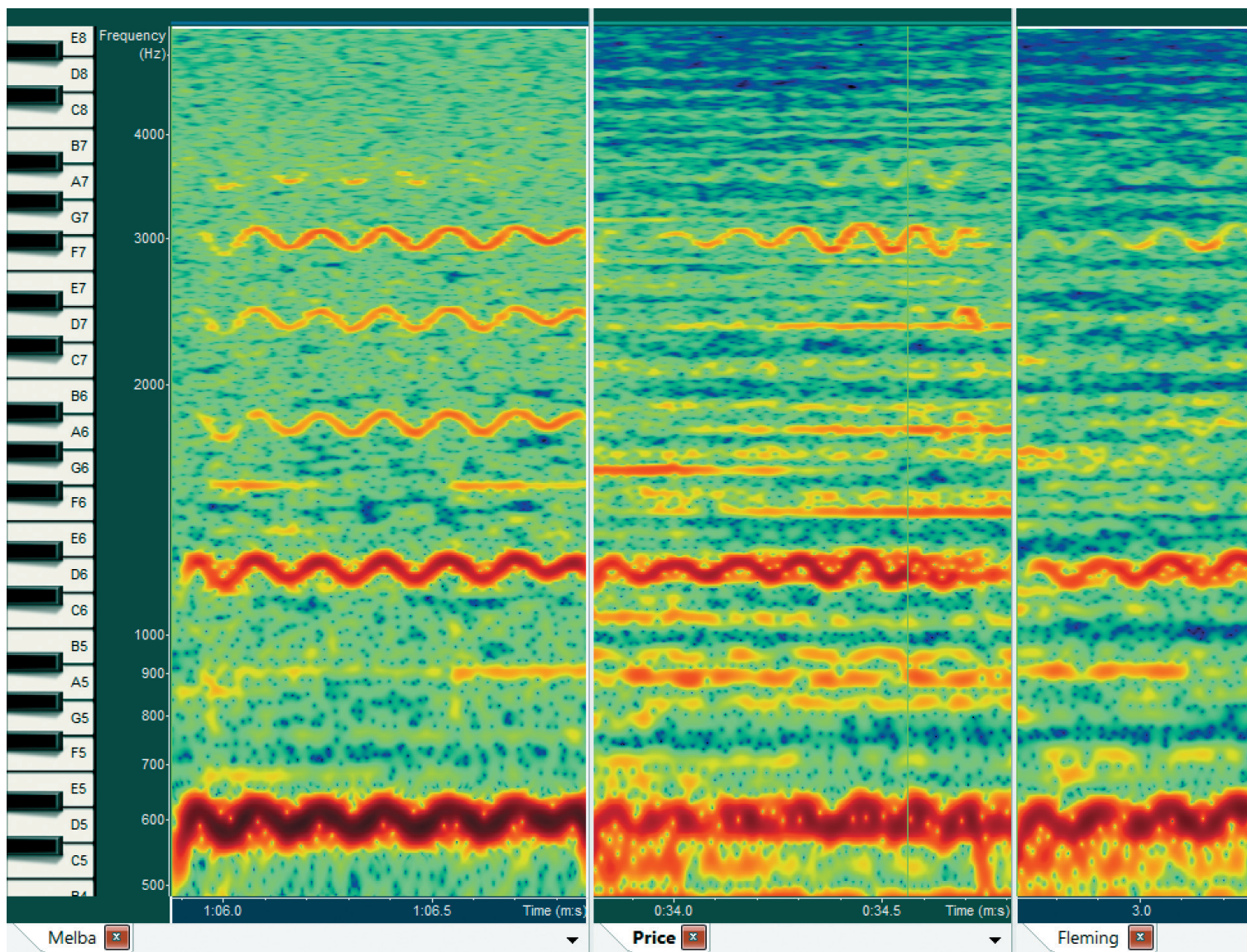


Vibrato Wars

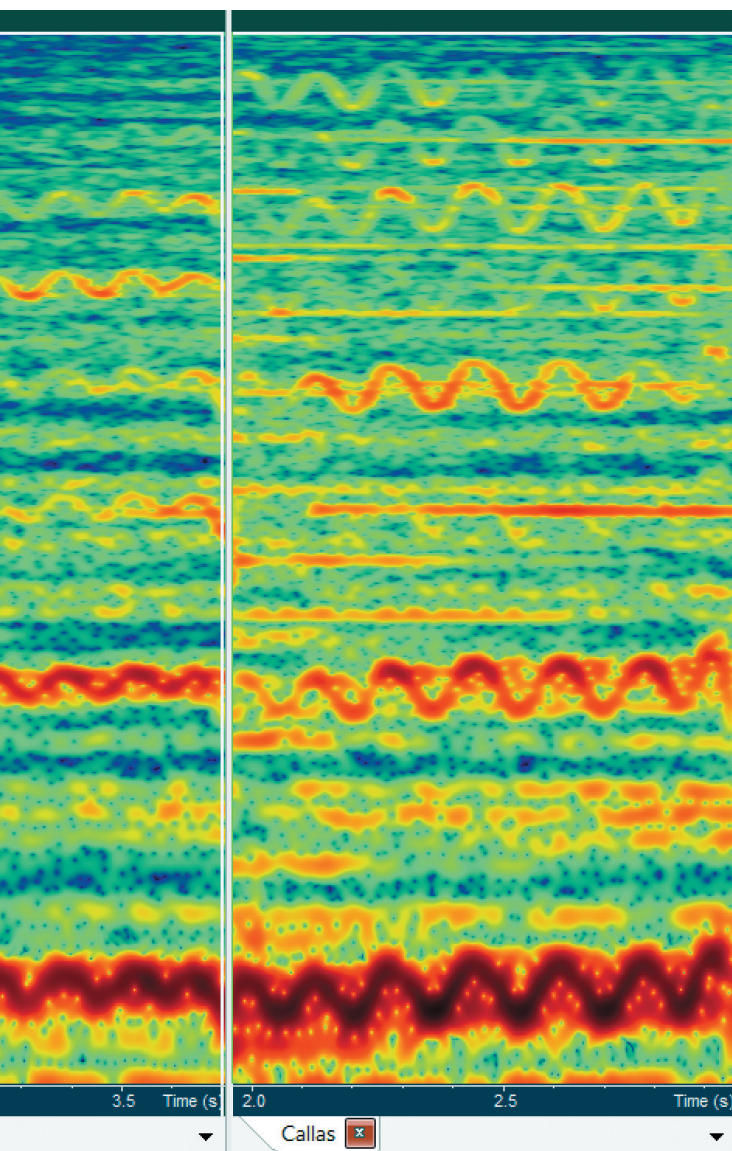


MANY PEOPLE THINK A peace treaty was signed after the vibrato wars of the 1970s, when the plush string textures of the modern symphony orchestra were challenged by the leaner sound of historical instruments. Eliminating vibrato, along with playing on gut strings, was the most noticeable mark of historically informed performance style. Before it was even called HIP, employing “authentic instruments” set early-music players apart from symphony orchestras, and singing with a pristine, boy-like sound marked a new vocal coloring.

Above: A spectrogram shows the pitch D5 on the written vowel “ah” from measure 35 of Mozart’s “Porgi amor” from *Le Nozze di Figaro*. From left to right, Nellie Melba, Leontyne Price, Renée Fleming, and Maria Callas. According to Ian Howell, “In these one-second clips, note the similar rate of vibrato (the number of peaks per second in the wavy lines) of all four singers. Melba, Price, and Fleming all share a similar extent (how far up and down they move) of a little more than a quarter-step; Callas’s vibrato is differentiated by a wider extent of about a half-step. Despite their similarities visually, Melba, Price, and Fleming’s vibratos sound distinct from one another. This paradox invites a deeper consideration of the manner in which we perceive vibrato on recordings (both historical and modern).”

To vibrate or not to vibrate: It's a question instrumentalists and singers continue to ponder in their search for expressive truth.

by **Judith Malafronte**



For many of today's conductors and performers, vibrato is a non-issue, a dead and meaningless talking point. Several leaders in the field even declined to comment for this article, and in some ensembles the words "vibrato" and "straight tone" are no longer used. But recent online discussions following the reprinting of an article by Beverly Jerold in *The Strad* magazine revealed that perhaps the calm in hostilities was nothing but a temporary cease-fire. The V-word can still raise blood pressures in musicians and music-lovers of all ilk. (See sidebar, page 33.)

First of all, what are we talking about here? Vibrato is a pulsing or shaking in the sound, and ideally it is regular in intensity, oscillating equally above and below the pitch center. Instrumentalists are taught how to use

the fingers, lips, or diaphragm to ripen the sound with this oscillating procedure, and pop singers often employ a wobbling or warbling effect on long notes. In classically trained adults, a healthy, open vocal sound contains some vibrato, and accomplished singers are able to vary both the speed and pitch, and even eliminate a noticeable pulsing altogether.

Opinions on vibrato and its uses differ between instrumentalists and singers, between those who perform primarily 19th-century music and those with broader repertoires, and between soloists and ensemble members. Fans of world music and pop genres tolerate considerable variety in vibrato, while conservatory juries expect a steady and even use on virtually every note played or sung. And yet, as baroque violinist Robert Mealy points out, "Why, in the modern orchestra, are we conditioned to accept as standard practice a flute playing with tons of vibrato, an oboe playing with some, and a clarinet playing with no vibrato? It's all extremely subjective and cultural."

In his brilliant and thoughtful book, *The End of Early Music*, pioneering period oboist Bruce Haynes notes that continuous vibrato—where every note is evenly enriched with pitch and intensity oscillation—is a 20th-century phenomenon, even though we associate it with 19th-century music and a Romantic aesthetic. Haynes finds a relationship between continuous vibrato, with its active and nervous effect, and equal temperament tuning, the compromise system in which no chord is truly stable acoustically. He likens all this to the overly active edge of a modern style.

It's still a hot topic—and a matter of taste and training for musicians of the past, as well as the present. A fashionista friend warns, "Like paisley, vibrato is good only in small amounts." Haynes called vibrato "the MSG of music." Countertenor Reggie Mobley quips, "Vibrato is a privilege, not a right." The 151 members of a Facebook group called "Vibrato is a bizarre and unnecessary affectation" banter or vent about its use, sharing musical examples.

Many conservatory-trained singers and instrumentalists identify with their characteristic timbre and equate expression and beauty with their vibrato-enriched sound. Yet it's important to remember that instrumentalists are taught how to create vibrato, while it exists naturally in singers, in spite of the WikiHow site "How To Sing Vibrato." This different point of view exists for mainstream as well as early-music performers.

One particularly unique perspective belongs to

Mark Bailey, who, in addition to heading the Yale Collection of Historical Sound Recordings and conducting the American Baroque Orchestra, is a professional violist with a degree in voice from Eastman. In Bailey's understanding, "Instrumentalists think more in terms of applying vibrato to the sound, whereas many singers think of vibrato as an inherent part of their vocal production. When instrumentalists are adding it, singers are leaving it out, which is a different psychology. It's an expressive inversion for a singer, where straight tone sounds like the ornament, rather than the vibrato, which is the string player's expressive enhancement."

Treatises

Treatise writers of the 17th and 18th centuries refer to several expressive devices that may or may not be what we now regard as vibrato. Terms such as *flattement*, *balancement*, *plainte*, *langueur*, *ardire*, *Bebung*, and sweetening are used, often with different meanings by various authors. As anyone knows who has read more than one early treatise, authors don't always agree on terminology, application, or taste, and it's easy to pick and choose the uses we prefer. Some complain that these vibrato effects were overused in the past and, frustratingly, many writers insist it is easier to learn how and when to apply these ornaments by listening to a teacher.

Modern terminology further confuses the matter. This was one of the main problems with the article in *The Strad*, which includes the term "light vibrato" and uses it without definition or source credit. In his seminal 1963 *The Interpretation of Early Music*, Robert Donington arbitrarily distinguishes between what he calls "tremolo"—defined as "a fluctuation of intensity"—and "vibrato," which he calls "a fluctuation of pitch." When the pitch fluctuation is a semitone apart, he dubs this a "trill," and if larger than a whole tone, he uses the word "tremolo" again, muddling the matter entirely, as he muddles quotations from early authors about the *trillo*, finger vibrato, the sting, and thrumming on plucked instruments.

In his 1676 *Musick's Monument*, Thomas Mace gives these instructions for producing the sting on the lute: "So soon as it is struck, hold your finger stopt upon the place, letting your thumb loose and wave your hand downwards and upwards several times." Writers as early as Silvestro Ganassi (1543) discuss vibrato on the viola da gamba, and Christopher Simpson (1659) even teaches a bow tremolo. There were two-finger vibratos as well as one-finger versions.

Jacques Hotteterre gives extensive charts for

fingering the *flattement* in a section immediately following the chapter on trill fingerings in his 1707 flute primer. Produced by wavering a finger above one of the open holes, the effect is of a gentle vibrato. Baroque flutist and teacher Sandra Miller points out, "It's impossible to do the *flattement* in rapid passages, so it can only be used ornamentally, on longer notes. But in [Hotteterre's] example, he applies it even on the last note of a piece, so, contrary to what I originally believed, it's not just a tool for adding excitement, passion, or tension."

Similarly, in his 1757 *Introduction to the Art of Singing*, Johann Friedrich Agricola mentions the ornament *Bebung* in his chapter on the trill because, as treatise translator Julianne Baird notes, both are produced by an up-and-down movement of the larynx, the gyrations in the vibrato being less pronounced. He praises its use by singers "on long sustained notes, particularly when applied towards the end of such notes."

Michel Pignolet de Montclair (1736) describes the *flatte* as a vocal ornament produced by slight, gentle aspirations. If the aspirations are slower and more pronounced, the ornament is called the *balancement*. Other 18th-century authors, such as Johann Mattheson and Leopold Mozart, use the terms *tremolo* and *Bebung*. Francesco Geminiani (1749) instructs the player to press the finger strongly upon the string and move the wrist in and out slowly and equally. The effect, he says, is so lovely that he encourages its use as often as possible.



For the Record

Tastes change. Recordings from the mid-20th century reveal the pervasive vibrato that characterized string playing, yet Miller remembers studying at the Curtis Institute when William Kincaid and Marcel Tabuteau were principal flute and oboe, respectively, of the Philadelphia Orchestra. Although these musicians were born in the 19th century, Miller recalls that "colors in tone and sound were encouraged and desirable. A decade later, we entered 'the-flute-must-project-to-the-back-of-Carnegie-Hall' era, where volume was the most important aspect." As one of today's leading early-music players and pedagogues, she cheerfully adds, "I'm happy to hear leading players today adding color back into their sounds!"

In the earliest recordings, from a century ago, vibrato is used sparingly. Baroque violinist Jude Ziliak points out that "the rise of continuous vibrato is linked to the decline of portamento." His comparison of the first movement of Elgar's Violin Concerto, in recordings from 1916, 1929, 1932, and 2004 bear out this relationship. Bailey speaks authoritatively about the sound and timbre, as well as musical style, of the earliest recorded

singers. He hears a difference between recordings made early in the 20th century and those made in the period between 1910 and 1925, which virtually document the emergence of continuous vibrato. “Nellie Melba [1861–1935], who coached the role of Mimì with Puccini himself, uses less vibrato than singers use for Bach and Handel with period groups today!”

Yet, when Bailey shared sound clips with Ian Howell, vocal pedagogy director and head of the Voice and Sound Analysis Laboratory at New England Conservatory of Music, an interesting clash between perception and science resulted. Howell used Overtone Analyzer, a spectrographic software that splits apart the harmonic frequencies and displays the results visually, to compare Melba’s singing to recordings of Mozart’s “*Porgi amor*” by Maria Callas, Leontyne Price, and Renée Fleming. Adjusting for sound quality, surface hiss, and background noise, Howell compared one-second samples of the same note (D5, on the first syllable of “*lascia*”), allowing for a direct comparison of rate and extent of vibratos.

[See spectrographic illustration on page 31.]

“According to the studies,” Howell said, “we tend to think of an oscillation rate of about 6Hz, or six cycles of vibrato per second, and plus or minus a semi-tone above and below the pitch, called the ‘extent,’ as pleasing. But Enrico Caruso, for example, frequently oscillated faster than 7Hz, Fleming’s extent averages only about a quarter-step, and even Dame Emma Kirkby”—whose singing epitomizes straight tone—“shows frequently regular, if narrow vibrato under electronic analysis.”

While the listener perceives Melba singing with a nearly straight tone, the spectrogram reveals a regular oscillation of about 6Hz, the modern standard for “pleasing,” and an average extent of a little more than a quarter-step. The interesting question for Howell is: “Why does it not sound ‘modern?’” In fact, in all four soprano examples, the vibratos have a rate of about 6Hz, while only Callas’s vibrato showed a wider extent. Howell is intrigued

by this kind of sampling, which suggests that “many of the differences in perceived vibrato relate to the limitations of the recording itself and the timbre of the particular voice, having to do with slightly inconsistent distribution of harmonic energy, rather than the specific rate or extent of the vibrato.” [He is pursuing further research. His preliminary results may be found at vocped.ianhowell.net/melba/ — available to site members only.]

Changing Attitudes

Nowadays, the V-word is often avoided in rehearsal situations, sometimes deliberately. In the professional choral world in New York, singers are asked to produce a simpler, purer sound, primarily in the interests of tuning and chord balancing. Bass player Steven Lehning often asks ensembles he coaches for “warmth.” Focusing on accented versus unaccented notes or syllables can help reduce offensive vibrato. Yet Bailey found that when he skirted the word vibrato while working with singers, he was “inadvertently patronizing them by denying them the type of suggestion I wouldn’t hesitate to use with instrumentalists. It’s better to be up front about what it is we’re trying to achieve, and how a sound must be tailored to reach that goal—and that means actually referring to ‘vibrato.’” Now he is more straightforward, cautioning both players and singers alike, “please don’t use vibrato to generate the tone, but only to warm or enhance it slightly after the fact.”

Even among mainstream musicians, attitudes today embrace vibrato as a controllable aspect of technique and artistry. Conductor and educator Stephen Lord, named by *Opera News* one of the “25 Most Powerful Names in U.S. Opera,” works with young as well as established singers, and is always attentive to their use of vibrato. “I do use the word for awareness’ sake, for example, in the cadenzas in *Norma*. One has to find a way for them to

Opposite:
Bust of Dame
Nellie Melba, by
Bertram Mackennal
(1863–1931).
London, Royal Opera
House, Covent Garden.

Next page: (top)
Melba 78 label for
“Porgi Amor” from Yale
Collection of Historical
Sound Recordings;
(bottom) Vocal
pedagogy director
Ian Howell (rear) and
vocal pedagogy major
Celeste Godin review
a spectrogram in the
NEC Voice and Sound
Analysis Laboratory.
Photo by Nina Guo.

Viva Vibrato?

The article in *The Strad* provoked a stream of comments, among them one from Mark Bailey that concluded, “Many [young musicians] embrace both period and modern instrument technique and practice, and they’re becoming really good at it. Rather, it seems this article is intended to start a fight that was resolved a long time ago.”

Hostile responses included this: “The true shame is that the spread of this ‘vibrato as an ornament’ thinking is ensnaring even some good present-day players, and we have people like you, safely ensconced in their academic playpens, spreading this kind of musical Ebola with abandon. (And I’m serious about the disease comparison, because playing like this sucks the life out of the music.)” Another hotheaded response included the sentence: “Now, HIP ‘experts’ have tried to force the voice into not vibrating: no need to mention the great number of singers who tried that and had to give up singing after ruining their throats.”

Beverly Jerold’s article “Did early string players use continuous vibrato?”: tinyurl.com/kgnnlmp

Response to Jerold article by Kevin Class: tinyurl.com/jwatxp3

hear each other.” He is distressed when young singers have wide, slow vibratos and will ask if this is being addressed in lessons because “the singer gets used to it, and it becomes part of them. To their ear, that is what they know.” While Lord is not fond of the overuse of straight tone, which he finds is related to musical rigidity, he is equally concerned about the too-wide vibrato, which he terms “another kind of rigidity, where air cannot escape.”

Countertenor Drew Minter wants “to hear vibrato used in a myriad of ways, from slow to fast depending on what you’re singing, much the way Janet Baker or [Dietrich] Fischer-Dieskau or Anna Netrebko use it.” Mezzo-soprano Aleksandra Romano, currently in her first season with Washington National Opera’s Domingo-Cafritz Young Artist Program, is conservatory-trained yet sensitive to the uses and abuses of vibrato. She notes faults such as wobble or “oscillations that peak at the pitch and trough well below the pitch, resulting in consistently flat sound,” and flutter, which “lacks a pitch center and is exceedingly difficult to tune, especially in the big opera houses.” In singing earlier repertoire, she finds that “as long as vibrato doesn’t interfere with the pitch, no one is offended by it.” As an ex-violinist, Romano also finds the same issue of addition or subtraction as Bailey noted: “Because I could see the movement of my wrist, vibrato didn’t seem natural on the violin, and it really was an effect.”

In most early-music circles today, the vibrato matter has been laid to rest in favor of expression, personalization, tolerance, and increased attention to the specific repertoire, acoustic, and ensemble dynamic. Viola da gamba player John Mark Rozendaal notes drily, “The history of vibrato is not, ‘once upon a time there was

none, then there was a little, then there was more, then the romantic virtuosi achieved continuous vibrato, then early music removed it.” Candace Smith, director of Cappella Artemisia, says “a singer should be able to sing with vibrato on

any pitch, any vowel, any dynamic. That doesn’t mean they should sing with it all the time. The first is a question of technique, the second of style and musicality.” Anne Azéma, artistic director of the Boston Camerata, believes “once we have clarity of tone, enunciation, and adequate articulation, we have the possibility of adding colors, or vibrato. What makes some singers

more interesting than others is their control, be it in early repertoires or later. Much of it is a matter of cultural, stylistic, and personal choices, in addition to technical aptitude.”

Boston-area soprano Shannon Rose McAuliffe notes that “my marketability has increased dramatically since I have become adept at singing with clear, straight tone. There is a healthy way of doing this, and I think any singer, regardless of their area of expertise, would be wise to hone this

skill.” When the word vibrato or non-vibrato is used in rehearsal, “this usually begins a brief dialogue on what the goal is. Tuning, ensemble blend, and aesthetic preference are often the topics that come up, but the best directors always caution that it should never sound strangled, forced, or as if the women are attempting to emulate pre-pubescent boys.”

Rozendaal reminds us that the excellence of the instrument also impacts the necessity for vibrato to enhance a wiry or shrill sound. “But when I have an instrument in hand making a really ravishing sound, I am happy to let it sing simply until the rhetoric or passion of the music demands special coloring.”

Violinist Ziliak, a graduate of Juilliard’s Historical Performance program, embraces the freedom he finds among colleagues. “I notice that while baroque violinists are taught to look to ‘good’ notes and tops of *messe di voce* [the swelling and diminishing of long notes] when thinking about where to vibrate, in practice it’s also quite common to hear a little vibrato on weak notes, or at the end of a phrase. The result is aesthetically similar: variegated timbre, plenty of purity, more of less general sweetness. In general, the more fluent and deeply specialized in early instruments and repertoire the player is, the less self-conscious about vibrato they tend to be. I don’t mean careless application, but a less rule-oriented and a freer way of thinking about it.”

Freedom: a worthy result of war.

Special thanks to violinist Daniel S. Lee for hosting a vibrant discussion on his Facebook wall. ■

