* of Cantata 4 but has a different purpose. It was composed for the inauguration of the Mühlhausen town council in 1708—a civic cantata, nevertheless retaining a sacred text largely drawn from Psalm 74. Its civic function allies it more closely with the courtly planet-ballets of the seventeenth century, though in this case it was probably out of the question to superscribe the names of pagan deities above the sacred texts.

⁵⁷ Jeffrey Mitchell Taylor, "Johann Pachelbel's Cantata 'Christ Lag in Todesbanden': Its Significance as a Possible Model for J.S. Bach's Cantata no. 4" (M.M. thesis, California State University, Long Beach, 1992), 21.

The cantata opens with an evocation of a kingly court; each choir of instruments answers the trumpets in an almost polychoral fashion. If the seven-planet schema is indeed at work here, this is obviously Jupiter's territory. The second movement, "Ich bin nun achtzig Jahr," seems completely opposed to this. Daniel Melamed has convincingly connected this meditation on old age to the new Bürgermeister, Adolph Strecker, who was then eighty-three years old. But the profound opposition between the two movements should not be overlooked. The obbligato for the second movement is played on the organ, an instrument which alone had no place in the royal court of the first movement, and whose pipes are made mostly of lead, Saturn's metal. At measure 22 (Ex. 22), the high tide of Saturn's affect appears, with a passus duriusculus in the soprano on the words "Sometimes sour steps" answered by the bass soloist's *pianti* on the word *warum*—"Why?"

Soprano

durch man - chen sau - ren Tritt

Tenor

soll dein Knecht sich mehr be-schwe - ren, war-um, war - um?

B.C.

Example 22. Gott ist mein König, BWV 71, Movement 2, mm. 21–24

⁵⁸ Daniel Melamed, "The Text of 'Gott ist mein König' BWV 71," Bach 32, no. 1 (2001), 13-14.

In the following movement, the problem posed by Saturn is resolved: the divine blessing "May your old age be as your youth" is pronounced, redeeming Strecker's dotage, and by extension the inevitable senescence of the state. Bach sets the text as a straightforward permutation fugue—clearly an exercise in contrapuntal alchemy in the tradition of Johann Theile. The first entry is in the E minor of the previous movement, but the successive entries recontextualize it as an entry in the dominant of the fugue's home key, A minor. It seems very likely that Bach and the librettist had the philosopher's stone in mind—the alchemical antidote to old age and death represented by Saturn, transmuting his lead into immortal gold. If so, the third movement is surely Mercury's. Interestingly, Saturn and Mercury both occupy the same place in the order that they did in Cantata 4: the second and the third movements.

The fourth movement, "Tag und Nacht ist dein," is plainly the Sun's, with its rustic sarabande and alternation between choirs of oboes and recorders evoking the divinely ordained cycle of day and night and the constant course of the heavenly bodies. The B section contrasts this with duple meter and a much busier bass-line, while the soloist sings about the establishment of the borders of each land on earth.

The fifth movement, "Durch mächtige Kraft," evidently belongs to Mars, with its sudden welters of trumpets and drums being quite dissimilar to the pompous acclamations of the first movement (Ex. 23). Most of the alto soloist's music is rather placid, except the opening and closing motto which provokes the outburst of military color. The opposition between the unassuming *Andante* and the martial outbursts may reflect the opposition between war and peace.

Example 23. Gott ist mein König, BWV 71, Movement 5, mm. 1–11



Example 24. *Gott ist mein König*, BWV 71, Movement 6, mm. 3–5 (winds omitted) est dem Fein

The sixth movement, "Du wollest dem Feinde nicht geben die Seele deine Turtul-Tauben," relies on a trilled *pianto* to evoke the sighing of the beloved turtle-dove (Ex. 24). Atypically, the movement ends on a Phrygian cadence. All this evokes the quiet yearning of Venus.

The process of elimination leaves us with the Moon in the final movement. But instead of one tempo alteration as in Cantata 4, here Bach uses no fewer than six (Ex. 25). Some of these are really metrical alterations, allowing him to hew closely to the curiously chaotic accentuation of the text: iambs in the first line, amphibrachs in the second and third, trochees in the fourth and fifth, and finally iambs again.

Das neue Regiment auf jeglichen Wegen bekröhne der Seegen Friede, Ruh und Wohlergehen müsse stets zur Seiten stehen dem neuen Regiment.

The considerable instability of meter both in text and music seems to have much to do with the Moon's changefulness. The previous movements "Tag und Nacht" and "Durch mächtige Kraft" both contain similar metrical shifts, but in the last movement, the profusion of the shifts becomes the topical basis for entire movement.

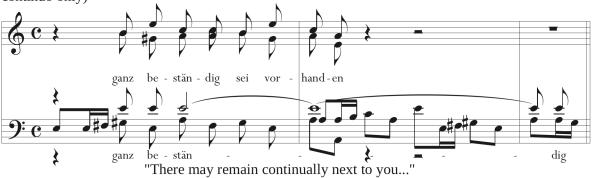
It is towards the end of this movement that the most clearly marked oppositional gesture arises, in the form of a long pedal point in the tenor on the word *beständig* (Ex. 26). This moment of steadfast assurance is marked out against the background of wildly unpredictable fortune and circumstance, embodied by the chaotic meter of both poetry and music. Afterwards, the *vivace* returns to reassert the comparatively frantic background mood. Reassertion and intensification of the background affect is a consistent function of Bach's music in the wake of an arresting oppositional gesture.

This gesture of steadfastness, then, takes its place alongside the silencing gesture of BWV 4, verse 3; and the strangling gesture of verse 5. All three of these gestures have a similar structural position: the ones from Cantata 4 occur about midway through the *abgesang* of the cantus firmus, while the one in Cantata 71 occurs about midway through the

Example 25. *Gott ist mein König*, BWV 71, Movement 7 (choral parts and basso continuo only)



Example 26. *Gott ist mein König*, BWV 71, Movement 7, mm. 90–92 (choral parts and basso continuo only)





Example 27. Christ lag in Todesbanden, BWV 4, Versus 5, mm. 64–71

second stanza of the text. The markedness of these gestures relies on their inherent atypicality as well as their correlation with the marked elements of the internal structure of the movements in which they appear. ⁵⁹

In the two verses of Cantata 4 under consideration, the music of the *abgesang* begins

⁵⁹ Hatten, Musical Meaning, 37–44.

to diverge from that of the *stollen*, preparing for the appearance of the starkly oppositional gesture by introducing a new development of the unmarked background elements. In verse 3, the block chords in the violin at measure 24, together with the transfer of the sixteenth-note motion to the bass line, effect a preparatory intensification of expressive meaning at one of the poles of the opposition, hitherto *unmarked* (Ex. 12). A similar exchange of registers occurs at measure 65 of verse 5, where the bass abruptly sings an long and extremely low pedal tone as the eighth-note motion moves into the middle strings (Ex. 27). Here the opposition of registers is extraordinarily piquant: the bass's low E-sharp pedal is shortly followed by an even longer pedal D above the staff as part of the marked opposition.

The inverted chromaticism of the vocal lines in the coda of Cantata 4, verse 2 is an example of an otherwise marked gesture that lacks the structural correlation of the other gestures (Ex. 19). But its failure to attain immediate significance at the structural level is itself a point of expressive significance through its difference to the later gestures, as we have seen. A similar situation obtains in the second movement of Cantata 71, the only chorale-based movement in the work. The tune used for the chorale *O Gott du frommer Gott* is in G major, but is mostly harmonically subverted by the movement's prevailing E minor. One of few places where the chorale is allowed to assert itself is mm. 35–38 (Ex. 28b), where a cadence in G major is not immediately contradicted, as in mm. 18–19 (Ex. 28a), but allowed a brief detour into C major, which is even more opposed harmonically to E minor. But E minor is quickly recovered at m. 41, since the internal oppositions to the Saturnine affect cannot be permitted to "succeed." The Saturn movements of both cantatas rely instead on their succeeding Mercury movements for permanently "successful" opposition.

Example 28. Gott ist mein König, BWV 71, Movement 2



28b. mm. 35-41



The tempo change at the coda of verse 1, by contrast, is a sort of fully integrated structural gesture, not merely a momentary opposition, but one that acts fundamentally to transform all that follows it—much like the Resurrection itself in Christian theology (Ex. 21). Both of the lunar movements permit a complete internal bipolarity, beginning at one pole, and ending at the other; whereas Saturn and most of the others must be comparatively unipolar in their reliance on structural opposition between pairs of movements.

Numerous other small-scale instances of opposition litter each cantata, beginning with

the first measure of the introductory sinfonia of Cantata 4 and its juxaposition of the *pianto* with its inversion (Ex. 18). The most significant of these have already been mentioned. Still to be considered are the structural oppositions between the movements and key areas in Cantata 71. At the highest level is the order of planets implied by the order of movements in either cantata. Both diverge from any known geocentric or heliocentric order. The two orders are different from each other as well, but they converge in several important respects. Saturn and Mercury form an oppositional pair, occupying the same location in the *dispositio* of either cantata. Not surprisingly, Mars and Venus are also adjacent and opposing. Also, the outer movements of Jupiter and the Moon exchange places from one cantata to the other. Of course, in Cantata 4 the order of planets was determined by Luther (consciously or not), but Bach himself may have had a hand in determining order of Cantata 71.

Table 5. The Seven-Planet Schema and Key areas in Cantatas 4 and 71

Cantata 4	–Planet	Cantata 71	–Planet	–Кеу
Versus 1: Christ lag in Todesbanden	The Moon	1. Gott ist mein König	Jupiter	C major
Versus 2: Den Tod niemand zwingen kunnt	Saturn	2. Ich bin nun achtzig Jahr	Saturn	E minor
Versus 3: Jesus Christus Gottes Sohn	Mercury	3. Dein Alter sey wie deiner Jugend	Mercury	A minor
Versus 4: Es war ein wunderlicher Krieg	Mars	4. Tag und Nacht ist dein	The Sun	F major
Versus 5: Hier ist das rechte Österlamm	Venus	5. Durch mächtige Kraft	Mars	C major
Versus 6: So feiren wir das hohe Fest	The Sun	6. Du wollest dem Feinde nicht geben	Venus	C minor / C Phrygian
Versus 7: Wir essen und leben wohl	Jupiter	7. Das neue Regiment	The Moon	C major

The key structure of Cantata 71 is based on C major (disregarding issues of *Chorton* vs. *Kammerton*). The most distant key is Saturn's E minor, which is brought into closer relation with C major by the mediating influence of A minor in the third movement. The other significant departure occurs in the next to last movement, when C minor becomes an extraordinary C Phrygian at its final cadence. The harmonic suspense is suddenly resolved by the pleasant, almost casual opening of movement 7, which by comparison may remind some of the beginning of an afternoon hunt.

In the context of a hunt, the *Vivace* music of the second half of movement 7 would depict the chase itself, recalling the scurrying character of the sinfonia in the last act of the 1678 ballet, in which the Moon appeared as Diana the huntress. Considered from the standpoint of the hunt, the meter changes of movement 7 would correspond to the various gaits of a horse. Even the single meter change of Cantata 4, verse 1, could be understood as moving from a trot to a gallop—a sensation which would have been commonplace at the time. Though the primary oppositional "gesture of steadfastness" in Cantata 71, movement 7 does not seem to fit the hunt topic as securely, the meter changes that form the background do have a sensory basis in the horse and hunt. But their expressive content is "chaos and unpredictability" as defined by the opposing gesture. Insofar as that content can be expressed through the hunt, the hunt is indeed depicted.

Of the oppositional pairs of movements mentioned above, Mars and Venus represent the most well-established music topics. While each is able to express an internal opposition—of war and peace (in the Mars movement of Cantata 71) on the one hand, and on the other burning love and envious hatred (in the Venus verse of Cantata 4)—both can ultimately be subsumed within the higher-level oppositions that have traditionally obtained

between them: war and love, courage and chastity, male and female. As a rhetorical strategy, the Mars-Venus pair relieves the intensity of the martial music by replacing it with soothing amorous affects. This pairing of masculine and feminine might be instructively contrasted with the tendencies of later developments in sonata form, especially in light of various interpretations in terms of gender offered by contemporary theorists.⁶⁰

The other pairing, of Saturn and Mercury, is less obvious. In both cantatas, Mercury presents the antidote to the deadly poison of Saturn. In Cantata 4, it is the very proclamation of the Gospel that effects what is proclaimed; in Cantata 71, it is the righteous deeds and undertakings of the aged man that can transmute old age into youth—"God is with you in all that you do," as the third movement concludes.

Perhaps Bach was contemplating the potential immortality of his own compositional deeds, as the deft counterpoint of the permutation fugue accompanied the mysterious transmutation referenced in the text. Certainly, his extant works as a whole have indeed outlived him, attaining as much lasting significance as he or anyone else could have hoped. While Bach was probably never a hermetic enthusiast in the manner of Walther or Bokemeyer, any composer of his time and place would have been perfectly willing to appropriate hermetic themes as grist for the rhetorical mill. In Cantata 71, the hermetic counterpoint is pressed into the service not of wild speculative flights of fancy, but of a commonplace affirmation of Lutheran piety and industry.

Although in most contexts we would expect the Sun and the Moon to form an opposing pair, in Bach's earliest cantatas we find instead the Moon and Jupiter in opposing

⁶⁰ The most famously controversial is probably Susan McClary's reading of the first movement of Beethoven's Ninth Symphony in *Feminine Endings: Music, Gender, and Sexuality* (Minneapolis, MN: University of Minnesota Press, 1991), 128.

⁶¹ Yearsley, Bach and the Meanings, 64–65.

outer movements, with the Sun left to itself. In Cantata 4, the Sun seems to simply reinforce the accomplishments of the previous movements by taking leave of death altogether—"the night of death is ended." In Cantata 71 the Sun's appearance seems to refocus the rhetoric outward from the figure of the aged Adolph Strecker (having now been rejuvenated through piety, industry, and good counterpoint) to the situation of the city as a whole: its boundaries determined by divine providence, its wars assisted by divine power, its peace guarded by divine solicitude, and its susceptibility to change moderated by divine impassibility.

In the shift from geocentrism to heliocentrism, the Moon retained its position as the lowest and lowliest of planets, while Jupiter remained the King of Planets. The order of planets in Cantata 4 takes an upward shape, beginning with the unsteadiness of the Moon and finally arriving at the eternal feast of Jupiter. Conversely, Cantata 71 begins with Jupiter and ends with the Moon, taking a downward direction. These varying directions seem to coincide with the parallel ecclesiastical and civil orders: Christ ascends from the bonds of death beneath the earth into the heaven of heavens, drawing the believing community after him. Meanwhile the Christian civil government brings its divine sanction to bear on worldly matters, where change and death are still active principles.

The striking correspondences between the rhetorical *dispositio* of these cantatas, together with the richness of the topical gestures, suggest that Bach ultimately conceived of these cantatas in special relation to each other, and perhaps to other planet-inspired works, such as Buxtehude's planet suites. Bach may well have intended these cantatas as a sort of homage to Buxtehude, especially since they deployed the presumed topical variety of his keyboard suites in the context of the highest genre of musical art available to Bach at the time. Their rhetorical components, including the Mars-Venus pair, the Saturn-Mercury pair,

and the upward-spiritual and downward-temporal tendencies of the structural frame appear in some of Bach's subsequent works in which the seven-planet schema is not complete, demonstrating the broad applicability of these elements.

Chapter 4. Types and Genres Related to the Seven Planets in Bach's Keyboard Works

The seven planet schema as used by Bach in the early cantatas does not seem to have been fully deployed in any of Bach's later choral works. We have, however, identified several expressive forms that can be traced throughout many of Bach's compositions of all kinds. The first is the "oppositional" bar form, which in later choral situations is mostly replaced by the da capo aria, in which the oppositional gestures are built into the familiar structure of Assection vs. B-section and often lose something of their abruptness. However, when a barform chorale is involved, a reversion to the earlier treatment is possible at whatever point in the abgesang might be convenient. It should be remembered that the oppositional gestures in verses 3 and 5 of cantata 4 occur at different points in the abgesang of the same chorale.

The multi-movement expressive forms include the Mars-Venus pair, which might be considered as merely a concrete instance of the commonplace binary opposition between masculine and feminine, and the Saturn-Mercury pair, which in turn might exemplify the basic dramatic dichotomy of problem-solution or conflict-resolution. Finally, the Seven Planets themselves might be deployed in an incomplete, complete, or super-complete schema. It is important to note that the question of the composer's intention with respect to these schemata need not be prejudged in any particular instance; the planet-pairs and seven-planet-schema are better utilized as a consistent and historically grounded interpretive frame for the interaction of perennial musical topics than as keys to the secret intentions of the composer. In Bach's mind, if indeed he intended a seven-planet schema, he did so in order to maximize expressive variety⁶²—not as an end in itself, as we might expect from Bokemeyer or even Walther.

⁶² As noted by Melamed, "The Text of 'Gott ist mein König," 16.

Example 29. O Lamm Gottes, unschuldig, BWV 656









A comprehensive catalogue of these expressive forms in the works of Bach alone would be a broad undertaking, so we confine ourselves to certain keyboard works, beginning with some of the eighteen "Leipzig" organ chorales that Jean-Claude Zehnder has dated to Bach's Mühlhausen period. ⁶³ *O Lamm Gottes unschuldig*, BWV 656, contains in its third verse perhaps the most stark and shocking instance of the "oppositional bar form." The opening of the third verse (Ex. 29a) contrasts with the elegaic second verse through its introduction of obbligato pedal and triple subdivision, which here as elsewhere suggests the light-heartedness of the pastoral topic. When the chorale reaches the word *verzagen*, "despair," in m. 135, the meter suddenly reverts to 3/2, and the harmony becomes almost unendurably chromatic as all the voices move through the passus duriusculus by turn (Ex. 29b). ⁶⁴ After a Phrygian cadence at measure 139 stops the motion, the chromatic interruption evaporates as quickly as it entered, displaced not by a reassertion of the triple subdivision, but by scales in eighth notes that drive the piece to its euphoric final conclusion.

The Sun, Saturn, and Jupiter might be invoked as stand-ins for the three distinct topics at work here. Triple meter with triple subdivision strongly elicits a pastoral dance that is challenged in turn by the appearance of pervasive chromaticism, so much more gruesome than the usual lament topic. The listener understands that the joyful, even innocent vivacity of the dance may at any moment collapse into the *Totentanz*, the rhythm and melodic flow not simply arrested but altogether disfigured by Death itself. But the third moment of this complex replaces that slow chromaticism with fast diatonicism while omitting any trace of

63 Jean-Claude Zehnder, "Georg Böhm and Johann Sebastian Bach: Zu Bachs Stilentwicklung in der Mühlhäuser und Weimarer Zeit," in *Das Frühwerk Johann Sebastian Bachs*, ed. Karl Heller and Hans-Joachim Schulze (Köln: Studio, 1995), 311–38.

⁶⁴ The bass line's alteration of the chorale is melodically identical to the soprano's passus duriusculus in Cantata 71, movement 2 (Ex. 19), as pointed out by Russell Stinson in *J. S. Bach's Great Eighteen Organ Chorales* (Oxford: Oxford University Press, 2001), 7.

the former triple-subdivision dance. The type of gesture used here could be called a *victory-scale*. It can be frequently found in Bach's organ works, and especially in chorales referring to the Holy Spirit, such as *Komm*, *Gott Schöpfer*, *heiliger Geist*, BWV 667; *Kyrie*, *Gott Heiliger Geist*, BWV 671 (m. 44 and following); and the concluding section of the E-flat Fugue, BWV 552b.

The attainment of victory over death as expressed in newly pervasive scales, together with the peace bestowed by Jesus as referenced in the text of the chorale *O Lamm Gottes unschuldig*, notably corresponds to the last verse of Cantata 4. The specific oppositions of rusticity and urbanity, of the primal innocence of nature against the civil unity of society, can be seen in the *O Lamm Gottes* chorale on either side of Death's interruption, and again in Cantata 4 between verse 6 and 7. In the final version of Cantata 4, the music of verse 7 uses choral homophony to express something that was left out of verse 6—the social unity enjoyed by the community constituted by the paschal feast. *O Lamm Gottes*, too, attempts no simple-minded return to Eden by returning to 9/4 time as though the saturnine chromaticism had never happened. Instead, the New Jerusalem is evoked by the final preeminence of the scale, which for Bach was the ideal "society" of disparate pitches.

O Lamm Gottes might be the most potent example of "oppositional bar form," since the opposition it exploits is probably the most fundamental of all—that between Life and Death. The space through which Cantata 4 moved in a piecemeal fashion—one topic at a time as it were—is traversed within a mere handful of measures in this organ chorale. This is a clear example of topical troping, 65 one in which incommensurate expressions of joy and despair redefine one another through close proximity. This particular troping of youthful vivacity and pitiless morbidity is marked by the presence of a third non-reasserting element

⁶⁵ Hatten, Musical Meaning, 170.

which points to a solution of the dichotomy of Life and Death by means of a new kind of life, an unprecedented *vitam venturi saeculi* which itself transcends the strife between ordinary life and death.

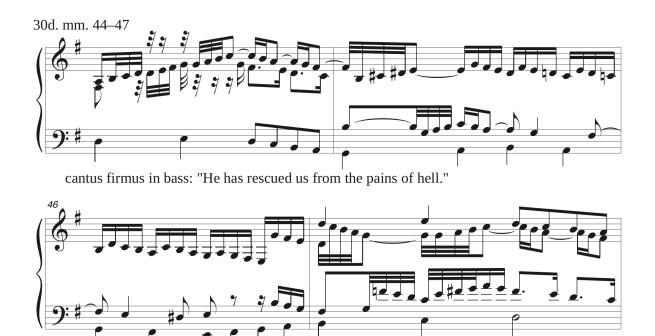
Another instance of the strife between life and death can be found in the early organ chorales *Jesus Christus unser Heiland*, BWV 665, which with its "alio modo" companion BWV 666 forms a Mars-Venus pair. The former setting depicts the pains of the crucifixion and Christ's courageous endurance of them. Each line of the setting intensifies the dysphoria: the first line uses an accompanying figure that repeatedly arpeggiates diminished chords; the second line uses octave-displaced escape tones (Ex. 30a and b), perhaps to evoke the stroke of a whip or the thunderings of God's wrath; the third, chromatic scales in contrary motion with ordinary diatonic scales (Ex. 30c).

The crux of the piece occurs at m. 37, where two parallel chromatic scales in the right hand are wedged against two parallel diatonic (or near-diatonic) scales in the left to force a cadence on G. The fourth section that follows uses a rising thirty-second note figure that is recovered by steadily falling sequences that drive toward cadences (ex. 30d). The triumphant rising gesture has the last word, as it appears five times in quick succession during the prolongation of the last note of the chorale in the pedal, expanding the final E major chord further into the upper octave. Clearly, all these are *battaglia* gestures that depict Christ's ultimate triumph over pain, as stated in the first verse of the chorale's text. ⁶⁶ The oppositions between chromatic and diatonic in the third section, and the fast rising figure and the slowly descending sequences in the fourth, make the violence increasingly palpable. Ultimately, the rising figure emerges unscathed.

^{66 &}quot;Durch das bittern Leiden sein / Hilf er uns aus der Hölle Pein."

Example 30. Jesus Christus unser Heiland, BWV 665





cantus in soprano, counterpoint inverted

If BWV 665 belongs to Mars, then BWV 666 surely belongs to Venus. The mood at its outset is mellow, yet somber; the triple subdivison of its 12/8 time does not seem to evoke the pastoral topic (Ex. 31a). After its first strong cadence on E, a sudden *zwischenspiel* (quasi-improvised melodic interlude) in sixteenth-notes interposes to allow the next section to begin in G major (mm. 10–11). After another cadence on E, the identical *zwischenspiel* returns, but this time its scalar sixteenth-note motion is taken up by the other voices, so that it pervades the texture through the end of the piece (Ex. 31b). Given the tentativeness of the initial presentation, these can hardly be Victory-scales; they seem rather to evoke fertility and vivification, as does Venus's fabulously overgrown garden from the 1678 ballet. The brief *zwischenspiel* is like the tiny but significant germination of a plant that will eventually grow to entwine each note of the chorale in second half of the piece.

If the ascription to Venus seems doubtful, one should consider the opposition between violence and gentleness that obtains at every point of comparison between the two settings.

Example 31. Jesus Christus unser Heiland, BWV 666



cantus firmus in soprano: "So that [your neighbor] can enjoy your [fruit]." (verse 7)

The crux is m. 24, a cadence on G which corresponds to m. 37 in the former setting. Here, instead of falling chromaticism with contrary motion in the bass, there is rising diatonicism with a stationary bass. The lengthy concluding pedal point, instead of filling upward as in BWV 665, starts in the uppermost register and descends to the tenor range. Aside from the shared key and melodic material, these two settings could scarcely diverge more.

We have seen that just such a divergence obtains between Cantata 4, verses 4 and 5. In that case, Bach's use of a Mars-Venus pair was prompted by the text. If he had a similar textual inspiration for his double treatment of *Jesus Christus unser Heiland*, it was most likely the first and last verses of the chorale text. The first verse speaks of Christ's bitter suffering; the last verse says that one "ought not remain without fruit" after reception of communion: this surely corresponds to the opposition between the bare branches of the eighth-notes and the leaves and vines of the sixteenth-notes in the second setting.

The pedaliter setting of *Jesus Christus unser Heiland* in *Clavier-Übung III*, BWV 688, is again quite different from either of the early settings. Here the focus is on a geometrically simple theme of only one measure in length. It uses a "compound" voice to encapsulate the simple contrapuntal procedure of voice-exchange: a tenth is inverted to a sixth by moving through an octave in contrary motion (Ex. 32a). The theme itself appears in retrograde, inverse, and retrograde inverse forms (Ex. 32b). Its simplicity recalls the venerable old Pythagorean-Platonic aesthetic that prizes basic geometric shapes as keys to universal truth and beauty, ⁶⁸ and the subtle operation of the counterpoint recalls the hermetic and alchemical pursuits of the seventeenth century. We seem to have another Mercury piece, a true descendent of the permutation fugue of Cantata 71.

67 "Die Frucht soll auch nicht ausbleiben"

⁶⁸ Plato, Timaeus, trans. Donald Zeyl (Indianapolis, IN: Hackett, 2000), 43-45.

Example 32. Jesus Christus, unser Heiland, BWV 688 (Clavier-Übung III)



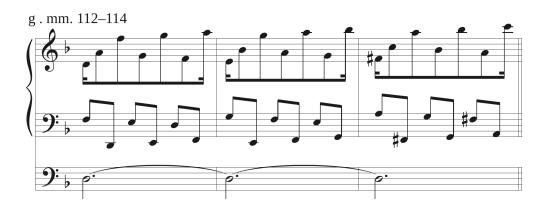
32e. mm. 63–68



f. mm. 104–107; inverted counterpoint derived from m. 51 et seq.



cantus firmus in bass: "He has rescued us from the pains of Hell."



The initial condition for the contrapuntal operation is marked by the subject's appearance in canon at the tenth at the distance of one sixteenth-note, beginning at measure 20 (Ex. 32c). The final product is exhibited with a further development of the same technique at m. 112, where the inverse in the left hand is harmonized with a syncopated form of the retrograde inverse in the right hand over a tonic pedal (Ex. 32g). In terms of the chorale's text, the wrath of God is turned by the suffering of Christ—not merely turned away but turned *into* something else (Ex. 32d and f). Christ's suffering as agent of change is expressed in the extraordinarily dissonant passages that frame the third line of text, "Through his bitter sufferings." At measure 63, a sequence begins that involves the inverse form of the theme harmonized with dissonances on beats 1 and 2 (Ex. 32e). The counterpoint is inverted at measure 67, allowing the pattern of pungent dissonances to persist for nine measures leading into the entrance of the third line of the *cantus firmus* in the pedal. By comparison, the line itself is then treated mildly: the rectus form of the subject returns and dissolves into a more conventional passage in F major with few dissonances. But as soon as the *cantus firmus* ceases at measure 83, the painful dissonances on beats 1 and 2 return. This time they persist for only two measures, dropping out as the music moves through a long circle-of-fifths progression (F major, C major, G minor, and D minor) on its way to the A minor of the next cantus firmus entrance at measure 99.

It is clear that this setting takes inspiration from the words of the first verse of the chorale, just as did the earlier setting, BWV 665. But in the *Clavier-Übung* setting, the vivid martial imagery is entirely supplanted by a demonstration of contrapuntal technique, unified by a geometrically simple subject. The complex yet transparent fugal style brings with it a more concentrated sense of agency: the periodic manipulation of the counterpoint, the

mediation between the rectus form of the subject and its three correlates, implies a constantly active agent (Christ) performing the operations within the narrative frame. In the earlier BWV 665, the passive experience of pain prevails until the fast rising figure of the fourth strain introduces the triumphantly active agent, by opposing the previous gestures of passive suffering.

It is possible to fit a seven planet schema onto the chorales of *Clavier-Übung III*. Both settings of *Dies sind die heiligen zehn Gebot* are certainly pastoral in character. In the pedaliter setting, the idyllic mood lasts only four measures before being contradicted by an oppositional gesture: pairs of slurred *pianti*, sequenced downwards (Ex. 33a). This gesture is opposed in turn by the long rising notes of the chorale itself. At measure 51, the chorale reaches a phrase that begins on a surprising B-flat, and it is here that the pianto-based gesture becomes inverted in the other voices, producing a euphoric effect that persists through the rest of the piece (Ex. 33b). In planetary terms, it amounts to a troping of Saturn and the Sun. A similar device is used at the end of the pedaliter *Aus tiefer Not schrei ich zu dir*, but lacking the pastoral context.

If the pastoral of *Dies sind* can be straightforwardly associated with the Sun, *Aus tiefer Not* is where the listener comes face to face with Saturn at his most unrelenting. It does not, however, form an oppositional pair with the succeeding *Jesus Christus unser Heiland*, at least not of the kind contained in the two early cantatas. Instead, *Aus tiefer Not* is another internally oppositional bar form, with the dysphoric affect of Saturn successfully opposed by three related gestures that arise in the abgesang. The first, a diatonic figure characterized by sequences of upward leaps, appears at measure 32 (Ex. 34a). The second starts out as a sequence of filled-in descending melodic thirds at measure 42 (Ex. 34b); the third, simply the

Example 33. Dies sind die heiligen zehn Gebot, BWV 678



Example 34. Aus tiefer Not schrei ich zu dir, BWV 686



inversion of the second, appears when the last line of the *cantus firmus* enters in the right foot's long notes (Ex. 34c). These gestures seem to track with the progress of the chorale text of the whole, rather than any particular verse.

With Saturn already successfully opposed internally, there is not so much left for Mercury to oppose at the structural level. Thus *Jesus Christus unser Heiland* sets and solves its own self-contained thematic problem. For a truly oppositional pair in the structure, we must look to *Wir glauben all an einen Gott* and *Vater unser im Himmelreich*. The latter is clearly in an advanced *galant*-influenced version of the languishing style, but the former seems to lack any unequivocally martial imagery such as we saw in earlier examples of Mars-movements. It is possible that the manualiter setting does most of the work in opposing the gentleness of the *Vater unser* settings through its unusually stern, even tragic Frenchoverture gestures. In turn, the *manualiter Vater unser* recalls the continuous scalar motion of the second half of BWV 666.

The pair serves the same function in the rhetorical *dispositio* that a clearly marked Mars-Venus pair would, but in this case the assignation of Mars would not be apparent except through its proximity to a Venus movement in the structure. Hence, the "Mars" music of the pedaliter *Wir glauben* is unmarked relative to Venus's unequivocal markedness. Given the reliance on invertible counterpoint in passages with pedal (Ex. 35 a and b), it has an apparent kinship with expressive types normally devoted to the Mercury family of topics, such as the permutation fugue. Ultimately, the Mars assignation must remain tentative.

Example 35. Wir glauben all an einen Gott, BWV 680



The last two planets are assigned easily enough: the profusion of structural references to the Trinity is plain enough in the *Kyrie* and *Allein Gott in der Höh sei Ehr* settings. It is less clear what *Christ unser Herr zum Jordan kam* has to do with the Moon, though one might adduce the natural correlation between the moon and the tides or the association of the moon with water in traditional astrology. ⁶⁹ But the continuous flow of sixteenth notes corresponding to the flow of the river is a similar gesture to the continuous violin solo of Cantata 4, verse 3, where it was ascribed to Mercury. The difference is primarily one of register: in *Christ unser Herr*, the bass line carries most of the continuous flow, depicting the waters into which Christ descends at his baptism. Calling this a lunar piece is at least plausible, though that decision may rely more on the process of elimination than some would like.

The question of whether Bach ultimately intended to fill out a complete seven-planet schema within *Clavier-Übung III* resists an easy answer. After all, he had already produced monumental seven-planet choral works in his early maturity, and Buxtehude had done the same for keyboard music. The presence of the schema, though possibly incomplete, shows clearly enough that Bach continued to be interested in the kind of topical variety exemplified by the early cantatas.⁷⁰ The putative schema is as follows:

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⁶⁹ Kay, Dante's Christian Astrology, 32-33.

⁷⁰ If, as seems merely possible, Bach was indeed attempting a grand neo-Ptolemaic cosmological structure, it would have made sense for him to represent the Earth by the four elements found there, probably in four Duettos. But one can only speculate.

Table 6. Possible Seven-Planet Schema in Clavier-Übung III

Chorale	Planet	Pedaliter qualities	Manualiter qualities
Kyrie / Allein Gott in der Höh sei Ehr	Jupiter	Stile antico, Trinitarian references	Trinitarian references
Dies sind die heiligen zehn Gebot	The Sun	Triple subdivision, a fall from innocence.	Triple subdivision, inversion of subject
Wir glauben all an einen Gott	Mars?	Quasi-permutation fugue with relatively free interludes	Stern and assertive French overture style
Vater unser im Himmelreich	Venus	Languishing style, <i>galant</i> influence	Scalar accompaniment in triple subdivision
Christ unser Herr zum Jordan kam	The Moon	Continuous sixteenth-note motion, mostly in bass, evoking the flow of a river	Inverted answers
Aus tiefer Not schrei ich zu dir	Saturn	Stile antico, double pedal, Phrygian mode	Fugue, Phrygian mode
Jesus Christus unser Heiland	Mercury	Double counterpoint, inversions and retrogrades of the theme	Fugue

This kind of topical variety obtains in the earlier volumes of the *Clavier-Übung* as well. The free preludes of the Six Partitas, together with the French Overture, do indeed seem to line up with the planets in some respects. It may also be significant that Bach gave each opening movement a unique title, much like Fischer did in *Musicalischer Parnassus*. But it is difficult even to hypothesize a complete schema for the partitas. Of the two most severe in affect, the E minor Toccata seems slower, heavier, more elegaic, and more appropriate to Saturn, leaving the more aggressive C minor Sinfonia to Mars. The A minor Fantasia seems more playful than either, and so might have something to do with Mercury. Of the major keys, the B-flat major praeludium uses lengthy pedal tones, which mark it as an essay in the pastoral topic and thus associated with the Sun. The Ouvertüre seems a clear enough reference to Jupiter, but its being succeeded by an extraordinary Allemande in a languishing style suggests Venus. But then the G major Praeambulum seems a little too rustic for Jupiter.

One must further decide whether to include one or both of the works in *Clavier-Übung II* in the reckoning, since they both fit into the circle-of-fifths key schema of the Six Partitas. For instance, the wayward D minor of the slow movement of the Italian Concerto would be as likely a place as any for the Moon's influence. A hypothetical planet sequence follows:

Table 7. Hypothetical Seven-Planet Schema in *Clavier-Übung I* and *Clavier-Übung II*

First movement title	Key	Planet	Galanteries
1. Praeludium	B-flat major	The Sun	_
2. Sinfonia	C minor	Mars	Rondeaux, Capriccio
3. Fantasia	A minor	Mercury	Burlesca, Scherzo
4. Ouvertüre	D major	Venus?	Aria
5. Praeambulum	G major	Jupiter?	Tempo di Minuetto, Passapied
6. Toccata	E minor	Saturn	Aria, Tempo di Gavotta
7. (French) Ouvertüre (BWV 831)	B minor	?	Gavottes, Passapieds, Bouree, Echo
8. Italian Concerto (BWV 971)	F major / D minor	The Moon?	_

It is clear by the tangled profusion of questions raised thus far that, while Bach's Partitas may have taken some inspiration from Buxtehude's planet-suites and even reproduced something of the topical variety embedded in their structure, Bach did not choose to be constrained by a seven-planet schema in his own most prized sequence of seven keyboard suites. Nevertheless, Bach's exploitation of free first movements to obtain a topical variety similar to that of seven-planet works suggests that Buxtehude's lost suites may have employed free movements in the same manner.

Bach would have had little desire to risk a slavish imitation of the Buxtehude planet-

suites, especially several years after he had already successfully imitated Buxtehude on the higher level of the two great cantatas of 1706–08. If anything, the cantatas were Bach's sacralization of the seven planets, and further deployments of the rhetorical fragments of the schema are to be sought in his other sacred works, culminating in *Clavier-Übung III*.

Conclusion

BWV 4 and 71, Bach's two Planet-cantatas, are significant attempts to portray the entirety of the ideal civil and ecclesiastical orders of his world through a family of musical topics, maximally exploiting what Mattheson called the *locus adjunctorum* and the *locus oppositorum*. An analysis based on Hatten's ideas concerning marked oppositions of gesture and structure elucidates the basis of the peculiar power and internal variety of these cantatas. While he probably never again deployed the seven-planet schema itself to the same extent, the basic oppositions within and among its various topics can be found throughout the works of Bach and other Baroque composers. In addition, the "marked-oppositional" types and genres of the oppositional bar form, Mars-Venus pairs, and Saturn-Mercury pairs can be fruitfully sought, even in the absence of a seven-planet schema. Later works, from Heinichen's *La gara degli dei* in Bach's own lifetime, to such products of the twentieth-century vogue for symphonic cosmology as Holst's *The Planets* and Charles Ives' *Universe Symphony*, are ripe for comparison on any number of levels to the Bach cantatas, the Dresden ballet of 1678, and the Buxtehude suites themselves, should they ever be rediscovered.

In the meantime, it may be said of the suites that they probably contained free first movements in addition to the usual four dances of the Baroque suite (like the Bach Partitas); they probably included ground-bass variation movements (like Fischer, and Buxtehude's own Passacaglia in D minor according to Kee); they employed many of the same topics as found in the 1678 ballet; and finally, that they employed marked oppositional structures and gestures in ways analogous to the Bach cantatas.

We have seen several correspondences of topic and gesture between the Dresden ballet and the Bach cantatas, most notably the military topic of Mars with its triadic figures,

the love topic of Venus with its melodic sighs and groans, the Mercury topic with its sudden unexpected silences, and the Moon as huntress with music depicting a frantic chase. While these topics were part of the cultural air breathed by virtually all Baroque musicians, it is reasonable to suppose that Buxtehude's planet-suites played an especially important role in mediating the seven-planet tradition for the young Bach.

Perhaps Bach's originality lay most of all in his application of the planet schema to sacred texts. The notion of a sacred turn is supported by the recurrence of planet-like rhetorical components in his chorale preludes, some from much later in his career, when the genre itself had become increasingly old-fashioned. The youthful Bach may have been more of a hermetic Lutheran in the tradition of Johannes Kepler than hitherto suspected. The remarkable success of these cosmologically informed cantatas suggests that Bach was singularly able to bring these speculative tendencies under the yoke of disciplined imagination, to put them to work in the mill of artistry. Bach never (or but rarely, depending on one's taste) sinks into mere artifice-for-artifice's-sake; instead, the two cantatas use the planets and their topics as lightning rods of musical meanings that together form the earliest complete sketch of the world of ideal social and musical equilibria as Bach conceived it.

⁷¹ J. V. Field, "A Lutheran Astrologer: Johannes Kepler," *Archive for History of Exact Sciences* 31, no. 3 (1984), 220-221.

Appendix 1

Musicalische Opera und Ballet von Zusammenkunfft und Wirckung derer VII. Planeten

First performed in Dresden, 3 Februar, 1678

Transcribed and edited by Jeffrey Cooper, 2017
From Mus.2-F-31 & Mus.2-F-31a
Sächsische Landesbibliothek – Staats- und Universitätsbibliothek, Dresden

Prologus. Cupido





















Act I. Saturn

Sinfonia













1. Entree: Ein Zauberer und der Neidt







2. Entree: 3 Bettler und 2 Bettlerinnen







3. Entree: 6 Berghauer









Act II. Jupiter











1. Entree: 2 Römer im Römischen Habit – Astrologus









2. Entree: Eine Mohren-Königin











3. Entree: 4 Monarchen.









Act III. Mars

"Mars gewafnet uf seiner Machine mit Trompeten und Paucken."





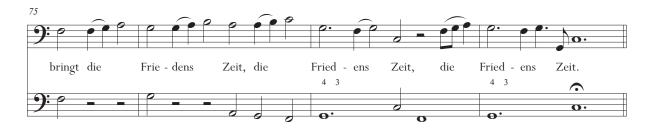












1. Entree: 2 Fechtmeister.









2. Entree: 3 Soldaten – 3 Amazonen









A third entree is mentioned in Tzschimmer's *Durchlauchtigste Zusammenkunft*, but no music for it survives.

Act IV. Sol

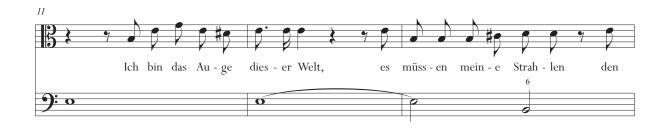
Sinfonia



The music for Sol (except the dances) is transposed down a whole step in the parts.



























1. Entree: 2 Spanier

















3. Entree: 4 Theile der Welt











Act V. Venus

















1. Entree: 4 Cupidons









2. Entree: 1 Cavllier und 1 Kupplerinn

















Act VI. Mercur









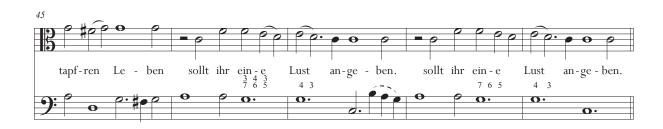








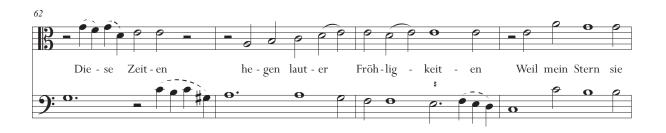


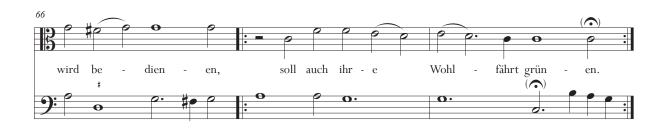


Ritornello











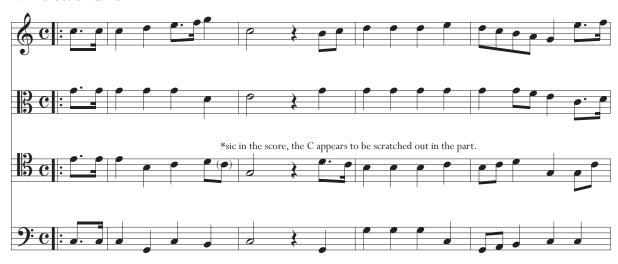








2. Entree: 4 Narren

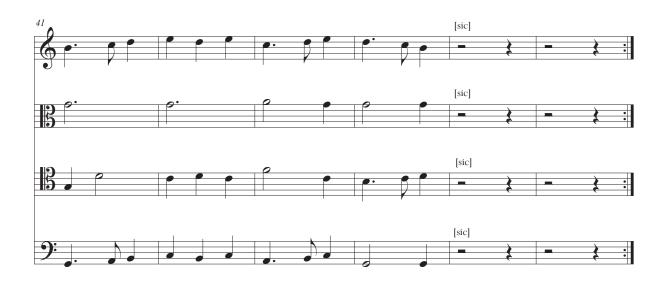












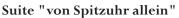
3. Entree



















Act VII. Luna

















1. Entree: 3 Schäffer





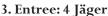




















Grand Ballet



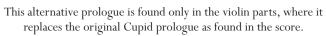








Appendix 2: Prologus. Der Friede







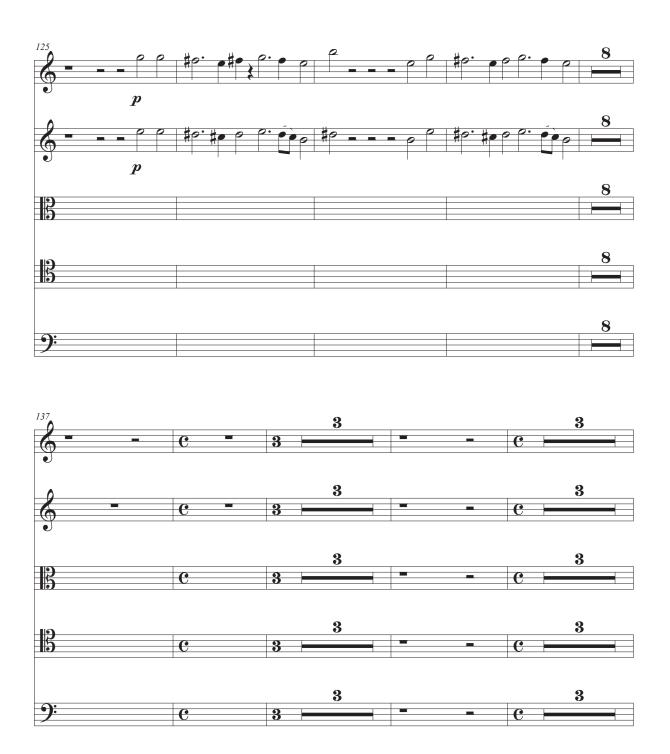










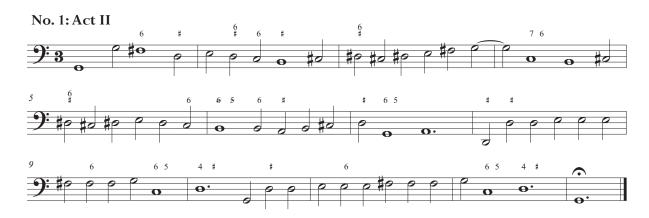






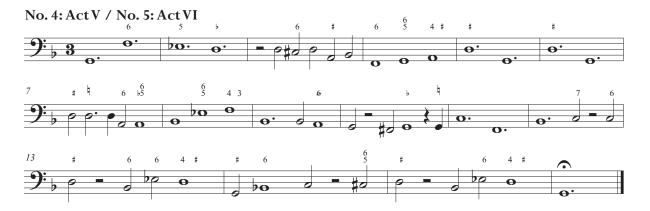


Appendix 3: Preludes





No. 3: Act IV is blank



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