

Beethoven in the Age of Mechanical Reproduction: The Violin Concerto on Record

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When scholars study canonic compositions of the Western tradition, individual performances are generally not considered relevant. Under scrutiny is a *work*, not any particular instance of it. Yet, clearly, any two performances of a piece can sound dramatically different. And these differences are far from trivial. A well-placed accent, the presence or absence of vibrato on a given note, a sudden tempo change, an unexpected slide—all can alter the shape and expressive impact of a phrase, a movement, even a whole work. Such details not only affect our understanding of a particular piece; they form part of its reception history and, more generally, can tell us much about the musical traditions and aesthetics of a given time. As I hope to show in the following pages, a close study of recordings of one such canonic work—Beethoven’s Violin Concerto in D Major, op.61 (1806)—can lead us to a fuller and more nuanced understanding of the Concerto and at the same time reveal how both the reception of the piece and violin performance practice in general changed over the course of the twentieth century.

Beethoven’s Violin Concerto has been recorded well over one hundred times since the early twentieth century.¹ For the purpose of this study I have chosen thirty-three recordings (Table 1). Taken together they span seventy-six years, representing twenty-seven soloists, twenty-nine conductors, and twenty-six orches-

I wish to thank Katarzyna Bugaj and Beth Jakub for their helpful comments on earlier drafts of this article and Jason Allen for his assistance with the music example.

1. James Creighton lists seventy-eight recordings of the Violin Concerto as of 1971. James Creighton, *Discopaedia of the Violin, 1889–1971* (Toronto: u Toronto p, 1974).

Table 1: Recordings of the Beethoven Violin Concerto, 1922–98*

Performers (Violinist, Conductor, Orchestra)	Date	CD Label & Number
Juan Manen/Gelabert/unnamed orchestra	1922	Pearl BVA I
Joseph Wolfsthal/Helmuth Thierfelder/Berlin State Opera Orchestra	1925	Biddulph LAB 095
Fritz Kreisler/Leo Blech/Berlin State Opera Orchestra	1926	Naxos 8.110909
Joseph Szigeti/Bruno Walter/unnamed orchestra	1932	Music & Arts CD-813
Bronislaw Huberman/George Szell/Vienna Philharmonic Orchestra	1934	Preiser 90118
Fritz Kreisler/John Barbirolli/London Philharmonic Orchestra	1936	Biddulph LAB 001-3
Georg Kulenkampff/Hans Schmidt-Isserstedt/Berlin Philharmonic Orchestra	1936	Teldec 9031-76443-2
Jascha Heifetz/Arturo Toscanini/NBC Symphony Orchestra	1940	Naxos 8.110936
Erich Röhn/Wilhelm Furtwängler /Berlin Philharmonic Orchestra	1944	Historic Collection MM 37077
Yehudi Menuhin/Wilhelm Furtwängler/Lucerne Festival Orchestra	1947	LYS 249
Ginette Neveu/Hans Rosbaud/SWDR Orchestra	1949	Tahra TAH 2.355-2.357
Christian Ferras/Karl Böhm/Berlin Philharmonic Orchestra	1951	Green Hill GH-0004
Yehudi Menuhin/Wilhelm Furtwängler/Philharmonia Orchestra	1953	EMI 0777 7 69799 2 2
Camilla Wicks/Bruno Walter/New York Philharmonic Orchestra	1953	Legend LGD 114
Jascha Heifetz/Charles Munch/Boston Symphony Orchestra	1955	RCA RCD1-5402
Nathan Milstein/William Steinberg/Pittsburgh Symphony Orchestra	1955	EMI 7243 5 67584 2 1
David Oistrakh/André Cluytens/French National Radio Orchestra	1958	EMI CDM 7 69261 2
David Oistrakh/Vittorio Gui/RAI Symphony	1960	CGD CDLSMH 34018
Zino Francescatti/Bruno Walter/Columbia Symphony Orchestra	1961	Sony SBK 60497
Wolfgang Schneiderhan/Eugen Jochum/Vienna Philharmonic Orchestra	1962	Deutsche Grammophon 447 403-2
Isaac Stern/Leonard Bernstein/New York Philharmonic Orchestra	© 1965	MYK 37224
Arthur Grumiaux/Alceo Galliera/New Philharmonia Orchestra	1966	Philips 426 064-2
Henryk Szeryng/Bernard Haitink/Amsterdam Concertgebouw	1974	Philips 442 398-2
Kyung Wha Chung/Kirill Kondrashin/Vienna Philharmonic Orchestra	1979	Decca 460 014-2
Gidon Kremer/Neville Marriner/Academy of St. Martin-in-the-Fields	1980	Philips 410 549-2
Itzhak Perlman/Carlo Guilini/Philharmonia Orchestra	1980	EMI 0777 7 64922 2 3
Itzhak Perlman/Daniel Barenboim/Berlin Philharmonic Orchestra	1986	EMI CDC 749567 2
Joseph Swensen/André Previn/Royal Philharmonic Orchestra	1987	RCA 7777-2-RC
Uto Ughi/Wolfgang Sawallisch/London Symphony Orchestra	© 1987	RCA 6536-2-RG
Stephanie Chase/Roy Goodman/Hanover Band	1992	Cala CACD 1013
Monica Huggett/Charles Mackerras/Orchestra of the Age of Enlightenment	1992	EMI 7243 5 65027 2 7
Hilary Hahn/David Zinman/Baltimore Symphony Orchestra	1998	Sony SK 60584
Aaron Rosand/Derrick Inouye/Monte Carlo Philharmonic Orchestra	1998	Vox VXP 7902

*Dates indicate when the recording was made or, when that is unavailable, the copyright date of the recording; Manen (1922) consists of the Larghetto only; Röhn (1944) and Neveu (1949) are broadcast recordings of a single performance; Menuhin (1947), Wicks (1953), Oistrakh (1960), and Perlman (1986) are taken from multiple live recordings; all others are studio recordings.

tras; six were recorded in concert; two use period instruments and lower tunings.²

Given such variety, we may assume that this sample broadly represents performance traditions of the Concerto in the twentieth century. Nevertheless, we must exercise caution when using recordings as documents of performance practice. A recording really only represents the approach of the particular participants on a specific occasion. We cannot assume that they would have performed in the same way at any other time or place, or that they played as they intended. Jascha Heifetz employed bowings and fingerings in his 1940 and 1955 recordings of the Concerto different from those he himself marked in his personal copies of the score.³ Which source is more representative of his performance of the work? It is impossible to know now. Moreover, the limitations and possibilities of recording technology can and do affect performances. Manen (1922) and Wolfsthal (1925) feature significant reorchestrations, with the string sections thinned considerably and the addition of low brass. Have we stumbled upon a previously undocumented performance tradition? Certainly not. Such rescorings were an accommodation to the limited abilities of the acoustic recording horn, in use up to the mid-1920s. On the other hand, splicing and digital editing can allow recordings to be virtually error-free. We cannot assume, therefore, that intonational standards have risen over this century simply because we hear fewer mistakes in recent recordings. Even discs labeled as live or concert recordings do not necessarily represent performances in the traditional sense. Many concert recordings, like Perlman (1986), are actually compilations of multiple live recordings; and even a recording of a single concert may well have been edited in the studio.

None of this should dissuade us from mining the wealth of information that recordings offer us—*sonic* information unavailable from any written source. To take full advantage of the data while allowing for the differences between live and recorded music, we must therefore study as large a sample as possible, account for

2. In choosing recordings I sought out the widest variety of performance available on CD. I restricted myself to CDs because not only are they more accessible to most readers than LPs and 78s, but the repeated and close study of recordings, particularly of very short passages, is significantly easier with CDs than with other formats. To ensure variety I selected recordings spanning the broadest possible period featuring a wide range of violinists, conductors, and orchestras, making sure to include both studio and concert recordings and “modern” and “period” performances. Some performers, however, appear more than once. Although I shall not pursue this avenue, interested readers can use the data presented here to compare recordings made by the same violinist, conductor, or orchestra in various combinations.

3. These scores are housed in the Jascha Heifetz Collection, Box 28, Folder 4 and Box 29, Folder 4, Music Division, Library of Congress.

the vicissitudes of recording, and compare aural findings with written documents—editions, treatises, and the like. Given these caveats, we can now proceed to the recordings, which will be considered from four broad vantage points: duration and tempo, vibrato, portamento, and articulation and timbre.

Duration and Tempo

Table 2 presents tempo measurements in selected passages from the beginning and end of the first movement, as well as its overall duration (minus the cadenza).⁴ The first four measurements come from the exposition: the first theme, the transitional scalar passage in the woodwinds, the *fortissimo* section in B \flat , and the second theme. The remaining readings come from the coda: the solo passage following the cadenza, and the final measures. With respect to duration, no consistent trend is obvious at first glance. One recording is almost equally likely to be shorter or longer than its immediate predecessor. On average, however, the later recordings are longer than the earlier ones. Table 3 shows that recordings of the first movement have gained nearly a minute and a half in the course of seventy-three years. The reason for this is not clear, for it does not seem to represent any broader trend in twentieth-century performance. As José Bowen's survey of tempo and duration in hundreds of orchestral recordings demonstrates, some works have become longer over the course of the century, others have become shorter, and still others have not changed at all. "The repertoire as a whole," he concluded, "is getting neither faster nor slower."⁵ Perhaps Fritz Kreisler, widely admired for his interpretation of the Concerto, led by example. His two recordings are considerably longer than any other of the period, but are much closer to the post-War average. More broadly, I believe that the longer performance times reflect a change in attitude toward the Concerto. As I shall explain later, the Concerto became more stately and serene in the hands of performers over the course of the twentieth century.

Duration is only a small part of the picture, however. It does not account for the range of tempo or the degree of tempo flexibility, both of which can reveal

4. The cadenza is not factored in here since not every violinist plays the same one. Cadenza times range from 1:35 in Chase (1992), who uses her own cadenza, to 5:41 in Swensen (1987), who plays his arrangement of Beethoven's cadenza for the piano version of the Concerto. Most are about three minutes long. By far the most commonly performed cadenzas are those by Fritz Kreisler: nineteen of the violinists play one or more of his cadenzas. Joseph Joachim's cadenzas, which had previously been standard, take a distant second, with five violinists using them.

5. José Bowen, "Tempo, Duration, and Flexibility: Techniques in the Analysis of Performance," *Journal of Musicological Research* 16 (1996), 114.

Table 2: Beethoven, Violin Concerto, movt. I, duration and selected tempos in beats per minute, 1925-98* (Shortest duration and fastest tempos are in shaded boxes with boldface type; longest duration and slowest tempos are in shaded boxes with italicized type)

Performers	Date	Time (w/o cad.)	I/1-9	I/18-24	I/28-37	I/43-50	I/511-18	I/531-34 531-35
Wolfsthal/Thierfelder	1925	19:20	107	128	145	125	76	134/130
Kreisler/Blech	1926	20:18	104	123	124	112	81	124/111
Szigeti/Walter	1932	19:22	103	122	134	113	71	144/134
Huberman/Szell	1934	18:10	110	124	125	117	78	150/147
Kreisler/Barbirolli	1936	20:10	106	115	118	112	87	132/118
Kulenkampff/Schmidt-Isserstedt	1936	20:32	105	118	121	116	67	131/121
Heifetz/Toscanini	1940	18:26	114	129	126	126	88	147/140
Röhn/Furtwängler	1944	20:50	106	112	123	109	73	132/129
Menuhin/Furtwängler	1947	20:58	99	<i>100</i>	122	108	79	119/113
Neveu/Rosbaud	1949	20:43	104	117	118	113	65	130/124
Ferras/Böhm	1951	21:49	106	115	122	114	67	128/123
Wicks/Walter	1953	19:13	99	123	126	113	73	131/122
Menuhin/Furtwängler	1953	20:47	98	102	114	104	73	121/115
Heifetz/Munch	1955	17:53	115	123	126	118	109	144/142
Milstein/Steinberg	1955	18:47	109	121	126	123	92	132/125
Oistrakh/Cluytens	1958	22:00	101	108	114	107	73	<i>102/98</i>
Oistrakh/Gui	1960	19:44	107	119	121	111	78	126/120
Francescatti/Walter	1961	20:35	<i>93</i>	112	118	<i>102</i>	79	122/115
Schneiderhan/Jochum	1962	21:05	109	121	118	119	79	<i>104/97</i>
Stern/Bernstein	1965	20:55	99	113	108	109	65	123/115
Grumiaux/Galliera	1966	20:58	100	113	119	109	70	120/114
Szeryng/Haitink	1974	21:52	105	112	112	110	75	112/107
Chung/Kondrashin	1979	21:56	98	109	<i>107</i>	108	69	112/105
Kremer/Marriner	1980	20:02	105	113	111	108	92	115/111
Perlman/Guilini	1980	21:35	98	107	110	104	76	109/106
Perlman/Barenboim	1986	20:56	98	104	109	109	82	112/103
Ughi/Sawallisch	1987	20:40	101	112	110	110	70	102/102
Swensen/Previn	1987	<i>22:08</i>	99	108	107	109	80	112/103
Chase/Goodman	1992	21:01	104	111	109	111	79	112/107
Huggett/Mackerras	1992	19:41	109	114	118	115	95	113/112
Hahn/Zinman	1998	20:47	102	116	115	111	73	129/121
Rosand/Inouye	1998	18:33	114	126	124	123	92	134/126

*Measurements are taken up to the downbeat of the final measure of each passage, except for the opening passage, in which all of m.9 is included. I have included separate figures for mm.531-34 and 531-35 because performers tend to slow down in the final cadence; therefore, a reading of just the last five measures would obscure the true tempo of the final passage. My reference scores were those edited by Shin Augustinus Kojima (Munich: Henle, 1973), and Alan Tyson (London: Eulenberg, 1967).

I obtained tempos in two different ways. For longer samples (usually more than four measures) I used a computerized BPM (beats per minute) counter, in which tapping a key in time with the music provided a tempo measurement for the sample. I found, however, that the tap method was less reliable for shorter samples. In these cases I used a stopwatch measuring to the thousandth of a second, timing each sample three times to find an average. I then divided sixty into the average and multiplied the result by the number of beats in the sample. That figure, rounded to the nearest whole number, is the tempo in beats per minute.

Table 3: Beethoven, Violin Concerto, movt. I, average duration, 1925-98

Date	Average Duration
1925-44	19:16
1947-65	20:22
1966-98	20:51

quite a bit about the character of a performance. For that, we must examine specific tempo measurements. When looking at the data in Table 2 we should remember that Beethoven gave no indications after the initial—and vague—*Allegro ma non troppo*, and that few twentieth-century editions offer any further guidance. Given the lack of direction, there is a surprising amount of agreement among the performers, at least in certain aspects. First, the range of opening tempos, 93 to 115, is rather narrow, and in fact the majority are between 99 and 107. Second, nearly every violinist agrees that the solo passage after the cadenza (mm.511*ff*) should be significantly slower than any other part of the movement.⁶

This is not to say, however, that there has been little change in the approach to tempo in the Concerto. As we would expect from the increase in duration, tempos have slowed during the sample period. But the slowdown is not consistent. An interesting pattern emerges from Table 4. The change in tempo in mm.1-9, 43-50, and 511-18 (the unshaded columns) over the sample period is quite a bit smaller than the change in mm.18-24, 28-37, and 531-35 (the shaded columns). The difference between these passages is revealing: the former are thematically stable areas, and the latter are transitional or more rhythmically active (as in the final measures of the movement). The earlier performers, then, seem to have used tempo to delineate structure, where an increased tempo highlights the instability of transitions and a relaxed tempo signals stability.⁷

The difference in approach to the movement's closing measures is especially noticeable. Almost all of the pre-War performers play these measures much faster

6. Prescription and practice do not always agree. Alberto Bachmann instructed violinists in 1925 that "the sublime phrase which follows the cadenza should be played . . . in the actual tempo of the beginning of the Concerto" (Alberto Bachmann, *An Encyclopedia of the Violin* [New York: Appleton, 1925], p.229). The closest any performer in the sample comes to following Bachmann is Heifetz (1955). His quick tempo after m.511 changes what is typically a contemplative song in many performances to a lilting dance.

7. José Bowen found that this approach to tempo is quite common in older recordings of the orchestral repertoire. Bowen, "Tempo, Duration, and Flexibility," pp.131-34.

Table 4: Beethoven, Violin Concerto, movt. I, average tempos in beats per minute, 1925–98*

Period	I/1–9	I/18–24	I/28–37	I/43–50	I/511–18	I/531–34 & 531–35
1925–44	107	121	127	116	78	137/129
1947–65	103	115	120	112	78	124/117
1966–98	103	112	112	111	80	115/110

*Robert Philip reports similar findings using a smaller and different sample in *Early Recordings and Musical Style: Changing Tastes in Instrumental Performance, 1900–1950* (Cambridge: Cambridge up, 1992), pp.16–17; and “Traditional Habits of Performance in Early-Twentieth-Century Recordings of Beethoven,” *Performing Beethoven*, ed. Robin Stowell (Cambridge: Cambridge up, 1994), pp.197–98.

than any other in the movement, and many come close to doubling the speed of the post-cadenza solo.

The clearest difference in the approach to tempo is not, however, in the structural sense. Most obvious even to the casual listener is the degree of smaller-scale tempo fluctuation in the older recordings. For example, many of the earlier performers tend to accelerate over the final measures (specifically between mm.531 and 534). This practice was supported and encouraged by the two leading violin teachers of the early twentieth century. Leopold Auer argued in 1925 that an accelerando is “natural and obvious, even though it is not indicated,” and in 1930 Carl Flesch called it “absolutely justified.”⁸ Huberman (1934), for one, certainly agreed, and seems to have challenged the Vienna Philharmonic to a race; were it not for George Szell pulling the rest of the players along, he surely would have won. Later recordings, however, reveal a different conception of the coda; if the earlier ones convey a sense of striving, these offer a sense of arrival. Chung (1979) is purposeful, almost deliberative, Swensen (1987) ascends to the high D with calm grace, and Hahn (1998) even broadens the tempo in m.533. Critical commentary has shifted as well. In his 1993 study, *Conducting Beethoven*, Norman Del Mar observes that “Some soloists play an accelerando over the last five bars of the movement, but this should not be necessary.”⁹ He advises that the final measures should be intensified with a crescendo—as marked in the score—not an accelerando.

The flexibility of the older performances runs much deeper than the occasional accelerando; in fact, we can often hear a quite prominent measure-to-measure

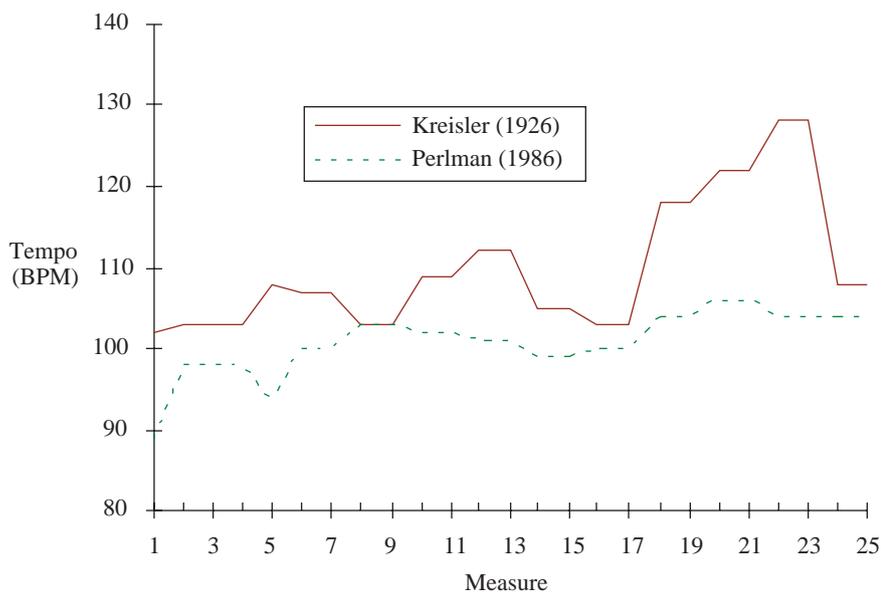
8. Leopold Auer, *Violin Masterworks and Their Interpretation* (New York: Fischer, 1925), pp.96–97; Carl Flesch, *The Art of Violin Playing* (New York: Fischer, 1930), II, 56.

9. Norman Del Mar, *Conducting Beethoven*, vol. II (Oxford: Clarendon, 1993), p.108.

tempo fluctuation. The orchestral tutti in the opening of Kreisler (1926) provides a prime example. After moving up and down between 102 and 113 in mm.1–17, Leo Blech and the Berlin State Opera Orchestra push through the transitional woodwind passage, accelerating from 118 to 128 in six measures (mm.18–23), in what would today strike listeners as uncontrolled rushing. The tempo then slows to 108 (mm.24–25) and then to 97 (mm.26–27) before speeding up to 124 for the *fortissimo* section in m.28. The later recordings are much steadier, especially in the woodwind transition. In Perlman (1986), for example, Daniel Barenboim and the Berlin Philharmonic stay within a beat and a half of 104 in mm.18–25, even slowing slightly in mm.22 and 23. Figure 1 graphically illustrates the differences between these two recordings by plotting tempo in the opening twenty-five measures. The contrast is especially clear after m.6, where Blech ranges between 103 and 128, and Barenboim stays within 99 and 106.¹⁰

Even more striking is the flexibility of the solo playing among the older generations. Listen to the opening solo (mm.89–101) where Huberman (1934) ranges

Figure 1: Beethoven, Violin Concerto, movt. I, mm.1–25, tempos in Kreisler (1926) and Perlman (1986).



10. Although I have confined my observations here to the first movement, the difference in tempo flexibility between older and newer recordings is equally evident in the *Larghetto* and *Rondo*. Consider, for example, the marked *accelerando* in the orchestra in movt. III, mm.28*f* in Szigeti (1932), or how many of the early recordings shortchange the rests in movt. II, mm.1, 2, and 5 by at least an eighth note.

between 100 (m.91) and 160 (the second half of m.100), or to the almost extreme give and take with the triplets in mm.93–96 in Kreisler (1926). Or consider another type of flexibility, between solo and accompaniment. In the post-cadenza passage it is a given today that the orchestra must play its pizzicato chords right on the beat with the soloist, and this is the case in many modern recordings. Yet in Wolfsthal (1925) the orchestra plays after him eight times, before him once, and with him only three times between mm.511 and 518. For Kreisler (1926) the count is eight after and four with; Kulenkampff (1936) and orchestra are never together in this passage. It is hard to believe that such lack of coordination could be purposeful, but there are times when soloist and orchestra are perfectly together, and it is often clear when a violinist intentionally jumps the beat or holds back.

From today's perspective it is easy to hear the flexibility of the older recordings as sloppy or capricious. What we are hearing, however, stems from an earlier aesthetic. For example, in 1913 Frederick Niecks wrote of "the propriety, even the desirability—nay, the necessity—of tempo modifications; that is, slackenings here and hastenings there," and violinist Achille Rivarde explained in 1921 that "elasticity of movement should be felt in every bar."¹¹ This elasticity was considered essential to any expressive performance, regardless of genre. As a critic claimed in 1909, "it is difficult to find a genuine violin solo in which tempo rubato may not be employed with good effect."¹² Speaking specifically of Joseph Joachim, the great nineteenth-century champion of the Concerto, one writer observed in 1910 that "naturally a Hungarian dance gave him more scope for rhythmical license than the Beethoven concerto, but in neither one nor the other was there any undue anxiety about the exact equalization of the beats."¹³ Hardly haphazard, this practice conformed to an ideal of musical performance in which tempo fluctuations conveyed changing emotional intensity or signaled important structural events. We may be confident, then, that the approach to tempo in the early recordings of the Beethoven Concerto represents a prevalent and pre-existing practice, illustrating what Robert Philip has described as "the rhetoric of musical rhythm" of the early twentieth century.¹⁴

11. Frederick Niecks, "Tempo Rubato from the Aesthetic Point of View," *Monthly Musical Record* 43 (1 May 1913), 117; Achille Rivarde, *The Violin and Its Technique as a Means to the Interpretation of Music* (London: Macmillan, 1921), p.44.

12. Clarine Gilmour, "Tempo Rubato," *Musical Standard* 77 (4 December 1909), 357.

13. "Rhythm and 'Rubato'," *Jacobs' Orchestra Monthly* 1 (April 1910), 4. Although Joachim made a few recordings late in his life, unfortunately, he never recorded the Beethoven Concerto.

14. Philip, *Early Recordings and Musical Style*, p.36.

Vibrato

One of the most significant changes in twentieth-century violin performance practice occurred in the use of vibrato. Violinists at the turn of the century tended to treat vibrato as an embellishment, best when used sparingly. In the violin playing of later decades, however, vibrato became much more conspicuous, nearly omnipresent.¹⁵ The recordings studied here come too late to document this change. By the time the first recordings of the Concerto were made in the 1920s, many soloists were already using a prominent vibrato; indeed, as Carl Flesch wrote in 1924, “If we consider the celebrated violinists of our day it must be admitted that in nearly every case they employ an uninterrupted vibrato.”¹⁶

Of course, not all violinists use vibrato in the same way. Consider the opening of the solo in the *Larghetto* (mm. 11–12). Kreisler (1926) vibrates strongly on selected sixteenth notes, not at all on others, and shakes through to the end of the long notes, but Szigeti (1932) plays the sixteenths straight, adding vibrato only to portions of the quarters. Kulenkampff (1936) uses no vibrato on the first quarter-note D and some on the second, and Menuhin (1953) vibrates the first strongly and the second very little. Similar variations may be heard in the delicate solo after the first movement cadenza—compare Huberman (1934), who uses vibrato on only four out of twenty-five notes to Röhn (1944) and Francescatti (1961), who vibrate nearly every note.

For decades critics and performers have complained about the overuse of vibrato in violin playing. In 1950 Adila Fachiri lamented the “unremitting, nauseating vibrato used by present-day violinists,” and more recently, Hans Keller decried the modern “mania for vibrato.”¹⁷ Interestingly, such mania seems not to have affected performances of the Beethoven Concerto. In fact, the discretion with which violinists use vibrato in this work is quite surprising. Itzhak Perlman—known for his luscious tone—plays some phrases in his 1980 recording (such as movt. I, mm. 511–14, movt. II, mm. 11–12, or movt. II, mm. 45–49) almost entirely straight.¹⁸

15. For more on this change in violin performance practice, see Mark Katz, “Aesthetics out of Exigency: Violin Vibrato and the Phonograph,” in *“I Sing the Body Electric”: Music and Technology in the Twentieth Century*, ed. Hans-Joachim Braun (Hofheim: Wolke, 2000), pp. 186–97. The volume was reprinted in 2002 as *Music and Technology in the Twentieth Century* by Johns Hopkins up.

16. Carl Flesch, *The Art of Violin Playing* (1924), I, 40.

17. Adila Fachiri, “Trends in Violin Playing,” ml 31 (October 1950), 282; and Hans Keller, “Violin Technique: Its Modern Development and Musical Decline,” in *The Book of the Violin*, ed. Dominic Gill (New York: Rizzoli, 1984), pp. 149–50.

18. His vibrato is slightly more pronounced in his 1986 live recording. Perhaps the vibrato allowed him to insure against imperfect intonation in a concert setting where it would not be possible to replay faulty passages.

The same is true with Chung (1979) and Kremer (1980), who make selective but strategic use of a *senza-vibrato* tone. Especially in the post-cadenza solo (with the previously mentioned exceptions of Röhn and Francescatti), few violinists use a prominent vibrato. The judicious use of vibrato seems in part to be a function of the music. Bronislaw Huberman made this point in a 1923 interview. “At times a very rapid vibrato gives just the right touch to human and dramatic expression, as in Lalo’s ‘Symphonie Espagnole’; at others the slower lyric vibrato, as in the Beethoven Concerto, is most expressive.”¹⁹ Indeed, Huberman used a fast, intense vibrato in his 1923 recording of the Lalo work he himself cited, but very little in his recording of Beethoven’s.²⁰ Many of the other violinists in this sample can be heard using quite a bit more vibrato in recordings of the late Romantic repertoire as well. Another contributing factor may be the early music movement. A straight tone is *de rigueur* in historically informed performances, such as in Chase (1992) and Huggett (1992); the “less is more” approach to vibrato may well have influenced other violinists in the sample. So whereas the changes in performance practice revealed in this study often reflect broader trends in violin playing, the use of vibrato actually counters the prevailing trend.

Portamento

With portamento the sample reflects a very clear change in modern violin playing. In the first decades of the twentieth century portamento was prominent in all types of music. By the 1930s the slow, heavily accented slide was becoming less common, by the 1940s violinists were using somewhat fewer and faster slides, and by the 1950s and 1960s portamento was generally in a light and sparing use, and was often avoided, especially in the pre-Romantic repertoire.²¹ We can see this trend in microcosm by examining how the violinists in this study performed a passage from the *Larghetto*.²² Table 5 reveals a marked decrease in the number of slides

19. Bronislaw Huberman, quoted in *String Mastery*, ed. Frederick H. Martens (New York: Stokes, 1923), p.69.

20. Huberman’s performance (with piano accompaniment) of the Andante and Rondo of the Lalo work can be heard on Biddulph compact disc LAB 077–78.

21. For more on the changes in portamento practice and its possible causes, see Mark Katz, *The Phonograph Effect* (Ph.D. diss., University of Michigan, 1999), pp.163–83 and 190–91.

22. The findings based on this passage are representative of the practice in the piece in general. Other representative passages include movt. I, mm.511–23 and movt. III, mm.311–14.

from the 1920s to the 1990s. The trend is even clearer if we break the sample into three large groups. The first (1922–44), representing the old style, averages 9.44 slides. The second group (1947–58) reveals a transitional period, with 5.75 slides and showing a much wider range (between 2 and 11) than the pre-War group (8–13). The final group (1960–98) offers a striking contrast with the earlier two, averaging 2.6 slides—less than one-third of the first group and less than half of the second. This dramatic change is also graphically illustrated in ex. 1, which notates the use of portamento in this passage in the first and last five recordings.

Not only did the frequency of portamento change, so did its manner of execution. Among the earlier performers the slides are generally slower and played with more bow pressure. Their use of portamento, furthermore, introduces a rhythmic effect as well as a melodic one, often creating momentary ritentutos, or slight anticipations or suspensions. On the other hand, the later violinists tend to slide

Table 5: Beethoven, Violin Concerto, Larghetto, mm. 43–49, recorded 1922–98

Performer	Date	Slides	Performer	Date	Slides
Manen	1922	9	Oistrakh	1960	6
Wolfsthal	1925	8	Francescatti	1961	5
Kreisler	1926	8	Schneiderhan	1962	1
Szigeti	1932	12	Stern	1965	1
Huberman	1934	8	Grumiaux	1966	0
Kreisler	1936	8	Szeryng	1974	2
Kulenkampff	1936	8	Chung	1979	4
Heifetz	1940	13	Kremer	1980	2
Röhn	1944	11	Perlman	1980	3
Menuhin	1947	5	Perlman	1986	4
Neveu	1949	6	Swensen	1987	2
Ferras	1951	7	Ughi	1987	1
Menuhin	1953	2	Chase	1992	6
Wicks	1953	7	Huggett	1992	2
Heifetz	1955	11	Hahn	1998	1
Milstein	1955	3	Rosand	1998	2
Oistrakh	1958	5			

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Manen (1922)
 Wolfsthal (1925)
 Kreisler (1926)
 Szigeti (1932)
 Huberman (1934)

Ughi (1987)
 Chase (1992)
 Huggett (1992)
 Hahn (1998)
 Rosand (1998)

Manen (1922)
 Wolfsthal (1925)
 Kreisler (1926)
 Szigeti (1932)
 Huberman (1934)

Ughi (1987)
 Chase (1992)
 Huggett (1992)
 Hahn (1998)
 Rosand (1998)

Example 1: Beethoven, Violin
 Concerto, Larghetto, mm. 43–
 49, recorded 1922–34 and
 1987–98.

quickly, with a fast and light bow-stroke, producing a more discreet sound with little effect on tempo or rhythm.²³

A modern-day listener might well believe that the earlier recordings betray an indiscriminate use of the ornament or even poor technique. But these violinists chose carefully when and when not to slide, for there are times when they shift positions without using portamento and others when they change positions specifi-

23. Stephanie Chase (1992) provides an exception. Although she makes no mention of portamento in the liner notes to the CD, she makes explicit her goal to re-create some of the practices of Beethoven's era. We may therefore assume that her use of portamento represents a conscious attempt to revive an earlier practice. Still, her slides are much more discreet than those heard in the early twentieth century.

cally in order to slide.²⁴ For instance, mm.45–46 of the *Larghetto* could be played solely in third position and m.47 all in first, yet the majority of violinists chose to slide at least once in these measures. And as the writings of the time make clear, portamento was to be cultivated, not shunned. Joseph Joachim claimed in 1905 that the slide is “the most important means of expression of the left hand,” and Carl Flesch even criticized those who avoided portamento, for they “deprive themselves of one of the most important means of expression.”²⁵ The slides in ex.1 reveal a purposeful use of the technique and serve several functions. They can be used to signal a cadence, as in the slide from C down to F \sharp at the end of m.45, which heralds the reaffirmation of G major after hints of A. In m.48, the slide intensifies the chromaticism of the motion from A \sharp to B, and in m.49 portamento dramatizes the large leaps, perhaps emulating vocal performance practice. Sometimes violinists simply used portamento to enliven passages that do not seem intrinsically expressive, as in the descending figuration of mm.43–44. This was apparently not unusual. A 1911 article in the journal *Violinist* noted how August Wilhelmj used portamento in “simple passage[s] which otherwise would sound colorless and perhaps pass unnoticed,” citing as an example a descending scale in Beethoven’s *Romance in G*.²⁶ Today, however, violinists typically shun adorning such passages, as is clear from ex.1. In general, we can see the earlier violinists’ use of portamento in this excerpt, and elsewhere in the *Concerto*, as something of a running commentary on the expressive and structural elements of the work.²⁷ In contrast, modern-day violinists, perhaps taught to let music “speak for itself,” shy away from such overt commentary.²⁸

24. Violinists can shift positions silently by lifting the fingers as the left hand moves up or down the fingerboard. We must therefore be careful when using fingerings in a violinist’s edition (or annotated score) as evidence of portamento use. Fingerings can only tell us where there is an *opportunity* to slide. For example, the fingerings in Wolfgang Schneiderhan’s 1982 Henle edition of the *Concerto* indicate several shifts in the post-cadenza solo of the first movement, yet in his recording he uses no portamento in this passage.

25. Joachim, quoted in Siegfried Eberhardt, *Violin Vibrato*, trans. Melzar Chaffee (New York: Fischer, 1911), p.14; Flesch, *Art of Violin Playing*, I, 34.

26. Arturo Tibaldi, “Tonal and Breath Effects on the Violin,” *Violinist* 10 (February 1911), 17.

27. Another function of portamento not illustrated in ex.1 is to differentiate repeated passages. For example, in the opening solo of the *Larghetto*, mm.11 and 12 are the same; a number of the earlier violinists, such as Manen, Wolfstahl, Szigeti, Huberman, and slightly later, Wicks, avoid portamento in m.11 but use it in m.12, giving the repeated phrase a different character.

28. While I have addressed only the use of solo portamento by only the soloist here, a similar trend may be observed in the use of orchestral portamento. Compare, for example, the consecutive slides in the violin section in movt. II, m.9 in Kreisler (1926), and Szigeti (1932) to the clean shifting in any of the recent recordings.

Articulation and Timbre

Unlike the case with tempo and portamento, there is little consistency in articulation and timbre over the course of the sample period. Nearly every conceivable type of bowing, accentuation, and tone color may be heard in these thirty-three recordings. Compare, for instance, the frictional, razor-sharp bowing of Heifetz (1955) in the beginning of the Rondo to the wispy flautando of Kremer (1980); or the Concerto's opening solo in Oistrakh (1958) and Grumiaux (1966), where the former treats the two notes of each pair nearly as equals, and the latter snaps the grace notes and emphasizes the quarters. Despite such variety, I would venture to make one generalization: the earlier violinists in the sample draw from a broader palette of bowings and timbres than the later ones. This is particularly so in the case of repeated or echo passages. Consider movt. III, mm. 85–88, four measures of sixteenth-notes that alternate *forte* and *piano* by the measure. Many of the earlier violinists articulate the measures differently—typically playing on the string for the loud measures and off for the soft, as in Kreisler (1926) and Heifetz (1940). Another good example of timbral alternation can be heard in Szigeti (1932), where he plays the repeated passages in movt. III, mm. 157–60 and 165–66 first on the E string and then on the A. Manen (1922) uses accents to add variety: in movt. II, m. 17 he accents the second note of each three-note figure, whereas he emphasizes the first note of each group when the passage is repeated in m. 27. The sense of the phrase is completely changed, as would the statement “I love you” have very different meanings depending on the placement of the accent. By contrast, we hear little of this kind of distinction, whether in terms of bowing, string choice, or accentuation, made by latter-day violinists.

The earlier violinists also used harmonics to differentiate repeated passages. When the main theme of the Rondo is repeated up two octaves (mm. 11–18), many play the quarter-note As in mm. 11 and 15 fully stopped, but use harmonics in the echo passages in mm. 12 and 16. This practice is quite common in the earlier recordings, though we can hear it in some of the more recent ones, like Ughi (1987) and Perlman (1980 and 1986). Generally, however, there is a greater use of harmonics—and by extension, the alternation of contrasting timbres—on the earlier discs. Take the first movement post-cadenza solo. Where Neveu (1949) uses four harmonics and Heifetz (1940 and 1955) six, the majority of violinists recording since the 1960s use none.²⁹ In the preface to his 1962 edition of the Concerto, Szigeti remarks on “the abuse of harmonics [in the] bad old days,” citing in particular the use of three consecutive harmonics in mm. 522–23 of this passage.³⁰ This particular use of harmonics is perhaps even more old-fashioned than Szigeti realized: it is

29. Two notable exceptions: the earliest recording of the Rondo in this sample, Wolfstahl (1925), uses no harmonics in this passage, and Rosand (1998), the most recent, plays four.

30. Beethoven, *Concerto for Violin and Orchestra, op. 61*, ed. Joseph Szigeti (Milan: Curci, 1962). Interestingly, he himself uses two consecutive harmonics here in his 1932 recording.

called for in editions by Henry Schradiek (1895), August Wilhelmj (1896), and Jacob Dont (1880), among many others. Dont (1815–88) performed as a violinist in Vienna shortly after Beethoven's death. Perhaps his editorial markings reflected common practices of the period; if so, the use of consecutive harmonics in mm.522–23 might actually be a remnant of Beethoven's day.³¹

In a review of the Concerto's 1806 premiere, Johann Nepomuk Möser complained of the "endless repetitions of a few commonplace phrases."³² It seems that many of the earlier violinists in this sample were likewise concerned that such repetition "could easily lead to weariness," and did their best to avoid this. On the other hand, late-twentieth-century violinists seem to agree more with Leon Plantinga. In a perceptive and poetic analysis from 1999, he described the work in terms of "a ritual that thrives on such repetition, on the comforts of the familiar." In this view, repetition is not to be disguised but embraced, and the work is revealed as a "quiet act of contemplation and assent to what we had expected all along."³³

Conclusions

The one inescapable conclusion of this study is that the sound of Beethoven's Violin Concerto has changed dramatically over the course of the twentieth century. Tempos have slowed and become more consistent. Portamento is no longer prominent—the sound of the slow slide up or down the strings has more or less disappeared. Although there is no clear trend in the use of vibrato, we find that modern-day violinists are willing to adopt a much more selective vibrato here than is typical in much of the violin repertoire. The deployment of timbre and articulation has changed as well. Where violinists once used a much wider range of bowings, accents, string color, and harmonics, consistency of sound has become a virtue among modern-day violinists.

If sound begets sense in music, then these changes in performance practice have led to changes in the meaning of the Concerto. Of course, each recording is unique and resists simple categorization. Nevertheless, I would generalize that the Beethoven Violin Concerto of the early twentieth century was passionate, emotive, and mercurial, but over the decades became contemplative, stately, and serene. This statement is supported by the corresponding changes in performance practice. In the earlier recordings the greater extremes and flexibility of tempo highlight the changing stability of the music, the more prominent portamento intensifies and drama-

31. For more on Dont's edition, see Clive Brown, "Ferdinand David's Editions of Beethoven," in *Performing Beethoven*, ed. Stowell, pp.121, 124–29.

32. Quoted in Robin Stowell, *Beethoven Violin Concerto* (Cambridge: Cambridge up, 1998), p.32.

33. Leon Plantinga, *Beethoven's Concertos: History, Style, Performance* (New York: W.W. Norton, 1999), pp.225–26.

tizes certain notes and passages over others, and the broader timbral palette suggests that the character of the music could change from one measure to the next. By contrast, in recent recordings the pace has slowed, the tempo contours have been smoothed out, and timbre has become more consistent, all lending a sense of balance and composure.

There are several possible explanations for such a transformation. With the shift from Romanticism to modernism in the early twentieth century, the role of the performer changed. It became less acceptable to add to, subtract from, or otherwise alter the printed score in performance. A good deal of what we hear in the older recordings of the Concerto might today be considered willful or self-indulgent, and indeed the modern approach to the work might be understood as an attempt to make the hand of the interpreter less apparent. The early music movement, blossoming later in the century, had an impact as well. It is most obvious in the recordings by Chase (1992) and Huggett (1992), both of which use period instruments and lowered tunings, and attempt to re-create the performance practices of Beethoven's day. But the discretion with which many of the other performers use vibrato also suggests the influence of the movement. Finally, I would argue that the very technology used to preserve the Concerto has played a role. As recording became an integral element of musical culture, new performance priorities emerged. The recording artist had to balance the desire to make a strong first impression—a desideratum of any live performance—with the need to create a document that can hold up to repeated hearings. And many of the idiosyncratic and unexpected gestures that characterize the earlier recordings may not wear well on repetition. Robert Philip has aptly observed that the performance practices of the early-twentieth-century musician seem “designed to explore different possibilities as one plays a piece of music. There is an impression that it could all be different at the next performance.”³⁴ But now, instead of working to convince listeners that a work could be quite different on the next hearing, musicians must create performances that may be revisited without a deterioration of effect.³⁵

Beethoven's music is often thought of as transcendent, as somehow existing independent of time and place. But as we can see from this study, interpretations of Beethoven, and indeed the meaning of his Violin Concerto, are deeply contingent on time and place, and on the aesthetics, technique, and technology that arise therefrom. Whatever the causes for the transformation of the work, and they are certainly many and interconnected, the Concerto is not simply a product of 1806. It is a product of every year since and, we hope and assume, every year to come.

34. Philip, *Early Recordings and Musical Style*, p.93.

35. This argument, extended to twentieth-century violin performance practice in general, is explored in much greater depth in Katz, *The Phonograph Effect*, pp.114–91.