Bach's Unaccompanied String Music: A New (Historical) Approach to Stylistic and Idiomatic Transcription for the Guitar
by Stanley Yates

Introduction

The history of J. S. Bach's unaccompanied string music is one of almost continuous transcription — a tradition initiated by the composer himself and taken up almost immediately by lutenists and keyboard players contemporary to him.[1] This process continued into the nineteenth century with further adaptions by such figures as Robert Schumann and Felix Mendelsohn, both of whom provided piano accompaniments to the violin works, and, later in the nineteenth century, we find Johannes Brahms' well-known version of the D-minor Violin Chaconne for piano left-hand alone, which was followed by an even better-known version by Ferruccio Busoni, who encased Bach's original within layers of virtuosic pianistic texture. Early in the present century Leopald Godowsky produced his keyboard edition of the Cello Suites, "very freely transcribed" and as the century progressed arrangements of this music have appeared for virtually every instrument, and even for full orchestra.

Beyond affirming the longevity of Bach's music, these transcriptions imply that a degree of alteration is necessary in order to fully realize this music on a harmonic instrument. Recent arrangements of this literature for the guitar, however — which may well be more numerous than those for any other instrument — have tended toward unaltered renditions, respectful of the note-content of Bach's originals. Undoubtedly, both approaches derive their inspiration from Bach himself — one in emulating the transcription process employed by the composer, the other in holding the original compositions sacrosanct. In arranging after Bach's models, we of course assume the model is an appropriate one; in making pristine editions, on the other hand, we suggest that in its original form the music is indelible. With this dichotomy in mind, in this article I would like to explore the arrangement process from the following perspectives: the musical structure and rhetorical nature of Bach's unaccompanied single-line textures; the arrangement process used by Bach himself and that used by his contemporaries; and the idiom of the modern guitar.

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[1] Of the six *Partiten* and *Sonaten* for unaccompanied violin (bwv 1001-6) and the six *Suitten* for unaccompanied cello (bwv 1007-12), Bach made alternate versions of the following: 1) the Suite for Cello in c- minor (bwv 1011) was set in g-minor for the lute (bwv 995); 2) the Partita for Violin in E-major (bwv 1006) was also set for lute (bwv 1006a); 3) the *Fuga* from the g-minor Violin Sonata (bwv 1001) exists in versions for lute (bwv 1000) and organ (bwv 539); 4) the a-minor Violin Sonata (bwv 1003) was arranged as the Clavier Sonata in d-minor (bwv 964); 5) the Adagio from the C-major Violin Sonata (bwv 1005) was given a clavier setting in G-major (bwv 1005); 6) the *Preludio* from the Violin Partita in E-major (bwv 1006) was used as an orchestral Sinfonia in two cantatas: *Wir danken dir, Gott, wir danken dir* (bwv 29) and *Herr Gott Beherrsher aller Dinge* (bwv 120a). Amongst Bach's contemporaries, the lutenist Johann Christian Weyrauch made a French lute intabulation of the g-minor Violin Fugue, and several anonymous intabulators produced lute versions of the c-minor Cello Suite and E-major Violin Partitia.

1. The Musical Structure of the Unaccompanied String Music

1.1 The Rhetorical Style. 1.2 Implied Polyphony. 1.3 Multi-Stopped Chords. 1.4 Polyphonic Integrity.

1.1 The Rhetorical Style

Modeled upon Greco-Roman principles of oratory and rhetoric, the Baroque compositional process consisted of the expressive elaboration of an underlying musical structure. Comprising the invention of an idea (the *inventio*), the realization of its basic form and contrapuntal framework (the *dispositio*), the elaboration of this contrapuntal skeleton with rhetorical figuration (the *decoratio*), and the final presentation of the completed composition in performance (the *pronunciato*), the rhetorical process lies at the heart of an understanding of the style.

The birth of the expressive rhetorical style, the *seconda prattica*, was rooted in Italian monody: an expressive solo voice, simply accompanied. Standing in stark contrast to the elaborate multi-voice polyphony of the Renaissance (the *prima prattica*), the goal of the monodists was to produce the most expressive musical rendition of a literary text as possible. Furthermore, this was felt to be attainable most effectively through the solo voice which, provided unobtrusive harmonic accompaniment, aimed to express the emotional content of every expressive word being sung.[2] Thus was born a vocabulary of improvised ornamentation and expressive rhetorical figuration which composers such as Bach would later notate in full.

The influence of the multi-voice polyphony of the Renaissance (the *prima prattica*) did persist however, and a confluence of the two practices led to a new style of vocal writing. It's essence lies in the dual function of the melodic leap, which acts not only as a expressive rhetorical gesture, but also allows a single voice part to be constructed in such a way that it gives the impression of the entrance of a "second" voice in dialog with the "first." Adopted by Italian string players, the style led eventually to an instrumental idiom — the *sonate a due* (the "solo sonata"); an expressive solo instrument, simply accompanied.[3] The idiom found its highest expression some eighty years later in the "unaccompanied" string music of J. S. Bach; the single line now implying not only the dialog texture of the Italian *sonate a due*, but the supporting continuo part *as well*.

1.2 Implied Polyphony

The appellation "unaccompanied," when applied to Bach's solo string music, therefore, is a misnomer. Rather, these works are *self-accompanied*, the accompaniment being embedded in a single "melodic" line along with the "solo" part proper. Bach implies this polyphonic texture in three ways: through arpeggiation, through melodic leaps, and through multi-stopped chords.

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[2] A detailed description of the style is found in the preface to Giulio Caccini's *Le nuove musiche* (c.1602).

[3] The technique is encountered in the early seventeenth-century vocal concerti and instrumental canzone of Ludovico Viadanna, where a pseudo-polyphony is projected by one or more self-imitating voice parts and, in a more developed form, in the later seventeenth-century Corelli-type *sonate a due*, in which the solo violin simulates the trio texture of the *sonate a tre* through the use of multi-stops, arpeggios and disjunct scale motion.

Often, and most obviously, the impression of a free-voiced polyphony is provided through the quasi *stile brisé* arpeggiation of the notated single line (figure 1).

Figure 1. Prelude, Cello Suite 1 (bwv 1007), mm. 37-9.

In most instances, however, the implied polyphony of Bach's single lines is much more subtle than the systematic arpeggiation shown in the example above. The "melodic" line in the following example outlines, in additon to the "continuo" pitch a, two (or more) levels of polyphony within the "solo" line (figure 2).

Figure 2. Prelude, Cello Suite 2 (bwv 1008), mm. 30-2.

It is the arranger's job to determine which leaps are rhetorical (that is, melodically expressive), which leaps *imply* polyphony (or dialog), and which leaps *literally represent* the lower voice or continuo part. In the example just provided, the second staff perhaps represents the best notational solution — the supporting lower part is independently marked, while the implied polyphony and rhetoric of the "solo" line is left to the interpretation of the performer (and to the fingering of the editor).

1.3 Multi-Stopped Chords

A multi-stopped chord is, of course, a literal polyphonic event rather than an implied one, and is treated as such by Bach in his unaccompanied string music. In the works for violin, prolonged passages of double, triple and even quadruple-stopped chords are not only common, but routinely accomodate entirely consistent voice-leading. The passage in figure 3, for example, reproduces a small portion of a prolonged and consistently well-voiced multi-stopped passage of some thirty-two measures duration.

Figure 3. Fuga, G-Minor Violin Sonata (bwv 1001), mm. 27-32.
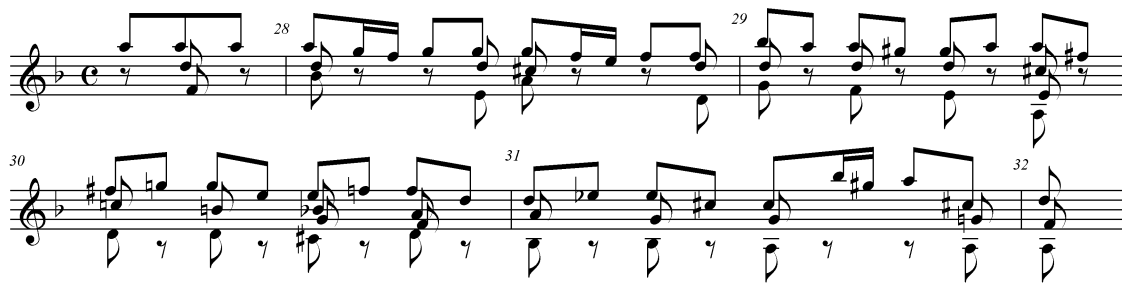
On the relatively few occasions that faulty voice-leading is encountered in the violin works, it usually results from a technical compromise in a passage of quadruple-stopped chords. In the passage in figure 4, for example, the inner voices are exchanged due to fingering limitations of the violin, resulting in a faulty resolution of the penultimate 4/3 harmony and a quite unusual voicing (figure 4).

Figure 4. Sarabande, B-Minor Violin Partita (bwv 1002), mm. 11-2.

The treatment of multi-stopped chords in the unaccompanied cello works, however, is considerably less consistent than those found in the violin works. Due to a less facile technical idiom, quadruple-stopped chords almost always result in faulty voice-leading. Triple-stops also often lack satisfactory resolutions, and even some double-stopped passages are problematic, as the following example demonstrates (figure 5).

Figure 5. Sarabande, Cello Suite 2 (bwv 1008), mm. 21-8.
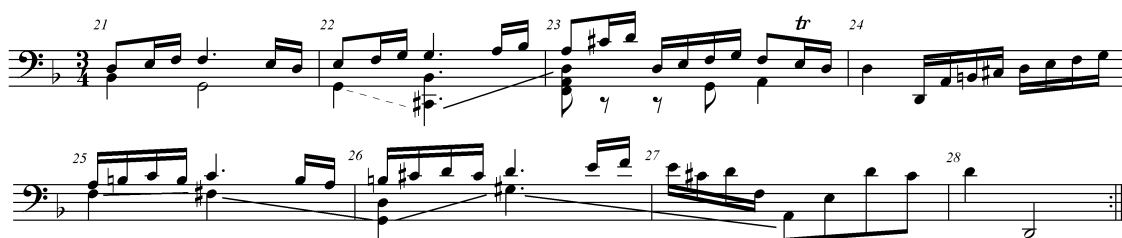
Such multi-stopped voicings, containing unresolved and even doubled tendency-tones, are found throughout the cello works. Representing a compromise between sonority on the one hand and an implied polyphony on the other, clearly these situations result from the technical idiosyncrasies of the cello. Indeed, in the following example the low C on the downbeat of measure 15 *cannot* be resolved downwards in register, since it is the lowest note possible on the instrument (figure 6).

Figure 6. Sarabande, Cello Suite 2 (bwv 1008), mm. 21-28

At times, Bach's desire for a rhetorically-expressive sonority overrides considerations of harmonic function. The ubiquitous cadential 4/2 harmony, for example, a dramatic structural marker found often in the preludes (where it is usually marked with a fermata): in the prelude to the G-major Cello Suite this dissonant harmony cannot be resolved in register because, again, the lowest note of the chord is the lowest note note possible on the cello. In this case, Bach simply proceeds as though the harmony hadn't even ocurred (figure 7).

Figure 7. Prelude, Cello Suite 1 (bwv 1007), mm. 19-24.

1.4 Polyphonic Integrity

Despite compromises of the type noted above, the multi-voice textures projected by Bach's unaccompanied cello lines are genuine contrapuntal structures that accomodate a high degree of polyphonic integrity. In figure 8, I have re-notated the opening measures of the Allemande from the C-minor Cello Suite (bwv 1011), according to the following scheme (Bach's solution, incidently, can be seen in Figure 10):

   a) note durations and stemming of the cello original[4]
   b) rhythmic reduction to the eighth-note level with ornamental and passing tones removed
   c) indication of harmonic structure and further clarification of voice-leading through verticalization
   d) indication of pitches essential to the harmonic and contrapuntal structure but not present in the original
   e) realization with reconstructed polyphony, assimilated into a "solo" line with continuo-style accompaniment

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[4] The autograph, by Anna Magdelena Bach, employs a *scordatura* notation in which the highest string of the cello is notated with respect to finger placement rather than to sounding pitch. To facilitate comparison with Bach's version for the lute, the version given here has been transposed to a-minor (the key most commonly used for performance of this work on the guitar) and adjusted to take account of the scordatura. A written a now equates to the lowest note possible on the cello.

Figure 8. Allemande, Cello Suite 5 (bwv 1011), mm. 1-5.

As can be seen, Bach's original line demonstrates a high degree of polyphonic integrity. It does not, however, present a high degree of textural integrity when transferred to an instrument capable of realizing, rather than implying, a consistent polyphonic structure. Transfering this passage to a harmonic instrument such as the guitar, then, is not simply a matter of re-stemming the original. Such a process addresses neither the inherent voice-leading inconsistencies of the original nor the idiomatic characteristics of the receiving instrument. Taken to a conclusion, such pitch-faithful arrangement succeeds only in superimposing the limitations or weaknesses of one instrument onto another, without substituting for the deficiency with expressive means idiomatic to the receiving instrument. The likely result is an arrangement expressively inferior to the original.

A more appropriate approach to arranging this music for an harmonic instrument such as the guitar, therefore, demands a presentation of the polyphony in a contrapuntally and harmonically-consistent form, the reconstruction of the texture of the solo sonata (an expressive solo line supported by a slower-moving, yet rhythmic, "continuo" line), and the realization of these goals in an expressive form idiomatic to the receiving instrument.

2. Historical Context of the Arranging Process

2.1 Bach's Lute and Keyboard Arrangements. 2.2 Other Period Arrangements

2.1 Bach's Lute and Keyboard Arrangements

Despite presenting considerable technical difficulty in their execution, Bach's lute arrangements of the unaccompanied string music are nevertheless generally well aligned with Baroque lute texture and playing technique: an ornate and fast-moving upper part executed with the fingers is supported by an articulate and slower-moving lower part executed with the thumb. Beyond addressing inconsistencies in voice-leading, Bach's arrangement process for the lute is one of textural clarification and enhancement of the lower voice. In his arrangement of the C-minor Cello Suite, for example, the opening of the Gigue is transformed in the lute version by a simple imitative treatment, while the second Gavotte is given a lower part which provides a richness of harmony barely hinted at in the original (figure 9).

Figure 9. G-Minor Lute Suite (bwv 995): a) Gigue, mm. 1-8; b) Gavotte II en Rondo, mm. 12-6.

However, there are also a number of places in this suite where the treatment does not seem entirely satisfactory, as can be seen by examining Figure 10.

Figure 10. Allemande, Cello Suite 5 (bwv 1011), mm. 1-18: a) cello original; b) lute version.

Although Bach has removed the doubled leading-tone in measure 8, and measures 11-13 and 15 now resolve in register, surprisingly he retains the original octave-displaced resolution in this measure that, even though somewhat disguised by the trill, does not produce a satisfactory effect. Elsewhere, the low e on the third beat of measure 4 would perhaps be improved by a g-sharp, the bass motions in measures 13-14 and 15-17 do not connect in register, and the unprepared bare 6/4 sonority at the end of measure 2 (created through *literal* imitation of the upper line) is weak (d would perhaps be better). The overall impression provided by the lute version is perhaps one of expediency, coupled with a desire not to overburden the textural capabilites of the instrument.

In his arrangement of the A-minor Violin Sonata (bwv 1003) for clavier (bwv 964), however, Bach goes considerably further in providing an idiomatically appropriate arrangement. In addition to providing melodic, harmonic and textural clarification, ornamental elaboration, and voice-defining re-stemming, the familiar and more accommodating medium led to a wholly-consistent keyboard texture. The transcription is so convincing that even though the violin

original is ever-present no hint is given to suggest that the music was ever conceived for any instrument other than clavier. The passage cited in figure 11 exemplifies the consistency of part-writing and texture that is maintained throughout the entire sonata.[5]

Figure 11. Adagio, Clavier Sonata in D-minor, bwv 964, mm. 1-3.

Since the original version for unaccompanied violin is reasonably complete in both texture and voice leading, translation to a harmonic instrument is relatively unproblematic. Bach's additions in the clavier version may therefore be regarded as a means to an appropriate idiomatic texture, rather than as a solution to a polyphonically compromised original.

2.2 Other Period Arrangements

Period arrangements made by lutenists and five-course guitarists confirm the overall idiomatic approach that characterizes Bach's arrangements, although in this case reduction rather than addition to the musical texture is the norm. For example, the simplification of chords and the displacement of basses (and even the occasional upper note) are representative of idiomatic technical changes made by Baroque lutenists in their intabulations of Bach's lute music (figure 5).[6]

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[5] In the examples cited here, the clavier version of the sonata (bwv 964) has been transposed from d-minor to a-minor, allowing for easy comparison with the violin original.

[6] A facsimile reproduction of the anonymous French lute intabulation of the g-minor suite bwv 995, *G mol Pieces pour le lut par Sre J. S. Bach*, along with a facsimile reproduction and modern transcription of Johann Christian Weyrauch's French lute intabulation of the g-minor violin fugue bwv 1000/1, *Fuga del Signore Bach*, may be found in Frank Koonce, *The Solo Lute Works of Johann Sebastian Bach* (San Diego: Kjos Music Company, 1989), pp. 118-121. A transcription into modern notation of the former is contained in *J. S. Bach: Opere Complete Per Liuto*, ed. Paolo Cherici (Milan: Suvini Zerboni, 1980), pp. 12-32.

Figure 12. *Fuga del Signore Bach* (bwv 1000). French lute intabulation by Johann Christian Weyrauch, mm. 13-14 and 42.

More extreme reduction characterizes the five-course guitar intabulations of, for example, Robert de Visée's versions of orchestral overtures by Lully, or Santiago de Murcia's guitar arrangements of Corelli violin sonatas. Indeed, changes relating to idiomatic and personal style are evident even in the adoptions that five-course guitarists made of each others music (figure 13).

Figure 13. Santiago de Murcia (1732), *Tocate di Coreli*, mm. 1-3.

In their own arrangements Baroque musicians rarely, if ever, relied upon *transcription* in the absolute sense (a note-for-note translation). Rather, an idiom-driven and, in some cases, very free arrangement process was the norm; a practical, utilitarian approach, undertaken not so much with a quasi-religious respect for the intentions of the original composer but for an unrestricted and functional adaptation of the music, and for the idiom itself.

3. Idiomatic and Stylistic Arranging for the Modern Guitar

3.1 Historical Models and Idiomatic Textures. 3.2 Additions to the Lower Voice. 3.3 Dividing Long Notes. 3.4 Imitation. 3.5 Octave Transposition. 3.6 Dance Type. 3.7 Key Choice. 3.8 Ornamentation. 3.9 Left-Hand Fingering. 3.10 Left-hand Slurs. 3.11 Notation and Rests. In Conclusion.

3.1 Historical Models and Idiomatic Texture

While it is illuminating to examine historical arrangement processes and performance practices, particularly those involving instruments closely related to the modern guitar, we should also bear in mind that despite similarities of timbre and playing technique there exists significant differences between the modern guitar and its predecessors, not to mention between Baroque musicians and modern ones, that color the adoption of historical models. The Baroque lute, with its array of diatonically-tuned open bass strings among its upwards of ten courses, is well-suited to its characteristic texture — an ornate and fast-moving upper part supported by a well-defined and slower-moving bass. Similarly, the characteristic texture of much of the five-course guitar repertoire reflects the idiomatic character of the instrument: effectively negating the concept of pitch-differentiated register, the re-entrant and octave tunings employed in much of the five-course guitar repertory result in the "bass" sounding in the same pitch register as the upper parts, differentiated "voice-parts" being achieved through contrasts in timbre rather than in register (a note played on a lower course with the thumb has a timbre distinct from that of the same pitch played with a finger on an upper course).

Despite extreme differences in tessitura, the five-course guitar and the Baroque lute do share some idiomatic common ground: *stile brisé* fingerings (idiomatic fingering in which a free-voiced contrapuntal texture is created through arpeggiation and scale motion based around expedient chord "shapes") and short passages of *campanela* texture (the sonorous, bell-like overlapping of scale tones created through the optimal use of open strings and the fingering of successive scale tones on adjacent strings). Indeed, the "timbral counterpoint," outlined above in relation to the five-course guitar, is a natural consequence of these idiomatic fingering systems. The modern guitar has the ability to utilize these techniques and textures, but with less facility than the instruments upon which the techniques originated; the modern guitar does not have a set of free diatonically-tuned basses, nor does it have octave-stringing or re-entrant tuning. While we may freely adopt historical performance techniques, if we are to use the *full* idiomatic potential of the modern instrument we cannot rely solely upon them. In determining an appropriate *baroque* texture for the modern guitar we must ultimately turn to the music itself, and to the idiomatic characteristics of the modern instrument.

The guitar has produced a large number of contemporary transcriptions and performances of Bach's unaccompanied string literature, probably more than any other instrument. Of this repertoire, the violin works are readily accommodated, the notated tessitura is similar, and almost all multi-stops can be comfortably reproduced and sustained. Indeed, in some ways the music is more technically feasible on the guitar than it is on the violin. However, the most important reason for the success of this music when played on the guitar is the polyphonic and textural completeness of the original — very little *needs* to be changed or added. Clearly, and for the reasons already discussed, this is not the case with the cello works, and unaltered renditions of this music on the guitar are likely to produce disappointing results. In order to produce a effective transfer to the modern guitar a degree of alteration must be made to the cello originals. These changes involve not only the addition of notes needed to complete the polyphony and

texture, but also the alteration of notes that although sonorous on the cello compromise voice-leading when heard on a harmonic instrument. Once the essential polyphony has been reconstructed, it may form the basis for an *idiomatic* arrangement.

Since a procedure for arriving at the polyphonic background of a piece has been given already (a player versed in continuo playing may well deduce this background in many stages less than those outlined earlier), a general account of idiomatic and stylistic changes appropriate to the modern guitar follows.[7]

3.2 Additons to the Lower Voice

In order to construct a consistent bass part, in register, it is necessary to add notes to the original. Often, however, a pitch needed to complete the lower voice may be sounding elsewhere in the texture. To allow for a strong contrapuntal structure in such cases it is sometimes desirable to change the note where it appears elsewhere in the texture (especially if the note is a tendency tone or a modal scale-degree) (figure 14).

Figure 14. Courante, Cello Suite 4 (bwv 1010), mm. 22-23.

The harmonic rhythm of the music (the rate of harmonic change) is another consideration in deciding upon places where basses may appropriately be added. Inextricably related to tempo and meter, harmonic change is also a function of dance type. Allemandes, for instance, often have only two harmonic changes per measure (because they tend to be slow); faster-sounding courantes and minuets, on the other hand, may have only a single harmonic change. Similarly, the second-beat metric stress of most sarabandes, and some minuets (effectively two beats per measure, the first short and the second long) is often a product of harmonic rhythm. These important metric patterns may be reinforced in the arrangement through the appropriate positioning of basses (figure 15).

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[7] The music examples that follow are represented in treble clef, and in keys appropriate for guitar performance, rather than in the original keys.

Figure 15. Sarabande, Cello Suite 1 (bwv 1007), mm. 1-6.

An increase in harmonic rhythm is typical at cadential points and contributes to the rise in tension before the final cadential resolution. Commonly, dances in triple meter employ hemiola rhythm in the approach to a major cadence, marking a temporary metric acceleration from one compound beat of 3/4 time to three beats of 3/2 time (an acceleration of 3:2). Again, in such places, meter-defining basses should be added (figure 8).

Figure 16. Menuet II, Cello Suite 2 (bwv 1008), mm. 19-24.

Completion of the polyphony may sometimes result in addition to the upper register of the texture (figure 17), as may other additions and adjustments intended to facilitate a more detailed contrapuntal or harmonic texture (figure 18):

Figure 17. Sarabande, Cello Suite 1 (bwv 1007), mm. 10-12.

Figure 18. Allemande, Cello Suite (bwv 1008), mm. 6-9.

3.3 Dividing Long Notes

Long notes may be easily sustained or even swelled on a bowed instrument, but die away quickly on plucked instruments and thus lose much of their expression. In order to maintain expressive intensity and momentum on the guitar it is often appropriate to break or divide such notes, or to add rhythmic interest in another voice (figure 19):

Figure 19. Bourrée II, Cello Suite 3 (bwv 1009), mm. 18-19.
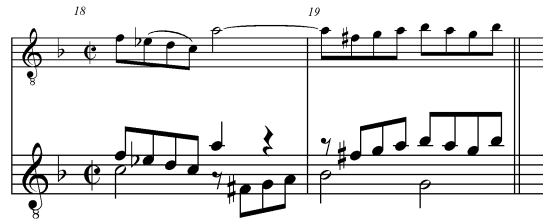
Extended passages of multi-stopped chords, sonorous and expressive on the cello or violin, are effective when arpeggiated on the guitar (figure 20):

Figure 20. Prelude, Cello Suite 2 (bwv 1008), mm. 59-63.

3.4 Imitation

Although relatively little of the unaccompanied string music is set in an imitative contrapuntal style, the intervallic structure of a single-line passage may nevertheless lend itself to imitative texture (figure 21 and also figure 19, above).

Figure 21. Sarabande, Cello Suite 3 (bwv 1009), mm. 13-16.

Bach's keyboard gigues are often imitative pieces, and short imitative openings, restricted to the first few measures of each binary half of a gigue, are also found amongst the tablatures for five-

course guitar and for lute.[8] This type of suggested imitative opening is often possible in the cello gigues, especially when the imitation responds to the rhythmic motive rather than literally to the intervallic one (figure 22):

Figure 22. Gigue, Cello Suite 5 (bwv 1011), mm. 1-4 and 25-29.

The *fugata* subject of the Prelude to the C-minor Cello Suite itself implies a two-voice "double subject" (becoming almost identical to the subject of the *fugata* found in the Prelude to the "Lute" Suite in e-minor, bwv 996) (figure 23):

Figure 23. Prelude, Cello Suite 5 (bwv 1011), mm. 28-35.
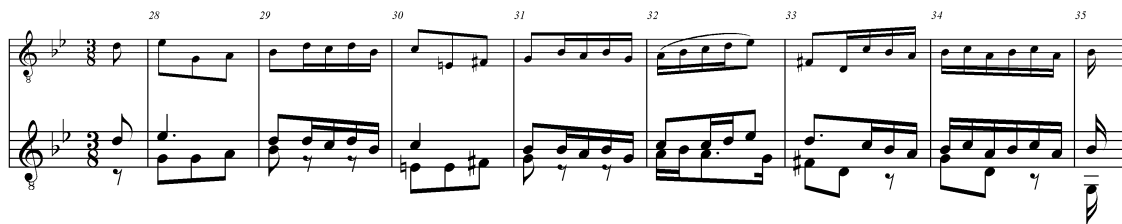
3.5 Octave Transposition

Occasional octave transpositions may be necessary, especially in cadential passages (figure 24), but also simply to allow a passage to sit more comfortably on the guitar (figure 25):

Figure 24. Courante, Cello Suite 6 (bwv 1012), mm. 26-28.

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[8] This type of suggested imitative opening (one restricted to the first few measures of each half of the binary form) is a common feature of five-course guitar tablatures, and is found, for example, in de Viseé (Suite in d-minor, 1686), Corbetta (Suite in g-minor, 1671), Roncalli (Suites in F-major and C-major, 1692), Murcia (various, 1732), and others.

Figure 25. Gigue, Cello Suite 6 (bwv 1012), mm. 57-61.

Pedal points of varying lengths are both implied and presented explicitly throughout Bach's unaccompanied string music, particularly in the preludes. Due to differences in tuning, however, an open-string pedal-point idiomatic to the violin or cello may not be possible on the guitar. This situation (which traditionally seems to have virtually dictated key choice in arranging for the guitar) is alleviated when we realize that the octave in which a pedal tone sounds does not alter its structural function, that of harmonic prolongation (usually of dominant harmony). It is therefore possible to invert a pedal point for idiomatic reasons without any loss of harmonic function, and often to greater musical effect (figure 26).

Figure 26. Prelude, Cello Suite 1 (bwv 1007), mm. 30-32.

3.6 Dance Type

Alterations made to the originals may also reflect the stylistic and expressive character (or *affekt*) of the music. For example, rich harmonic realizations (containing sevenths, and other dissonances) may generally be reserved for the more musically substantial and expressive movements (usually the allemandes and sarabandes), while the galanterie (minuets, bourrées and gavottes) may be harmonized in a simpler and more direct manner, reflecting their galant character. The courantes and preludes, almost all of which are set in Italian rather than French style (with the exception of the C-minor cello suite), are also better suited to a somewhat simpler harmonic treatment. Often characterized by idiomatic display, rather than strong metric patterns or predictable harmonic schemes, the preludes often lend themselves to idiomatic texture on the guitar — campanela fingering, for example.

3.7 Key Choice

From a practical standpoint the choice of an appropriate key for guitar transcription is determined by tessitura — that is, the range in which the highest and lowest notes of a piece may be comfortably accommodated on the guitar. In the violin works the tessitura is such that the original keys work well on the guitar, with an upward transposition of a major second being a possible (though probably unnecessary) alternative. The cello works, on the other hand,

employ a range of only approximately two and a half octaves, from C two octaves below middle-C to G or A above middle-C (the Sixth Suite employs a five-string accordatura, which extends the range of the instrument by the interval of a fifth). Since a usable two and a half-octave tessitura may be generated on the guitar starting on any pitch between D (with scordatura) and A, several transpositions for each suite appear possible. In practice, however, it is necessary for pitches to be available below the lowest-sounding note of the cello (see section 1.3). This reduces the number of available keys on the guitar to those found at a fourth or fifth above those for cello. Ignoring "hostile" keys, the more likely transpositions for each suite are as follows:

	Cello	**Guitar**
Suite I	G-major	C-major or D-major
Suite II	D-minor	g-minor or a-minor
Suite III	C-major	G-major or A-major
Suite IV	Eb-major	G-major or A-major
Suite V	D-minor	g-minor or a-minor
Suite VI	D-major	D-major or E-major (due to the *accordatura*)

Of these, the slightly lower transpositions at a fourth usually provide greater opportunity for chordal-based fingerings in *brisé* style, although this is in contrast with the keys traditionally chosen. Moving through the suites however, (which, technically, musically and texturally, are set in progressive order) the open-string tonic and dominant basses resulting from transposition at a fifth (or even a sixth) are of greater technical expediency. My preferences for the six suites are C-major, a-minor, G-major, A-major, g-minor, and D-major, respectively.

3.8 Ornamentation

Another important factor in adapting Bach's music to the modern guitar is the ability of the transcription to support idiomatic and stylistic ornamentation, especially at cadences, but also elsewhere. Owing to the multi-functional role of ornamentation — as cadential structural marker, thematic motif, expressive rhetorical gesture, variation, virtuosic filigree, etc. — it is important that the arrangement be not so over-filled with added notes as to compromise the execution and addition of embellishments. A distinction should be made between the "essential" and the "improvisatory;" ornaments considered essential to the arrangement (cadential trills, for example) should be indicated in the score, supplementing the ornamentation indicated in the originals when needed, while improvisatory ornamentation may be left to the prerogative of the performer.

Since information regarding the execution of standard ornamentation in French-style is readily available, and generally well-known, I would like to provide here examples of Italian-style *passaggi* that, although less systematically documented, undoubtedly are appropriate to Bach's simpler music (see figure 27).

Figure 27. Italian-style ornamentation: Allemande, Cello Suite 1 (bwv 1007), mm. 1-6.

3.9 Left-Hand Fingering

Left-hand fingering is determined by melodic and harmonic context and the compromise between musical effect, instrumental sonority, and technical expediency. Melodic fingerings, which move strictly from note to note without allowing any overlapping of notes within the line, stand in stark contrast to harmonic fingerings which allow for the overlapping of notes belonging to the same harmony, even though the notation may not indicate it. The deciding factor in choosing one system over the other is decided by musical context and instrumental sonority. The degree to which either system may be employed consistently is further restrained by the physical limits of the instrument and by the facility of the player, noting that results in performance will likely reflect the *intentions* of the player as much as the implications of the fingerings themselves.

As we have seen, harmonic (*stile brisé*) fingering is idiomatic to both the lute and the five-course guitar, as well as some keyboard instruments, and is one system upon which an idiomatic arrangement for the modern guitar may be based. With the technical purpose of idiomatic expediency, and the musical one of projecting a free-voiced polyphony, this style of fingering is achieved by forming fingerings harmonically, allowing notes to ring into one another to create a sonorous and ambient harmonic "background" — similar to the effect of the sustaining pedal on a modern piano (although it is not possible to deal with every harmonic tone of the texture according to this idealistic scheme). Importantly, this system does not preclude the projection of independent voice-parts — bass movement may be independently voiced beneath a layer of harmonic *brisé* texture. In the following example, open noteheads ring through, while filled noteheads receive their written durations (figure 28):

Figure 28. Allemande, Cello Suite 1 (bwv 1007), mm. 1-4.

In passages of explicit dialog texture, melodic fingerings provide an appropriate means of projecting the independence and motivic shape of the voice parts (figure 29):

Figure 29. Gigue, Cello Suite 5 (bwv 1011), mm. 53-57.

Combining both melodic and harmonic *brisé* fingerings to produce a striking and sonorous effect, overlapping *campanela* fingering is a stylistic and idiomatic technique on both the baroque lute and the five-course guitar. Ornamental in function, the technique produces an expressive sonority, as well as off-setting the predictability of a consistently articulated line. Subtly used, allowing successive notes to merge only momentarily, overlapping fingerings produce a seamless, expressive legato, in the manner of the harpsichordist's over-legato (figure 30):

Figure 30. Prelude, Cello Suite 2 (bwv 1008), mm. 1-4

3.10 Left-Hand Slurs

Left-hand slurs are appropriate to this music, and may be categorized in three ways: technical, textural and phraseological. Technical slurs are used simply to aid the right hand in the execution of fast passage-work; textural slurs relieve the monotony of constantly-articulated equal-note passages, particularly when it may not be possible to provide enough variety of touch with the right-hand alone; and phraseological slurs are defined according to their musical effect. It is worth noting that, regardless of the motivation for their use, all slurs have a musical, or phraseological, consequence — generally that of connecting or grouping notes together, stressing the first note of the group.

Slurs found in Baroque lute and five-course guitar tablatures are generally of the technical and textural type. An important stylistic characteristic lies in their placement — they are invariably placed for convenience rather than for motivic consistency or relationship. The slurs notated in the lute version of the fugue in g-minor (bwv 1000), for example, are all of the descending type, and are almost always positioned so as to "pull-off" to an open string. Textural slurs may therefore be regarded as ornamental (and are included in this context in ornamentation tables for the lute and five-course guitar) and contribute to the constant variation that appears at the surface level of much Baroque music.

3.11 Notation and Rests

Musical notation is a deceptively complex subject — an inevitable result of a need for both precision and simplicity. Beyond the general lack of notated dynamic and rhythmic nuance, notational ambiguities in Bach's string and lute music concern duration (and, therefore, articulation) and, particularly, the interpretation of notated rests.

The notation employed for the unaccompanied cello music consists of a single line with occasional multi-stops, and very few rests — a reflection of the idiomatic sustaining character of the cello and a musical texture in which the upper voice predominates. Bach's notation for clavier, on the other hand, provides very precise voice-leading information through careful stemming, notes ties over the barline, and carefully-placed rests — again, a reflection of the articulate and facile idiom of the clavier and an elaborate, idiomatic musical texture. The notation employed by Bach in his arrangement of the C-minor lute suite (an autograph) contains hardly any such ties over the barline. It does, however, include an almost overwhelming number of rests (figure 31).

Figure 31. G-minor Lute Suite (bwv 995): a) Presto, mm. 48-54; b) Sarabande, mm. 1-4.

To what extent does Bach's notation represent the articulation and textural idiom of the lute? Bach did not attempt an elaborate textural or contrapuntal realization in his arrangements for the lute (as compared to the clavier arrangement) but adopted a relatively simple idiomatic texture comprising a slow-moving, yet articulate, lower voice supporting a polyphonically-incomplete and faster-moving single line above it. In general, the consistency and regularity of placement of rests suggests a literal interpretation of their duration, especially in the lower voice (though we seldom hear them performed that way), but also in the upper voice (where they often clarify motivic figuration).

An appropriate notational texture for guitar transcription, therefore, comprises a reconstructed polyphony assimilated into a single written upper voice with a slower continuo-style bass and an occasional free-entering third voice. Rests can be employed in the upper voice to clarify phrasing and figuration, though a period of actual silence is not necessarily required. In the lower voice, rests should indicate a degree of articulative silence that contributes to the projection of a continuo-style accompaniment, the larger musical structure and the expression of a dance-like *affekt*.

In Conclusion

In this article, we have touched upon three aspects of arranging Bach's music for the modern guitar. An examination of the musical structure of Bach's "unaccompanied" lines revealed his polyphonic and textural intentions and the extent to which his chosen instrumental medium permitted him to realize them; hopefully, we discovered the essence of what we are attempting to realize in our arrangements. A consideration of instrumental idiom allowed us to assess the natural strengths and weaknesses of the original instrumentation and of the modern guitar, and hopefully encourages us to speculate as to how Bach might have realized his intentions on the modern guitar. An examination of historical style and informed performance practice provides us clues toward a means of expressing and arranging this music. The end result, however, can never be anything more than a *modern* baroque style for transcription and performance on the *modern* guitar.