"Die Natur und Kunst zu betrachten": Carlo Farina's Capriccio stravagante (1627) and the Cultures of Collecting at the Court of Saxony

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Like many noblemen of his time, Johann Georg I, Elector of Saxony from 1611 to 1656, was a collector. Official court records, together with accounts left by curious visitors, attest to the variety and richness of the collections that he inherited, enhanced, and expanded: individual rooms were devoted to books, live animals, stuffed animals, wine, armor, costumes, and hunting gear. The Saxon collections focused especially on practical tools rendered in artistic fashions, from rakes and picks to surgical instruments, optical instruments, and naturally, musical instruments.

At the heart of the collections at the Saxon court in Dresden was the Kunstkammer. Translated literally, the title denotes merely a room of art. But in the Dresden court and other German courts in the late Renaissance and early modern era, the meanings of the Kunstkammer for the practice and knowledge of the arts, humanities, and sciences were much more far-reaching. The Electoral Kunstkammer did indeed contain paintings that hung on walls, but it also housed a vast array of artifacts, novelties, and curiosities—some exhibiting distinctly Saxon origins and characters and others imported from exotic places abroad-that bore witness to human interaction with and mastery over nature.¹ Philipp Hainhofer-an adviser to the court of Augsburg and himself a theorist and practitioner of the art of collecting-left two substantial descriptions of the Dresden collections in his travel diaries of 1617 and 1629;² a statement in his diary of 1617 suggests that the exploration of the relationship between man and the world around him was one of the primary focal points of the Kunstkammer. Apparently frustrated at the brevity of his visit to the collection, he wrote that "There are in this Kunstkammer, on all the tables, in all the chests, and on all the walls so many small

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and large, ugly and elegant tools and items that one would need several days to see everything one wanted and needed to see, and to observe nature and art [die Natur und Kunst zu betrachten]."³

Hainhofer's opposition of nature and art highlights the role of the *Kunstkammer* as a repository of items meant to inspire wonder, both at the world in its apparently untouched state and at the observer's ability to interact with and control that world. Although the *Kunstkammer* provided perhaps the most intense opportunity for the observer to examine and ponder this dichotomy, the courtly collections as a whole served a similar purpose. Indeed, the collections seem to have been designed to serve as a microcosm through which the ruler could learn and assert his place in his environments, both social and natural.

Johann Georg also expressed his penchant for collecting through the collection of things musical. The Kunstkammer contained models of musical instruments fashioned out of stone and glass, but there were also extensive collections of more practical instruments outside that sanctum, in the Pfeiffenkammer, which contained wind and string instruments, and the schlagende Instrumentkammer, which housed keyboard instruments.⁴ Johann Georg is known to have updated the musical establishment of his court, hiring talented composers and commissioning musical works in the modern style, at least until the economic constraints imposed by the Thirty Years War interfered with musical and other cultural activities at the court.⁵ To judge from some of the music composed for the Elector in the 1610s and 1620s, he seems to have been especially interested in the adaptation of recent Italian innovations to his native German idiom. Indeed, although the Italian influence on the Dresden court may be seen as early as the late sixteenth century, it was Johann Georg's journey to Italy in 1601 (ten years before the start of his reign as Elector) that most tangibly shaped the Italianate character of the musical, cultural, and intellectual environment of his court.⁶ Most famously, he invited Heinrich Schütz to Dresden in 1614, the composer having recently returned to the court of his patron, Landgrave Moritz of Hesse-Kassel, from a lengthy stay in Venice, during which he studied with Giovanni Gabrieli.⁷

Another significant contribution to the Italianate character of the musical establishment in Dresden was the hiring, in 1625, of the Mantuan violin virtuoso Carlo Farina as court *Konzertmeister*.⁸ Most of the music in Farina's five extant publications, all of which date from his brief tenure at the Saxon court, is dance music for four-part consort; also included are ten sonatas in the Italian *stile moderno*. But the work that has received by far the most attention in recent musicological scholarship is the curious *Capriccio stravagante*, which appears in Farina's

second publication. The title page of that volume announces the book's inclusion of multiple genres, including one piece with some highly unusual features; the title reads as follows: Ander Theil Newer Paduanen, Gagliarden, Couranten, Frantzösischen Arien, benebenst einem kurtzweiligen Quodlibet / von allerhand seltzamen Inventionen, dergleichen vorhin im Druck nie gesehen worden / sampt etlichen Teutschen Täntzen / alles auff Violen annutig zugebrauchen.⁹ The "kurtzweilig Quodlibet von allerhand seltzamen Inventionen" (amusing, time-passing, or perhaps fragmentary quodlibet with various strange inventions) to which Farina refers is the Capriccio stravagante—in fact, the title seems to be an Italian translation of the German phrase¹⁰—a work in which the violin consort imitates a host of other instruments, and even animals. As explained below, the term Invention seems to refer both to the theatrical conceits of the work and the virtuosic techniques (col legno, sul ponticello, glissando, multiplestopping, and more) used to enact those conceits. The mimetic sections of the piece are assigned Italian rubrics in the partbooks of the three highest instruments, and the bass partbook contains both the Italian rubrics and their German translations. The virtuosic techniques required for the work's execution are explained in a list of instructions printed at the end of the volume, first in Italian and then in German; these are followed by a glossary of Italian terms rendered into German. (Table 1 presents an outline of the representational sections of the work, together with the performance instructions relevant to each section in both languages.)

In musicological scholarship from the nineteenth century to the present day, the *Capriccio* has been noted for its pioneering virtuosity but dismissed as superficial and meaningless.¹¹ It is easy enough to understand why the work has elicited such skeptical reactions. Technical virtuosity has long been associated with superficiality—even with immorality—in contrast to "true" artistry; scholars of nineteenth-century music have only recently begun to understand the underlying cultural motivations and meanings of virtuosity in the works of Paganini, Liszt, and others.¹² In addition, the *Capriccio* is unusually amorphous and formally open-ended, features that have bothered some commentators of the past century.¹³ It moves erratically between sections of standard Franco-Germanic consort music—some that are harmonically predictable and others that are surprisingly dissonant—and sections of theatrical mimesis that make use of the most recent developments in Italian soloistic virtuosity.¹⁴ The work as a whole projects a sense of instability, fragmentation, and disruption.

This essay will suggest that the *Capriccio*, fragmentary and unstable as it is, is in fact richly meaningful. Its model may be found in the many collections at the Dresden court and in the early modern strategies of

Italian title	German title ¹	Likely English equivalent	Relevant excerpt from "Alcuni avertimenti nel soprano intorno al Capriccio stravagante" ²	Relevant excerpt from "Etliche Nothwendige Erinnerungen wegen des Quotlibets von allerhand Inventionen"
La Lira	Die Leyer	Peasant's lyre (hurdy-gurdy)	Dove si truovano nota sopra nota con forme all'Intavolatura dell'Organo con questo segno a di sopra, all'hora si suonera Lirsando, come fanno li Orbi overo Ciechi. (Where one finds one note on top of another, as in organ tablature, with this sign above it, it should be played like a lyre, as one-eyed and blind people do. ³)	Wann zwo Noten uberinander stehen oben mit diesem Zeichen register gezeichnet / als muß man dieselben Noten mit dem Bogen schleiffen / gleich einer Leyren. (When two notes stand one on top of another with this sign register pictured, then one must play both notes with [a single] bowstroke, like a lyre.)
Il Pifferino	Das kleine Schalmeygen	Little shawm	Il Pifferino vien sonato con strascini. (The little shawm is played with slurs.)	Das kleine Schalmeygen wird gleichsfalls wie oben gemeld / schleiffend gemacht. (As mentioned above the little shawm likewise [like the tremulant ⁴] is played with slurs.)
Lira Variata	Die Leyer uff ein andert Art	Peasant's lyre, varied		
Qui si bate con il legno del archetto sopra le corde	Hier schlegt man mit dem Holtze des Bogens	Here one strikes the strings with the wood of the bow	Si trovera una altra volta nota sopra nota come di sopra, queste vengono battute con il legno dell'Archetto come fanno li tamburini, cio è non bisogna lasciar fermar troppo, ma parar via di lungo. (Where one finds again one note on top of another, as above [in the lyre section], these [notes] are hit with the wood of the bow, as tabor players do; that is, it is not necessary to leave the bow still for too long, but rather to spring away directly afterward.)	Weiter findet man auch andere Noten ubereinander gesetzet / gleich als in der Orgel Tablatur / diese werden mit dem Holtze des Bogens gleich eines Hackebrets geschlagen / doch daß man den Bogen nicht lange stille halte / sondern immerdar fortfahre. (Further, one finds more notes set on top of one another, as in organ tablature; these are hit with the wood of the bow like a hammer dulcimer; but one should not leave the bow still for long, but rather always move away [quickly].)
La Trombetta, Il Clarino, Le gnachere	Die Trommeten, Das Clarin, Die Heerpaucken	Trumpet, clarino trumpet, kettledrums		

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Table 1. Representational sections of the Capriccio stravagante, in order of appearance in the composition

Hen

La Gallina

Il Gallo

Die Henne

Il Flautino pian piano	Die Flöten still stille	Recorders, very quietly	Il flautino vien sonato con leggiadria strascinando cio è che si suona pianino sott'al scannello del violino solamente un mezzo dito discosto [cont. in "Il fifferino"] (The recorder is played gracefully, with slurs; [this is accomplished by] play[ing] softly near the bridge of the violin, just a half a finger's [width] away.)	Die Flöten werden gantz lieblichen nahe bey dem Steg / etwan ein quer Finger darvon / gar stille gleich einer Lira geschleiffet [cont. in "Das soldaten Pfeifflen"] (The recorder is played very sweetly just by the bridge, about a finger's width away from it, quite softly, [and] bowed like a lyre.)
Il Tremulo	Der Tremulant	Organ tremulant	Il Tremolo và sonato solamente facendo tremar il pulso della mano dell'Archetto. (The tremulant is played by making only the wrist of the bow-hand tremble.)	So wird das Tremuliren mit pulsirender Hand / darinnen man den Bogen hat / auff art des Tremulaten in den Orgeln imitiret. (The tremulant is played with a pulsating bow- hand, by way of imitating the tremulant of the organ.)
Fifferino della Soldadesca, Il Tamburo	Das Soldaten Pfeifflen, Die Paucken oder Soldaten Trommel	Soldier's pipe and tabor	[cont. from "Il flautino"] " me desimamente il Fifferino vien sonato conforme il flautino ma sonando la mita piu sotto al scanello & più forte. (The fife is played exactly [like the recorder], but played slightly closer to the bridge, and somewhat louder.	[cont. from "Die Flöten"] " deßgleichen das Soldaten Pfeiffgen nur allein daß es etwas stärcker und näher / am Stege gemachet wird. (likewise the soldier's fife, only it is played somewhat louder and closer to the bridge.)

Continued

Italian title	German title ¹	Likely English equivalent	Relevant excerpt from "Alcuni avertimenti nel soprano intorno al Capriccio stravagante" ²	Relevant excerpt from "Etliche Nothwendige Erinnerungen wegen des Quotlibets von allerhand Inventionen"
Il Gatto	Die Katze	Cat	Il Gatto vien sonato facendo morir quelle note cio è portar la man indietro à poco alla volta, ma le semicrome vengono sonate disgratiatamente alla peggio cio è facendo fuggir l'Archetto dentro & fuora del scannello; come fanno li Gatti quando scappono vià. (The cat is played by making the notes die, that is, by shifting the [left] hand backwards a little at a time; but the sixteenth notes are played ungracefully and badly, that is, by making the bow run above and below the bridge, just as cats do when they scatter away.)	Das Katzengeschrey anlanget wird folgender gestalt gemacht / daß man mit einem Finger von den Thon da die Noten stehet / mehlichen unterwartz zu sich zeuhet / da aber die Semifusen geschrieben sein / muß man mit dem Bogen bald vor / bald hinter den Stegk uffs ärgste und geschwindeste als man kan fahren / auff die weise wie di Katzen letzlichen nach dem sie sich gebissen und jetzo außreissen zu thun pflegen. (With respect to the cat cries, they are made in the following manner: That one slides the finger gradually toward oneself [i.e. downwards] from where one [initially] stops the string; however, where sixteenth notes are written, one must take care to run the bow, now above, now below the bridge as badly and as quickly as one can, in the way that as cats ultimately do, as they bite each other and run away in chase.)
Il Cane	Der Hund	Dog	Ecco il Cane questo vien sonato all'incontrario del Gatto, portando la mano sempre innanzi furiosamente. (The dog is played in the opposite way from the cat, continually shifting [the left hand] furiously upwards.)	Darkegen das Hundebellen wird mit einem Finger von der Noten gar geschwinde auff einer seiten / nauffwarts gezogen. (In contrast, the dog's bark is [played] by quickly shifting the stopping-finger upwards on a string.)

Table 1. continued

La Chitarra	Die spannische	Spanish guitar	La Chitarra Spagnuola vien sonata levando via	Endlichen die Spannische Chitarren belangend
Spagniola	Cythar		il Violino dalla spalla, & mettendolo sott'il	wird ihrer art nach mit den Fingern
			fianco sonando con le dite, conforma alla	geschlagen / indeme man die Geigen unter
			Chitarra istessa. (The Spanish guitar is	den Arm nimbt / und drauff schlegt als eine
			played by lifting the violin from the	rechte Spannische Chitarrea wie. (Lastly
			shoulder and placing it under the hip, to	concerning the Spanish guitar, one plays the
			play like the aforementioned, in the manner	violin with the fingers in the same manner,
			of the guitar itself.)	by taking it under the arm and plucking it, as
				if it were a Spanish guitar.)

¹A nearly complete set of partbooks survives in Kassel (D-KI); the bass partbook contains both German and Italian rubrics, and the other partbooks give only Italian rubrics. The Kassel set preserves only the very brief performance instructions pertaining to the tenor partbook; the more complete instructions in the cantus partbook survive only in the copy in Dresden (D-SI). The transcriptions here maintain the spellings, capitalizations, and punctuations from the 1627 print. ²My thanks to Mary Frandsen, Helen Greenwald, Francesco Izzo, Jeffery Kite-Powell, and Neal Zaslaw for their suggestions concerning these translations. ³The rosined wheel of the hurdy-gurdy rendered all of its music legato.

⁴The order of representational sections in the music is not maintained in the performance instructions; thus Farina's description of the performance technique for the tremulant directly precedes that of the shawm.

learning, knowing, and experiencing the world through the act of collecting. And although the *Capriccio* is groundbreaking in many respects, this study will also show that it was not without precedent—that other works of music and music theory may also be related to the practices of courtly collecting, and so offer a context for understanding Farina's work.

In proposing connections between the *Capriccio* and the court of Dresden, I do not mean to imply that Farina denied his own Italian roots. As is well known, the collection of curiosities was nearly a pan-European phenomenon, and some features of the work, most notably its innovative uses of virtuosity, show clear Italian influences. However, a book of music by the Dresden *Konzertmeister*, produced by the court publishing house, dedicated to the Electress, and possibly composed—as I will suggest—as a wedding-gift for the Electress's daughter, calls for contextualization within the tastes and cultures of the Dresden court.¹⁵

The connection between the *Capriccio* and the cultures of collecting operates on multiple levels. First, to enact his parade of musical curiosities, Farina employs the quodlibet—a genre that itself may be interpreted as a musical collection. Although Farina's work for instruments seems to stand alone within this otherwise entirely vocal genre, the composer draws on precedents set by his vocal models. Most importantly, the quodlibet may be associated with the notion of a "patchwork," often quoting preexistent material and assembling it, as in a collection, for presentation in a new format.

Second, the musical instruments depicted in the *Capriccio* have models in the collections of instruments housed in the Electoral palace. Thus it is possible that Farina intended to offer a sonic tour of his patron's instrument holdings. Furthermore, these depictions cover instruments with a wide range of social associations, suggesting that Farina sought to encapsulate musical practices in society as a whole. Michael Praetorius's *Theatrum instrumentorum* of 1620—an illustrated catalog of musical instruments that served as a graphic supplement to the second volume of the author's theoretical treatise, the *Syntagma musicum*—constitutes a visual parallel to Farina's musical work. To judge from these two examples, the culture of musical practice at early modern German-speaking courts seems to have encouraged a comprehensive, encyclopedic approach to the study and use of musical instruments.

However, the animal noises in the *Capriccio* disrupt the interpretation of the work as a simple tour of Johann Georg's collection of musical instruments. Instead, a division of Farina's work into sounds that imitate animals (products of the natural world) and those that imitate other instruments (products of man's creation) prompts consideration of the work on a third level, within the broader realm of scientific and humanistic discovery and exploration through the act of collecting, and especially against the backdrop of Hainhofer's theory of the Kunstkammer as a vehicle for the study of the relationship between nature and art. Farina's simulation of the sounds of both natural and artificial creatures may be linked to the so-called mechanistic philosophy, which informed the character of early modern Kunstkammern, and which saw self-propelled activity and motion as the defining component of life. Furthermore, Praetorius's Theatrum instrumentorum-actually part of a genre of scientific treatises known as "theaters of machines," cultivated in the late sixteenth and early seventeenth centuries—informs an interpretation of the Capriccio within the context of the Kunstkammer, where scientific instruments themselves were objects of study and fields of discovery. In his Capriccio, Farina presents the violin as an instrument worthy of experimentation and inquiry itself, one that could provide multiple perspectives on the sonic realities of the surrounding world. The curiosity that led to the assembly and expansion of the many collections in Dresden may also have informed the exploration of the sonic and musical worlds in Farina's Capriccio.

The Capriccio stravagante engages with the cultures of collecting at the Dresden court on a fourth and final level: the performance of knowledge and wonder. As both Hainhofer's account of the collections and official descriptions of courtly events attest, the term Invention referred not only to a new product of human creativity and ingenuity but also to the theatrical conceits of courtly processions. Farina's use of the word Inventionen to describe the wondrous effects and musical masquerades employed in the Capriccio connects the piece to those performances. It is significant that the nonmimetic parts of Farina's composition bear resemblance to the genre of the Intrada, used (among other things) to announce and accompany the courtly masquerade processions known as Aufzüge. Indeed, the character of the Capriccio as a sonic parade of curiosities suggests the possibility that the work was intended as a musical model of an Aufzug—a procession-on-paper that the collector could keep as a meme-nto, and recreate in his imagination through the act of reading.

The Quodlibet as a Collection

Farina's *Capriccio stravagante* is a big work—modern performances generally last eighteen to twenty minutes—made up of some thirty-six sections separated from one another by changes of key, time signature, or character. The two broad categories within the piece—sections in which the violin consort imitates the sounds of animals or other musical instruments, and sections of nonmimetic or nonrepresentational music—both play a role in conveying the meanings of the work. As this study will demonstrate, the nonrepresentational sections provide a backdrop for the representational music, setting in motion Farina's parade of curiosities.

The musical medium for the *Capriccio* is the genre of the quodlibet. Although that term originally referred to a serious type of religious disputation, in sixteenth-century German-speaking areas, it assumed a meaning specific to polyphonic song: a lowbrow, humorous parody of preexistent material, in which quoted musical phrases are divided among the various voices, or in which different voices quote different songs, juxtaposing them in silly or unexpected ways.¹⁶ The earliest examples of the musical genre date to the mid-sixteenth century: the 1544 collection of Wolfgang Schmeltzl typifies many of the features that would characterize the vocal quodlibet into the seventeenth century¹⁷—features that make their way into Farina's instrumental contribution to the genre.¹⁸

The quodlibet's fragmentary character was noted as early as 1571, in Simon Roth's foreign-word dictionary (the first book in that genre). Roth described the quodlibet as quirky and incongruous, defining it as "a song [made up] of various melodies or texts put together, of which none goes with the other. A thing just like any [other] put-together thing—be what it may—that makes sense neither alone nor together. A confused *misch-mäsch*."¹⁹ Praetorius echoed this definition of the quodlibet in the third part of his *Syntagma musicum*, published in 1619:

Messanza or *mistichanza* is a quodlibet or mixture of all sorts of herbs—a tossed salad [*una salata de mistichanza*]—which is otherwise commonly spoken of as a quodlibet. It consists of a great variety of half and complete lines of text extracted from motets, madrigals, and other secular, also humorous, German songs together with their melodies; out of these many bits and pieces an entire fur can be sewn and patched together, as it were.²⁰

Praetorius's notion of the quodlibet as a garment sewn together from disparate patches of material resonates with the title of a vocal quodlibet that had appeared in print in 1606 and was reprinted in 1612: Johann Groh's *Bettlermantel, von mancherley guten Flecklein zusammen gestickt und geflickt* (Beggar's Cloak, sewn and patched together from various good pieces), the title page of which identifies the work as a quodlibet.²¹ Indeed, given the similarities between Praetorius's definition and the

title of Groh's work, it seems likely that Praetorius knew Groh's quodlibet, or at least that both authors drew their descriptions from a common vocabulary and conception of the genre.

The term *Bettlermantel* points to another significant characteristic of the quodlibet: its association with lowbrow humor. Quodlibets by Schmeltzl, Melchior Franck, and Andreas Rauch bring together preexistent songs, the texts of which often center on themes of peasant life, bawdy love, and drink.²² Perhaps in keeping with their character as drinking songs, the texts of some quodlibets eventually dissolve into nonsensical words such as "fa la la" or "dira da, dara da," or into facile recitations of numbers or solfege syllables. These vocalizations, like the patchwork genre of the quodlibet itself, poke fun at the notion of song as a coherent medium, and instead isolate musical sound itself as a source of pleasure and humor.

In this respect, the recitation of nonsense syllables within vocal quodlibets points to a way of understanding Farina's contribution to the genre. Although I have discovered no other instrumental quodlibets from this period, Farina's *Capriccio* may be viewed as an extreme manifestation of the quodlibet's tendency to isolate and exploit musical sound, independent of a (coherent) text. Indeed, many of the representational sections of the *Capriccio*—especially the sections that imitate animal noises—highlight the ability of the violin to make noise, rather than music. In "Il Cane" (The Dog) and "Il Gatto" (The Cat), for example, Farina instructs the performers not to hold their stopping fingers steady on a single pitch, but to use *glissando*, sliding their fingers flat for the cat (see ex. 1)²³ and sharp for the dog (see the instructions for these passages in Table 1).

In other respects, the relationship of Farina's *Capriccio* to the larger genre of the quodlibet is not entirely straightforward. The melodies employed in the illustrative sections of the *Capriccio* do not appear to be preexistent, so the notion of quotation, described by Praetorius and exemplified by the vocal quodlibets of the period, does not fully apply. However, the music that Farina used to depict his musical instruments seems fairly formulaic—typical, perhaps, of the kind of music most often associated with those instruments, and therefore a sort of fabricated quotation. The passage that imitates an ensemble of trumpets and kettledrums demonstrates this tendency: the key of D major was most common for these ensembles because of the construction of trumpets; the lowest line ("Die Heerpaucken") imitates kettledrums oscillating between the first and fifth scale degrees; in "La Trombetta" low- and mid-range "trumpets" mostly outline D-major triads; and the highest line ("Il Clarino") copies trumpets in the *clarino* register, where the



Example 1. "Il Gatto / Die Katze," mm. 288–95.

natural harmonic series allows for the sounding of a full diatonic scale (see ex. 2).

As a patchwork of musical quotations and nonmusical noises, the genre of the quodlibet, and Farina's quodlibet more specifically, constitutes a musical collection. Farina's work brings together strains of music that are not normally juxtaposed, framing and connecting them with new material. Here the composer acts as a collector, orchestrating and arranging passages of preexistent music, or in Farina's case, stock music, to amuse and entertain.²⁴

The Capriccio stravagante as an Encyclopedia of Musical Instruments

It may not be surprising that official court inventories, together with Hainhofer's descriptions of the instrument collections at the Dresden court, demonstrate that nearly all of the instruments that Farina imitates



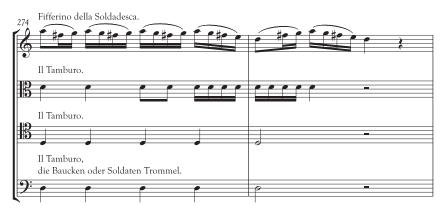
Example 2. "La Trombetta, Il Clarino, Le Gnachere, / Die Trommeten, Das Clarin, Die Heerpaucken," mm. 168–76.

in his *Capriccio stravagante* are represented in the Dresden collections. What is perhaps more striking is Farina's inclusion of instruments from such a wide range of social contexts and associations.



Example 3. "La Lira / Die Leyer," mm. 67–74.

Farina was a practical musician, known to have led the instrumental music at several official celebrations and other occasions, and as such he must have been familiar with the extensive collections of musical instruments housed at the Dresden court. Although the Capriccio does not serve as a comprehensive tour of those collections, those instruments that Farina did select can be taken to stand for musical practice throughout society. The first instrument represented in Farina's parade is the "La Lira / Die Leyer," the hurdy-gurdy, described by Praetorius as the "Lyra Rustica, seu pagana, ein gemeine Lyra" (the rustic, or ordinary lyre)²⁵ and by Hainhofer as the "Teutsche gemaine lÿren" (common German lyre).²⁶ Indeed, Farina's performance instructions call attention to the association of the instrument with peasants, noting that it is normally found in the hands of "li Orbi overo Ciechi" (blind or one-eyed beggars²⁷). The rich droning of this section, realized by means of double-stops, serves as a marker both of the instrument itself and its apparently unrefined harmonic language (see ex. 3).²⁸



Example 4. "Fifferino della Soldadesca, Il Tamburo / Das Soldaten Pfeifgen, Die Paucken oder Soldaten Trommel," mm. 274–75.

At the other extreme of the German social landscape is the section imitating trumpets and kettledrums, described above. As is now well known, these instruments were associated in this period exclusively with the music of the uppermost members of the nobility, a connection confirmed by Imperial edicts issued as early as 1630 delineating a clear separation between trumpeters and kettledrummers on the one hand, and ordinary *Stadtpfeifer* (city wind players) on the other.²⁹

Farina evokes military images as well, not only through his imitation of trumpets and kettledrums (which were used in both courtly and military contexts), but more specifically through his representation of a pipe and tabor and military kettledrums (see ex. 4), which he calls the "Fifferino della Soldatesca / Das Soldaten Pfeifflen" and "Il Tamburo / Die Paucken oder Soldaten Trommel."³⁰

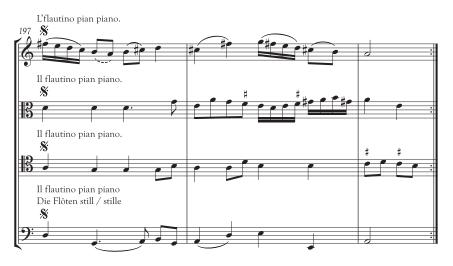
The section Farina titled "Il Pifferino / das kleine Schalmeygen,"³¹ featuring imitation of a shawm at least on the highest line, captures the sound of a wind ensemble. Such ensembles, which might also include trombones, dulcians, and other wind or brass instruments, had formed the core of German civic ensembles by the late fourteenth century—indeed, the term *Stadtpfeiffer* (literally, "city shawmists") was applied to all members of such groups, regardless of which wind instrument they played³²—and the importance of the shawm in civic music in both Germany and Italy persisted well into the seventeenth century. Shawm ensembles, part of the category of *hauts instruments* (loud instruments), were sponsored by cities and privately by noble patrons; they provided music for banquets and accompanied public processions and other civic functions,³³ and Praetorius attests to their use to accompany courtly dance.³⁴

Perhaps in contrast to the *Schalmeygen*, the recorder consort, represented in the section "Il Flautino pian piano / Die Flöten stil stille," which highlights the recorders' softness even in its title, may be taken to stand for the *bas instruments* (soft instruments), used primarily in courtly settings to substitute for or accompany voices in ensemble motets or madrigals. Indeed, although "Il Pifferino" and "Il Flautino" are not positioned directly next to one another, their soprano lines are something close to inverses of each other, a feature that highlights the opposing nature of the two consorts (see ex. 5A and B). The melody of "Il Pifferino" starts by ascending in eighth notes, then contains an ornament in sixteenths; "Il Flautino" opens with descending sixteenth notes and continues with an ascending eighth-note figure. These motives form the core of the two sections in question, calling attention to the opposition between *haut* and *bas*.

Farina's *Capriccio* refers also to organ music, in the section that calls for the use of a measured bow tremolo to imitate the organ tremulant, a



Example 5a. "Il Pifferino / Das kleine Schalmeygen," mm. 75–78.



Example 5b. "Il Flautino pian piano / Die Flöten still stille," mm. 197–99.

mechanism that varies at a regular metric interval the flow of air through the organ pipes, creating an oscillation in the volume of the sounded notes.³⁵ (Thus although the notes are written with larger values, Farina's instructions indicate that the tremolo should be played in even eighth notes.) In general, the tremulant created a somber or melancholy affect,³⁶ here augmented by the harsh dissonances that connect this section with the Italian tradition of *durezze e ligature* organ works.³⁷

Only one instrument included in the *Capriccio* is absent from Hainhofer's inventory of the instruments in the Dresden collections.³⁸ Perhaps not coincidentally, it is an instrument that Praetorius describes with notable inaccuracy: the Spanish guitar. Indeed, the exotic foreign guitar stands in stark contrast to the hurdy-gurdy—the only other string instrument represented in the *Capriccio*—with its distinctly German character.

Praetorius associates the guitar, like the hurdy-gurdy, with folk music, writing that "In Italy the charlatans and saltimbanco ([*commedia dell'arte* performers] who are like our comedians and buffoons) strum on these in singing their villanelle and other crude songs. But [nonethe-less], the quintern [guitar] can be used by good singers for accompanying pleasing and lovely songs."³⁹ As James Tyler and Paul Sparks have noted, Praetorius's description of the stringings and tunings of the guitar betrays a lack of familiarity with developments in guitar technique and technology in Italy in the late sixteenth and early seventeenth centuries.⁴⁰ Among other lacunae, Praetorius writes only of a four-course instrument, whereas the most up-to-date Spanish guitars in Italy had five courses. Hainhofer's inventory of 1629 does not include a guitar, supporting the notion that the instrument was still not in widespread use in Dresden, and perhaps at other German-speaking courts as well.

Taken together, the hurdy-gurdy and the Spanish guitar bridge the gap between the native German music of Farina's host country and patron and his own Italian heritage, which included the quasi-exotic influences of Spain. That Praetorius equivocates about the peasant's lyre, including it among his illustrations but only mentioning it cursorily in the written description in his *De organographia*, may speak not only to questions of its suitability in a book dedicated to a member of the nobility but also to its familiarity among a German readership. The Spanish guitar, by contrast, had only recently been introduced to Italy and was barely familiar to German audiences.⁴¹ Its inclusion in the *Capriccio* may have signified a nod toward what one might presume Farina's responsibilities at the Dresden court to have been: to introduce the new Italian musical styles and to fuse those with the musical practices of his host country.⁴²

The Capriccio thus offers a snapshot of a sampling of musical instruments in various social contexts, from instruments used by peasants to those used in court, from instruments destined for church to those designed for the battlefield. Hainhofer's catalog of the Pfeiffenkammer, too, describes a vast range of instrumental types, and describes them in various ways.⁴³ Some, such as "etliche Cornet," "etliche Geigen," and "2 harffen," require only brief mention; others call for more explanation: "Bäugglin und ain pfeiffen zusamen, das man mit der ainen hand pfeiffet, und mit der andern baugget" (A little bag and pipe together, that one blows and fingers with one hand, and pumps with the other). Some are native to Germany—as noted above, other, more exotic locations; for example, he mentions a "Tapas, auf dessen saiten man mit ainem sammetinen kleppel schlegt, und ain Indianisch instrument ist" (Tapas, on the strings of which one strikes with a velvet clapper, and it is an Indian instrument). Some of the instruments in the collection seem to be lavishly decorated, including "2 schöne geigen und 1 lautten, aller mit perlenmutter eingelegt, die dachstern mit stainen gezieret" (two beautiful violins and one lute, all inlaid with mother-of-pearl, the rosette ornamented with precious stones).

Farina's composition, which brings together musical materials from many social contexts, may be seen as analogous to Hainhofer's description of the Dresden instrument collections—and indeed, to the contents of the collections themselves—encapsulating the familiar and the exotic, the ornate and the practical. Like the instrument rooms at the Dresden court, the *Capriccio* brings together instruments from widely disparate sources, uniting them within a single collection.

The Spirit of the Kunstkammer I: Farina's Animal Noises

The musical instruments in the *Pfeiffenkammer* and the schlagende Instrumentkammer were not the only ones in the collections at the Electoral court. Those rooms contained the instruments that were practical, usable. Even the ones that were lavishly decorated had the potential to be used. The chronicler Anton Weck, writing in 1680, described musical instruments in the Kunstkammer-instruments of quite a different kind. These included "various regals, positives, organworks, and musical instruments, some of alabaster and marble, some entirely of glass, some of rare wood, and artfully inlaid."44 Such instruments had evidently been in the Kunstkammer for some time: the official inventory of the collection taken in 1619 includes, for example, a "Gläserne Orgel" (glass organ).⁴⁵ Hainhofer also records the presence of musical instruments of a sort quite apart from those in the practical collections, most notably, multiple "self-playing" keyboard instruments, presumably propelled by clockwork mechanisms. The 1619 inventory includes descriptions of such mechanical instruments, among them an "Instrument und Positif von schöner eingelegter und geschnizter arbeit, schlegt drey stücken von sich selbsten mit vier stimmen" ([keyboard] instrument and positive of beautifully inlaid and engraved work, which plays three pieces by itself with four voices).⁴⁶ As we shall see, these two categories of instruments-instruments rendered out of unusual natural materials fashioned in artistic ways, and those with musical automata that probed the boundary between creation and mechanization capture the spirit of the Kunstkammer, aiding the viewer in "observing nature and art."

In 1587 Gabriel Kaltemarckt wrote a lengthy letter to Elector Christian I, father of Johann Georg I, concerning the ideal contents of a *Kunstkammer*. He explained that

a well equipped *Kunstkammer* ought primarily to contain three things. First, sculptures. Secondly, paintings. Thirdly, curious items from home and abroad made of metals, stone, wood, herbs—whether from above the ground, from within the ground or from the waters and sea. Next, utensils used for drinking or eating which nature or art has shaped or made out of such materials. Then, antlers, horns, claws, feathers and other things belonging to strange and curious animals, birds, or fishes, including the skeletons of their anatomy.⁴⁷ The first two categories that Kaltemarckt describes are entirely manmade and pertain to man's imitation or interpretation of the world around him. The third category is considerably broader and more ambiguous in both its origins and its purposes. Its items begin in nature but enter through various processes into the domain of man. The "curious items . . . made of metals, stone, wood, [and] herbs" may be entirely derived from and fashioned by nature; the utensils made of those materials may be items that "nature or art has shaped." The skeletons and other items taken from "strange and curious animals" are entirely natural, but it is man who disassembles, rearranges, and displays them, presumably for the purposes of study and marvel. Even though they are natural items, their inclusion in the ideal *Kunstkammer* brings them into the domain of human creativity. The collector and viewer recreate them as objects of art.

The timing and contents of Kaltemarckt's letter denote his antipathy to the Dresden *Kunstkammer* as it already existed. The collection, formed around 1560 by Elector August, was filled not with the painting and sculpture that Kaltemarckt ultimately advocated in his letter, but with scientific instruments and practical tools for the study, cultivation, and mastery of nature. Kaltemarckt's pleas to Christian I that the *Kunstkammer* be refashioned in the image of the Italian collections of art fell on deaf ears, and the Dresden collection was in subsequent years enhanced with the arrival of curiosities, naturalia, and machines.⁴⁸

Indeed, although Kaltemarckt devotes the great majority of his essay to the categories of sculpture and painting, saying that "I believe there is no need to relate here how and where the curiosities are to be found, especially since such things are regularly obtainable in large quantities in German and Italy,"⁴⁹ Hainhofer's account of his visit to Johann Georg's *Kunstkammer* in 1617 suggests that it was Kaltemarckt's third category that had by then assumed the most prominent and important position within the Dresden collection. These curiosities—from rhinoceros horns to optical instruments—present the viewer with a means of considering man's relationship with nature. Hainhofer's succinct distillation of the purpose of the *Kunstkammer*—"die Natur und Kunst zu betrachten"—underscores the importance of the co-creative role of the collector. As Horst Bredekamp notes, the collector—the orchestrator of the *Kunstkammer*—was theorized as a Promethean figure, able to master nature's raw materials and transform them into works of art.⁵⁰

If the representations of musical instruments in Farina's *Capriccio stravagante* call to mind man's creative abilities—his activities in the sphere of art—then the animal noises in the piece address the role of the collector as a coordinator and interpreter of nature. Indeed, Farina's

imitations of the hen, rooster, cat, and dog, although very brief, problematize the interpretation of the *Capriccio* as a tour of musical instruments. These sections interrupt the flow of the piece, which would otherwise remain strictly in the sphere of music—of man-made artifice. By including imitations of nature, Farina encourages his listener to consider the relationship between natural sound—even in its most comical manifestations—and music that originates in human artistry. Indeed, in probing the boundary between nature and art, Farina asserts his role not just as a collector or coordinator of musical sound, but as an interpreter of the natural world as well.

What the natural world meant to the courtiers of Saxony is not an entirely straightforward matter. The early seventeenth century was, after all, a transitional period in the understanding and practice of the sciences. Hainhofer's diaries, along with the official court inventories and records, confirm extreme engagement with alchemy in the Dresden court. As Helen Watanabe-O'Kelly has suggested, superstitions associated with alchemy took root with particular firmness in Saxony, where the mining of metals and stones was an important component of the economy and a source of wealth for the Electoral court.⁵¹ At the same time, early modern Dresden, together with much of the rest of Europe, stood on the cusp of the Scientific Revolution. Seventeenth-century practitioners of the sciences did not share twenty-first-century views of the distinctness of these two categories of fact-based and superstitious thought. Scientific endeavors during this period often drew on theories of natural magic, which encompassed both occult beliefs and more rationalist dealings in mechanics and physics.⁵²

Many of the curiosities within the Dresden *Kunstkammer* seem to owe their existence to the dual loyalties of science to natural and artificial production; in displaying them in the *Kunstkammer* the collector sought to demonstrate his position as a master of nature through both means. The *mineral Zimmer* (mineral room) of the *Kunstkammer* was full of items, many of which have been preserved in Dresden's present *Grünes Gewölbe* (Green Vault), that encapsulated the Saxon preoccupation with mining and the transformation of raw materials, as well as the ingenuity of the sculptor as cocreator. In some cases, these items appeared to have been extracted and retained in their natural formations, but in reality, they were formed through a combination of natural and artificial processes.⁵³ These mineral objects—transformed in the hands of artisans into idealized versions of themselves—were informed by both mystical alchemy and objective experimentation.

More than in the realm of rocks and jewels, however, the meanings of the *Kunstkammer* become clearest through consideration of the

collection's attempts to quantify, analyze, and recreate life. At the heart of the *Kunstkammer* collections was the so-called mechanistic philosophy, which sought to understand all natural phenomena, including life, in terms of mechanics,⁵⁴ and which for early modern collectors represented a means of both understanding the natural world and joining in the process of creation. The ultimate goal of the collector was to understand and reproduce animate motion, which was seen as the essential and defining component of all life.⁵⁵ Mechanistic philosophy itself represented a synthesis of objective science and the occult attempts to understand the mysteries of life, as Bredekamp writes:

The inherent meaning of the *Kunstkammer* was by no means limited by their mechanistic structure; on the contrary, it was expanded therein. One of the most surprising elements of mechanistic philosophy is that it also supported the expression of occult tendencies that were long considered the sheer opposite to "cold" Cartesian thought. The strongest connection between these two apparently incompatible schools of thought could be found in attempts to synthesize life. Since life in its highest form was defined since Plato's time as the ability to move independently, the creation of movement became the decisive criterion.⁵⁶

In the spirit of these attempts to understand and recreate the mechanisms of life, the *Kunstkammern* of the sixteenth and seventeenth centuries were filled with stuffed animals, skeletons of animals, reproductions of animals' muscular structures, sculptures of animals, and animal automata.

The assembly of animalia in both the *Kunstkammer* and the Anatomiekammer⁵⁷ (anatomy room) of the Dresden court suggests an interest both in analysis of the physical composition of common creatures (for example, stuffed birds) and evidence of rare or mythical beings (including rhinoceros horns and claws of a griffin).⁵⁸ A set of eight animals sculpted out of wax, listed in the 1619 inventory of the *Kunstkammer*, includes not only lions (a group of real ones were housed in the Electoral Lewenhaus [lion-house]⁵⁹), but also a unicorn.⁶⁰ Man's role as enabler of these natural curiosities is made evident in Hainhofer's description of the chameleon, "who adopts the color of each thing, where one sets it"⁶¹; the animal does not go where he pleases, but changes color under the supervision of the observer who sets it down.⁶²

Other objects represent animal life through the fusion of the natural and the artificial. For example, a set of sculpted cups in the form of ostriches, still housed in the *Grünes Gewölbe*, started with real ostrich eggs, which, taken out of their natural context, were intermingled with silver gilt, so that they give birth, as it were, to new, man-made ostriches.⁶³ The sculptor of these birds seems to have been toying with the notion of creation, using technology and artifice to refer to the alchemical quest for life. The intertwined sciences of chemistry and alchemy are also highlighted in Hainhofer's description of "A free-standing deer, in which various medicines were prepared according to the art of chemistry from more than 40 body parts of the noble deer." (Hainhofer goes on to note that the court apothecary, Johann Wechingern, sings a song about this animal and the medicinal experiments done on it.)⁶⁴

Another category of objects within the Kunstkammer was that of automata and machines, which emphasize man's ability to harness his ingenuity to imitate and participate in the creation of life. Indeed, automata of the sort included in the Dresden collection were informed by—and contributed to—the development of mechanistic philosophy.⁶⁵ Many of the clockwork automata in the Kunstkammer took the form of animals. Made through the artistry of a human carver, these animals would be set into motion through the mechanical ingenuity of a human artisan-scientist; when the appropriate time arrived, they would spring to life, imitating the activities of similar animals in the natural world. So, for example, the Kunstkammer included "two beautiful little dogs, in which a clockwork mechanism causes them to move their eyes," "a little clock with a pelican and its young, which move when the clockwork strikes," and "a bear, which, when the clockwork strikes, it moves its eves, its paws, its nose, and plays a drum, while a hunter holds up his horn, as if to blow it."66

In his *Capriccio* Farina, too, acts as a collector. This is true not only in the sense suggested above—that his work functions as a tour of instruments, offering musical images with a comprehensive array of social associations—but also in the work's attempts to isolate and recreate the noises of animals in their natural states, an activity that reflects the spirit of the *Kunstkammer*. Like the sculptor who fashioned his ostriches out of eggs and silver and the anatomist who prepared birds for stuffing and display, Farina captures natural phenomena—the sound of hens, roosters, cats, and dogs—and records them in music. Through his extremely brief imitations of these animals, Farina acts as a creator of life, highlighting the manner in which courtly collectors and viewers of collections interact with nature.

Farina exploits the technical capacities of his instrument to render his animal sounds as realistic as possible. Still, the *Kunstkammer* (in contrast to the *Lewenhaus*) was not a menagerie, displaying real animals making real noises; rather, it extracted items from nature and rendered them in a manner that also displayed the collector's ingenuity. Likewise, Farina



Figure 1. Nautilus-shell cups in the shape of a rooster and hen, made ca. 1593–1602. First mentioned in the *Kunstkammer* inventory of 1640; now housed in the Grünes Gewölbe, Staatliche Kunstsammlungen Dresden, Inventory number III, 156 and III, 193. Photographed by Jürgen Karpinsk. Reproduced by permission.

presents his animals within the context of man-made artifice, in a refined setting made up of carefully planned and coordinated harmonies, rhythms, and motives. The nonrepresentational music serves as a frame—a display case, perhaps—for Farina's artificial instruments and synthetic animals.

It seems significant that Farina chooses not to imitate more noble creatures—or, for that matter, the ones that are more musical. But musicality is precisely *not* the point. Instead, Farina seems intent on depicting these natural sounds in a distinctly unmusical manner. The purpose of the Dresden collections was to experience both the beautiful and the grotesque in nature, to use tools and instruments—in this case, musical instruments—to understand it, and, as Farina does, to recreate it through imagination and resourcefulness.⁶⁷ Indeed, the matching nautilus-shell rooster and hen drinking cups shown in figure 1, made in the late sixteenth century and residents of the *Kunstkammer* by 1640, suggest that the seemingly mundane barnyard animals of the *Capriccio* would have been quite at home within the Electoral collection (see ex. 6).⁶⁸

It is not at all clear that Farina would have known the contents of the Dresden *Kunstkammer*, a visit to which required special invitation and, apparently, an escort by the curator of the collection or some other



Example 6. "La Gallina, Il Gallo / Die Henne, Der Han," mm. 181–87.

official with knowledge of it. However, Farina's familiarity with specific items within the *Kunstkammer* is, in a sense, immaterial. At issue is the more general culture of the study and mastery of nature, evident throughout the collections at the Dresden court, and, as we shall see, in courtly practices themselves.

The Spirit of the Kunstkammer II: The Violin as a Scientific Instrument

The mechanical inventiveness on display in the *Kunstkammer* did not stop at animal automata. It also encompassed scientific instruments, and musical machines and instruments themselves, so that the tools created by man for the study and enhancement of nature could come to life. The problems of animate motion and stability are showcased, for example, in "a perpetual motion, which ascends and descends inside a glass ring,"⁶⁹ and "several magnets, of which the largest weighs 5 lots, but which attracts 66 lots of iron, which it holds day and night, year and day."⁷⁰ Included in the *Kunstkammer*, too, were large quantities of scientific instruments, including lenses, scopes, and devices for measuring and weighing.⁷¹ Astronomical clocks and mechanical automata made

possible by recent developments in clockwork technology aided the collector in his amateur study of the workings of the planets. Indeed, novelty in mechanization was of primary importance in most *Kunstkammern*.⁷²

Some of the curiosities in the Dresden Kunstkammer emphasized the importance of tools and instruments themselves, not only as mechanisms through which to learn about and exploit the natural world, but also as fields of inquiry in their own right. One of the rooms included "on various tables, all sorts of cups, dishes, vessels, water pitchers, spoons and knives, all made of marble, alabaster, serpentine, and other rocks that are mined in the Electorate of Saxony, and beautifully polished."73 In addition to these somewhat ordinary types of tools, and in keeping with the character of the collection first assembled by Elector August, the Kunstkammer in 1629 still contained a large quantity of professional tools-a feature that apparently set the Dresden Kunstkammer apart from similar collections in other German cities⁷⁴—instruments pertaining to joinery, hunting, gardening, wool-spinning, and other local professions.⁷⁵ However, the tools in the Kunstkammer were no ordinary items but lavishly decorated and constructed from the finest materials. The collection also included many worktables and writing tables, most of them made of expensive or exotic stone or wood and ornamented with precious metals.⁷⁶

That musical instruments could also be counted among the tools meriting inclusion in the *Kunstkammer* is suggested by the presence of those instruments described by Weck and Hainhofer—some richly decorated, others worthy of interest because of their automatic mechanisms. However, a related body of evidence—in the form of published books suggests that more ordinary musical instruments, too, might be considered within the category of machines and tools worthy of collection, exploration, and study.

Behind the automata, scales, lenses, and other scientific tools in the *Kunstkammer* stood the mechanic: the engineer whose knowledge and resourcefulness led to the development of the wonders of the collection. Although within the walls of the collection these inventors may have gone unrecognized, they had other means of advertising their abilities and activities. Most notably, starting around 1570, engineer-inventors began to produce—and in many cases, publish—books known as "theaters of machines," which illustrated their mechanical creations or the theoretical speculations they hoped might one day bear fruit in the form of such inventions.⁷⁷

Theaters of machines and books with similar titles and functions were written and printed throughout Europe in the late Renaissance.

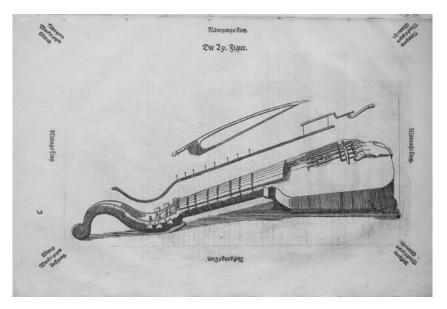


Figure 2. Plate 29 of Jacques Besson, Theatrum oder Schawbuch allerley Werckzeug und Rüstungen des hochverstendigen sinnreichen Mathematici, Iacobi Bessoni, auss dem Delphinat (Mümbelgart, Getruckt durch J. Foillet, 1595). Reproduced by permission of Herzog August Bibliothek, Wolfenbüttel.

These books brought an understanding of mechanics and an awareness of new inventions to a wider audience, and in the process they brought fame and prestige to the patrons of inventors. The machine books nearly all shared a common format, coupling detailed engraved images of mechanical inventions with prose descriptions of their mechanisms. Some achieved remarkable popularity and were translated into multiple languages. Most famously, Jacques Besson's *Theatrum instrumentorum et machinorum*, probably written around 1571 but first printed in France in 1578, was still being reprinted and translated into the seventeenth century.⁷⁸ Following editions in Latin, French, and Italian (and preceding one in Spanish), a German translation appeared in 1595 as the *Theatrum oder Schawbuch allerley Werkzeug und Rüstungen.*⁷⁹

Besson's *Theatrum*, pioneering what would become the standard format for such machine books, included a number of different inventions, as well as improvements for machines and instruments already in use. His plate 29, which depicts a musical instrument (see fig. 2), bears the following brief explanation: "The Author's proposition concerning the twenty-ninth figure. A new form of a musical instrument, whose metal strings, when touched with fingers or a fiddle-bow, gives a mixed, equally tempered, and lovely sound, equally comparable to the sound of a lyre and trombone."⁸⁰ The construction of the instrument is not at all clear from the picture, but it appears to consist of a violin-like body and a fretted fingerboard presumably producing Besson's desired temperament, with an additional stick, possibly meant to run along the inside of the fingerboard, which might have produced a sympathetic buzzing.⁸¹ The terseness of the description of the instrument does not help the reader to interpret the picture. Indeed, both Besson and, apparently, the engraver issue warnings to the effect that the instrument was never actually built, and therefore the design and drawing might be faulty.⁸²

In the context of the mechanistic philosophy at play within the *Kunstkammer* and against the backdrop of these scientific theaters of machines, the first and arguably most important of which counted a musical instrument among its scientific inventions, Praetorius's *Theatrum instrumentorum* takes on a new significance. Although the author describes this illustrated catalog of musical instruments merely as the sixth part of his *De organographia*, its title and format situate it within the larger context of these machine books, which, like the *Kunstkammer* itself, displayed the tools and mechanisms through which man could study, understand, and master nature.⁸³

Although a thorough study of the relationship between Praetorius's Theater of Instruments and similar books published by scientist-inventors lies outside the scope of the present study, both Besson's scientific work and Praetorius's collection of musical pictures offer another model for an interpretation of the Capriccio, a work that highlights the role of the violin as a tool—an instrument—for the study of the natural and manmade soundworlds. The literary-artistic genre of the theater of machines functioned both as an outlet and a means of fame for inventors, and as an engine for the growth of collections of machines themselves, encouraging and enabling the collector's sense of mastery over nature that was exemplified by and enacted within the Kunstkammer.⁸⁴ Machine books recorded and facilitated the collector's attempts to harness nature-to reshape and refine natural resources in an artistic mold, to overcome challenges presented by nature by means of scientific instruments and tools, to study and understand the mechanics of life, and even to act as a creator of life in the form of animated automata-all of which in turn helped him to assert his own place within the sphere of nature. The role of Praetorius's catalog in the amateur study of music is made explicit on the title page of the *De organographia*, which contains the text that corresponds to the illustrations in the Theatrum instrumentorum. There the author acknowledges that although his work is useful for musicians and instrument builders, it serves the secondary purpose of being

"entertaining and delightful to read for philosophers, philologists, and historians." 85

In the Capriccio, Farina, too, assumes the role of an inventor or developer of instruments, akin to the engineers and mechanics who authored illustrated machine books. The composer presents not a scientific instrument, but a musical one-the violin-and demonstrates how it can be exploited and manipulated to aid in the project of mastering nature. Thus the first sense in which Farina uses the word Invention: the violin in the Capriccio assumes the status of a new invention, comparable to the mechanical inventions in the Kunstkammer, and the composition expounds upon the technical possibilities of the instruments. In fact, the violin was something of a new invention in the early seventeenth century.⁸⁶ Although forms of the instrument had existed since the early sixteenth century, it served primarily as a functional instrument, to accompany dance or outdoor ceremonies. Not until the 1610s and 1620s did Italian composers begin to publish idiomatic music to highlight the virtuosic and expressive capabilities of the violin family. Indeed, as Aurelio Bianco notes, most of Farina's published works may be equally suitable for viol consort, and his use of the term Violen on the title page of the Ander Theil may be ambiguous, referring to either set of instruments.⁸⁷ Still, Farina's ten lengthy sonatas are idiomatic to the violin family and in the tradition of the stile moderno sonatas of the composer's Italian contemporaries. This is true to an even greater extent of the virtuosic techniques incorporated into the Capriccio. (Indeed, as shown in Table 1, the performance instructions that appear at the end of the Ander Theil refer specifically to the violino and the Geige.) The collection of technical innovations contained in the Capriccio represents one of the earliest attempts to define and exploit the violin itself as an Invention.

One section of the *Capriccio* uses a virtuosic technique, but does *not* bear a title indicating that it imitates an animal or another musical instrument. The rubrics state only, "Qui si bate con il legno del archetto sopra le corde / Hier schlegt man mit dem Holtze des Bogens" (here [the player] hits the wood of the bow against the strings) (see Table 1 and ex. 7).⁸⁸ In the appendix to the *Capriccio*, Farina explains further how this technique is applied: the Italian *avertimenti* suggest that the player should use his bow "come fanno li tamburini" (as tabor players do), and the German *Erinnerungen* instruct the violinist to use his instrument "gleich eines Hackebrets" (like a hammer dulcimer). This section does not *imitate* either of those instruments, but rather it applies their performance technique to the violin. Here, mimesis assumes secondary



Qui si bate con il legno del archetto sopra le corde.

Example 7. "Qui si bate con il legno del archetto sopra le corde / Hier schlegt man mit dem Holtze des Bogens," mm. 103–11.

importance. Of greater significance is the exploration of the instrument itself as a tool for the production and contemplation of sound qua sound.⁸⁹

The *col legno* passage of the *Capriccio*, missing an overt and specific representational aspect, focuses the attention of the player (as well as that of the patron-dedicatee) on the violin as an instrument. But of course, it is the representational portions of the work that spotlight the ability of the violin to aid the collector in the study and understanding of life. This is true not only in the passages that illustrate the noises of animals, which, as we have seen, constituted an essential focal point of the *Kunstkammer*. The violin's capacity to recreate life is also evident in the portions of the *Capriccio* that illustrate other musical instruments.

The *Kunstkammer*'s concern with music as a driving force in human life is on display, for example, in the automaton shown in figure 3: a pyramid of turned ivory, the base of which hides a clockwork



Figure 3. Close-up view of a turned-ivory pyramid, at the base of which are mechanical musicians playing trumpets and kettledrums. (Not shown is a sphere at the top of the pyramid containing a group of automated banqueters.) Included in the *Kunstkammer* inventory of 1595; now housed in the Grünes Gewölbe, Staatliche Kunstsammlungen Dresden, Inventory number II, 133. Photograph by Jürgen Karpinski. Reproduced by permission.

mechanism that would, at the appointed time, set in motion the trumpeters and kettledrummers, who would hold their instruments as if playing them, while the musical mechanism produced their sounds, all while a group of pages walked up the stairs at the base of the pyramid. A separate mechanism caused the banqueters inside the sphere at the top of the column to raise their hands to their mouths, as if eating.⁹⁰ On a basic level, this artifact uses music to display the creative capacities of the designers of musical instruments and the players of music. On a more self-conscious level, and perhaps a deeper one, music within this automaton-microcosm serves as a marker of life. The banqueters at the top of the pyramid become animated only through the single medium of movement. The musicians, by contrast, both move and *sound*.

So too, in Farina's *Capriccio*, does music serve as a marker of human life. Farina illustrates not simply music, but *people making music*—music as a product and function of life. As previously noted, the work does not stop at the refined music of court, but rather represents music of all kinds, from the mundane to the sublime, from the familiar

to the exotic. It is remarkable that all of these aspects of musical humanity may be observed—or rather, heard—through a single instrument. Much like the optical lenses within the *Kunstkammer*, which allowed the viewer to consider nature from multiple perspectives (and therefore to understand that a single object could be seen in many ways), the violin is exploited in every conceivable fashion—the bow produces chords and slurs, playing close to and even over the bridge, its wood strikes at the strings, the instrument is held on its side, the player's stopping fingers slide up and down, the arm vibrates—to offer the listener a multiplicity of images of musical life.⁹¹

In this respect, Farina's own status as an object of collection must have served him well. Farina was one of the many Italian expatriate musicians who sought their fortunes north of the Alps. The violinists in particular—among them Biagio Marini, Giovanni Battista Buonamente, and Antonio Bertali—appear to have been highly prized in Germanspeaking courts for their extreme virtuosity, as evidenced in published works such as Farina's *Capriccio* and many of the sonatas and capriccios in Marini's *Sonate*, *Symphonie*, *Canzoni*, *Pass'emezzi*, *Baletti*, *Corenti*, *Gagliarde*, & *Retornelli* of 1626.⁹² In contrast to the virtuosic works in Marini's *Sonate*, however, which were published in Venice (despite the composer's residence in Neuberg) and which retain the Italianate texture of soprano-bass polarity, Farina's *Capriccio* fuses Italian virtuosity with the German medium of the four-part consort—and, as we have seen, the spirit of the Dresden *Kunstkammer*.

The Capriccio stravagante as a Performance of Knowledge

That the machine books of engineers like Jacques Besson were called "theaters of instruments" signifies an underlying conception of those works: they are meant to be experienced as theatrical in some way. Like the experience of hearing music, the act of reading a machine book is time-bound. The theatrical nature of these books is highlighted in the introduction to one volume in the genre, the *Theatri machinarum* of Heinrich Zeising, published in six volumes between 1607 and 1614.⁹³ Zeising explains the analogy: Of the three people involved in a theatrical production—the players, the producers, and the spectators—only the spectators are truly happy, since the players are full of worry and the producers must go through a great deal of trouble and work. So, too, do the inventors of machines and instruments (analogous to the players in a show) and the engravers and producers of a machine book (equated here with the producers of a theatrical production) face a great deal of trial and difficulty. Only the reader has the opportunity to enjoy the final product. A correlation between invention and enjoyment existed on multiple levels at the courts of late-Renaissance Germany. The introduction to Besson's *Theatrum* prefigures that of Zeising, suggesting that all machine books served the dual purposes of "utilitas et delectation" (utility and delight).⁹⁴ As Bredekamp notes, the *Kunstkammer* was perceived as a "playroom," a locus of creation analogous to the world itself, which was seen as a canvas for Nature the Player.⁹⁵ In machine books and in *Kunstkammern*, the collector could both observe creation from a distance and join Nature in its creative enterprises. In both cases, though, the work was done beforehand, by the likes of Zeising's inventors and publishers. In their final forms, *Kunstkammern* and machine books were worthy of presentation—presentation initiated by the viewer's entrance into the collection or the reader's opening of the book.

Presentation of knowledge within German courts was enacted on yet another level, one with a more overt performative component. The term *Invention*, used so prominently on Farina's title page, could refer to newly developed machines, instruments, or other artifacts. But in the context of rhetoric, it denoted a theme or *topos*, and in a meaning drawn from that sense it also referred to theatrical presentation within the courtly processions known as *Aufzüge*. Hainhofer's diary of 1617 attests to the use of *Invention* in this sense: he recounts his visit to the "Churfürsten Inventions-Hauß" (Electoral Inventions-House), which contained "vilerley Their, Triumphwägen und Schiffe, und mancherley Aufzüge" (many counterfeit animals, triumph-wagons and floats, and various sceneries for processions), items used in the *Aufzüge* to display the power and knowledge of the Elector.⁹⁶ *Invention* was used both as a synonym for *Aufzug* and as a word that referred to the theatrical components of an *Aufzug*.⁹⁷

Theatrical *Aufzüge* were staged to mark a momentous occasion such as a birth or wedding within a ruling family, or to commemorate an important entrance of a member of the nobility into a city. Participants in the procession sometimes wore allegorical costumes, dressing themselves as conquerors or beneficent rulers from biblical sources and ancient mythology. In some pageants, the participants dressed as natives from exotic locales such as Africa or America, and in others, the nobility actually dressed as peasants. The procession would advance through the town in lavishly decorated wagons (Hainhofer's *Triumphwägen*) pulled by costumed horses and sometimes displaying novelties of the court collections.⁹⁸

In Dresden, it was the artist Giovanni Maria Nosseni—another Italian expatriate—who most often conceived and produced the *Aufzüge*



Figure 4. Invention-wagon from a volume of paintings, no later than 1613. Hauptstaatsarchiv Dresden, 10006 Oberhofmarschallamt, Hierüber 4 (Aufzug und Inventionen unter Kurfürst August). Image reproduced from Friedrich Sieber, *Volk und volkstümliche Motivik im Festwerk des Barocks dargestellt an Dresdner Bildquellen* (Berlin: Akademie-Verlag, 1960), Appendix, 8. Reproduced by permission of the Akademie-Verlag and the Hauptstaatsarchiv, Dresden.

of the late sixteenth and early seventeenth centuries. Indeed, Nosseni left quite a significant mark on the *Aufzug* as a genre, initiating in 1613 a tradition of unifying all the theatrical allegories, costumes, and scenery within a single theme. It is perhaps significant that this first unified *Aufzug* was centered around Time and the Seven Planets—that is, around scientific knowledge and discovery.⁹⁹ Indeed, as a whole, the *Aufzüge* seem to have been designed to display the knowledge of the ruling family and to enact that knowledge through performance. The involvement of curiosities was in many ways essential to the conveyance of the theatrical conceits of the *Aufzüge*. For example, one well-known image produced in 1613 depicts a wagon carrying an astronomer, identifiable by means of his globe and other scientific instruments.¹⁰⁰

The themes of these processions were not always lofty. In an *Aufzug* of 1582, Elector August dressed as a peasant celebrating the harvest season, with courtiers assuming characters of a similar kind, and many *Aufzüge* on peasant themes also include characters playing peasant instruments such as bagpipes.¹⁰¹ Figure 4 shows a processional carriage

holding three men whose class is suggested by the fact that one of them is carrying a rooster.

And of course, the *Aufzüge* also included music, of which unfortunately very little survives. However, one little-discussed source ties together several important themes related to the *Capriccio*. The *Intrada der Trommeter*,¹⁰² apparently performed at the postwedding homecoming of Princess Sophia Eleonora, daughter of Johann Georg I and Magdalena Sibylla, and Landgrave Georg II of Hesse-Darmstadt in 1627, consists of twenty-two stanzas of poetry in an acrostic spelling the name "Sophia Eleonora Herzogin zu Sachsen," and a single page of music to which the text was apparently sung. The text appears to describe, one by one, the parade floats included in the *Aufzug*, most of the themes of which derived from Greco-Roman mythology. The music itself is written for a consort of trumpets and kettledrums, a remarkable fact given that, as already noted, the performance practices of those instruments were closely guarded secrets.

Another aspect of the *Intrada der Trommeter*—not entirely surprising in light of the etymology of the word—is its confirmation of a link between the courtly procession and the musical genre of the intrada. Indeed, the connection is also suggested by Praetorius:

Intrata (*commonly intrada*) or entrata, *which means an "entry*" [ingressus] or "going in" [aditus] *derives from* intran do [*entering*] or introitu [*entrance*] and is used for entrances of great lords or processions at tournaments and other functions.¹⁰³

Hainhofer goes even further, relating the intrada to masquerade, a connection that is entirely appropriate given the costumed *Inventionen* performed as part of the courtly *Aufzüge*. His twelve-volume set of lute tablatures, classified by genre and itself constituting a sort of musical collection, includes a "Zechender Thail . . . welche vor . . . Spagnolette, Entrate, und andern mascharatischen däntzen tractieret" (Tenth part . . . which treats Spagnolettas, Entratas, and other masquerade dances).¹⁰⁴

Given the function of the Intrada, a reconsideration of the nonrepresentational music in Farina's *Capriccio stravagante* seems fitting. Two of the most prominent types of intradas from the early seventeenth century are represented throughout the *Capriccio* in the sections that frame and link the representational passages. The first, in duple meter using dactylic fanfare rhythms, announces the start of the parade of curiosities; the second is in compound meter with dance-like rhythms.¹⁰⁵ In fact, music of both types dominates the nonrepresentational sections of Farina's work.

Farina's use of the term *Inventionen* to refer to the theatrical conceits of the *Capriccio* thus suggests another interpretation of the work: the entirety of the *Capriccio* as analogous to an *Aufzug*—a procession that displays the knowledge embodied by the court collections, or perhaps, given the comical nature of the animals represented in the work, a procession celebrating or even jesting with the notion of knowledge on parade. Here the purpose of the *non*representational sections of the *Capriccio* becomes clear. These passages are intradas, music that introduces and sets aside the representational sections, which are equivalent to the theatrical *Inventionen* of these parades and offers a musical analogy for their visual spectacle.¹⁰⁶

Although there is no reason to think that the Capriccio was performed as music for an actual Aufzug-indeed, its construction suggests otherwise-it may nevertheless have been intended as music to celebrate an important occasion—in fact, as a sort of wedding gift. Farina signed the dedication of the Ander Theil to Johann Georg's wife, Electress Magdalena Sibylla, on 1 January 1627, when the court would have been busy preparing for the wedding of her daughter.¹⁰⁷ If Hainhofer's account is to be believed, Magdalena Sibylla was herself a skilled and knowledgeable collector. After touring her Kunstkammer, separate from that of her husband, he writes that "dise löbliche Churfürstin grossen lust und guten verstand hat" (this lovely Electress has great curiosity and good understanding).¹⁰⁸ It may be worth noting that Magdalena Sibylla's Kunstkammer also contained—in addition to shells, stuffed animals, mechanical animals, clocks, and other curiosities-musical instruments of the kind included in her husband's collection, among them "Ain lieblich lautent clavier, alles nur von papir oder cardon gemacht" (a lovely ringing clavier, all made from paper or card),¹⁰⁹ and musical automata such as "Ain tischlin mit selbs spilenden musicalischen wercklin" (a little table with a self-playing musical mechanism).¹¹⁰ Hainhofer himself, between 1620 and 1630, commissioned worktables-small-scale collections-for both Johann Georg and Magdalena Sibylla. That of the Electress included, among other things, writing implements, scientific tools, kits of medicines and toiletries, portraits, games, and a keyboard instrument of around four octaves.¹¹¹ Like the worktable, the *Capriccio* is a sort of portable collection, a miniature model of a musical-theatrical Aufzug, perhaps presented in celebration of Sophia Eleonora's wedding to a patroness who might appreciate its relationship to the cultures and practices of courtly collecting.

Although the dedication of the *Ander Theil* does not suggest a specific connection between the Electress and the *Capriccio*, the fact that a book dedicated to Magdalena Sibylla would include such a work unique in Farina's oeuvre—implies that the composer expected her to look favorably upon it.

In its relationship to the courtly Aufzug, the Capriccio stands apart from the Kunstkammer. It is ephemeral and fleeting; it hinges on performance. To be sure, the act of walking through the Kunstkammer and observing its contents was also performative in some respects, but the viewer of the collection could be certain that when the tour was over and the doors closed, the contents remained safe and stable inside. If the score of the Capriccio serves as a visual or material memento of the work's performance, the recreation of that performance is no certainty. After all, the piece does not just require performance: it requires execution of extremely difficult virtuosic techniques. Although the work is in many ways analogous to a collection, it ultimately resists the collector's control. Still, perhaps like the clockwork mechanisms of the automata in the Kunstkammer, the printed score may serve as a catalyst for the reproduction of the music it contains.

No other source from this period includes explanations of violin virtuosity like those described in the appendices to the *Capriccio*, likely because most performers would have learned the techniques through apprenticeship, not through reading. The appendices demonstrate an interest on the part of Farina's patrons in understanding the many ways that the violin could produce sound in the hands of skilled players, who could hold it sideways, pluck its strings, bow close to the bridge, play multiple notes at once, and so on. Just as the Elector would sit with his astronomical instruments, dabbling in a study of the heavens, so he might consider the musical instruments in his collections and the ways they could be exploited to further his study of art and nature. That these virtuosic violin techniques emerged from south of the Alps must have rendered the enterprise of exploration and discovery all the more engaging.

Like the machines, figurines, maps, optical instruments, decorative mining tools, and other curiosities of the *Kunstkammer*, the violin offers a window onto the various realities of the surrounding world. Yet as a performance-based work, the *Capriccio* has the capacity to recreate life—both human and animal—in a way not available to static visual artifacts. The representational music of the *Capriccio stravagante* serves as a marker of that life, animating a collection of imaginary characters. It presents a new perspective on the mysteries of the world, inviting the

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listener not only to "*observe* nature and art," as Hainhofer suggested, but to *listen* to them as well.

Notes

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1. On Kunstkammern and the purposes and ideals of collecting generally, see Horst Bredekamp, The Lure of Antiquity and the Cult of the Machine: The Kunstkammer and the Evolution of Nature, Art, and Technology, trans. Allison Brown (Princeton, NI: Markus Wiener Publishers, 1995); Lorraine Daston and Katharine Park, Wonders and the Order of Nature, 1150–1750 (New York: Zone Books, 2001); Krzysztof Pomian, Collectors and Curiosities: Paris and Venice, 1500-1800, trans. Elizabeth Wiles-Portier (Cambridge: Polity Press, 1990); Paula Findlen, Possessing Nature: Museums, Collecting, and Scientific Culture in Early Modern Italy (Berkeley: University of California Press, 1994); Pamela H. Smith and Benjamin Schmidt, eds., Making Knowledge in Early Modern Europe: Practices, Objects, and Texts, 1400–1800 (Chicago, IL: University of Chicago Press, 2007); and Pamela H. Smith and Paula Findlen, eds., Merchants and Marvels: Commerce, Science, and Art in Early Modern Europe (New York: Routledge, 2002). On the Dresden Kunstkammer in particular, see Helen Watanabe-O'Kelly, Court Culture in Dresden from Renaissance to Baroque (New York: Palgrave, 2002), 71–99. Several catalogs of representative items in the Dresden Grünes Gewölbe, the heir to the Kunstkammer, have been published in recent years; see especially Dirk Syndram and Antje Scherner, eds., Princely Splendor: The Dresden Court, 1580–1620 (Milan: Electa; Dresden: Staatliche Kunstsammlungen Dresden, 2004), which also contains a series of informative scholarly essays.

2. The manuscript of Hainhofer's 1617 travel diary was transcribed and published as *Philipp Hainhofers Reise-Tagebuch, enthaltend Schilberungen aus Franken, Sachsen, der Mark Brandenburg und Pommern im Jahr 1617, Baltische Studien 2 (Stettin: Christoph* von der Ropp, 1834); see 127–48 for the passage on Dresden. A transcription of much of Hainhofer's diary of 1629 was published as *Des Augsburger Patriciers Philipp Hainhofer Reisen nach Innsbruck und Dresden*, ed. Oscar Doering (Vienna: Carl Graeser, 1901); for the passage on Dresden, see 141–248.

3. Hainhofers Reise-Tagebuch, 135. "Es ist in diser Kunstcammer auf allen Tischen, in allen Kasten und an allen Wenden so vil klain und groß, schlecht und fürnem Gezeug und Sachen, daß ainer auch etlich Tag darzue brauchete, alles nach Lust und Nottdurfft zu sehen, und die Natur und Kunst zu betrachten." Translations are mine unless otherwise indicated. Transcriptions from primary sources in German and Italian retain all original spellings, except that "v" is modified to "u" when it is used as such. Capital letters in both German and Italian, including those in midsentence, are retained from the original sources, except in short titles (e.g., *Capriccio stravagante* and *De organographia*).

4. The official court inventories of the Pfeiffenkammer and the schlagende Instrumentkammer, both written in 1593, are transcribed, respectively, in Moritz von Fürstenau, Beiträge zur Geschichte der Königlich Sächsischen musikalischen Kapelle (Dresden: C. F. Meser, 1849), 40-41, and von Fürstenau, "Ein Instrumenten-Inventarium vom Jahre 1593," Mitteilungen des Sächsischen Altertumsvereins 22 (1872): 66-76. Both are translated in Eszter Fontana, "Musical Instruments for the Electoral Kunstkammer in Dresden around 1600," Musique, images, instruments: Revue française d'organologie 8 (2006): 8–23. Hainhofer's lists from 1629 are transcribed in Doering, Des Augsburger Patriciers, 231–35. Wolfram Steude, correcting a long-held misunderstanding among contemporary scholars, has pointed out that the usable instruments were not those contained in the Kunstkammer, but rather those in the Pfeiffenkammer and the schlagenden Instrumentkammer; see Steude, "Michael Praetorius' Theatrum instrumentorum 1620, Philipp Hainhofers Dresdner Reiserelation von 1629, und die Inventare der Dresdner Kunstkammer," in Theatrum instrumentorum Dresdense: Bericht über die Tagungen zu historischen Musikinstrumenten, Dresden, 1996, 1998 und 1999, ed. Wolfram Steude and Hans-Günter Ottenberg (Schneverdingen, Germany: Verlag der Musikalienhandlung Karl Dieter Wagner, 2003), 233–40. The Rüstkammer (armory) also held some instruments, especially those used for hunting; see Stephan Blaut, "Die Jägerhörner in den Rüstkammer der Staatlichen Kunstsammlungen Dresden," Musica instrumentalis: Zeitschrift für Organologie 2 (1999): 8-22; and Blaut, "Hornfessel, Quasten und das inhaltsreiche Detail: Zur Ausstattung der Jägerhörner in der Dresdner Rüstkammer," in Theatrum instrumentorum Dresdense, 39-46.

5. Mary Frandsen points out that Johann Georg I's interest in Italian music was shortlived. Although he fostered the adoption of Italian-style music at his court during the 1620s, his subsequent involvement in the Thirty Years War consumed his interests. See Frandsen, "Allies in the Cause of Italian Music: Schütz, Prince Johann Georg II and Musical Politics in Dresden," *Journal of the Royal Musical Association* 125, no. 1 (2000): 1–40, esp. 3n3. Nevertheless, the Elector perhaps deserves more credit than he is generally given for cultivating musical developments in the *Hofkapelle* before his involvement in the war. Steude, for example, describes Johann Georg I as "beschränkt" (narrow-minded), a characterization that does not take sufficient account of musical activities at the court during the 1610s and 1620s. See Steude, "Die Dresdner Hofkapelle zwischen Antonio Scandello und Heinrich Schütz (1580–1615)," in Der Klang der Sächsischen Staatskapelle Dresden: Kontinuität und Wandelbarkeit eines *Phänomens*, ed. Hans-Günter Ottenberg and Eberhard Steindorf (Hildesheim, Germany: Olms, 2001), 23–45.

6. On the Italian journey of Johann Georg I and its implications for the Dresden court, see Watanabe-O'Kelly, *Court Culture in Dresden*, 59–70. Frandsen notes that even after Dresden became embroiled in the Thirty Years War, the Elector's son, Johann Georg II, showed a marked interest in Italian music, probably encouraged by Schütz, that persisted throughout his reign. See Frandsen, "Allies in the Cause of Italian Music."

7. Although Schütz's trip to Dresden was to have been brief, he remained there, officially assuming the position of Kapellmeister in 1621 (although by then he had served in that capacity de facto for several years). One of Schütz's most significant contributions to the court culture of Dresden was his composition of what is commonly (if problematically) referred to as the first German opera. Dafne, the music of which is now lost, was performed in 1627 as part of the celebrations honoring the wedding of Sophia Eleonora, the eldest daughter of Johann Georg I and his second wife Magdalena Sibylla, to Landgrave Georg II of Hesse-Darmstadt. As I shall argue, it seems possible that the subject of the present essay-Farina's Capriccio stravagante-was also composed as a sort of wedding gift for Sophia Eleonora. On the status of Dafne as an opera modeled on through-composed Italian works such as Peri's L'Euridice and Monteverdi's L'Orfeo, see Wolfram Steude, "Heinrich Schütz und die erste deutsche Oper," in Von Isaac bis Bach: Studien zur älteren deutschen Musikgeschichte. Festschrift Martin Just zum 60. Geburtstag, ed. Frank Heidelberger, Wolfgang Ostoff, and Reinhard Wiesend (Kassel, Germany: Bärenreiter, 1991), 169-79; also Elisabeth Rothmund, "Dafne' und kein Ende: Heinrich Schütz, Martin Opitz, und die verfehlte erste duetsche Oper," Schütz-Jahrbuch 20 (1998): 123–48; Aurelio Bianco, "Nach englischer und frantzösischer Art": Vie et oeuvre de Carlo Farina avec l'édition des cinq recueils de Dresde (Turnhout: Brepols, 2010), 36–37 and 195–201; Bettina Varwig, "Schütz's Dafne and the German Operatic Imagination," in Music, Theatre, and Politics in Germany, 1850–1950, ed. Nikolaus Bacht (Aldershot: Ashgate, 2006), 117-38; and Varwig, Histories of Heinrich Schütz (New York: Cambridge University Press, 2011), 58–93.

8. For the most up-to-date biography of Farina, see Bianco, Nach englischer und frantzösischer Art, 23–73.

9. Carlo Farina, Ander Theil newer Paduanen, Gagliarden, Couranten, Frantzösischen Arien, benebenst einem kurtzweiligen Quodlibet / von allerhand seltzamen Inventionen, dergleichen vorhin im Druck nie gesehen worden / sampt etlichen Teutschen Täntzen / alles auff Violen anmutig zugebrauchen (Dresden: Gimel Bergen, 1627); this volume is cited as RISM A/I/3, F98; and in Claudio Sartori, Bibliografia della musica strumentale italiana (Florence: Leo Olschki, 1952), record number 1627a, 314. A nearly complete set of partbooks is held by the Universitätsbibliothek Kassel, Landesbibliothek und Murhardsche Bibliothek der Stadt Kassel (D-Kl), shelf mark 2° Mus. 25, but it preserves only the very brief appendix containing the performance instructions for the tenor partbook. The more complete appendix for the cantus is preserved, however, in the partbook held at the Sächsische Landesbibliothek, Staats- und Universitätsbibliothek Dresden (D-DI), shelf mark Mus. 1510-N-1. Bianco, Nach englischer und frantzösischer Art, includes a modern edition of all of Farina's music on CD-ROM; the Ander Theil appears on the CD-ROM on 123–214, and the Capriccio stravagante on 179–208. The Kassel exemplar of Farina's works is accompanied by a handwritten bass partbook, suggesting that it would have been

possible—though not necessary—to accompany the music with a continuo instrument; see Bianco, "Les sources," in *Nach englischer und frantzösischer Art*, CD-ROM [ii].

10. The idea that "kurtzweilig Quodlibet von allerhand seltzamen Inventionen" is meant as a translation of *Capriccio stravagante* is supported by many other German translations of Italian rubrics in this piece, as will be discussed below. The title itself requires some explanation; see note 24.

11. David Boyden's characterization is representative: "About 1600 violin music is remarkable for its experiments in idiom, form, and expression; but it does not follow that novelty and experiment are always synonymous with the best artistic results. The most interesting piece violinistically is not necessarily the most interesting musically, and the exploration of the violin idiom sometimes advances the technique of the instrument more than its musical ends. Farina's much-mentioned Capriccio stravagante of 1627 is a classic case. This piece calls for relatively exotic devices like *col legno*, *sul* ponticello, and even glissando in the interests of depicting barking dogs, yowling cats, and crowing cocks. All this is in good fun for the violinist-and was probably intended as such by Farina-but musically such pieces cannot be considered seriously except in so far as they advance the technique of the instrument." Boyden, The History of Violin Playing from Its Origins to 1761, 4th ed. (New York: Oxford University Press, 1990), 131-32. Similar sentiments are expressed in other histories; see, for example, William S. Newman, The Sonata in the Baroque Era, 4th ed. (New York: Norton, 1983), 54; Walter Kolneder, Das Buch der Violine, 5th ed. (Zurich: Atlantis Musikbuch-Verlag, 1993), translated and edited by Reinhard G. Pauly as The Amadeus Book of the Violin: Construction, History, and Music (Pompton Plains, NJ: Amadeus Press, 1998), 268-69; E. Van Der Straeten, The Romance of the Fiddle: The Origin of the Modern Virtuoso and The Adventures of His Ancestors (London: Rebman, 1911), 21–22. More recent studies have treated the Capriccio stravagante more cautiously, but still somewhat neutrally; see Manfred Fechner, "Bemerkungen zu Carlo Farina und seiner Instrumentalmusik," Schütz-Jahrbuch 18 (1996): 111-13. Bianco's treatment deals in depth with the influence of the Capriccio on subsequent instrumental program music in German-speaking areas; see Bianco, Nach englischer und frantzösischer Art, 123–49. Simon McVeigh associates the mimetic effects of the Capriccio with the early seventeenth-century interest in musical theater (see McVeigh, "The Violinists of the Baroque and Classical Periods," in The Cambridge Companion to the Violin, ed. Robin Stowell [Cambridge: Cambridge University Press, 1992], 48), an idea taken up in Rebecca Cypess, "Esprimere la voce humana': Connections between Vocal and Instrumental Music by Italian Composers of the Early Seventeenth Century," Journal of Musicology 27, no. 2 (Spring 2010): 181-223.

12. An excellent example is Dana Gooley, "*La commedia del violino*: Paganini's Comic Strains," *Musical Quarterly* 88, no. 3 (Fall 2005): 370–427.

13. Van der Straeten, for example, disparagingly calls the work "formless"; see *The Romance of the Fiddle*, 22.

14. As noted in Cypess, "*Esprimere la voce humana*," 211, the ending of the *Capriccio* is particularly unstable. In contrast with the opening of the work, solidly in D major, the ending fades away in F, unprepared by any cadence. The ending of the *Capriccio* is reproduced on page 213.

15. Susan Lewis Hammond has explored the relationship between German *Kunstkammern* and German editions of Italian vocal music. The case of Farina's *Capriccio stravagante* may be further evidence in support of Hammond's assertion that "like their professional counterparts in the world of the *Kunstkammer*, German anthologists gathered and domesticated non-native, foreign objects, and fashioned northern replicas when needed." See Hammond, *Editing Music in Early Modern Germany* (Aldershot, UK: Ashgate, 2007), 182; also Hammond, "Collecting Madrigals in Nuremberg: *De' fiori del giardino* (1604) and the Music Anthology as *Kunstkammer*," paper presented at the 69th annual meeting of the American Musicological Society (Houston, 2003). A similar culture of "aural collecting" in Italy is explicated in Andrew Dell'Antonio, *Listening as Spiritual Practice in Early Modern Italy* (Berkeley: University of California Press, 2011), Chapter 2.

16. German quodlibets were not the only works that involved nonsense syllables and imitations of instruments and animals. Farina likely also knew Italian vocal precedents such as those in Orazio Vecchi's *Il convito musicale* (1597). Nevertheless, his situation of the *Capriccio stravagante* within the genre of the quodlibet prompts consideration of the work within that more specifically German tradition.

17. Wolfgang Schmeltzl, Guter seltzamer und künstreicher teutscher Gesang, sonderlich ettliche künstliche Quodlibet, Schlacht, und der Gleichen, mit vier oder fünff Stimmen, biss her im Truck nicht gesehen (Nuremberg: Petreium, 1544; facsimile ed., Stuttgart: Cornetto-Verlag, 1997). Modern edition by Rudolf Flotzinger (Graz: Akademische Druck- und Verlagsanstalt, 1990).

18. An early study of the vocal quodlibet is Hans Joachim Moser, Corydon: Geschichte des mehrstimmigen Generalbassliedes und des Quodlibets im Deutschen Barock, 2nd ed. (Hildesheim: Georg Olms, 1966), esp. 26–27.

19. "Quodlibet, Ein Gsang von mannicherley zusam geklaubten Liedern oder Texten / da keins auff das ander geht. Jtem sonst ein zusam geklaubt ding / es sey was es wöl / das sich doch nindert oder wenig zusamen gattet. Ein durch einander misch mäsch." See Simon Roth, Ein teutscher Dictionarius / dz ist ein außleger schwerer / unbekanter Teutscher / Griechischer / Lateinischer / Hebraischer / Wälscher und Frantzösischer / auch andrer Nationen wörter / so mit der weil inn Teutsche sprach kommen seind / und offt mancherley jrrung bringen: hin und wider auß manicherley geschrifften / und gemainer Red zusamen gelesen / außgelegt / und also allen Teutschen / sonderlich aber denen so zu Schreibereien kommen / und Ampts verwaltung haben / aber des Lateins unerfarn seind / zu gutem publiciert: durch Simon Roten (Augsburg: Michaël Manger, 1571), transcribed in Emil Öhmann, "Simon Roths Fremdwörterbuch," Mémoires de la Société Néo-Philologique de Helsingfors 11 (1936): 225–370, 344. It is noteworthy that Roth's dictionary, the earliest known of its kind, is itself a sort of collection-a "misch mäsch" of curious and foreign objects-brought together for the edification and entertainment of the reader. On the tradition of foreign-word dictionaries in Germany beginning with Roth, see W. T. Jones, "German Foreign-Word Dictionaries from 1571 to 1728," Modern Language Review 72, no. 1 (January 1977): 93-111.

20. "Messanza seu Mistichanza: Ist ein Quotlibet oder Mixtur von allerley Kräutern / una salata de Mistichanza: Wird sonsten in gemein ein Quotlibet genennet. Do nemlich aus vielen unnd mancherley Motetten, Madrigalien, und andern deutschen weltlichen / auch possirlichen Liedern / eine halbe oder ganze zeile Text mit den Melodeyen und Notten / so darzu und darüber gesetzt seyn / herausser genommen und aus vielen stücklin und fläcklein gleichsam ein gantzer Peltz zusammen gesticket und geflicket wird." See Praetorius, Syntagmatis musici ... tomus tertius.... Sampt angehengtem außfürlichem Register (Wolffenbüttel, Germany: Elias Holwein in Verlegung des Autoris, 1619), 17. For an English translation, see Michael Praetorius, Syntagma musicum III, trans. and ed. Jeffery T. Kite-Powell (Oxford: Oxford University Press, 2004), 33. Praetorius continues by describing three types of quodlibet, defined by their methods of fragmentation. In some, each voice has its own text, which it recites in full; in the second category, each voice has its own text but those texts are all truncated; and in the third category, the voices all have the same text, but they are broken off and taken up by different voices as the piece proceeds.

21. Groh's quodlibet was reprinted in Johann Groh, Dreissig neue außerlesene Padovane und Galliard / mit fünff Stimmen so zuvor niemals in Truck kommen / auf fallen musicalischen Instrumenten lieblich zugebrauchen. Sampt einem zu end angehengtem Quotlibet genannt. Bettlermantel. Von mancherley guten Flecklein zusammen gestickt und geflickt / allen denen so ihnen was neues belieben lassen / zu ehren mit 4. Stimmen verfertigt (Nuremberg: Abraham Wagenman, 1612).

22. See, for example, Melchior Franck, Musicalischer Grillenvertreiber: Jn welchem alle Quodlibeta so biszhero unterschiedlich in Truck ausgangen / zusamen gebracht / auch mit etlichen newen / als einem lateinischen und zweyen teutschen vermehret / Allen der Edlen Music Liebhabern zu sonderlicher frölicher Ergetzlichkeit / Mit 4. Stimmen Componiret und in Truck verfertiget (Coburg, Germany: Forckel, 1622); Andreas Rauch, Musicalisches Stammbüchlein in welchem Anfangs etliche Geistliche: dann weltliche Gesänglein mit lieblich, fröhlich, und lustig amorosischen Texten sampt einer lächerlichen Geschicht eines jungen paar Ehevolks. Auch einem Rundtruncks Gesänglein, einem Quodlibet und zwo Litanien von fromm und bösen Weibern (Nuremberg: Wagenmann, 1627). For a modern edition of Rauch, see Ágnes Sas and Antal Jancsocivs, eds., Andreas Rauch: Musicalisches Stammbüchlein 1627, with an introduction by Kornél Bárdos, Ilona Ferenczi, and Károly Mollay. Musicalia Danubiana 2 (Budapest: Magyar Tudományos Akadémia Zenetudományi Intézet, 1983).

All musical examples were prepared from the 1627 print and checked against the 23. modern edition contained in the CD-ROM that accompanies Bianco, Nach englischer und frantzösischer Art. Aspects of the 1627 print are quite difficult to interpret. In particular, slurs seem to have posed substantial problems for Farina's printer: they float above the staves, and it is often unclear whether they are attached to a given note or simply imply a slurred execution throughout the passage. In such cases, the interpretations and editorial suggestions offered in Bianco's edition have been retained. In addition, the use of accidentals is inconsistent. As was common in the early seventeenth century, the majority of the *Capriccio* is printed without barlines. Some accidentals may therefore apply only to the notes to which they are directly attached, but in many cases (for example, in fully notated trills), the harmonic vocabulary necessitates application of the accidental to a series of notes subsequent to its initial appearance. The musical examples in this essay include editorial cautionary accidentals but omit some of the *ficta* that Bianco suggests, unless the harmonic context renders them necessary. Whereas Bianco's edition standardizes and consolidates rubrics, the examples presented here retain original spellings and punctuations. I have standardized the groupings of beams.

24. The titles that Farina uses for his quodlibet—in both Italian and German—reflect this notion of the *Capriccio* as a musical collection. Although composers working in

Italy most often associated the genre of the capriccio with contrapuntal music (as in the capriccios of Girolamo Frescobaldi), the Italian Biagio Marini, who was employed at the court of the Duke of Neuberg while Farina was in Dresden, used the term as Farina did, to refer to works in which the violin engages in role-play. In addition, the word capriccio evidently connoted wandering: the Vocabolario degli accademici della crusca, 2nd ed. (1623; 155), translates the word as "val pensiero, fantasía, ghiribízzo, invenzione" (following one's thoughts, fantasy, whim, invention). According to the Crusca linguists, the word stravagante also carried an implication of pretense. Readers of the Vocabolario, upon turning to the entry for stravagante (845) are referred to fantastico (323): "da FANTASMA. Finto, immaginato, non vero" (related to a spectre. Feigned, imagined, not true). Farina's German title for the work, the kurtzweilig Quodlibet von allerhand seltzamen Inventionen, likewise implies both imagination and a sense of wandering, even to the point of fragmentation. Kurtzweilig in its most literal sense is that which makes time seem short (as opposed to langweilig). The Deutsches Wörterbuch of Jacob and Wilhelm Grimm (assembled in the nineteenth century based on surveys of earlier literature) defines kurzweilig both in terms of humor (using the words witzig, unterhaltend and erheiternd [joking, entertaining, and cheerful]) and with a connotation of fragmentation (zerstreuend [scattered]). This sense is reflected, significantly, in a rubric that introduces a category of lute music in the tablature manuscript of Philipp Hainhofer (the same travel diarist and Augsburg court emissary mentioned above). Hainhofer's Dritter Thail P.H. Lautenbucher includes quasi-improvised genres such as preludes, preambles, fantasies, ricercars, and "andere kurtzweilige musicalische leufflen" (other fragmentary/amusing/time-passing musical forms). Farina's phrase "von allerhand seltzamen Inventionen" may be translated literally as "of various strange inventions," but as noted earlier, the term Invention itself requires further explanation, which will be undertaken below. For these definitions and usages, see Vocabolario degli accademici della Crusca in questa seconda impressione da' medesimi riveduto, e ampliato, con aggiunta di molte voci degli autor del buon secolo, e buona quantità di quelle dell'uso, con tre indici delle voci, locuzioni, e proverbi latini, e greci, postiper entro l'opera (Venice: Sarzina, 1623); Jacob Grimm and Wilhelm Grimm, Deutsches Wörterbuch (Leipzig: S. Hirzel, 1854–1960), 32 vols., online at http://germazope.uni-trier.de/Projects/WBB/ woerterbuecher/dwb/WBB/dwb/wbgui; the definition of "kurzweilig" is in 11:2862; and Philipp Hainhofer, Dritter Thail P.H. Lautenbucher darinnen begriffen preludi, praeambuli, phantasiae, ricercate, passionate etc. und andere kurtzweilige musicalische Leufflen. Mit angehencktem tractetlin, auf was weisz die Lauten zulernen ist, 1603, Herzog August Bibliothek, Wolfenbüttel (call number Cod. Guelf. 18.7+8 Aug.2⁰). On this last work, and Hainhofer's lute music in general, see Joachim Lüdtke, Die Lautenbücher Philipp Hainhofers (1578–1647), Abhandlungen zur Musikgeschichte 5 (Göttingen, Germany: Vandenhoeck and Ruprecht, 1999).

25. This description is located in the introduction to the *De organographia*: "Ist noch ein Instrument / an welchen zugleich die Clavier geschlagen / und die Säitten mit einem Rade / an stadt deß Bogens / erreget werden / Nemlich / Lyra Rustica, seu pagana, ein gemeine Lyra" (There is also an instrument played by keys and with a wheel to set its strings into motion in place of a bow, namely the lyra rustica or pagana: the common lyra). Praetorius, *De organographia*, 5, translated in Harold Blumenfeld, *The Syntagma musicum of Michael Praetorius*, vol. 2: *De organographia*, *First and Second Parts*, *Plus All Forty-Two Original Woodcut Illustrations from Theatrum instrumentorum* (New York: Da Capo Press, 1980), 5. In the section on the *lira* itself, Praetorius declines to comment on this instrument, implying that its social status does not earn it a place

in his written work: "Allhier ist nicht zu sagen / von der Bawren- unnd umblauffenden Weiber Leyre / die mit einem Handgriff herumb gedrehet / und mit der lincken Hand die Claves tangirt warden" (The peasant lyra and the lyras of street women, instruments which are ground with one hand while the keys are fingered by the left hand, will not be treated here). See Praetorius, *De organographia*, 49. Nevertheless, he does present a picture of the peasant's lyre in his *Theatrum instrumentorum*, one of several representations suggesting that his illustrative catalog was meant to be more comprehensive than his written work.

26. See Doering, *Des Augsburger Patriciers*, 232. On the social associations of the hurdygurdy, see Emanuel Winternitz, "Bagpipes and Hurdy-Gurdies in Their Social Setting," *Metropolitan Museum of Art Bulletin* 2, no. 1 (Summer 1943): 56–83. Winternitz provides ample iconographic and written documentation to support an association of the hurdygurdy with peasant music, but also notes that in paintings of the late Renaissance, the instrument is frequently pictured in the hands of angels: "Angels seem to have no social prejudices whatever; like playful children they do not hesitate to take a juggler's or beggar's instrument for the greater glory of the Lord or his Saints" (66).

27. My thanks to Aurelio Bianco for helping to clarify the meaning of this phrase.

28. The presentation of double-stops in "La Lira" and elsewhere in the *Capriccio* was apparently difficult for Farina's printer; in both the Kassel and the Dresden exemplars, one note of each double- or triple-stop was printed and the others were added by hand.

29. See Caldwell Titcomb, "Baroque Court and Military Trumpets and Kettledrums: Technique and Music," *Galpin Society Journal* 9 (June 1956): 56–57; Timothy A. Collins, "Of the Differences between Trumpeters and City Tower Musicians': The Relationship of Stadtpfeifer and Kammeradschaft Trumpeters," *Galpin Society Journal* 53 (April 2000): 51–59; and Don L. Smithers, "The Hapsburg Imperial *Trompeter* and *Heerpauker* Privileges of 1653," *Galpin Society Journal* 24 (1971): 84–95.

30. That Farina's rubric in the bass partbook offers two German terms for the drum in question—*Paucken oder Soldaten Trommel*—raises questions about the identity of this instrument. Plate 6 of Praetorius's *Theatrum instrumentorum* depicts a soldier's pipe with a small drum, but the term *Paucken* may indicate a military equivalent to the *Heerpaucken*, or kettledrum; Praetorius depicts *Soldaten Trummeln* in plate 23. Given the make up of the music, in which only the uppermost violin plays a melody and the lower three instruments play various rhythmic motives on a single pitch, it seems possible that Farina meant to represent a soldier's pipe accompanied by drums of various sizes and types.

31. The German phrase is a double diminutive, meaning that the instrument in question is a small version of the soprano-register shawm.

32. On the composition of German wind bands, see Keith Polk, "Instrumental Music in the Urban Centres of Renaissance Germany," *Early Music History* 7 (1987): 159–86. On the use of the term *Stadtpfeifer*, see page 162. See also Keith Polk, *German Instrumental Music of the Late Middle Ages: Players, Patrons, and Performance Practice* (Cambridge: Cambridge University Press, 1992), 45–86.

33. See the images in Polk, German Instrumental Music, 66.

34. In the third volume of the Syntagma musicum, Praetorius writes of the dance genre known as the *ballo*, saying that "Der andern Art Balli oder Ballette seynd / welche

keinen Text haben: Und wenn diselbigen mit Schallmeyen oder Pfeiffen zum tantze gespielet werden / so heist es stampita" (Balli or ballets of this type have no text, and if they are played on Schalmeyen or pipes for dancing, they are called *stampitas*). Praetorius, Syntagma musicum, vol. 3, 19; trans. in Kite-Powell, 35.

35. In the performance instructions in the appendices, Farina makes the connection to the organ explicit, as shown in Table 1. See Stewart Carter, "The String Tremolo in the 17th Century," *Early Music* 19, no. 1 (February 1991): 49–60. Praetorius expresses a fondness for the organ tremulant, calling it "eine fein Stimbwerck" (a fine voice-mechanism) and outlines some principles for its use in his essay on the organ, *Kurtzer Bericht, waß bey uberliefferung einer klein und grosverfertigten Orgell zu observieren*; see *Michael Praetorius und Esaias Compenius Orgeln Verdingnis*, Kieler Beiträge zur Musikwissenschaft 4, ed. Friedrich Blume (Wolfenbüttel and Berlin: Georg Kallmeyer, 1936), 23–24.

36. Carter, "The String Tremolo in the 17th Century," 43ff.

37. Elsewhere I suggested that the dissonances in the "tremulant" section of the *Capriccio* were meant to mock an organist becoming lost during the course of his improvisation. However, what appear to be the contrapuntal improprieties in this section are actually not far from other works in the "*durezze e ligature*" tradition, for example, in works by Trabaci, Macque, and most famously, Frescobaldi. See Roland Jackson, "On Frescobaldi's Chromaticism and Its Background," *Musical Quarterly* 57, no. 2 (April 1971): 255–69.

38. For inventory lists and other sources of information on the instruments at the Dresden court, see note 4.

39. "In Italia die Ziarlatini und Salt' in banco (das sind beyn uns fast wie die Comœdianten unnd Possenreisser) nur zum schrumpen; Darein sie Villanellen und andere närrische Lumpenlieder singen. Es können aber nichts desto weniger auch andere feine anmuthige Cantiunculæ, und liebliche Lieder von eim guten Seuger und Musico Vocali darein musicirt werden." See Praetorius, *De organographia*, 53.

40. See James Tyler and Paul Sparks, *The Guitar and Its Music: From the Renaissance to the Classical Era* (New York: Oxford University Press, 2007), 139–40. The advances in guitar building and the repertoire of the instrument made in Italy in the first decades of the seventeenth century—advances of which Praetorius seems ignorant—are described on 51–99.

41. On a seventeenth-century compendium of instruments that does demonstrate an awareness of the Spanish guitar, see J. Patricia Campbell, "Musical Instruments in the *Instrumentälischer Bettlermantl*—A Seventeenth-Century Musical Compendium," *Galpin Society Journal* 48 (March 1995): 156–67. This volume is an undated manuscript, so it does little to help clarify precisely when information on the Spanish guitar was incorporated into German musical knowledge.

42. The same purpose apparently helped to motivate the third volume of Praetorius's *Syntagma musicum*, the title page of which lists among its contents an explanation of "How Italian and other musical terms, such as *ripieno*, *ritornello*, *forte*, *pian*, *presto*, *lento*, *capella*, *palchetto*, and many more, are interpreted and employed" and "the training of young schoolboys in the current Italian manner of singing." Translated in Kite-Powell, 3.

43. Hainhofer's travel diaries move fluidly from a narrative style replete with anecdotal information about the people he encountered to a more terse style that catalogs the artifacts and curiosities he saw during his visits. His descriptions of the rooms of musical instruments in the Dresden court typify this latter mode of writing. In fact, Hainhofer's lists of the instruments in the *Pfeiffenkammer*, which contained wind and stringed instruments, and the *schlagenden Instrumentkammer*, which housed keyboard instruments, have no obvious structure. Instead, it seems likely that he wrote descriptions of the instruments he saw in the order that he encountered them.

44. "unterschiedene Regale, Positive, Orgelwercke und Instrumenta Musicalia, theils von Alabster und Marmor, theils gantz von Glaß, theils von kostbaren Holtze und künstlich eingelegt." See Anton Weck, Der chur-fürstlichen sächsischen weitberuffenen Residentz- und Haupt-Vestung Dresden Beschreib: und Vorstellung: auf der churfüstlichen Herrschafft gnädigstes belieben in vier Abtheilungen verfasset, mit Grund und anderen Abrissen, auch bewehrten Documenten erläutert (Nuremberg: J. Hoffmann, 1680). Quoted in Steude, "Michael Praetorius' Theatrum instrumentorum," 234.

45. Inventarium uber die churfürstliche sächβ: kunst cammern im schloß und vestung Dresden Verneüert und auffgericht den 26. Junii anno: 1619, fol. 321r. Transcribed by Jochen Vötsch in Kunstkammerinventar 1619. HStA Dresden, 10009 Kunstkammer, Sammlungen und Galerien, Nr. 7 (als Leihgabe in der Direktion des Grünen Gewölbes, Staatliche Kunstsammlungen Dresden) Vgl. Die kurfürstlich-sächsische Kunstkammer in Dresden, vol. 3: Das Inventar von 1619, ed. Dirk Syndram and Martina Minning (Dresden: Staatliche Kunstsammlungen Dresden, 2010). My thanks to Martina Minning for sharing proofs of the modern edition of this inventory with me prior to its publication.

46. Inventarium uber die churfürstliche sächβ: kunst cammern, fol. 321r, transcribed in Syndram and Minning, *Kunstkammerinventar* 1619. This is probably the same instrument as the one Hainhofer describes as "Ain schön eingelegts selbs schlagendes instrument, so auf allerleÿ schöne muteten zu richten" (A beautiful inlaid self-playing keyboard instrument, which plays several beautiful motets); see Doering, *Des Augsburger Patriciers*, 171.

47. "In einer wolbestelten KunstCammer sollen fürnemlich dreierlei sachen zubefinden sein. Erstlich runde Bilder. Zum andern Gemele, und zum dritten wunderbarliche In und auslendische Gewechse. von Metallen, Stein, Holcz, Kreutern so uff der Erden, in der Erden, in Wassern und Meer, gefunden wirdt, Item was durch Natur und Kunst von solchen Gewechsen zu trink und andern Geschirrn formirt und gemacht. Item Geweihe, Gehörne, / Klawen. Federn und anders von frembden selczamen Thieren. Vögeln. und Fischen, darunder / auch die Schelleton der Anatomia mit einge- / bracht warden sollen." Quoted and translated in Barbara Gutfleisch and Joachim Menzhausen, "How a Kunstkammer Should Be Formed': Gabriel Kaltemarckt's Advice to Christian I of Saxony on the Formation of an Art Collection, 1587," *Journal of the History of Collections* 1, no. 1 (1989): 11.

48. On the tension between the different approaches to collecting embodied within the Dresden *Kunstkammer*, see Joachim Menzhausen, "Elector Augustus's *Kunstkammer*: An Analysis of the Inventory of 1587," in *The Origins of Museums: The Cabinet of Curiosities in Sixteenth- and Seventeenth-Century Europe*, ed. Oliver Impey and Arthur MacGregor (Oxford: Clarendon Press, 1985), 69–75. In fact, Italian collections, too, were filled with curiosities as well as art; see especially Findlen, *Possessing Nature*, passim.

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49. "Wo und wie solche zuerlangen, achte ich diß orths onnötig zuschreiben. Sintemal derer ding hin und wider in Teutschland und Italia vil zubekommen. Derhalben Ich die beruhen lassen, und die andern zwei theil der KunstCammer für mich nemen will." See Gutfleisch and Menzhausen, "How a Kunstkammer Should Be Formed," 11.

50. Bredekamp, The Lure of Antiquity, 19-27.

51. On the significance of mining and alchemy for the court culture of Dresden, including the documentation of alchemical collections and activities there, see Watanabe-O'Kelly, *Court Culture in Dresden*, 100–120.

52. On natural magic in the late Renaissance and early modern eras, see, for example, Penelope Gouk, Music, Science, and Natural Magic in Seventeenth-Century England (New Haven: Yale University Press, 1999), especially 66–111; and Gary Tomlinson, Music in Renaissance Magic: Toward a Historiography of Others (Chicago: University of Chicago Press, 1993).

53. See, for example, the emerald cluster in Syndram and Scherner, eds., *Princely Splendor*, 302.

54. Derek J. De Solla Price, "Automata and the Origins of Mechanism and Mechanistic Philosophy," *Technology and Culture* 5, no. 1 (Winter 1964): 9–23; Julian Jaynes, "The Problem of Animate Motion in the Seventeenth Century," *Journal of the History of Ideas* 31, no. 2 (April–June 1970): 219–34. Athanasius Kircher's treatises and collections assembled later in the seventeenth century manifest mechanistic philosophy on numerous levels; on this topic, see especially Michael John Gorman, "Between the Demonic and the Miraculous: Athanasius Kircher and the Baroque Culture of Machines," in *The Great Art of Knowing: The Baroque Encyclopedia of Athanasius Kircher*, ed. Daniel Stolzenberg (Stanford: Stanford University Press, 2001), 59–70. See also Eric Bianchi, "Prodigious Sounds: Music and Learning in the World of Athanasius Kircher" (PhD diss., Yale University, 2011).

55. Bredekamp, The Lure of Antiquity, 46-51.

56. Bredekamp, The Lure of Antiquity, 46.

57. Hainhofer's account of his visit to the Anatomiekammer can be found in Hainhofers Reise-Tagebuch, 140–41.

58. On the significance of the rhinoceros as a commercialized symbol of the exotic, see Pamela H. Smith and Paula Findlen's introduction to *Merchants and Marvels*, 1–28.

59. Hainhofer's description of the Lewenhaus is found in Hainhofers Reise-Tagebuch, 137–38.

60. 8 Stück wachßene thierlein, welche der junge Nicol Schwabe gemacht und ubergeben worden den 2. Augusti anno 90, alß 1. Einhorn, 1 Löwe und löwin, 1 Pantherthier, 1 Wildtschwein sambt einem leidthunde, 1 Bock sambt einem ledigen wasserhunde, 1 Wieder mit einem Satyro bildtnüß, so ihn darnieder dringet oder schlegt, 1 Strauß sambt einem kranich, 1 Adeler." *Inventarium uber die churfürstliche sächβische kunst cammern*, fol. 444v, transcribed in Syndram and Minning, *Kunstkammerinventar* 1619.

61. Doering, *Des Augsburger Patriciers*, 159. "Camaleon terrestris, so iedes Dings farb an sich nimmet, warauf man es setzet."

62. Hainhofer's description of the contents of the *Kunstkammer* in 1629 is transcribed in Doering, *Des Augsburger Patriciers*, 156–79.

63. See Syndram and Scherner, eds., Princely Splendor, 232.

64. Doering, *Des Augsburger Patriciers*, 167. "Ain frey stehender hirsch, in welchem allerleÿ arzneÿ auf etlich 40 stuck von des edlen hirschen glidern auf chÿmische art praepariert, vnd von hiesingen geschickten HofApotecker, Johann Wechingern z wegen gebracht worden, laut hiernach gesetzter beschreibung." Doering unfortunately does not reproduce this song.

65. See De Solla Price, "Automata and the Origins of Mechanism and Mechanistic Philosophy."

66. Doering, *Des Augsburger Patriciers*, 168. "Zweÿ schöne hündlein, darinn uhrwerck mit bewegung ihrer augen zu befinden"; "Ain uehrlein mit dem pelican und seinen iungen, wann es schlegt, so bewegen sie sich"; and "Ain beer wann es schlegt, so bewegt er die augen, die tazen, rüssel, und baucket, darbeÿ ain waÿdmann das horn ansetz, als ob er blies."

67. On the grotesque within the Dresden collections, see Wolfram Koeppe, "Exotica and the *Kunstkammer*: 'Snake Stones, Iridescent Sea Snails, and the Eggs of the Giant Iron-Devouring Bird," in *Princely Splendor*, 80–89; esp. 81.

68. On imitations of birdsong in vocal music, see Elizabeth Eva Leach, Sung Birds: Music, Nature, and Poetry in the Later Middle Ages (Ithaca: Cornell University Press, 2007).

69. Doering, *Des Augsburger Patriciers*, 167. "Ain perpetuum mobile, welches in ainem gläserinen ring ascendiert und descendiert."

70. Doering, *Des Augsburger Patriciers*, 167. "Etliche magnet, deren der größte 5 lott schwer, und zeucht 66 loth eisen an sich, so er tag und nacht, iahr und tag haltet."

71. See J. H. Leopold, "Collecting Instruments in Protestant Europe Before 1800," *Journal of the History of Collections* 7, no. 2 (1995): 151–57; and Sven Dupré and Michael Korey, "Inside the *Kunstkammer*: The Circulation of Optical Knowledge and Instruments at the Dresden Court," *Studies in History and Philosohy of Science* 40, no. 4 (2009): 405–20.

72. See J. Schardin, "History of the Horological Collections in Dresden," Antiquarian Horology 19, no. 5 (Autumn 1991): 493–510; Leopold, "Collecting Instruments."

73. Doering, *Des Augsburger Patriciers*, 172. "Allerleÿ auf etliche taflen, becher, geschirr, schalen, gieskandten, leffel und messer, alles von marmor, alabaster, serpentin, und andern stainen, so im Churfürstenthum Sachsen gebrochen werden, gar schön poliert."

74. See Menzhausen, "Elector Augustus's Kunstkammer," 72.

75. See especially Doering, Des Augsburger Patriciers, 165–67.

76. See, for example, Doering, Des Augsburger Patriciers, 167.

77. On the motivations behind the production of machine books, see Marcus Popplow, "Why Draw Pictures of Machines? The Social Contexts of Early Modern Machine Drawings," in *Picturing Machines*, 1400–1700, ed. Wolfgang Lefèvre (Cambridge: Massachusetts Institute of Technology Press, 2004), 17–48.

78. Jacques Besson, *Theatrum instrumentorum et machinorum* (Lyon: B. Vincentium, 1578). On the 1571 manuscript of Besson's work, see Alexander Keller, "A Manuscript Version of Jacques Besson's Book of Machines, With His Unpublished Principles of Mechanics," in On Pre-Modern Technology and Science, ed. Bert S. Hall and Delno C. West (Malibu: Undena Publications, 1976), 75–103.

79. Jacques Besson, Theatrum oder Schawbuch allerley Werckzeug und Rüstungen des hochverstendigen sinnreichen Mathematici, Iacobi Bessoni, auss dem Delphinat (Mümbelgart, Getruckt durch J. Foillet, 1595). Volume available as part of the online digital library of the Herzog August Bibliothek at the persistent URL http://diglib.hab.de/drucke/od-2f-3/start.htm.

80. Besson, *Theatrum oder Schawbuch*, plate 29. "Des Authoris Proposition zu der Neun und Zwentzigsten Figur. Ein newe form eines Musicalisches Instruments / dessen Metallische Saiten / mit den Fingern und Fidelbogen berühzet / geben einen gemengten / gleichmessig Temperirten / und lieblichen Concent / der sich mit einer Leyren und Posaunen schall zum theil vergleichet."

81. See Luigi Francesco Valdrighi, Nomocheliurgografia antica e moderna: Ossia Elenco di fabbricatori di strumenti armonici con note esplicative e documenti estratti dall'Archivio di Stato in Modena (1884; repr., Bologna: Forni, 1967). My thanks to Renato Meucci and the many others who participated in a lively discussion about this instrument on the e-mail list of the Society for Seventeenth-Century Music.

82. Popplow notes that many machine books included such unrealistic or unrealized designs and offers suggestions for understanding the motivation behind such illustrations. See "Why Draw Pictures of Machines?" 23–24.

83. See Conny Restle, "Organology: The Study of Musical Instruments in the 17th Century," trans. Daniel Hendrickson, in *Instruments in Art and Science: On the Architectonics of Cultural Boundaries in the 17th Century*, ed. Helmar Schramm, Ludger Schwarte, and Jan Lazardzig (Berlin: Walter de Gruyter, 2008), 257–68.

84. On the importance of machinery for late-Renaissance culture throughout Europe, see Jonathan Sawday, *Engines of the Imagination: Renaissance Culture and the Rise of the Machine* (New York: Routledge, 2007).

85. "Philosophis Philologis und Historicis sehr lustig und anmütig zu lesen." Although Praetorius himself does not comment on the relationship between his instruments and the nature–artifice divide, Marin Mersenne, writing in 1636, did so. Instruments, according to Mersenne, may have been intended originally to imitate the only natural instrument—the human voice—but they developed independently of nature, in effect superseding it. Mersenne thus states explicitly what is implied by the musical instruments of the Dresden *Kunstkammer*: that musical instruments could aid in man's project of mastering nature. Although instrumental music starts with the reference point of natural music, its artifice soon goes beyond what nature can accomplish alone. See Restle, "Organology," 263.

86. On the early history of the violin, see especially the first chapter of Peter Holman, *Four and Twenty Fiddlers: The Violin at the English Court, 1540–1690* (Oxford: Clarendon Press, 1995).

87. See Bianco, Nach englischer und frantzösischer Art, 118–23.

88. The *col legno* section of the cantus partbook contains notes that are obviously mistaken. In the original print, the bottom note of the triple-stop oscillates between Gsharp and G-natural; in combination with the other parts this reading is harmonically untenable. I have followed Bianco's suggestion of changing each notated G-natural to an A.

89. The significance of the col legno technique described here is amplified by a description of one musical instrument found in Hainhofer's inventory of the Pfeiffenkammer: a "Neue invention mit stecken, an welche man oben aine aufgeblasene schweinblasen bindet, und an die stäb (so wie die handbögen sein) 3 saiten anmachet, ueber die blater oben spannet, mit ainem fidel darauf geiget, oder schlegt, und ainen wunderbahren sonum oder tonum aus den blatern und auf den saiten geben sollen." (New invention with pegs, at the top of which one ties an inflated pig's bladder, and on the sticks (like an archer's hand-bow) attaches three strings, stretches them over the bladder on the top, plays on them the strings in the manner of a violin [darauf geiget] with a bow [fidel], or hits, and a wonderful sound or tone is produced by the bladder and on the strings. [emphasis added]). Although the syntax of this entry is awkward, it seems possible that Hainhofer is here describing an instrument that may be played like a violin (that is, bowed in the normal way) or hit using Farina's col legno technique. Whether or not Farina's Capriccio introduced the performance practice of col legno to Dresden, it appears from Hainhofer's account that the technique interested musicians within the Electoral court shortly after Farina's stay there-enough that someone thought to produce a "new invention" that incorporated it. See Doering, Des Augsburger Patriciers, 232.

90. Dirk Syndram, *Renaissance and Baroque Treasury Art: The Green Vault in Dresden* (Berlin: Deutscher Kunstverlag, 2004), 41–42. This piece is described in the 1619 inventory (fol. 139r–141r) as follows: "Ablenglichter geschraubter Pyramides von Helffenbein mitt seinem Postament . . . unnd Ceptel gesimbs auff einen schwarz Eübenen geheüse stehende, mit 7. mössenen vergüldten Soldaten, unnd 8. [7] mössenen vergüldten Spizenn gezierett, darauff sechs Trommeter unnd ein Heer Peucker Welche wann das Werck in schwarzen geheüse auffgezogenn, zu Tische blasenn, unnd der Marschalch mitt den zugeordentenn Truxsassenn die essen vortragenn, Oben in den knopff auff der Seülen ist eine fürstliche Taffell, daran 5. Personen sindt, welche beweglich, auch im gehenden Werck sich die Truchseß mitt dem essen sehen lassenn, mit einer runden Kugell, darinnen ein dreÿeckigt Corpus mit 4. geschraubten Spizender ander mitt einem dreieckigtenn Corpus mit dreÿ geschraubtenn Spizenn."

91. On optical instruments in the *Kunstkammer*, see Dupré and Korey, "Inside the *Kunstkammer*." A classic late-Renaissance text on the amateur practice of optics and natural magic is book 17 of the expanded edition of Giovanni Battista della Porta, *Magiae naturalis libri* XX (Naples: Apud Horatium Salvianum, 1589); della Porta's treatise circulated widely in its original Latin and in translation. On a competing view with roots in optical experimentation in the Dresden Kunstkammer, see Sven Dupré, "Inside the Camera Obscura: Kepler's Experiment and Theory of Optical Imagery," *Early Science and Medicine* 13, no. 3 (2008): 219–44.

92. Biagio Marini, Sonate Symphonie Canzoni, Pass'emezzi, Baletti, Corenti, Gagliarde, & Retornelli, A 1. 2. 3. 4. 5. & 6. Voci, Per ogni sorte d'Instrumenti. Un Capriccio per Sonar due Violini Quatro parti. Un Ecco per tre Violini, & alcune Sonate Capricciose per Sonar due è tre parti con il Violino Solo, con altre curiose & moderne inventioni. Opera *Ottava* (Venice: Bartolomeo Magni [1626]). On violin virtuosity in Italian and German musical centers, see Peter Allsop, "Violinistic Virtuosity in the Seventeenth Century: Italian Supremacy or Austro-German Hegemony?" *Il saggiatore musicale* 3, no. 2 (1996): 233–58. On the dating of Marini's *Sonate*, see Cypess, "*Esprimere la voce humana*," 209n41.

93. Heinrich Zeising, Theatri machinarum erster Theill, in welchem vilerley künstliche Machinæ in unterschidlichen Kupfferstücken zu sehen sindt (Leipzig: Henning Gross the Younger, 1607), I, [ix-x].

- 94. Quoted in Bredekamp, The Lure of Antiquity, 72.
- 95. Bredekamp, The Lure of Antiquity, 69-80.
- 96. Hainhofers Reise-Tagebuch, 136.

97. Invention is used as a synonym for Aufzug in, for example, the catalog of the Electoral library assembled in 1612, in a section presumably referring to a collection of festival books. See the manuscript catalog, Inventarium über die Bücher, welche der Dürchlauchtigste Hochgeborne Fürst und Herr, Herr Johans George, Hertzog zu Sachsen ... Anno 1612 in der Churf. Bibliothec alhie zu Dreszden einnantworten und beysetzenn lassen, 1612, Sächsische Landesbibliothek, Staats- und Universitätsbibliothek, Dresden (shelf mark Bibl.Arch.I.Ba,Vol.30.b); available on-line at the persistent URL http://digital.slub-dresden.de/id287023524; the section titled "Inventiones und Auffzuge" starts on 109. Use of Invention to describe the themes of the processions or the contents of the sleighs may be found in Hainhofer's diary of 1617: "darzwischen 35ley Schlitten von mancherley inventionen" (between those stand 35 sleighs filled with various inventions). See Hainhofers Reise-Tagebuch, 130.

98. Evidence concerning these processions survives in the form of paintings, festival books, and pamphlets of commissioned poetry. Samples of these documents are presented and elucidated in, for example, Edmund Bowles, *Musical Ensembles in Festival Books*, *1500–1800: An Iconographical and Documentary Study* (Ann Arbor: UMI Research Press, 1989); Mara R. Wade, "Politics and Performance: Saxon-Danish Court Festivals 1548–1709," in *Aurifex 1* (2003); and Wade, *Triumphus Nuptialis Danicus: German Court Culture and Denmark: The "Great Wedding" of 1634*, Wolfenbütteler Arbeiten zur Barockforschung 27 (Wiesbaden: Harrassowitz, 1996).

99. Jutta Bäumel, "Festivities and Hunts at the Dresden Court," in Syndram and Scherner, ed., *Princely Splendor*, 51.

100. See Bäumel, "Festivities and Hunts," 53.

101. Some pictures that include peasant instruments are reproduced in Friedrich Sieber, *Volk und volkstümliche Motivik im Festwerk des Barocks* (Berlin: Akademie-Verlag, 1960), appendices 8 and 9.

102. Intrada der Trommeter / welche nach jüngstgehaltenen wolvollbrachten fürstlichen Beylager / des durchlauchtigen / hochgebornen Fürsten und Herrn / Herrn Georgen / Landgraffen zu Hessen / Grafen zu Catzenelnbogen / Dies / Ziegenhain und Nidda. Und der durchlauchtigen / hochgebornen Churf. & Princessin / Fräwlein Sophien Eleonoren / Hertzogin zu Sachsen / Gülich, Cleve und Bergen / Landgräffin in Türingen / Marggräffin zu Meissen / und Burggräffin zu Magdeburg / Gräffin zu der Marck und Ravenspurg / Fräwlein zu Ravenstein. Bey der fürstlichen Heimführung von Torgaw / abgeblasen worden (Leipzig: Gregorio Rißsch, 1627). For a fuller discussion of this work and other pieces composed for Sophia Eleonora, see Rebecca Cypess, "Music for a Saxon Princess," in Word, Image, and Song: Essays on Musical Voices, ed. Rebecca Cypess, Beth L. Glixon, and Nathan Link (Rochester: University of Rochester Press, forthcoming).

103. "Intrata (vulgò Intrada) vel Entrata, id est, ingressus vel aditus: ab intrando, vel introitu, welch man bey grosser Herren Einzug oder Auffzügen im Turnieren und sonsten zu gebrauchen pflegt." See Praetorius, *Syntagma musicum*, vol. 3, 24–25, trans. Kite-Powell, 40.

104. See note 24. Praetorius links dance music within the *Aufzüge* to the performance of *Inventionen*: "Ballet aber sein sonderliche Tänze zu Mummereyen und Uffzügen gemacht / welche zur Mascarada gespielet werden; Dieselbe werden uff ihre sonderliche Inventiones gerichtet" (Ballets are special dances for mummeries and *Aufzüge* that are played at mascarades. They are arranged according to their specific inventions). See Praetorius, Syntagma musicum, vol. 3, 19; translation adapted from Kite-Powell, 35.

105. The opening of the *Capriccio* is reproduced in Cypess, "*Esprimere la voce humana*," 212. Margarete Reimann's study of the intrada suggests that the genre may be divided into four types in all. See Reimann, "Materialen zu einer Definition der Intrada," *Die Musikforschung* 10 (1957): 337–64.

106. As noted in Cypess, "*Esprimere la voce humana*," 214–15, the harmonic language of the nonrepresentational sections varies in level of dissonance. This feature of the work may be interpreted as a humorous commentary on the distinction between nature and artifice, as the dissonant representations of nature bleed into the artificial music of the intradas.

107. The two families are known to have been exchanging gifts in preparation for the wedding as early as the previous year; one such gift is pictured in Syndram and Scherner, ed., Princely Splendor, 224. Elsewhere I suggest that there may have been a tradition in early modern Germany for composers to pen quodlibets in honor of the family of the bride or groom in the year of an important wedding; see Cypess, "Music for a Saxon Princess," forthcoming. Other examples of this phenomenon include Johann Möller's quodlibet of 1610, dedicated to his patron, Philipp III, the only Landgrave of the short-lived realm of Hesse-Butzbach. It was in July of that year that Philipp married Anna Marghareta of Diepholz. Johann Christenius published his quodlibet in 1619 as part of his Gülden Venus Pfeil; his patron, Johann Philipp of Sachsen-Altenburg had been married in 1618 to Elisabeth, daughter of the Duke of Braunschweig-Wolffenbüttel. Groh's "Bettlermantel," discussed above, was first published in 1606, the year in which a member of the family who had previously employed the composer—none other than Johann Georg, who had not yet ascended to the throne of Saxony—lost his first wife in childbirth and shortly thereafter married Magdalena Sibylla. See Johann Möller, Ein new Quodlibet zu unterthänigen Ehren und gefallen dem durchleuchtigen hochgebornen Fürsten und Herrn / Herrn Philipsen / Landgraffen zu Hessen...Componiret mit vier Stimmen (Frankfurt: Wolfgang Richtern, 1610); Johann Christenius, Gülden Venus Pfeil: In welchem zu befinden / newe weltliche Lieder/ teutsche vnd polnische Täntze / mit Texten vnd ohne Texte / auch ein kurtzweilig Quotlibet / und zu Ende angehengter Dialogus, darinnen die Stimmen propter meliorem partem Mundi, mit einander discurriren; mit Vier Stimmen aus sonderlicher favorisation Componiret und ans Tageliecht gegeben (Leipzig: Lanckisch, 1619); and Groh, Gülden Venus Pfeil. Although the notion that humorous works like the Capriccio stravagante and these vocal quodlibets may be connected to occasions like a wedding may seem far-fetched, it should be

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remembered that the Bach family a century later evidently also used quodlibets to mark weddings; the most obvious surviving example is J. S. Bach's "Wedding quodlibet," BWV 524. Despite the social distinction between the Bach family and the Electoral family of Dresden, the dedication of quodlibets to members of the uppermost ranks of German society is itself evidence that they incorporated humorous music of this sort into their social practices in some way.

- 108. Doering, Des Augsburger Patriciers, 225.
- 109. Doering, Des Augsburger Patriciers, 220.
- 110. Doering, Des Augsburger Patriciers, 225.

111. The Arbeittisch of Magdalena Sibylla is preserved in the Staatliche Kunstsammlungen Dresden, catalog number KGM 47714.