

**PLAYING FROM OPEN SCORE No. 2:  
KERLL'S RICERCATA FOR A BARREL ORGAN**

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Kerll's Ricercata is offered here in open score as a companion piece to Froberger's Fantasia FbWV 206 given in Part 1 of this mini-series (*British Clavichord Society Newsletter* 66, October 2016, pp. 3–9 and insert). The 'Ricercata in Cylindrum phonotacticum transferenda ... à Gasparo Kerl' was published in open score in Athanasius Kircher's *Musurgia universalis* (1650) in the fifth part of Book 9 entitled 'Automatic musical instruments; how to power and play organs automatically' (Crane, p. xxxiii). It appears alongside several smaller pieces presented both in open score and as a graphic representation showing how to set the pins of the rotating drum of a barrel organ. (The original can be consulted online via the IMSLP website, [www.imslp.org](http://www.imslp.org).) Kircher develops his theme of musical automata at length and includes technical descriptions of famous water organs of his day. We will concern ourselves here with the substance of Kerll's composition.

Kircher presumably chose Kerll's ricercata with the limitations of an automatic playing mechanism in mind: indeed, he may have commissioned it from Kerll for this specific purpose. It is certainly a short seventeenth-century fugue but within its modest structure (just over 50 bars) Kerll succinctly demonstrates (one might say, understates) the potential of a typical fugue based on three subjects. The ricercata illustrates a range of motivic and contrapuntal devices using material derived exclusively from its three subjects. Unlike the lengthy, multi-sectional variation fantasia by Froberger (FbWV 201) chosen by Kircher as 'A Composition Suitable for the Harpsichord' in the earlier section of his book on instruments, the ricercata follows a quite different practice, that of 'triple' fugue: in this case, with three subjects exposed and combined in three short sections. Such triple fugues are not uncommon in the seventeenth century and were popular with theorists as didactic exemplars. A few years earlier, the French theorist Marin Mersenne had commissioned a magisterial triple fugue in three sections from 'one of the best contrapuntists of this age', Charles Racquet, organist of Notre Dame Cathedral in Paris, to show 'what can be done on the organ'. Kerll's ricercata wears its *multum in parvo* technique on a more modest canvas and its 'secrets of the guild' are discreetly concealed amidst the fast-moving and seamless development of ideas, the continuous overlapping of melodies and the polished perfection of each individual voice.

Born in 1627, Johann Caspar Kerll was taught initially by his father in his native Saxony and then by the celebrated vocal composer and imperial Kapellmeister, Giovanni Valentini, in Vienna in the 1640s. He was in Brussels from 1647 with the Viennese archducal court and then in Rome, where he studied with Carissimi. From Rome Kerll moved to Munich and quickly rose within the ranks of electoral court musicians to become Kapellmeister to Ferdinand Maria in 1656. He left Munich in 1673 following a row with the Italian opera singers there and was appointed court organist to Leopold I in 1677. He taught the opera composer Agostino Steffani in Munich, and his last pupil was the German organist, composer and theorist Franz Xaver Murschhauser. Kerll returned to Munich where he died in 1693. His music was well known, much copied and 'borrowed' by others. Perhaps the most famous borrower was Handel (the entire chorus

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'Egypt was Glad' from *Israel in Egypt*, the theme of 'Let all the Angels of God' from *Messiah*, and a solo passage in the *Cuckoo and the Nightingale* organ concerto, HWV 295), but networks of similarity and parody can be found in keyboard works by J. S. Bach, P. Heidorn, Murschhauser, B. Pasquini, Poglietti and Speth.

Kerll was clearly a remarkable composer and virtuosic player. The Roman keyboard virtuoso Bernardo Pasquini wrote:

This celebrated virtuoso deserves universal praise as a man excellent at the keyboard, as well as a great composer of vocal music, as his learned, polished and beautiful compositions attest ... (Giebler, p. viii and xiii, f.n. 21)

David Fuller makes the interesting point that 'compared to Frescobaldi and Froberger, Kerll is less profound, less intensely expressive, but not less skilled, and a lot more immediately attractive' (Fuller, 7.1). While Kerll's toccatas betray the strong influence of Frescobaldi, he could not have studied with him in Rome, and, paradoxically, while Kerll and Froberger very probably met, their keyboard music is temperamentally very different. The parallels with Froberger are conspicuous. Both were born into German protestant families, converted to Roman Catholicism, studied in Rome and worked in Brussels, where they may have met, and both had a piece published in Kircher's *Musurgia universalis* (Fuller, 3.2). In the modern literature, Willi Apel's account from 1966 remains the fullest discussion of the music, and its wider context is considered by John Butt (Apel, 561–6; Butt, 201–2).

Kerll's keyboard music is central to his surviving compositional output but his career, unlike Froberger's, responded to additional stimuli which resulted in a prolific output of church and theatre music. In addition to the *ricercata*, Kerll's keyboard works comprise eight toccatas, six canzonas, four suites, a cuckoo capriccio, a battle piece, ciaccona, passacaglia, and a set of 56 Magnificat versets for the eight tones published in 1686 under the title *Modulatio organica*. He also wrote a brief treatise on modes and counterpoint (Fuller, 3.1), instrumental chamber music, and provided reams of vocal music as Munich Kapellmeister and Viennese court organist. His 11 operas written for the Munich Hofoper are all lost, though his music for a Viennese Jesuit school play in 1677 survives. The sacred music fared better and the 18 surviving masses and mass movements reveal a range of styles from the *prima pratica* polyphony of the Palestrina school to the most modern *concertante* vocal and instrumental writing of the late seventeenth century. The adventurously chromatic and dissonant *Missa in fletu solatium* was written to commemorate the siege of Vienna in 1683 and published in the *Missae sex* (Munich, 1689). In the same collection the mass *Superba, Non sine quare* parodies one of the organ versets in the *Modulatio organica* written while the plague ravaged Vienna between 1679 and 1682, and the *Renovationis* mass demonstrates extreme economy of means by recycling its initial subject matter throughout. Many of these masses and a selection of the 26 Latin motets for two to five voices published as *Delectus sacrarum cantionum* (Munich, 1669) can be heard on commercial recordings.

The *ricercata* is a model of *antico* fugue construction in the fantasia and *ricercar* style deploying similar principles of motivic construction to those used by his contemporary, Froberger. Drawing on the terminology of rhetoric one might consider this type of fugue analogous to a verbal discourse or written essay. The three subjects form the principal elements of the thesis to be discussed and argued, and each is proposed, dissected, developed, refuted and reaffirmed as one section evolves into the next. The opening



section (bars 1–23) is divided into three sub-sections: the first, a longer initial exposition of the first subject, is followed by two shorter passages, both strettii ('conversation') with appearances of the first subject separated by a distance of one bar (bars 13–16) and half a bar (bars 16–23). The second main section (bars 23–37) considers the second subject, often in combination with the first, and the final section (bars 37–53) considers the third subject in the light of the second interspersed with four apostrophized statements of the first subject. The musical material is cunningly distributed within this framework to play with the variety and timing of events and to surprise the listener's expectation of forward momentum and retarding stasis.

Remarkably, every pattern of notes, even those masquerading as 'free' or non-thematic, can be derived from the three principal subjects or themes. All three subjects are first stated successively in the cantus part (bars 1–7) in a continuous and seamless melody (the 'thesis') which avoids rests to articulate the beginning and end of each idea (see Example 1). Each subject is subsequently developed separately and in combination ('discussion') as the fugue proceeds until all three are combined simultaneously in the final few bars ('conclusion'). The principle of exposing all ideas (or at least the 'germs' of those ideas) in their purest and least developed form at the outset of a multi-themed fugue must have been instinctive to the best seventeenth-century keyboard contrapuntists, and can be found, for example, in Froberger's fantasias and ricercars (see Part 1 of this series).

Example 1: The three subjects of the Kerll Ricercata

The musical score for Example 1 consists of three staves: Cantus (top), Tenor (middle), and Bass (bottom). The Cantus staff shows three subjects: Subject 1 (bars 1-4), Subject 2 (bars 5-7), and Subject 3 (bars 6-7). The Tenor staff shows Subject 2 (bars 24-25) and Subject 3 (bars 37-38). The Bass staff shows Subject 2 (bars 24-25) and Subject 3 (bars 37-38). Brackets and labels A, B, and C indicate specific sections of the music.

The building blocks might be described as follows (Example 1):

Subject 1: an upward leap of a perfect fourth, followed by a stepwise descent over the same interval of a fourth (a downward tetrachord), with the introduction of an additional downward minor third, to produce a *cambiata* profile. Compare Froberger's ricercars, FbWV 405, 410 and 411. The Hamburg organist Martin Radek (or Radex) happened on the same theme as subject 1, transposed down a tone, in his *Praeambulum noni toni* (Apel, p. 609).



Subject 2: a descending tetrachord, as in subject 1, with the notes delayed onto weak beats by syncopation and suspension (4th species Fuxian counterpoint or *per arsin et thesin* as defined by Marpurg in 1753) and ‘enlivened’ (Fux) with crotchet interruptions of the ligatures (notes of anticipation). This enlivening of rhythm, however, also brings with it pathos as each downward step is emphasized. Compare, for example, the ‘dona nobis pacem’ of the ‘Agnus Dei’ from Byrd’s Mass for Four Voices. The conspicuous absence of any quaver ornamentation of the suspension figures after bar 11 must reflect a conscious decision to keep this aspect of the subject highlighted.

Subject 3: a short melodic fragment to complement subject 1 and consisting of three, upward, conjunct steps and a fall of a third back to the starting note. Similar to a plainsong reciting tone and producing the effect of a *cantus firmus*.

Motives ‘A’ and ‘B’: these are derived from, and thus related to, the same melodic pool as subjects 1, 2 and 3 through inversion or retrograde motion (*al rovescio*). They are used to generate shorter note values and to provide ‘free’ material (e.g. Bass, bar 15, and its inversion bar 16; Alto, bars 21, and 24–25). They also enhance and contrast the melodic profiles and rhythmic identities of the three main subjects, from which they derive.

As an elementary exercise in score reading Kerll’s *ricercata* is not too difficult to read, rewarding to play and fascinating to study, and motivically varied enough to challenge skills of interpretation and technique.

From the images of pinned cylinders in *Musurgia universalis*, the surfaces of which are drawn as if laid out flat, it is possible to adduce automated performance practice: namely, that notes written with the duration of a crotchet or longer would sound slightly shortened (detached) while those written as quavers or shorter, especially when moving in conjunct motion, would sound joined (*legato*) (Fuller, 5.2).

In addition to the version in *Musurgia universalis*, the *ricercata* is elsewhere ascribed to Poglietti and Frescobaldi, and thus its authorship might be called into question. In 1686 Kerll defended himself against plagiarism with a published catalogue of his keyboard music, the *Subnecto*, which he placed at the end of the *Modulatio organica*, but he omitted the *ricercata* in that list. Since the *Musurgia universalis* is the oldest source of the *ricercata*, it is reasonable to accept Kircher’s attribution to Kerll as correct. Kerll adapted the *ricercata* for chamber ensemble performance as the ‘fuga’ which concludes his *Sonata modi dorrii* for 2 violins, bass viol and continuo.

Kerll’s chamber music transcription of the *ricercata* opens the possibility for the performance of open-score fugues by more than one instrument or voice. In the preface to his *Modulatio organica*, a carefully crafted and much revised collection, Kerll warns the performer against further embellishing or adapting his pieces. This signals a new trend amongst later seventeenth-century keyboard publications — compare, for example, Georg Muffat’s *Apparatus musico-organisticus* (Salzburg, 1690) — to present compositions as perfected and carefully finished objects, solidified in the act of printing, and demanding deferential and respectful performance. This startlingly modern attitude, similarly expressed, for example, by François Couperin in the next century, is a long way removed from Frescobaldi’s printed expectation of stylish interpretation through performance freedom or Froberger’s vague ‘*joïe à la discretion*’ and the free adaptations of his fugal music by d’Anglebert, Blow and Roberday. Did the younger Kerll of the 1650s (when the *ricercata* must have been written) expect or license the performer to embellish and adapt more generally? (Charlston, p. 15).



The transcription uses accidentals according to seventeenth-century practice: each accidental applies for one note only, not the remainder of the bar. Cautionary accidentals are shown within round brackets. As a general rule of thumb regarding the distribution of inner voices between the hands, it is assumed that the right hand will take the alto voice and the left hand the tenor. Where this is difficult, some solutions have been indicated with brackets. In bars 15–16 the LH must take three voices, and in bars 21–22 the inner voices must swap hands. Fingering has also been added to try and clarify these moments, and also in bar 38 for technical and phrasing reasons. Players who are without a short-octave keyboard and find the stretch of a tenth in the LH at bar 43 a little awkward will need to spread and/or lose a note: the counterpoint cannot be satisfactorily rewritten. Each subject should be somewhat differentiated by phrasing, articulation and character but without loss of unity within the overall structure or misleading caricature. The subtle note repetitions of subject 2 require a practised hand to maintain tone and musical shape on a good clavichord, and where notes are repeated, the first should be articulated but not be too short. Four-hands duet on a single keyboard or with two keyboards is also possible. A steady tempo of minim equals approximately 60 beats per minute should result in a convincing discourse.

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# Ricercata

Transcription in open score with modern clefs

Source: Athanasius Kircher, *Musurgia universalis, sive Ars magna consoni et dissoni* (Rome, 1650), Volume II (Book 9), pp. 316–319.

Johann Caspar Kerll (1627–1693)

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