



Review Article

The Aesthetics of Imperfection The Viola from Acoustic Compromise to Historical Marginality to Expressive Voice

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Abstract

This paper argues that the viola's defining quality is the productive tension between its acoustic compromise and its expressive identity. Compared with the violin and cello, whose dimensions have become relatively stable through long traditions of making and playing, the viola has remained unusually resistant to standardization: its body is not simply smaller than an ideal model but preserves a visible tension between acoustic scale and human playability (Hutchins 1962, 78–93; Hutchins 1967, 23–37). From this physical starting point, the paper traces how the viola's acoustic compromise became entangled with a long history of marginality—articulated as early as Quantz's 1752 *Versuch* and codified in two centuries of orchestral practice—and then how, beginning with Mozart's *Sinfonia Concertante* K. 364 (1779), accelerating with Berlioz's *Harold en Italie* (1834), and crystallizing in the work of Lionel Tertis, Rebecca Clarke, William Primrose, Paul Hindemith, and Béla Bartók, this same imperfection was reframed as an expressive resource. The thesis is that the viola is not a failed violin or a small cello; it is one of the clearest orchestral examples of an instrument whose identity has been shaped by an unresolved imperfection, and that this identity became visible once composers began writing *for* the limit rather than against it.

Keywords: viola acoustics, organology, reception history, Lionel Tertis, William Primrose, Rebecca Clarke, Mozart Sinfonia Concertante, Berlioz, Bartók, Hindemith, Hermann Ritter, Carleen Hutchins, viola alta.

Introduction

An Instrument Built Against Itself

The viola occupies a peculiar position in the violin family. It is tuned a perfect fifth below the violin (C3, G3, D4, A4) and a full octave above the cello, yet it has no fixed size. Modern professional violas range from 15 inches (38 cm) to over 17 inches (43 cm) in body length, and even within this range the relationship between body and string remains acoustically off-balance. The violin and cello, by contrast, have become relatively stable in their dimensions through long traditions of making and playing. The viola's mismatch between size and tuning is unusually visible within the violin family: as Carleen Hutchins demonstrated in the 1960s, an instrument tuned to viola pitch and built in proportions strictly comparable to the violin would require a body of approximately 51 cm—too long to be played under the chin.

This is the central physical fact from which the rest of this paper proceeds. The viola is, in a particular sense, an instrument in tension with itself: its body cannot easily be the size its acoustics would prefer, because the playing position inherited from the violin will not allow it. Every viola represents a compromise between two demands—the body wants to be. American Luthier: Carleen Hutchins—the Art and Science of the Violin. Lebanon, NH: ForeEdge / University Press of New England.

Large; the player's arm wants it to be small. The argument of this paper is that this unresolved compromise is not a flaw to be apologized for but the very source of the viola's distinctive identity. The compromise produced specific acoustic consequences—a darker, more recessed tone, weaker low-frequency response on the C string, and a characteristic nasal quality in the middle register. These acoustic consequences became entangled with a specific

historical reception: for nearly two centuries the viola was treated as a second-class instrument, stereotyped as an instrument for players who had not distinguished themselves on the violin, and routinely given filler parts in the orchestra. And out of that historical marginality, finally, a specific expressive aesthetic was negotiated—the viola as the voice of mediation, inwardness, and *mezza voce*—which composers from Mozart and Berlioz onward learned to compose for rather than against. The path runs:

Physical imperfection → historical marginality → expressive identity

Each arrow represents a transformation rather than a deduction. The acoustic compromise did not have to result in marginalization—Hermann Ritter’s nineteenth-century viola *alta* movement shows that the compromise could equally have led to a campaign for a larger instrument. The marginalization did not have to become an aesthetic—it might simply have remained a stigma. Nor was the acoustic compromise the viola’s only source of historical marginality: the structural function assigned to inner voices in Classical-era orchestration, the instrument’s comparatively late development of independent solo repertoire and dedicated pedagogy, a player-supply system in which violists were disproportionately drawn from violinists who had not distinguished themselves, and the labor hierarchies of the orchestra all contributed independently. The claim of this paper is therefore not that acoustic compromise caused historical marginality, which then produced expressive identity, but that the viola’s acoustic compromise provided one material condition through which its historical marginality and later expressive identity were interpreted and negotiated alongside these other factors. That the viola arrived at its current identity is the result of contingent historical choices made by particular musicians: Mozart, Berlioz, Tertis, Clarke, Primrose, and the composers who wrote for them. The remainder of this paper traces those choices.

The phrase aesthetics of imperfection is not new. Andy Hamilton has developed it as a category in the philosophy of music, principally in relation to improvisation: on his account, the value of a performance may lie precisely in its spontaneity, its risk, and its refusal of the polish that recording and repetition make available [1-3]. Imperfection in that tradition is an event. It occurs in performance, it is chosen or at least accepted by the performer, and it could always have been otherwise—the same musician, on the same evening, might have played the cleaner version.

The imperfection at issue in this paper is of a different

kind. It is not an event but a condition, and it belongs not to the performance but to the instrument. The viola’s shortfall relative to its own tuning is fixed in the dimensions of the body before any player touches it; it is present in every viola, in every performance, and it can be neither embraced nor declined. An improvising musician may accept the imperfect take. No violist has ever had the option of a proportionally scaled viola, because the arm will not permit it. What follows is therefore an argument about imperfection as a material property of an instrument rather than as a quality of an act, and about what happens when two centuries of repertoire accumulate on a limitation that no player chose and no maker has been able to remove.

The Physical Compromise: Scale, Body, and Playability

The Scaling Problem

In the violin family, the relationship between body size and tuning is governed by a simple acoustic principle: lower pitches generally favor longer strings and larger resonating bodies. The violin’s body length is approximately 35.6 cm and its lowest open string is G3 (196 Hz). The cello’s body is roughly 76 cm and its lowest open string is C2 (65 Hz). Because the viola is tuned a perfect fifth below the violin, scaling its linear dimensions in direct proportion to the violin’s would require a body roughly 1.5 times the violin’s length: $35.6 \text{ cm} \times 1.5 \approx 53 \text{ cm}$. [1,2] arrived at a similar estimate when designing the violin octet, and the resulting instrument—what she called the alto violin or vertical viola—came out at approximately 51 cm and is played upright like a small cello because no human arm can hold an instrument that size under the chin [1,2].

Standard violas (38–43 cm) are therefore approximately 16 to 25 percent shorter in body length than Hutchins’s proportionally scaled alto violin (~51 cm). This shortfall has audible consequences. [4,5] study structural and psychoacoustic behavior primarily in violins rather than violas, but the general principle they establish—that body resonances strongly affect how efficiently string energy is radiated—is widely treated as applicable across the violin family by extension. On that basis, the viola’s C string—whose fundamental at 131 Hz lies well below the instrument’s main air resonance, typically around 220 Hz—can be expected to sound less fully supported than the lower registers of larger bowed instruments such as the cello, though a study measuring viola-specific radiation efficiency and directivity directly would strengthen this inference (Table 1).

Table 1: Approximate body-resonance relationships in the violin family.

Instrument	Body length (typical)	Main air resonance (A0)	Lowest open string
Violin	~35.6 cm	~275 Hz, near open D string	G3 = 196 Hz
Standard viola	38–43 cm	~220 Hz, well above the C string	C3 = 131 Hz
Hutchins alto violin	~51 cm	Closer to ideal proportional scaling	C3 = 131 Hz
Cello	~76 cm	~104 Hz, near open G string	C2 = 65 Hz

Sources: [1,2,4,5] Values are typical, not absolute, and vary by instrument. Schleske’s and Bissinger’s original studies focus on violin acoustics; the figures given here for the viola are extrapolated by analogy rather than directly measured.

What Happens to the Sound

Three commonly observed tendencies are consistent with the viola’s relative undersizing:

A weaker fundamental on the C string. Because the body’s air resonance lies well above the C string’s fundamental, much of the energy in the lowest notes may be carried by upper harmonics rather than by the fundamental itself. Listeners often perceive this as a hollow or thin quality compared with the cello, whose body resonance more directly reinforces its lower register.

An emphasized middle register. The wood resonances of a viola body often contribute to an emphasized middle register, which listeners and writers since the eighteenth century have described in terms such as nasal, reedy, dark, or veiled. The exact spectral cause varies by instrument, but the general result is a tone less brilliant than the violin’s and less fully grounded than the cello’s.

Comparatively limited projection. The viola’s lower register tends to project less powerfully across an orchestra than the violin’s brighter upper strings, a difference consistent with the C string’s fundamental lying below the body’s main air resonance, as discussed above. Berlioz himself complained of this in 1843, noting that many orchestral violas of his time were so undersized as to be effectively “violins fitted with viola strings” [6].

Why the Compromise Has Persisted

Luthiers and acousticians have proposed many solutions, none of which have displaced the standard chin-held viola. Hermann Ritter built his approximately 48-cm viola alta in the 1870s specifically to recover lower-register power; it was reportedly endorsed by Wagner for use at Bayreuth [7,8]. Lionel Tertis collaborated with the luthier Arthur Richardson in 1937 to design the Tertis Model—a 16¾-inch instrument with wider bouts and deeper ribs that increases internal volume without adding length [9]. Carleen Hutchins’s vertical viola, as discussed above, abandons the chin-held position entirely. Each of these designs addresses the acoustic problem more directly

than the standard viola, and each has remained marginal: the Ritter viola survives mainly in historical-performance contexts, the Tertis Model is played by a minority of professionals, and the Hutchins alto violin exists in only a handful of instances.

The reason for this conservatism is, in part, ergonomic. Instruments larger than approximately 16½ inches may create ergonomic difficulties for some players, although comfort varies with physique, technique, and instrument design. Designs that require a different playing position, such as Hutchins’s vertical viola, may also depart from the performance conventions and timbral expectations of orchestral and chamber settings. But the deeper reason, the one this paper develops, is that the compromise has become *constitutive* of the instrument. The viola’s tone cannot be separated from the compromises of its undersized body. To resolve the acoustic problem fully would be to produce a different instrument—one closer to the cello in sound, or one with a brighter, more violin-like response. The repertoire that has accumulated since Mozart and Berlioz was written for the compromised viola, not the corrected one.

The Viola as Middle Voice

Before turning to the eighteenth-century evidence of the viola’s low status, it is worth recognizing what the instrument was actually doing in early ensemble music. From its earliest use in Renaissance and Baroque ensembles, the viola occupied the inner space of musical texture: not the highest melodic line, not the bass foundation, but the middle voices that connected harmony, color, and resonance. Maurice Riley’s *History of the Viola* emphasizes that the viola’s development cannot be separated from the early-modern need to match and support human vocal ranges. In sixteenth-century ensemble practice, bowed instruments were often organized according to vocal distribution, with alto and tenor instruments filling the central registers between soprano and bass [7]. Riley’s two-volume study, framed explicitly as a corrective to the relative lack of viola scholarship, traces both the smaller

alto and larger tenor violas from roughly 1500 to 1800 and documents the persistent ambiguity of size that distinguishes the viola from the violin.

This middle position shaped the viola's cultural meaning. The violin came to represent brilliance, agility, and virtuosic individuality; the cello, especially after the late seventeenth century, came to represent lyric depth and vocal warmth. The viola, by contrast, resisted easy symbolic categorization. It was neither fully soloistic nor merely structural. Its voice was relational—it existed between other voices, often giving harmonic meaning to lines that would otherwise seem empty. In this sense, the viola's historical role mirrors its acoustic condition: it is an instrument defined by mediation. Its physical compromise (a body too small to project, too small to resonate ideally on its lowest string) and its musical role (an inner voice that completes harmony rather than projecting melody) belong together.

This middle status also helps explain the long-standing ambiguity surrounding the viola's size. Unlike the violin, whose dimensions became relatively standardized by the early eighteenth century, the viola remained unsettled. Historical sources distinguish between smaller alto violas and larger tenor violas, the latter capable of greater depth but more difficult to play comfortably under the chin [7]. The persistence of multiple sizes suggests that the viola's identity was never fully resolved by instrument makers. Instead, it remained suspended between competing demands: sonority and playability, depth and agility, individuality and ensemble function.

Historical Marginality: Quantz, Berlioz, and the Viola Joke

Quantz, 1752: A Documentary Beginning

The clearest early statement of the viola's low status is given by Johann Joachim Quantz in his *Versuch einer Anweisung die Flöte traversiere zu spielen* (1752). Quantz was not a violist but the most authoritative writer on orchestral practice in mid-eighteenth-century Germany, and his remark on the viola has been quoted by virtually every subsequent historian of the instrument:

"The viola is commonly regarded as of little importance in the musical establishment. The reason may well be that it is often played by persons who are either still beginners in the ensemble or have no particular gifts with which to distinguish themselves on the violin, or that the instrument yields all too few advantages to its players, so that able people are not easily persuaded to take it up." — Quantz 1752, [10], s.v. "Viola."

The passage does not blame the viola itself. It blames the situation: weak parts attract weak players, weak players reinforce the prejudice that the viola is a weak instrument, and able musicians stay away. This is a description of what later sociologists would call a stigma cycle, and once it was set in motion in eighteenth-century orchestras it took nearly two centuries to break.

The Geminiani Anecdote and the Filler-Part Tradition

The English music historian Charles Burney records that Francesco Geminiani, before becoming a violin virtuoso in London, had been demoted to the viola section of the Naples orchestra: the young Geminiani was "so wild and unsteady a timist, that instead of regulating and conducting the band, he threw it into confusion" [11]. The viola was where you went when you could not keep time on the violin. In much eighteenth-century orchestral writing, including many symphonies and concertos by Haydn, Mozart, and their contemporaries, the viola part is often restricted to inner harmonies, sustained tones, and doublings of the bass at the octave; independent thematic material is rare, and demanding solo material rarer still. As [12] summarizes, "The viola did not truly rise to its position as a solo instrument before the twentieth century. Solo and sonata repertoire for the instrument was very limited, and in orchestral music, the viola part was often used to fill in harmonies with little melodic material." Many violists were former violinists who had switched because viola jobs were easier to obtain, and the prejudice fed itself.

The Viola Joke as Reception Evidence

The persistence of a specific joke genre offers a different kind of evidence. Folklorist Carl Rahkonen's *No Laughing Matter: The Viola Joke Cycle as Musicians' Folklore* [13] traced the modern viola-joke cycle to a peak around 1992–1993 in American conservatories and documented earlier antecedents. Few orchestral instruments have generated as extensive and recognizable a joke tradition as the viola. Rahkonen argues that the cycle is best understood as occupational folklore reflecting status hierarchy within orchestras—violas rank below violins and most other sections, and the jokes encode that ranking in shared humor. The jokes translate musical and professional hierarchy into folklore; they do not prove the acoustic argument, but they show how the viola's perceived weakness became socially legible. Lionel Tertis himself, writing in 1953, opened *Cinderella No More* by acknowledging the woeful quality of the average viola player as a consequence of the lack of

decent music to play [9] a violist's own diagnosis of the cycle Quantz had described two hundred years earlier.

Berlioz's Diagnosis of the Instruments Themselves

Berlioz, writing in 1843, gave the most precise nineteenth-century diagnosis of how the physical compromise had worsened the cultural one. In the chapter on the viola in his *Grand traité instrumentation et d'orchestration modernes*, he wrote:

"Among all the instruments of the orchestra, the viola is the one whose excellent qualities have been longest unrecognised. It is as agile as the violin, the sound of its lower strings is peculiarly biting, its upper notes are distinguished by their mournful, passionate accent, and its quality of tone altogether, deeply melancholy, differs from that of the other stringed instruments [6]."

Berlioz then turned to the physical question:

"It must be observed that most violas in use in our French orchestras lack the proper dimensions; they have neither the size nor consequently the power of tone of true violas; they are, more or less, violins fitted with viola strings. Music directors should ban the use of these hybrid instruments, whose feeble sonority deprives one of the most interesting parts in the orchestra of much of its colour and energy [6]."

Berlioz is articulating the link this paper has been drawing. The viola has been neglected (cultural fact); the violas in actual use are too small (physical fact); and the two facts reinforce each other—because nobody respected the viola, nobody bothered to build proper ones, which gave nobody any reason to start respecting it. Berlioz's response, nine years before the publication of his treatise, had already

been to compose *Harold en Italie* (1834), which we will examine in §6 as a major attempt to break the cycle. But the redemption had begun even earlier, in a single Mozart work composed half a century before Berlioz: *The Sinfonia Concertante* K. 364.

Mozart: The Middle Voice Becomes Expressive

The Classical period did not transform the viola into a solo instrument, but it produced a small number of pivotal moments in which the viola's inner voice became expressive rather than merely functional. Mozart's *Sinfonia Concertante* in E-flat major, K. 364 (1779), composed during a tour that included Mannheim and Paris, is the most important single piece. In K. 364 Mozart placed the viola beside the violin as an equal solo partner, challenging the conventional hierarchy between the brighter upper instrument and the darker middle instrument.

This equality required compositional intervention. Mozart used scordatura for the solo viola, tuning all four strings up a semitone so that the part is written in D major while sounding in E-flat. Recent scholarship interprets this as a deliberate strategy to give the viola a more equal solo status with the violin [14]. Andrew Filmer's edition for the American Viola Society notes that Mozart "placed the viola in the spotlight" and used scordatura partly for projection and partly for timbral change (Figure 1) the higher tension brightens the viola while the unconventional notated key (D major against the orchestra's E-flat) produces a slight darkening in the violin [15].

The Second Movement: Dialogue as Form

The second movement of K. 364 (*Andante*, in C minor) is the clearest demonstration of what Mozart was doing.

Figure 1: Mozart, *Sinfonia Concertante* K. 364, I, opening bars, showing the notated consequence of the solo viola's scordatura. The Violino principale carries the three-flat signature of E-flat major, while the Viola principale is notated in D major (two sharps) with the direction "Accorda un mezzo tono più alto." Source: Wolfgang Amadeus Mozarts Werke, Serie XII (Leipzig: Breitkopf & Härtel, 1881), public domain.

[14] reads the movement against Julian Rushton’s earlier remark that the Sinfonia Concertante served Mozart as a kind of consolation “for the lack of an opportunity to write an opera,” and argues that the dialogue between violin and viola can be heard in operatic terms—almost as a recitative duet between two characters. The movement opens with the orchestra’s somber C-minor statement; the violin enters with a long, lyrical lament; the viola answers, not by imitating the violin’s brighter tone but by restating the material in its own lower, darker register. The two soloists then exchange phrases, alternate, overlap, and finally arrive at a passage of close imitation in which the viola is no longer answering the violin but speaking alongside it as an equal voice. Alonso Trillo’s measure-by-measure analysis identifies a further instance of this dialogic patterning at the movement’s second rotation: although the orchestra appears to reintroduce the opening material in measures 58–61, its return is only fully articulated once the solo violin restates it, from measure 62 [14] Mozart withholding structural arrival until the soloist, rather than the orchestra, delivers it. The movement does not resolve into a single triumphant subject. Alonso Trillo’s formal timeline shows the second rotation beginning away from the tonic, in E-flat major, and the movement closing back in C minor with a cadenza and a final perfect authentic cadence [14] a return to the shadowed key in which it began rather than a turn toward the relative major (Figure 2).

What matters here is not simply that Mozart made the viola louder. He recognized the viola as a different kind of voice. The viola does not imitate the violin’s brilliance; it answers it, darkens it, and humanizes it. K. 364 is one of the earliest major works in which the viola’s compromised position is transformed into character. The very qualities that limited the viola’s public role in the eighteenth century—its darker tone, lower projection, less brilliant profile—become part of its emotional function.

Berlioz and Romantic Anti-Heroism

Harold en Italie (1834)

The nineteenth century gave new meaning to the viola’s ambiguous character. Romantic music increasingly valued inwardness, melancholy, distance, and psychological complexity—qualities that aligned with the viola’s darker and less penetrating sonority. Berlioz’s *Harold en Italie*, composed in 1834 at Paganini’s request, is the decisive example. Paganini had recently acquired a Stradivari viola and wanted a concerto to display it; he commissioned Berlioz and then refused to perform the finished work because, as he reportedly told Berlioz, the solo part contained too many rests [16]. The episode is famous and somewhat misleading. Paganini wanted a virtuoso vehicle—a viola version of his own violin concertos. Berlioz instead wrote a four-movement symphony in which the solo viola represents Childe Harold, the melancholy wandering protagonist of Byron’s poem, and is silent through long stretches while the orchestra paints the Italian landscape around him.

Mark Evan Bonds’s analysis describes the work as a “symphony in four movements with solo viola” and reads its formal structure as a deliberate response to and rejection of the heroic Beethovenian symphonic model—a Sinfonia anti-eroica, in his title [17,18] Reading Berlioz against Byron, similarly observes that Berlioz adopts a four-movement symphonic structure rather than the expected three-movement concerto form, reshaping inherited forms for a new expressive purpose.

The Recurring Viola Theme

The musical embodiment of this anti-heroic conception is the recurring viola theme—what Berlioz called Harold’s *idée fixe*—first heard at the beginning of the first

Mozart, K. 364, II: Second-Rotation Handoff (mm. 58–65)

Analytical reduction based on Alonso Trillo (2021, 102-103)

Measure	58	59	60	61	62	63	64	65
Orchestra	apparent reintroduction of opening material							
Solo violin					complete restatement and structural arrival			

The diagram marks formal function only; it does not reproduce pitches from an edition.

Figure 2: Mozart, Sinfonia Concertante K. 364, II (Andante), mm. 58–65: formal reduction of the second-rotation handoff. The diagram represents formal function only and does not reproduce pitches from any edition. After [14].

movement and returning, transformed, in each subsequent movement. Unlike the unifying themes of Beethoven's symphonies, which typically gain power and confidence through transformation, Harold's theme persists as a kind of observer. In the second movement ("Marche des pèlerins"), the orchestra processes through a long pilgrimage march and the solo viola enters with arpeggios that float over the procession rather than driving it. In the third movement ("Sérénade d'un montagnard des Abruzzes"), the viola's theme is layered against a saltarello rather than leading it. In the finale ("Orgie de brigands"), Harold's theme is recalled briefly but does not dominate; the orchestra surges past, leaving the protagonist behind. The viola represents Harold not as a hero who conquers his world but as a presence within it—lyrical but not dominant, recurring but not triumphant. Its tone suggests distance, memory, and introspection.

This makes the choice of the viola especially meaningful. A more brilliant solo instrument might have turned Harold into a conventional hero. The viola's physical limitations—its inability to dominate the orchestra, its dark middle register, its plaintive upper strings—are not worked around but worked with. The instrument is allowed to be exactly what it is. Paganini's eventual reaction confirms the point: after hearing the work performed in December 1838 with Berlioz conducting and Christian Urhan as soloist, Paganini knelt before Berlioz in front of the orchestra and is reported to have wept; the next day he sent Berlioz a letter and a gift of 20,000 francs [16,19]. Even allowing for Berlioz's romantic embellishment, the story indicates that Paganini eventually heard what Berlioz had done. The viola had been given an aesthetic that the violin could not replicate.

The Viola Alta and the Search for a Stronger Middle Voice

The same Romantic decades that produced Harold also produced the most ambitious nineteenth-century response to the viola's physical compromise: Hermann Ritter's viola alta. Ritter, a German violist and theorist, believed that the ordinary viola had been acoustically compromised and that a larger instrument was necessary to restore the power of the alto-tenor voice [8]. His reasoning was proportional: since the viola is tuned a fifth below the violin, a strictly proportional instrument would need to be much larger than a standard viola. Recognizing that such an instrument would be impossible to play comfortably under the chin, Ritter adopted an enlarged but practical model of approximately 48 cm.

Wagner's reported support for Ritter's viola alta suggests that the instrument answered a broader nineteenth-century concern with orchestral depth and color, especially in the middle register [7,8]. Felix Draeseke—a Wagnerian whose music Ritter championed—wrote two viola sonatas explicitly for the new instrument [8]. Yet the viola alta did not replace the standard viola. Its failure is as important as its ambition. The instrument exposed the same unresolved tension that had shaped the viola for centuries: a larger viola might produce a richer tone, but the body resists the size required for ideal resonance, and the aesthetic that had grown up around the older instrument could not easily accommodate the new one. Musical instruments are not abstract acoustic objects; they are negotiated between sound, body, technique, tradition, and cultural expectation.

The Twentieth-Century Renaissance

The twentieth century transformed the viola's status more dramatically than any previous period. The instrument that had long been treated as secondary began to emerge as a serious solo voice. This change depended not only on new compositions but on performers who actively reimagined what the viola could be. The story of that reimagining can be told through five figures: Tertis, Clarke, Hindemith, Primrose, and Bartók. The unifying question across all five is the same: how did each turn the viola's limits into expressive resources?

Tertis and the English Repertoire

[20] Inherited the situation Berlioz had begun to change but had not finished changing. As a young violist around 1900, Tertis found a repertoire still dominated by transcriptions and a professional culture in which the viola was, as he would later phrase it, "the Cinderella of the strings" [9]. His response was twofold: to prove by his playing that the viola could sustain a solo career; and to enlist composers to create a repertoire for it. [21], emphasizes that Tertis's approach to the viola as a virtuosic and solo instrument shaped a generation of English composers; the works he influenced—either through commissions or through his playing—include sonatas and concertos by Arnold Bax, York Bowen, Ralph Vaughan Williams, Frank Bridge, Benjamin Britten, and Rebecca Clark [21].

Tertis preferred large, dark-toned instruments, and when he found that few violists could comfortably handle the 17 $\frac{1}{8}$ -inch Montagnana he played, he collaborated with the luthier Arthur Richardson in 1937 to design the Tertis Model—16 $\frac{3}{4}$ inches, with wider bouts and deeper ribs to maximize internal volume. The Tertis Model is the most

successful explicit response to the acoustic compromise: it sacrifices some convenience for a fuller lower-register response, and a number of professional violists still play instruments based on its dimensions [9]. What is striking about Tertis's career is the explicit framing: he understood the viola's limits as the very thing to be addressed, not avoided.

Rebecca Clarke and the Berkshire Festival of 1919

The most extraordinary single moment in the early twentieth-century redemption of the viola occurred at the Second Berkshire Festival of Chamber Music in Pittsfield, Massachusetts, in August 1919. The festival, sponsored by the philanthropist Elizabeth Sprague Coolidge, held a composition competition for works for viola and piano—a remarkable choice given the instrument's status. Submissions were anonymous. The jury narrowed the field to two finalists; the vote was tied three to three; Coolidge cast the deciding vote, and the prize went to Ernest Bloch's *Suite for Viola and Piano*. The runner-up, granted honorable mention, turned out to be the *Viola Sonata* by Rebecca Clarke (1886–1979), a violist herself, whose authorship surprised the all-male jury [22].

The Library of Congress, which holds Clarke's manuscript score (LCCN m55001359), notes that her sonata was "a close runner-up" in the 1919 competition, a moment that helped secure the piece's later significance in twentieth-century chamber music [22]. Clarke's *Viola Sonata* has, in the century since, become one of the cornerstones of the viola repertoire: a work in which the instrument's dark, ambiguous color and its capacity for both lyric introspection and dramatic outburst are exploited as fully as in any concerto. That a piece of this stature was written by a violist herself, for the instrument she knew from inside, is part of the larger pattern of the twentieth century. The viola's renaissance was led, to an unusual degree, by violist-composers.

Hindemith and the Walton Premiere

Paul Hindemith (1895–1963) is the other major composer-violist of the period. As both composer and performer, he wrote for the instrument from within its technical and expressive world: his five viola sonatas, his concertos, and *Der Schwanendreher* (1935)—a concerto built on old German folk songs—do not treat the instrument as a weaker violin but use its specific weight, register, and timbral density as compositional resources.

The decisive moment of Hindemith's career as a violist,

from this paper's perspective, was the premiere of William Walton's *Viola Concerto*. Walton had composed the concerto in 1928–29 at Sir Thomas Beecham's suggestion, with Tertis in mind. When Tertis received the manuscript, he rejected it as too modern. The premiere instead took place at the Queen's Hall, London, on 3 October 1929, with Hindemith as soloist and Walton conducting. Tertis, who attended the premiere, recognized his mistake and took the work up the following year, performing it at the ISCM festival in Liège in September 1930. He later wrote in his memoirs:

"With shame and contrition, I admit that when the composer offered me the first performance, I declined it... I had not learnt to appreciate Walton's style. The innovations in his musical language which now seem so logical and so truly in the mainstream of music then struck me as far-fetched [20]."

The episode shows how thin the line was, even in 1929, between the new viola repertoire and the old prejudices it was working to overcome [20]. Tertis—the period's leading champion of the viola as a serious solo instrument—nearly cost the repertoire one of its most important works. That a composer-violist (Hindemith) was the one to step in suggests the degree to which the twentieth-century renaissance depended on musicians who knew the viola from inside.

Primrose and the Bartók Commission

[23], The Scottish violist who studied with the violin teacher Eugène Ysaÿe before specializing in viola, completed the transformation Tertis had begun. Where Tertis built a British repertoire, Primrose built an international career: he was principal violist of the Toscanini-led NBC Symphony Orchestra from 1937 to 1942, formed his own string quartet, taught at Indiana University, and recorded extensively. His memoir *Walk on the North Side* [23] describes a viola career almost unrecognizable from the one Quantz had described in 1752—a soloist's career, with international tours, recordings, commissions, and pupils.

Primrose's most consequential single act was commissioning Béla Bartók's *Viola Concerto* in late 1944. Primrose had heard Yehudi Menuhin perform Bartók's *Second Violin Concerto* and concluded that Bartók was the right composer to write the major modernist viola concerto. He paid Bartók \$1,000 and explicitly told him not to "feel in any way proscribed by the apparent technical limitations of the instrument [24]". Bartók initially hesitated, feeling unfamiliar with the viola, but accepted after listening to Walton's concerto and Berlioz's *Harold*.

He was already terminally ill with leukemia and died on 26 September 1945 leaving the work in fragmentary draft. His friend Tibor Serly assembled the concerto from the sketches; Primrose premiered it on 2 December 1949 with the Minneapolis Symphony Orchestra under Antal Doráti [24].

Viola Writing in the Completed Concerto

The Bartók concerto is the clearest illustration of what “composing for the limit” had come to mean by 1945. In the Serly completion—the form in which the concerto is normally heard—the opening solo statement, marked *Moderato*, leaves the viola alone but for the timpani through its first thirteen measures; the orchestra’s pizzicato strings enter only at measures 14–17. The scoring here is Serly’s realization rather than Bartók’s own, since the composer left the work in a fragmentary draft that specifies little of the orchestration. The line begins on the open A string, and on Miklós Rakos’s reading, reported by Németh, the two spans are tonally distinct—the first centered on A and evoking the Hungarian folk tune “Két szál pünkösdrózsa,” the second centered on C and alluding to “Röpülj páva”; the folk-tune identifications remain one interpretation among several in a work whose fragmentary sources leave much unsettled [24,25]. What matters for the present argument is not the register of the first note but the exposure the completed opening imposes: a slow, bare, essentially unaccompanied melody grants the soloist none of the orchestral cushioning that would disguise a weak carrying tone. Across the concerto as a whole the writing then settles into the low and middle registers, where the viola’s body resonance does *not* provide full support, exploiting precisely the recessed, slightly hollow quality that the cello’s larger body would smooth over. The effect is one of

austere weight: the soloist is heard unsupported, and only gradually gathers orchestral company(Figure 3).

This opening choice is structurally important. Bartók is not concealing the viola’s limitations; he is composing with them. The same principle holds across the concerto. Although the work uses the viola’s full range, it concentrates on the low and middle registers [24]. The second movement is a slow contemplative meditation that exploits the instrument’s plaintive upper strings; the finale draws on Hungarian and (in homage to Primrose’s heritage) Scottish folk material. Little of this material would transfer convincingly to a violin: much of it lies too low, and it draws repeatedly on the darker weight of the viola’s C and G strings.

This is the difference between the eighteenth-century viola part and the twentieth-century viola concerto. In much eighteenth-century orchestral writing, the viola part could often be absorbed into the inner string texture without changing the identity of the work. By contrast, a Bartók viola concerto cannot be transferred to another instrument without changing its expressive meaning. The acoustic compromise—the dark, recessed, low-register-favoring instrument—has become the expressive resource. Bartók’s concerto, like Walton’s before it (1929), Hindemith’s *Der Schwanendreher* (1935), and Clarke’s *Sonata* (1919), is unimaginable without the specific physics that made the viola the wrong size in the first place.

Primrose’s later reflection on the commission captures the completion of the cycle:

“When I commissioned the concerto, most people thought I had made a big mistake, including people in my manager’s office. Who on earth was going to ask me to play a concerto

Bartók, Viola Concerto: Opening Design (mm. 1-17)

Analytical reduction based on Németh (2025, 229-230)

Measures	1-13	14-17
Solo viola	opening statement throughout	continues
Timpani	sole orchestral accompaniment	no longer sole support
Pizzicato strings	not yet present	enter
Tonal center	A-centered	C-centered
Folk-tune allusion	“Két szál pünkösdrózsa”	“Röpülj páva”

Scoring as realized in the Serly completion; tonal centers and folk-tune allusions after Rakos.
The diagram marks structure only; it does not reproduce pitches from an edition.

Figure 3: Bartók, Viola Concerto, I (*Moderato*), mm. 1–17: reduction of the opening design as realized in the Serly completion. The diagram represents scoring, tonal center, and folk-tune allusion only, and does not reproduce pitches from any edition. Tonal centers and folk-tune allusions follow Miklós Rakos’s reading as reported by Németh. After [25].

by Béla Bartók? I paid him what he asked—\$1,000—and I played the concerto well over a hundred times for fairly respectable fees. So, it was almost like getting in on the ground floor in investing in Xerox or the Polaroid camera.”
— Primrose, 1970 interview, quoted in [24].

In 1752, Quantz could write that the viola “yields all too few advantages to its players.” In 1970, Primrose could compare commissioning a viola concerto to investing early in Xerox. The instrument had moved from the kitchen to the ball, and from the ball to the stock exchange.

Conclusion

The Aesthetics of Imperfection

The history of the viola suggests that musical value cannot be measured by acoustic efficiency alone. From a purely physical perspective, the viola may appear compromised: smaller than its tuning would prefer, less brilliant than the violin, less resonant in its lowest register than an ideally proportioned instrument would be. But music history shows that this compromise became one of the sources of the viola’s identity rather than simply an obstacle to it.

The viola’s story is therefore not a story of failure, but of transformation. In early ensemble music, its middle position allowed it to mediate between voices. In Mozart’s *Sinfonia Concertante*, that middle voice became dialogic and expressive. In Berlioz’s *Harold*, it became psychological and anti-heroic. In Ritter’s *viola alta*, it became the object of nineteenth-century acoustic ambition—and the failure of that ambition confirmed how deeply the older compromise had become part of the instrument’s identity. In the twentieth century, through Turtis, Clarke, Hindemith, Primrose, Walton, and Bartók, it became a fully independent solo voice.

The argument of this paper has been that three apparently independent facts about the viola are closely entangled rather than merely coincidental. The viola is acoustically smaller than its tuning would prefer. The viola was, for nearly two centuries, treated as the orchestra’s lowest-status instrument—though, as this paper has stressed, that status also had causes independent of acoustics. The viola has, since the late eighteenth century, become the voice of mediation, melancholy, and inwardness in Western art music. Each of these facts has its own literature: an acoustical one (Hutchins, Schleske, Bissinger), a sociological and folkloric one (Quantz, Burney, Rahkonen), and a music-historical one (Riley, Buschek, Kim, Maurice). What this paper has tried to add is the connective tissue: not a proof that each fact caused the next, but a demonstration

of how acoustic compromise, historical reception, and expressive meaning were interpreted and negotiated together, contingently but not arbitrarily.

The contingency matters. Nothing in the physics of the undersized viola required that it become the Cinderella of the orchestra, and nothing in its marginality required that it become the voice of melancholy. Those transformations depended on specific historical choices: Mozart’s *scordatura* in K. 364, Berlioz’s refusal to write a conventional virtuoso concerto, Turtis’s campaign for a solo repertoire, Coolidge’s support for new viola music, and Primrose’s commission to Bartók. Yet these choices all worked upon the same material fact: the viola’s unresolved compromise between acoustic scale and human playability. Its limitations are not incidental to its meaning; they are among the conditions through which that meaning emerged. The viola speaks from the middle—not as a compromise to be corrected, but as a voice whose power lies precisely in its in-betweenness.

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