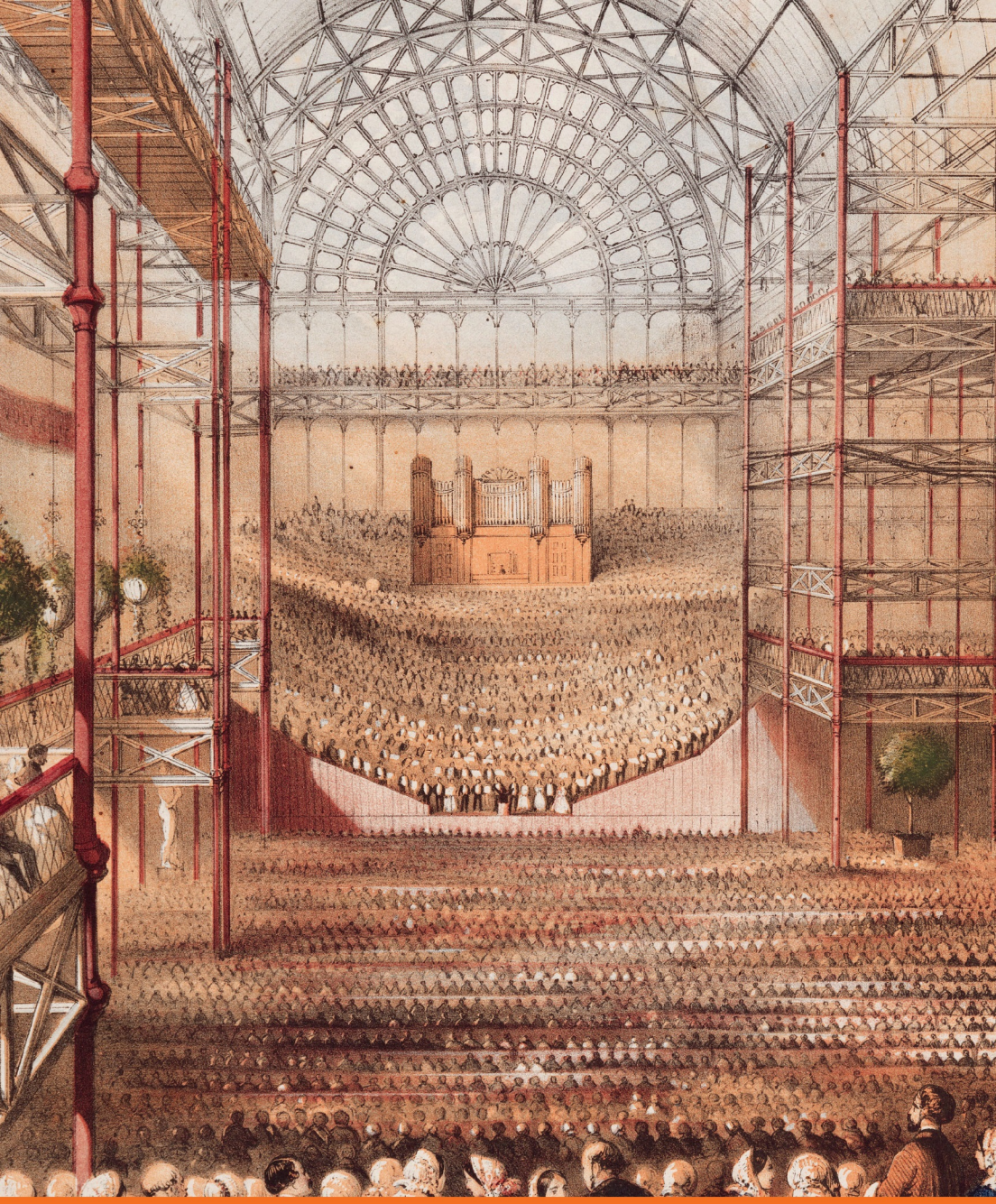

SING ROMANTIC MUSIC ROMANTICALLY

NINETEENTH-CENTURY CHORAL PERFORMANCE PRACTICES

DAVID FRIDDLE Foreword by Nick Strimple

Sing Romantic Music Romantically

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David Friddle, DMA²

Foreword by Nick Strimple, DMA

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dedicated to

FRANK COOPER

with continued thanks for your help with this book & every other project we tackled during our long friendship

and a thousand thanks to

STUART, TIM, RYAN, JO-MICHAEL, BILL, JON & NICK

for reading,
commenting, rereading,
& encouraging me to keep going—
especially when the going got tough

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ACKNOWLEDGMENTS

Any project as vast as this one necessarily relies on the efforts of many people. Several University of Miami music students were involved in producing *Christus*. Professor Frank Cooper was always available for consultation and provided crucial guidance as well as moral support. His profound knowledge of music and of Liszt was continually useful and often kept me from wandering into an intellectual dark wood. Moreover, Frank has been a loyal and trustworthy ally, and it is for his friendship that I am most grateful.

There are several folks who helped me translate the many sources. Because they are from the nineteenth century, they needed special attention; being specialized music terms also made deciphering the texts more challenging. Anthony Krupp, PhD, as he did with *Christus*, ensured that my translations of the convoluted German texts—printed in Fraktur font, no less—were accurate and intelligible; Professor Mari Siiroinen, of the Helsinki Institute for Social Sciences and Humanities, translated the Finnish texts without even being asked; Monica Faust Figueroa, PhD, UGrow Fellow, ASPIRE at the University of Miami helped me with Spanish and Portuguese; Lucia Marchi, PhD, of the Department of Modern Languages/School of Music—DePaul University, translated several pages of antiquated Italian into comprehensible English; Maria Lyon graciously verified my Swedish translations; Costijn Sommeling and the staff of *De Juiste Vertaler* translated the Dutch, Danish, and Norwegian.

My friend Jon Moyer stepped in when asked to proof a few chapters that needed a pair of eyes other than my own.

I'm grateful to Gabryel Smith, Director, Archives and Exhibitions for the New York Philharmonic for helping me locate rare illustrations and photographs included herein; likewise to Bridget P. Carr, The Blanche and George Jones Director of Archives and Digital Collections for the Boston Symphony Orchestra, whose assistance was invaluable. Ian Brearey, HonARAM, Digitization Officer for the Royal Academy of Music in London, also assisted. And to Courtney Morales, Emma Ebert, and Linda Kessler of Lexington Books/Rowman & Littlefield, I send my sincere appreciation and gratitude for helping see this extremely complicated project to fruition.

Timothy Newton, DMA, a longtime colleague and now a trusted friend, helped me shape the chapter on pronunciation, as well as contributing his editorial and publishing expertise to this project, which undoubtedly makes it a more useful work that otherwise would have been the case. I am grateful that Tim would share his experience as a professional singer and choral conductor to shape the content into something that any interested conductor can access to enhance their own performances of romantic choral music.

Jo-Michael Scheibe, Professor of Choral and Sacred Music at the USC Thornton School of Music, read and critiqued this book, much to my—and every reader's—benefit. Dr. Scheibe knows the bulk of this work intimately, since he knew it in its original form as the Preface to *Christus*. He and his mother helped me decipher more than a few antique German words that proved unusually vexing.

It is only fitting that USC Thornton School of Music Professor of Practice Nick Strimple should have penned the Foreword for this book. In 2006, when *Christus* was published by Bärenreiter, Nick gave the Preface (which formed the basis for this volume) a favorable assessment in *American Choral Review*, in which he wrote, "If a single volume on choral performance practice across the centuries is ever written, he should probably be the author."† Although he may not realize this, that encouraging comment in his

† Strimple, Nick. "Liszt's *Christus*: a New Bärenreiter Edition." Edited by James John. *American Choral Review* 53, no. 2 (Summer/Fall 2011): 13-14. https://www.scribd.com/doc/249362387/American-Choral-Review-53-2.

review is what motivated me to produce this volume and also its companion, *Choral Treatises & Singing Societies in the Romantic Age*. So, Nick, thank you not only for writing such a thoughtful and illuminating foreword, thank you as much—or more—for encouraging me to keep writing. That was a great gift, as is your ongoing professional support.

Dr. Stuart Dunkel, my Juilliard classmate and longstanding and benevolent friend, made possible the recordings that accompany this book. Thank you Stuart. Ryan Holder, Professor at Northern Arizona University, agreed to the thankless—and laborious—task of making sure all the tables, figures, and musical examples were sequential, without repetition or omission. And, finally, to every person who kindly replied to my emails—and there were dozens—and provided me with information and helped me locate sources and images, I borrow from the German and Italian languages the phrase that best shows my gratitude: *Tausend dank* and *Mille grazie*.

I am grateful to the Minnesota Arts Board: This activity is made possible by the voters of Minnesota through grants from MSAB thanks to a legislative appropriation from the arts & cultural heritage fund.

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INTRODUCTION

My DMA dissertation for the Frost School of Music at the University of Miami included more than ninety pages of discussion of nineteenth-century performance practices as part of the urtext, which included topics such as "The Orchestra," "Instruments," and "Expressive Devices." With approval from Bärenreiter, I expanded those sections into the chapters on "Expressive Devices," "Chordophones, Aerophones & Drums," and "Quires, Bands & Where They Sit."

Including orchestras and instruments in a book about choral performance practices may at first seem nonsensical to readers. Some conductors perform choral/orchestra works on occasion, however; and, to fully understand performance practices from the 1800s, one must recognize the differences that exist between nineteenth-century orchestral instruments and ensembles, and those of modern times. Moreover, when it is feasible to place the chorus in front of, or flanking, the orchestra, as was the practice, an immediate and noticeable improvement in balance takes place.

Many of the musical examples regarding articulation, tempo, ornamentation, and so forth, are drawn from instrumental music; the simple reason is that primary sources specific to choral music performance are scarce. It is hard to imagine that two separate musical vocabularies existed—one for vocal and another for instrumental music; consequently, it is a safe bet that performance indications were universal across genre and medium. If notations and indications for vocal and instrumental music were analogous—a slur is a slur—then conclusions about nineteenth-century performance practices drawn from instrumental music must surely be applicable to vocal and choral music as well.

It is true that multiple volumes on choral pronunciation exist. I included a chapter on pronunciation in the 1800s so that information for multiple geographical regions could be found in a single volume. Contemporaneous sources frequently include specific pronunciation guidelines, such as pronunciation charts; referencing these will make possible performances of nineteenth-century choral music that

use vowels and consonants similar to those used by, for instance, a choir in 1860s Bruges.

My aim in producing this volume is to give background and direction to any choral professional who wants to investigate historically informed performance (HIP), and how doing so might make their performances more authentic—and I believe, more compelling. Who doesn't love the sound of collegiate sopranos floating the high F at the end of the Brahms *Requiem*? That ethereal sound, though, usually does not move one to tears. Rather, it is the emotional message that is embedded in all great music by composers—including Brahms—that produces the frisson, also known as aesthetic or musical chills or the shivers up your spine.

I once taught Music Appreciation at a community college in Western North Carolina; my students were country folk who were by and large compelled to take the course. Once I played two performances of the first movement of Beethoven's *Symphony No. 5*: von Karajan and the Berlin Philharmonic, and the Hanover Band playing period instruments conducted by Monica Huggett. Interestingly, the Hanover Band managed to get through to the students where the Berlin Philharmonic did not. My class better appreciated Beethoven on period instruments, performed without continuous vibrato: the emotional message was more successfully transmitted to them. In short, they *got* Beethoven; they identified with his feelings.

None of us can relate to intellects like those of Beethoven or Bach; yet, we can all relate to Bach the parent, half of whose children died, or Beethoven, who probably fathered a disabled son and who went deaf at the height of his fame. Such profound grief, as evidenced in their music, touches us all. Conveying a composer's emotional message to listeners is the hallmark of inspired performance. As the Roman lyric poet Quintus Horatius Flaccus, known today as Horace, famously wrote in *Epistola ad pisones, de Arte Poetica (The Art of Poetry: an Epistle to the Pisos)*: "Si vis me flere, dolendum est Primum ipsi tibi." or "If you would have me weep, you must first express the passion of grief yourself."[♪]

If incorporating HIP into our performances helps to fill a listener with joy, or move him/her to tears, then isn't the extra effort or modest amount of diligence—or a little more rehearsal time—worth it?

PROVISO

There will be instances herein where I will switch to a sans serif font and add a drop cap when I express my personal beliefs, or want to slip into a voice that is a bit more informal. Whenever I quote an English source verbatim, I enclose it between "quotation marks." English sources that I paraphrase are credited with a endnote following the quote. Since I believe that any translation is a paraphrase, I credit every source with quotation marks at the end of the quote. Each footnote contains the text of the quote in its original language—German, Spanish, Catalan, French, Italian, Portuguese, Swedish, Finnish, Danish, and Norwegian.

There are 123,017 words in this book. Even though I have been as careful, and thorough as anyone could possibly be, the chance that there are zero misspelled, mistranslated or incorrect words is zero; if I omitted a citation, believe me when I say it was an oversight—it is not my habit to steal intellectual property and the many hours of research, writing, editing, correcting, and so forth from colleagues; I hope readers will give me the benefit of the doubt and trust that the many months and significant personal financial resources I have

[♪] Horace. *Horace on the Art of Poetry*. Latin Text, English Prose Translation. Translated by Ben Jonson and Edward Henry Blakeney. *Ars Poëtica by Horace*. London: Scholartis Press, 1928. https://www.poetryfoundation.org/articles/69381/ars-poetica.

invested in this project motivate me to create the highest-quality book I can create.

There are audio and video recordings of selected examples available online. Recordings are identified herein with these icons: . A listing of URLs follows:

Fig	Page	URL Destination
A	xxv	http://audi examples.net/Pages/SRMR/A/
B	xxv	http://audioexamples.net/Pages/SRMR/B/
C	1	http://audioexamples.net/Pages/SRMR/C/
D	4	http://audioexamples.net/Pages/SRMR/D/
E	19	http://audioexamples.net/Pages/SRMR/E/
F	20	http://audioexamples.net/Pages/SRMR/F/
G	111	http://audioexamples.net/Pages/SRMR/F/
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K	111	http://audioexamples.net/Pages/SRMR/K/
L	298	http://audioexamples.net/Pages/SRMR/L/
M	345	http://audioexamples.net/Pages/SRMR/M/
N	373	http://audioexamples.net/Pages/SRMR/N/
		www.audioexamples.net

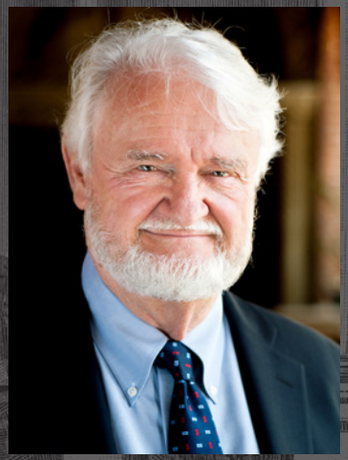
Finally, I'm fortunate that so many museums and libraries have digitized their collections; had they not, I would've been unable to produce this book. There are undoubtedly some authors and materials I might have found if I was physically in Europe; however, because of the state of a world impacted by COVID-19, I necessarily had to work from the United States. Some readers and reviewers prefer paraphrases of original sources; I respectfully disagree. Rather, I choose to allow authors, composers, and conductors to speak for themselves; after all, what can I possibly add to improve what François-Joseph Fétis, Hugo Riemann or Sir George Grove report?

By allowing them to speak directly—limiting my personal commentary—readers are challenged to draw their own conclusions:

based not on what I say about their words, but based on their words themselves—*Viene dalla bocca della verità*—"coming from the mouth of truth;" or, better yet, "straight from the horse's mouth."

Rochester, MN
May 2022

FOREWORD



By Nick Strimple, DMA
Professor of Practice, Choral Music and Sacred Music,
USC Thornton School of Music

ART: Moritz Ledeli: *Festive Concert of the Vienna Männergesängverein at the Hofreitschule, in the presence of the Emperor Francis Joseph I*, 1890. Woodcut. [Source: Berlin, Sammlung Archiv für Kunst und Geschichte, ©akg-images / WHA / World History Archive, used with permission.]

In 2014, David Skinner, the redoubtable Tallis scholar at Cambridge University, conducted a concert with his ensemble at the American Choral Directors Association's Western Division Conference. That program, which featured music by John Taverner and Thomas Tallis, was quite unlike anything ever heard by some in the audience: the tone quality and dynamic range bore no similarity to the expectations of those familiar with what is often referred to as the "English Cathedral Sound" and the conducting gestures—entirely based on what is now known about the gestures used by ensemble leaders in the Middle Ages and Renaissance—were anathema to those who believed that early music should be conducted without strong beats. While many thought the performance stimulating and challenging, others were troubled: they were comfortable with the ideas of performance practice that had been established by scholarship after World War II but had not realized that ongoing scholarship continued to discover other, perhaps uncomfortable, ideas that could significantly alter the playing field.

The attitudes of this latter group, however, are not without merit and certainly not without precedent. Choral professionals have been writing about performance practices for a long time. And, as the decades passed and tastes changed, those practices evolved cyclically from one thing into another. Even though sources continued to write in detail about how music was performed, styles had their heyday, after which they were supplanted by something newer, forward-looking, perhaps avant-garde. As music went out of print and was replaced by new works, written in the style of the day, performers just forgot about older music. Bach would have played a suite by Alessandro Frescobaldi in the only style that he knew, that being what came to be known as Baroque. And so forth, until the early twentieth century.

What has become known as historically informed performance (HIP) developed in a number of Western countries beginning in the middle of the twentieth century. Ironically, HIP was, in the words of Richard Turuskin, a "modernist response to the modernist break with earlier performance traditions."[1] Clusters of like-minded musicologists and performers sprang up in cities such as London, Berlin and Boston. Dissatisfied with hearing Mozart performed as if it were Mahler, they created a discipline that has grown continuously to this day, both in audience appeal and scholarly accuracy.

But HIP has also often been met with considerable skepticism and resistance. Its critics claim it is a "a whole wish list of modern(ist) values, validated in the academy and the marketplace alike by an eclectic, opportunistic reading of historical evidence"[2] or "the effect [of HIP] has frequently been to cocoon the past in a wad of phoney scholarship, to elevate musicology over music, and to confine Bach and his contemporaries to an acoustic time-warp."[3]

Yet, it has persisted and so flourished that virtually every major music conservatory or school of music now has whole departments dedicated to the study of how music was performed during the time in which it was composed. It also took root in the recording industry, which has produced multivolume sets of the complete works of composers such as Bach, Mozart, and Beethoven—performed with period instruments and played and sung in the manner that Bach, Mozart and Beethoven expected it to be heard.

At first, stylistic research focused on the Baroque, which was a favorite of audiences and purchasers of recordings. The choral world followed suit in 2013, with the publication of Dennis Shrock's seminal work on choral performance: *Performance Practices in the Baroque Era*. And it was not long until inquisitive scholars and performers, such as

David Skinner, started taking second looks at the music of the Renaissance, medieval and classical periods.

The HIP movement has a more patchy record of success with music of the nineteenth century. Certainly Beethoven, Schubert, Mendelssohn-Bartholdy, and Berlioz are performed and recorded with period instruments and stylistic awareness; there are any number of recognized scholars and conductors who have made significant contributions to the ever-growing body of recordings that are influenced by HIP. But there is still work to be done. Although some renowned conductors such as Sir Roger Norrington and Sir John Elliott Gardiner perform nineteenth-century music with stylistic awareness, most major choral/orchestral works have yet to be recorded under such guidance. These performances would greatly expand our understanding of the differences between, say, what Brahms expected to hear when his *Requiem* was first performed in 1867, and what we have become accustomed to hearing now—150 years later.

Until now, there has not been a single, coherent discussion of issues—such as the development of instruments and their various uses, placement of choirs and pronunciation of text—that have had a profound impact on an informed understanding of nineteenth-century performance practices. Just as instruments known to Bach and Haydn have changed dramatically, so too instruments in the 1800s, while being more evolved, are nevertheless different enough from their modern counterparts that the difference in timbre is considerable. For conductors who have the opportunity to perform romantic choral/orchestral works, just an awareness that German oboes sound different than French oboes is a good start. One does not require period instruments to perform nineteenth-century choral/orchestral music.

Strings in the nineteenth century were also quite different from modern counterparts: for much of the 1800s they

were made, as they had been for centuries, from catgut; but when an acute need for catgut sutures developed, there was a change to steel strings. Interestingly, this impacted choral performance practice. Once steel strings came into use, wind instruments could play louder, since the strings were capable of producing a larger sound.

Johann Mattheson, in his 1739 treatise *Der Vollkommene Capellmeister, Das Ist, Gründliche Anzeige Aller Derjenigen Sachen, Die Einer Wissen, Können, Und Vollkommen Inne Haben Muss, Der Eine Kapelle Mit Ehren Und Nutzen Vorstehen Will (The Perfect Kapellmeister, That is, a Thorough Display of All Those Things That One Must Know, be Able to, and Fully Possess, Who Wants to Lead a Chapel with Honor and Benefit)*, states that "Die Sänger müssen allenthalben voran stehen—The singers must be at the forefront everywhere."[4] (In other words, the singers must stand in front of the instruentlaists.) And even as ways of articulating or ornamenting music evolved, some practices—such as placing singers in front of instrumentalists—continued for centuries; however, toward the end of the nineteenth century this changed. Dvorak Hall in Prague's neo-Renaissance concert hall the Rudolfinum, which opened in 1885—boasted elevated choir stalls permanently installed behind the orchestra.

Beginning in the early twentieth century, the advent of larger concert halls meant that orchestras could greatly expand their dynamic palette upward. But, unfortunately, the new halls favored designs similar to the Rudolfinum. So, paradoxically, just as the instruments acquired greater dynamic power the choir, which had never been a match for them, was placed behind them, creating a balance problem. Even in colleges and universities, performance spaces where it is possible to place a large chorus in front of a large orchestra are few. This is unfortunate, because balance

between the two forces is greatly improved, and choruses can sing ***pp*** and still easily be heard.

One component of performance practice that is unique to vocal music is pronunciation. It is true that there is a great body of literature about choral pronunciation available today; but David Friddle has gathered multiple relevant sources peculiar to how choral music was pronounced in the 1800s throughout Europe and North America, including regional dialects and variations. Having these disparate sources together in a single volume provides conductors who want to explore the possibility of altering pronunciations for performances of romantic music with the resources needed to do so.

Fortunately, unlike earlier historical periods where the available writings about performance practice might be incomplete or ambiguous, the nineteenth-century writers included within these pages speak plainly about performance indications such as articulation, ornamentation, phrasing, tempo and vibrato. Nevertheless, like David Skinner's 2014 concert and HIP in general, David Friddle's work is apt to be controversial. While readers must decide for themselves, they may rest comfortably in the knowledge that the information provided is the result of careful, strenuous, and objective scholarship. All of which is to say that this book fills a gap in the scholarly literature about how choral music specifically was performed, and what the resulting implications indicate for today's choral professionals.

NOTES

1 Richard Taruskin, *Text and ACT Essays on Music and Performance* (Oxford: Oxford University Press, 1997).
2 Richard Taruskin, "Last Thoughts First," *Text and Act* (New York: Oxford University Press, 1995), 5.
3 Roger Scruton, *The Aesthetics of Music* (Oxford: Oxford University Press, 2009), 5.
4 Johann Mattheson, *Der Vollkommene Capellmeister, Das Ist, Gründliche Anzeige Aller Derjenigen Sachen, Die Einer Wissen, Können, Und Vollkommen Inne Haben Muss, Der Eine Kapelle Mit Ehren Und Nutzen Vorstehen Will* (Hamburg: Christian Herold, 1739), 484, §26, "Die Sänger müssen allenthalben voran stehen."

TWO THINGS

FIRST THING

It's easy to look at everything in this book and feel overwhelmed. Most choral professionals are busy people; so, the idea of just adding more—whether time, choir preparation & rehearsal, energy, or one more thing to think about—elicits groans and headshaking. I freely admit that some practices described herein would require more effort than others. Vibrato, for instance: many choirs already perform without continuous vibrato; if so, check that one off your list.

Understanding the differences between articulation marks, slurs, or ornaments means that one can then explain them in rehearsal; not many choirs will master the switch on the first go, but helping them identify and then incorporate these ideas into their individual singing shouldn't take forever. Pronunciation, however, is a different matter. If your choir hasn't sung much Swedish literature, then teaching them nineteenth-century vowels and consonants won't be much of a problem. And, by and large, choruses everywhere—except German- and French-speakers—pronounce Ecclesiastical Latin as if it were Italian. Switching to Germanic or French

ART: Gilbert Abbot à Beckett, "Cicero Denouncing Catiline," from *The Comic History of Rome. from the Foundation of the City to the End of the Commonwealth,* Colored woodcut by John Leech. [Source: London: Bradbury Evans, and Co., 1850, 80.]

pronunciation might indeed prove challenging. Only an individual conductor can determine if doing so is feasible—or even desirable.

Any intrepid conductor who chooses to incorporate historically informed performance (HIP) into their choir's performances will be in the vanguard of choral professionals—indeed in the majority of professional musicians. In 2002, Sir Roger Norrintgon performed Brahms *Symphony No. 1* with the Juilliard Orchestra, an event I never imagined possible. Personally knowing their mindset, **A** the students could easily have been horrified at the mere thought of Brahms being played without continuous vibrato. Instrumental conductors and ensembles are probably a tougher row to hoe when it comes to incorporating HIP into romantic music, but nothing stops us from asking instrumentalists in our own performances to turn off continous vibrato—or at least tone it down.

For me, all these considerations are justified by the transformative experience of hearing the resultant sonorities. Once one hears the main theme from the first movement of Tchaikovsky's *Symphony no. 6 in B minor, op. 74*, as performed without continuous vibrato by Norrington and the Stuttgart Radio Symphony Orchestra, **B** one is ruined forever. Vibrato is said to give warmth to a sound; in passages such as this, however, its disuse produces a timbre that evokes a stronger emotional response, perhaps due to the purity of intonation and the almost imperceptible edge on the sound wave. For that revelation alone I'll gladly expend precious resources; plus, there will be many additional advantages.

The zenith of performance is reached when a listener is so moved by what she/he hears that tears are shed, or a frisson of more than a few seconds is experienced—as once happened to me. Everything comes together in that magical moment: the composition, the conductor, the singers and instrumentalists, the performance space, as well as whatever steps were taken to produce as authentic a re-creation as possible of what the composer wanted to hear. The closer we can come to producing the sound composers heard in their minds, the closer we will come to performances of unparalleled beauty, truth, and pathos.

SECOND THING

We are fortunate as a community of choral professionals to have access to one exceptional performance of Anton Bruckner's *Mass No. 1 in D minor*, WAB 26 by **Dr. Deanna Joseph**.† Her research in the area of nineteenth-century cho- ral-orchestral performance-practice has led to invited presentations on the topic at several division conferences of the ACDA

Anton Bruckner was born in 1824. By 1867, the forty-three year-old Bruckner was living in Vienna, where he was chosen to become organist of the Wien Hofkapelle, as well as professor in the Konservatorium Wien (Vienna Conservatory), and in 1875 he was appointed to the Universität Wien. The *Mass No. 1 in D minor* was composed in 1867 in Vienna; it is the first of the "great" choral works that includes: *Grand Masses in D minor* (1867), in *E minor* (1869), and in *F minor* (1872), a *Te Deum* (1885), and *Psalm CL* (1892). According to the Editor of the Grove *Dictionary of Music and Musicians*,

> [Bruckner's] style is marked by great earnestness and considerable originality, though it may be reproached with a certain lack of contrast, and an inordinate leaning towards the manner of Wagner, upon whose death the slow movement of the seventh symphony was written as a kind of elegy. Bruckner died at Vienna, 11 October 1896.‡

Bruckner composed his first Mass, the *Mass in D minor*, in just four months in 1864. Nevertheless, it was not finished as planned for the birthday of Emperor Franz Joseph I. It was first performed on November 20 at the Cecilia Festival in Linz Cathedral—with great success. The Mass is one of the first works by Bruckner in which his characteristic symphonic style is applied; it was composed from 1884 through 10 August 1887; revised from April 1889 to March

† Professor of Music and Director of Choral Activities at the Georgia State University School of Music. Dr. Joseph holds conducting degrees from the Eastman School of Music, where she was awarded the Walter Hagen Conducting Prize.

‡ J. A. Fuller Maitland, "Bruckner," A. Fuller Maitland, ed. 1908. *Dictionary of Music and Musicians*, First ed. Vol. 5: 147. New York: Macmillan and Co.

1890; although no name is included in the score, correspondence reveals that Bruckner dedicated this symphony to Emperor Franz Joseph of Austria. The world premiere 18 December 1892, by the Vienna Philharmonic, Hans Richter, conductor. Bruckner had confirmed his sympathies with Wagnerian aesthetics, thereby earning a place on the blacklist of Vienna's most influential music critic, the virulent anti-Wagnerite Eduard Hanslick, who let flow a stream of malicious ink when each new Bruckner opus appeared.

Anton Bruckner (1824–1896), unattributed, 1885. Found in the collection of Landesmuseum, Linz. [Source: ©akg-images / WHA / World History Archive, used with permission.]

To any of us who care about HIP, Dr. Joseph's Bruckner performance is a rare gift: an encyclopedia that produces the aural components of that will be discussed in print. Everything from seating and placement to tempo rubato to appropriate pronunciation. I chose to post Dr. Joseph's performance in its entirety so that anyone who cares to hear for themselves how the issues and solutions studied in this book *sound* in performance. Pick any random spot and you will hear at least one period performance practice; that there are several is even better. Having heard how theory turned reality sounds, perhaps there will be more concerts.

Anton Bruckner: *Mass No. 1 in D minor*, WAB 26, Dr. Deanna Joseph, conductor, Sacred Heart Cathedral, Rochester, NY, 11 April 2010.

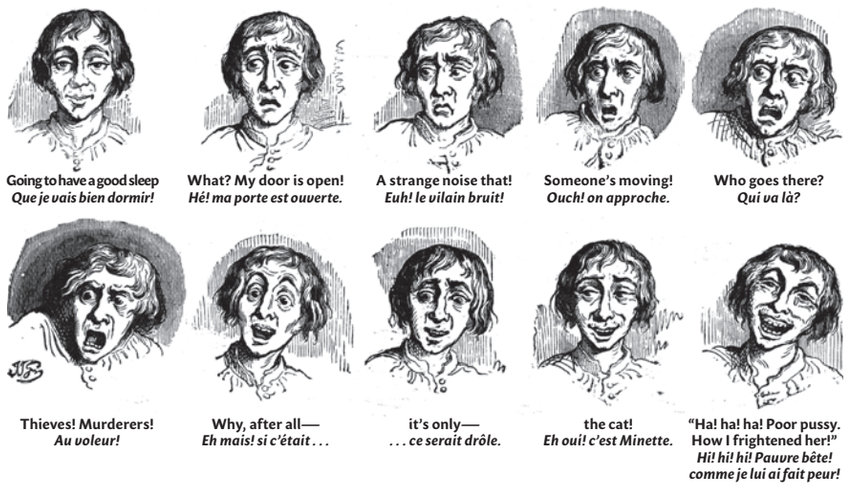
Movement	URL Destination
Kyrie eleison	http://www.audioexamples.net/BRUCKNER/Kyrie
Gloria in excelsis Deo	http://www.audioexamples.net/BRUCKNER/Gloria
Credo in unum Deum	http://www.audioexamples.net/BRUCKNER/Credo
Sanctus, sanctus, sanctus	http://www.audioexamples.net/BRUCKNER/Sanctus
Benedictus qui venit	http://www.audioexamples.net/BRUCKNER/Benedictus
Agnus Dei quo tollis	http://www.audioexamples.net/BRUCKNER/Agnus

EXPRESSIVE DEVICES

The great law of the arts is expression; any work of art that does not express an idea means nothing.

—Manuel Garcia II:
Traité complet de l'art du chant, 1901.[5]

ART: *The Concert Choir at the Conservatoire,* c. 1880. [Source: Paris, Bibliothèque Des Arts Decoratifs, ©akg-images / WHA / World History Archive, used with permission.]



Baptiste has emptied some excellent bottles from his master's cellar, in company with the concierge and the footman. His companions, while pouring him a lot of drinks, told him stories to make him shudder. But Baptiste is a strong spirit; he doesn't believe in thieves. "We don't steal," he said; "these are tales!" Eleven o'clock strikes: the copious libations and the desire to sleep have weighed down his eyelids; he says goodnight to the company, goes up without a candle, and gropes his way for his door in a dark corridor.[6]

FIGURE 2.1 **J. J. Grandville (Jean Ignace Isidore Gérard Grandville): *The Monologue of Baptiste.***
[Source: J. J. Grandville. 1842. "Le Monologue De Baptiste," ed. Edouard Charton, *Le Magasin Pittoresque*, X, 208.]

Anyone who has ever heard the Bach *h-Moll-Messe* sung by prepubescent and teenage boys and accompanied by period instruments, and who then listened to the same work sung by an adult chorus with twentieth-century instruments, can easily contrast the two. Even if each ensemble employed the same number of singers and players, read from the same Urtext score, recorded in the same acoustical space; even if enlightened, imaginative musicians gave an historically appropriate, stylistically correct rendering, the period instruments will produce a timbre that, while comparable to their modern counterparts, is nevertheless distinct.

Beethoven's orchestra, for instance, sounded as dissimilar to the orchestra of Brahms' day as that orchestra would to our own. The symphony orchestra underwent such radical transformations in the nineteenth century, in fact, that even "If we grant that musical instruments in the first half of the nineteenth century sounded quite different from those in the second, it in no way follows that the latter more closely resembled what we hear today."[7] Even so, sonority is not the entirety of music; rhythm, melody, articulation, ornamentation, and tempo are equally elemental. Thus, historically informed performances on modern instruments are surely more appealing—and genuine—than stylistically indifferent interpretations on older ones.

Conductor Sir Roger Norrington writes in the introduction to *A Perfowrmer's Guide to Music of the Romantic Period* that

> A tremendous number of performance ideas can be transferred easily from "early" instruments to full-scale "modern" ones. Although the players don't have historical instruments or background, they can achieve the same effect, and are surprisingly keen to try. String sections can be reduced in size, or the number of winds increased, to achieve the kind of balance expected by composers. Orchestras can sit as they were intended to, with violins divided across the stage and cellos and basses facing the audience. Players can learn the relevant tempos, bowing, articulation and phrasing.[8]

Still, types of instruments, seating arrangements, bowings—even tempo, articulation, and phrasing—are syntax; the primary purpose of music is to convey emotion. Hugo Riemann recognized the shortcomings of notation as well as the danger that players sometimes focus more on the symbols than on their meaning, when he wrote that,

> *Ausdruck*. (Ital. *Espressione*, French. *Expression*) is called the presentation of musical works of art, which the notation can not express in detail, i.e. all the small decelerations and differences, as well as the dynamic shades, accentuations and different tone colors by the type of strikes (piano), bowing (violin, etc.), phonation (wind instruments, singing voice) and are described in their entirety as *expressive playing*. If all the little accents— ^ > or *sf*, etc.—were indicated, which are indispensable for the artful presentation of a work, the notation would be very overloaded; at the same time, however, the performer would also be deprived of all genuine freedom of involvement.[9]

Manuel Garcia II, writing earlier, knew that "Sounds, unlike words, convey no distinct ideas; they only awaken sentiments: thus, any given melody may be made to express many different emotions, by merely varying the accentuation. An instrumentalist enjoys great liberty with regard to expression, as well as ornamentation; and … a performer is at full liberty to give a melody any tint or expression he pleases, if it corresponds with the general character of the piece."[10]

That liberty is also a great responsibility: merely singing or playing the notes as written is insufficient to amplify the overtones of feelings that embellish the fundamentals of sound, for the driving force behind music of every place and time is the expression of the heart.

I. VIBRATO

> *It does not matter if one deviates slightly from the rule, provided that the piece is rendered with as much feeling and as perfectly as if the rule had been followed.*
>
> —Jean-Baptiste Dupuits (des Bricettes), 1741[11]

To modern audiences, long-accustomed to hearing singers, instrumentalists, choirs, and orchestras perform with continuous vibrato, the very notion of a sonority that has no vibrato—the so-called straight tone—is anathema; indeed, from the 1930s until the 1970s, musicians in Europe and the United States had so integrated vibrato into their playing that until recently its history and development received scarcely any thought whatsoever.

How vibrato was (and ought to be) used in performance is the most contentious of the many expressive devices currently being reevaluated; in modern times it is considered basic to vocal and (with few exceptions) instrumental tone production. The controversy surrounding vibrato is hardly new: as early as 1926 voice professionals recognized that vocal tone production and the development of voices stirred great debate and prompted emotional responses; some went so far as to compare the dispute about vibrato to religious and political debate.

There are multiple reasons why vibrato evolved from its original, incidental role in music making to one where it is a fundament of tonal production; yet, no one agrees why the shift occurred at all. One writer even advanced bald commercialism as a motive: he posited that continuous vibrato pandered to the masses, thus assuring business success for its practitioner. As the twentieth century progressed, the role of vibrato in musical performance dramatically changed: by mid-century, the nineteenth- and early-twentieth-century understanding of the term was turned on its head.

Disagreement about the exact terminology used to identify vibrato was already evident in the early nineteenth century. It was variously understood to be 1) "strongly marked;" 2) a specific instruction to Italian opera singers to "throw out [the] voice in a bold, heroic style;" or 3) the action of tickling a plant "at the tips,"[12] which might suggest some kind of demarcation. There are also references to vibrato that are similar to our modern understanding: an "undulation or tremor."[13]

Grove's *Dictionary of Music and Musicians* contains succinct definitions of both vibrato and tremolo, demonstrating the ambiguity of its usage. Additionally, the modern *Grove Music Online* definition of Vibrato follows.

> Vibrato, an Italian term (past participle of, or verb adjective, derived from *vibrare*, to vibrate), denoting an effect, something akin to Tremolo (which see), yet differing essentially from it, used in musical performance. In vocal music, its mechanism is an alternate partial extinction and re-enforcement of a note, producing almost its apparent re-iteration. In music for bowed instruments, it is identical with the vocal "tremolo," consisting of a rapid change of pitch brought about by a quick oscillation of the hand while the finger is stopping a note, and producing a trembling sound or trill. It is strange that vibrato on the bowed instrument is the tremolo on the voice, while the tremolo in instrumental music (the rapid reiteration of the same note by up and down bow) more nearly resembles the vocal vibrato.[14]

> Vibrato (It., from Lat. *vibrare*: 'to shake'). A regular fluctuation of pitch or intensity (or both), either more or less pronounced and more or less rapid. The Italian term 'tremolo' is also occasionally used for vocal vibrato. Terminology used in music was not standardized until the twentieth century; earlier terms, primarily applied to vocal vibrato, include: *flattement, flatté, balancement, balancé, plainte, langueur, verre cassé;* tremolo, tremolo *sforzato, ardire, trilletto; Bebung, Schwebung*; and sweetening, depending on the effect wanted or tech-

nique used. Terminological uncertainties arise because vibrato is regarded not as a single ornament but rather as a complex of 'quivering' ornaments which might be the emotion to be aroused. Neither intensity nor tempo, therefore, can be clearly determined, and many Baroque or Classical kinds of vibrato are only distantly related to our present concept. Wobble (exaggerated, slow or irregular vibration of the singing voice) is a technical fault, and not to be regarded as vibrato.[15]

The Grove *Dictionary of Music and Musicians* is even more concise when it states that "By tremolo is usually understood an undulation of the notes, that is to say, more or less quickly reiterated departure from true intonation. The vibrato is an alternate partial extinction and re-enforcement of the note."[16] The concepts of vibrato or tremolo are confusing to be sure. In string performance, tremolo indicates a rapid back-and-forth motion of the bow, whereas vibrato assumes an undulation of the left hand—meaning that the string is stopped with a finger, while the pitch is manipulated without interference of the bow.

However, in singing the terms vibrato and tremolo are reversed. Tremolo means the back-and-forth slapping together of the left and right sides of the vocal folds—an effect that "which the French call *chevrotter*, to make a goat-like noise; for which the singers of the Opera at Paris have so often been ridiculed."[17] On the other hand, vibrato in singing is harder to define, since in singing vibrato can occur spontaneously through variations in the larynx; yet, there is no definitive explanation of how or why these variations occur.

In the seventeenth century, the term "trillo" was used by composers to indicate a specific practice, as demonstrated in contemporaneous works. "[Giulio Romolo] Caccini goes on to describe the different kinds of embellishment he has used in his songs. The two commonest ones "gruppo," which was like our trill, and the "trillo," in which one note, usually the last but one of a phrase, was repeatedly sung to the same syllable in ever-shortening values. Composers rarely troubled to write them down; usually they indicated them letters "g" and "t," or left it to the singer to insert them in the appropriate places. [Ottavio] Durante says that ornaments should never be added to the opening bars of a song or to the last syllable of a word; they are to be sung only on the vowels A, E and O (I and U are "odious vowels.")[18]

One fact is plain: virtually every nineteenth-century source condemns continuous vibrato in both instrumental and vocal performance. Sir George Grove defines tremolo as

A figure consisting, in the case of bowed instruments, of reiterated notes played as rapidly as possible with up and down bow, expressed thus with the word tremolo or *tremolando* added (without which the passage would be played according to the rhythmical value of the notes), producing a very fine effect, if judiciously used, both in *fortissimo* and *pianissimo* passages. On the Pianoforte it is a rapid alternation of the parts of divided chords, reproducing to a great extent the above-mentioned effect … In vocal music, the term is applied to the abuse of a means of expression or effect, legitimate if used only at the right time and place, [approximately 1830] and in the right way. It assumed the character of a vocal vice about forty years ago, and is supposed to have had its origin in the vibrato of Rubini, first assuming formidable proportions in France, and thence quickly spreading throughout the musical world.[19]

In his influential 1921 treatise, *Violin Playing as I Teach It*, Leopold Auer wrote that vibrato is used "to lend expressive quality to a musical phrase." He went on to explain how to physically produce it on string instruments: "rapid oscillation of a finger on the string."[20] One decade later, H. C. Stewart described vocal vibrato as "a muscular action, produced by the impact of the breath on the vocal cords." Moreover, vibrato was deemed "of prime necessity to string-players and singers as an aid to warmth and beauty of tone."[21]

Leopold Mozart concedes that "There are performers who tremble consistently on each note as if they had a fever," but condemns the practice; he suggests instead that vibrato should be played "At the end of a piece, or also at the end of a phrase, and on long, closing notes … "[22] His son Wolfgang opined on the subject in a letter to his father in 1774, criticizing the singing of Herr Meisner, who

> as you know, had the bad habit of making his voice tremble at times, turning a note that should be sustained into distinct crochets, or even quavers—and this I never could endure in him. And really it is a detestable habit and one which is quite contrary to nature. The human voice trembles naturally—but in its own way—and only to such a degree that the effect is beautiful.[23]

Clive Brown points out that in the late nineteenth and early twentieth centuries, there were "many different terms that were used to describe the various kinds of wavering that are now generally subsumed in the word 'vibrato.'" Indeed, he notes that the same terms often characterized different things.[24] Brown also observes that while string players in the late nineteenth century gradually came to associate the terms with their modern understanding, vocalists continued to associate vibrato and tremolo with the opposite meanings. This conundrum persisted into the twentieth century: writers used tremolo to identify fluctuations in pitch while vibrato was used to indicate a fluctuation in intensity.

Even though the documentation concerning ornamental vibrato is sometimes unclear, the evidence suggests that vibrato had an ancillary function in Western music making;[25] the preponderance of sources from the eighteenth century and thereafter clearly state that vibrato was originally ornamental in nature.[26] *Grove Music Online* confirms this belief:

> Ornament. In addition to the major classes of notated ornaments (which throughout much of the period might well have been introduced where they were not written) there were others that were only occasionally notated, though very frequently employed. Chief among these were vibrato, Portamento and *arpeggiando*. A few composers marked vibrato with dots under a slur or by various accent signs under slurs (which in string playing probably indicated an unmeasured bow vibrato or portato), as well as with a wavy line. The *crescendo-diminuendo* sign, in connection with a single note of shorter value was also used by many composers to invite, if not to instruct, string players to make an ornamental vibrato, as explained in the *Violinschule* by Joachim and Moser.[27]

Nineteenth-century sources confirm that orchestras in Europe (at least until the early twentieth century) rarely incorporated vibrato into their performances.[28] Louis Spohr says vibrato (he called it tremolo) was one of the "class of embellishments," which he says is produced by changing fingers on the same note.

> To the class of embellishments belong also the tremolo, and the changing of the finger on the same note. The

singer, in the performance of passionate movements, or when forcing his voice to its highest pitch, produces a certain tremulous sound, resembling the vibrations of a powerfully struck bell. It consists in the wavering of a stopped note, which alternately extends a little below and above the true intonation, and is produced by a trembling motion of the left hand in the direction from the nut to the bridge. This motion, however, should be slight, in order that the deviation from purity of tone may scarcely be observed by the ear.

In old compositions this trembling is sometimes indicated by a dotted line ..... or by the word tremolo; but in modern ones its employment is left entirely to the player, who, however, must guard against using it too often, and in improper places. In cases corresponding to those in which, as stated above, the trembling is observed in the singer, the Violinist may also avail himself of it; hence, it is employed only in an impassioned style of playing and in strongly accenting notes marked with *fz* or >.

The tremolo may therefore be divided into four species: First the quick tremolo, for strongly accented notes: Second, the slow, for the sustained notes in passages of deep pathos: 3rd, the slow commencing and gradually accelerating, for long notes played *crescendo*: and the 4th, the quick commencing and gradually slackening, for such as are played *diminuendo*.[29]

Based on his interpretation of the historical sources, vocal researcher Carl Seashore concludes that continuous vibrato of some sort has been part of vocal production for centuries. Even so, in his article "In Search of Beauty in Music," Seashore writes that "The vibrato is but one of the thirty or more recognized ornaments in music, an element so far in the background of musical structure that it is

never indicated in a musical score."[30] James Stark, author of *Bel Canto: A History of Vocal Pedagogy*, shares this interpretation.[31] Garcia also directs singers to use tremolo or vibrato only as an occasional effect. Despite a lack of universal agreement in the treatises, methods, and tutors about its exact use, the tenet was universally accepted that performers must cultivate taste and discretion when judging the appropriate use of ornamental or continuous vibrato.[32]

There is, however, virtual unanimity in the sources regarding the secondary role of vibrato, as well as its expressive possibilities. Spohr indicates that vibrato [tremolo] is appropriate for "an impassioned style of playing" and for "sustained notes in passages of deep pathos." Norrington concurs: he maintains that in the eighteenth and nineteenth centuries vibrato was an expressive device; like Spohr, he recommends its limited use to inflect long notes or to heighten especially passionate moments.[33]

Joseph Joachim was said to use vibrato sparingly and only for color and shading.[34] Joachim's student Leopold Auer believed that vibrato could "lend a touch of divine pathos to the climax of a phrase or the course of a passage, but only if the player has cultivated a delicate sense of proportion in the use of it."[35] The French flutist Georges Barrère, who lived in New York, wrote in *Musical Quarterly* (1944) that vibrato is expression, suggesting that without vibrato there is no expression, and without expression, no love. Barrère then boldly asks: Without love, then "what is the use of music?"[36]

In the first half of the nineteenth century, musicians favored restraint and purity of expression—a renunciation of the highly ornamented style of the late eighteenth century. In the 1800s, vibrato was used more for its "expressive qualities than as one among a host of ornaments with which an individual note could be enlivened."[37] Spohr was not the only source to link the use of vibrato to dynamic shifts;

both French and German authors of the late eighteenth and early nineteenth centuries demonstrated how to introduce vibrato as a "bow swell," which could be made to sound like an altogether "naturally occurring phenomenon."[38]

Garcia declared that tremolo

> is employed to depict sentiments, which, in real life, are of a poignant character;—such as anguish at seeing the imminent danger of any one dear to us; or tears extorted by certain acts of anger, revenge, &c. Under those circumstances, even, its use should be adopted with great taste, and in moderation; for its expression or duration, if exaggerated, becomes fatiguing and ungraceful. Except in these especial cases just mentioned, care must be taken not in any degree to diminish the firmness of the voice; as a frequent use of the tremolo tends to make it prematurely tremulous. An artist who has contracted this intolerable habit, becomes thereby incapable of phrasing any kind of sustained song whatever. Many fine voices have been thus lost to art.[39]

According to Norrington, early critics referred to continuous vibrato as "café vibrato."[40] Later ones, including Arnold Schönberg agreed, likening it to the "unpleasant sound of a billy goat."[41] Auer dismissed continuous vibrato in his violin method; he admitted that he never tolerated it, even though his fights against it in his pupils' playing had only "limited" success.[42] Auer advised other teachers to forbid students to use vibrato on any unsustained notes and to treat it with care in the case of successive held notes.[43] He continues: "Unfortunately, both singers and players of string instruments frequently abuse this effect just as they do the Portamento, and by so doing they have called into being a plague of the most

inartistic nature, one to which ninety out of every hundred vocal and instrumental soloists fall victim."[44]

Grove Music Online writes that:

> When the vibrato is really an emotional thrill it can be highly effective, as also the tremolo in extreme cases, but when, as is too often the case, it degenerates into a mannerism, its effect is either painful, ridiculous, or nauseous, entirely opposed to good taste and common sense, and to be severely reprehended in all students whether of vocal or instrumental music. Hard and fast lines in matters of expression in art are difficult, if not almost impossible, to draw. Cultivation of taste, observance of good models, and especially the true and unbiased analysis of human feelings, must be the guides as to how far these two means of expression are to be used.[45]
>
> The Vibrato and the Tremolo are almost equally reprehensible as mannerisms. Mannerisms express nothing but carelessness or self-sufficiency, and the constant tremolo and vibrato are therefore nauseous in the extreme. Their constant use as a means of expression are simply false, for if they are to represent a moral or physical state, it is that of extreme weakness or of a nervous agitation that must soon wear out the unfortunate victim of its influence. The tremolo is said to be frequently the result of forcing the voice. It may be so in some cases, but it is almost exclusively an acquired habit in this age of "intensity." It is a great mistake to say that it is never to be used, but it must be so when the dramatic situation actually warrants or requires it. If its use is to be banished entirely from vocal music, then it should equally disappear from instrumental music, though, by the way, the instrumental tremolo is

> more nearly allied to the vocal vibrato. Indeed, what is called 'vibrato' on bowed instruments is what would be called 'tremolo' in vocal music.[46]

Auer is equally opposed to overstating the expressive content of a composition. Even as he reiterates his conviction that good tone production and intonation are paramount for a successful performance, he states that "resorting to the vibrato in an ostrich-like endeavor" is "out and out dishonest artistically." What is more, Auer condemns "pitifully misguided" violinists who think that continuous vibrato is a means of "soulful playing or piquancy in performance."[47]

Brown distinguishes between modern vibrato and *Bebung*, described as a "finger vibrato in which the pitch was subject to only quite imperceptible oscillations." He reminds us that *Bebung* was in use in Germany until at least 1880, and points out that vibrating on inappropriate notes was widely regarded as "unseemly and inartistic."[48] Even though continuous vibrato seems to produce greater sensitivity, it in fact strips away a level of expressiveness; it also "distort[s] and obscur[es] the intervallic relationships of voices within an ensemble."[49]

Musicians and audiences expect to hear a tone that is rich with vibrato—a sound often characterized by adjectives such as "warm," "colorful," and "textured." Twenty-first-century audiences would be startled to hear the standard repertory performed with any other sonority. Ironically, composers from the seventeenth to the early twentieth century would have been equally startled—if not more so: for, by and large, players were taught never to use ornaments (including vibrato) when playing in ensembles.

Brown asserts that "The view that vibrato was detrimental in ensemble playing seems to have been generally acknowledged."[50] Norrington maintains that modern audiences have "become entirely used to an orchestral sound that not a

single one of the great composers would have expected or imagined."[51] Additionally, he notes that orchestras in the 1830s did not regularly use vibrato; its use as the basis for tonal production was delayed by at least a century.[52]

Robert Philip's exhaustive study of early recordings (and the musical styles exhibited in them) discusses at length the variety of woodwind instruments in use throughout Europe; he also explains how the differences between instrument makers, fingering systems, and the choice between wood or metal affected the timbre and performance styles of orchestra concerts. From his analysis of orchestral recordings and his readings of associated literature, Philip found that

1. into the first decade of the twentieth century, wooden flutes were still in use throughout Britain, Germany, and Eastern Europe and that generally the tone had no vibrato;
2. oboists in Vienna and Germany eschewed the French oboe and used no vibrato in their playing;
3. excepting clarinetists in France, and jazz clarinetists in the United States, vibrato was more or less universally avoided in the recordings;
4. bassoonists in Germany and the United States commonly played without vibrato;
5. brass instruments—trumpets, trombones, and, in particular, horns—were played without vibrato except in France, Czechoslovakia and the United States;
6. even as late as the early 1900s, wind players made limited use of vibrato; and,
7. vibrato was used even less frequently by wind players than string players or singers.[53]

Spohr insisted on purity of intonation in his violin method and instructs players to conform to intonation that is "perfectly true." He likewise adjures the orchestral violinist

to abstain from all additions of appoggiaturas, turns, shakes &c, as well as all artificial positions, the gliding from one note to another, the changing of the finger upon a note—in short, from everything appertaining to the embellishment of Solo-playing, and which, if transferred to the Orchestra, would destroy all unity of performance.[54]

This performance tradition existed well into the twentieth century and breached national borders; Brown states that orchestral string and wind sections would have naturally played without vibrato unless it was specifically indicated.[55] Examining the extraordinary occasions when composers included specific requests for vibrato in their music yields insights into their compositional intent;[56] these notations underscore the multiple published recommendations that vibrato be employed for expression.[57] Portato,[58] a nineteenth-century type of vibrato produced by pulsing the bow, was requested more frequently.[59]

The introduction of continuous vibrato into orchestral playing concluded a long stylistic tradition. Philip points out that nineteenth-century writers on cello performance make plain that when vibrato was used it was highly unusual and not a basic component of tonal production; early twentieth-century recordings corroborate Philip's assertion that orchestral cellists were restrained in their use of vibrato.[60] Indeed, the "internationally acclaimed cellist Bernhard Romberg referred retrospectively to an earlier period (probably the 1780s and 1790s, when his career began) as one in which cellists employed left-hand vibrato very frequently, but identified himself with a younger generation that rejected that approach."[61]

Romberg's recollection confirms that the trend toward more elaborate ornamentation (a development that occurred in the second half of the eighteenth century) was reversed in the nineteenth century; the new aesthetic prized powerful declamation and simple expression, neither of which is compatible with indiscriminate vibrato. Until almost the middle of the twentieth century, German and Austrian orchestral players clung to the traditional use of vibrato, the loss of which was lamented internationally: "I feel certain that by the beauty of their playing and steadiness of tone, [the Viennese] would convince … anyone … of their unquestionable superiority."[62]

Norrington describes the introduction of continuous vibrato into orchestras in Europe and the United States:

> Only in the early 1920s did the more sensuous and entertainment-minded French players begin to experiment with continuous vibrato in orchestras, although they were enthusiastic enough to try it in all sections of the orchestra, even including clarinets and horns. The British followed suit in the late 1920s. But the high-minded Germans and most of the big American orchestras held out until the 1930s. The Berlin Philharmonic does not appear on disc with serious vibrato until 1935 and the Vienna Philharmonic not until May 1940! During the first half of the twentieth century, therefore, violin concertos were heard with vibrato from the soloist, but with pure tone from the best orchestras in Germany.[63]

Norrington further asserts that today's mainstream performers could easily discern that German orchestras adhered to the nineteenth-century style until the 1930s by listening to early recordings. The tonal purity and simple expression of the romantic aesthetic—its "innocence"—is lost when overlaid with continuous vibrato.[64] Recordings likewise document the changes in technique that players made to accommodate continuous vibrato. Instrumentalists and singers on early recordings use a narrow, fairly rapid vibrato while modern players use a wider and slower rate of oscillation.[65]

Performance customs dictated how vibrato was supposed to be used in sonata-allegro form: while it was discouraged in the introduction and expositive theme, it was permitted during the second, "singing" theme.[66] In this same vein, distinctions were drawn between more emotive themes and dispassionate passages, as recordings demonstrate.[67] This practice is consistent with the many instrumental tutors and treatises in the era that advocated introducing vibrato only into truly emotive passages. Ultimately, twenty-first-century performers, like their nineteenth-century counterparts, must employ taste and judgment when applying vibrato to music written in the romantic style.

II. VIBRATO AS AN ACOUSTICAL PHENOMENON

Control of vibrato *helps your musical expression.*

—James Galway

If A = 440, then a perfectly proportioned fifth above that A would be E. Since the ratio 3:2 produces a "perfect" fifth, the E therefore vibrates at 660 Hz. This simple illustration demonstrates the principle graphically (figure 2.2). A vibrating string divides into two equidistant segments, here represented with a solid line, producing an octave. Simultaneously the string divides into three equidistant segments, represented here by a dotted line, producing a fifth. When the numerical relationships are complementary, the segments align at the nodes and reinforce each other to produce a more brilliant and amplified tone.

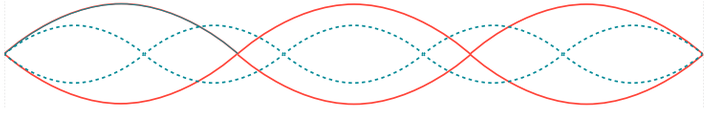


FIGURE 2.2 Demonstration of perfect tuning. [Source: Author.]

These drawings, made by an eighteenth-century device called a Harmonograph, illustrate the distinction between a perfect unison and an imperfect one that beats (figure 2.3).

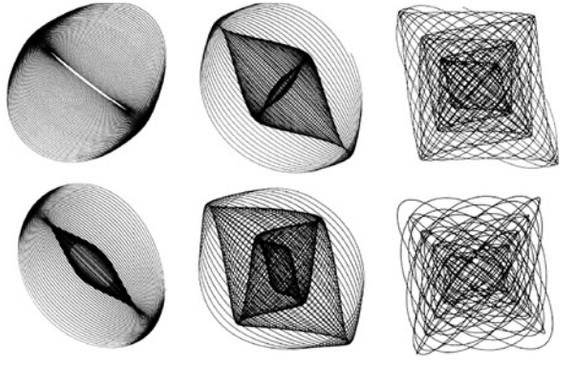


FIGURE 2.3 ABOVE: Harmonograph rendering perfect unisons; BELOW: imperfect unisons.
[Source: Ashton, Anthony. 2005. *Harmonograph: A Visual Guide to the Mathematics of Music.* Glastonbury: Wooden Books, 49.]

Conversely, if either pitch varies more than a few cents (one-hundredth of a semitone) from the baseline, the mathematical proportion is adversely affected, causing tension between the two numerical relations. The imperfection of the numerical relationship, which can be expressed as A = 440 and E = 665, will create a slow wide beat. A larger imperfection, say A = 440 and E = 680 will create a faster, narrower beat. The divisions of the string are no longer synchronized, which produces an imperfect mathematical relationship, then causes the segments to misalign at the nodes, which ultimately produces the beats (figure 2.4).

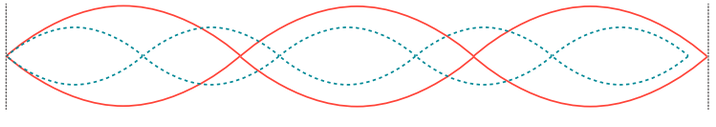


FIGURE 2.4 Demonstration of imperfect tuning. [Source: Author.]

At its matrix, superior choral intonation is nothing more than good mathematical relations between the various voice

parts. Simply put, when an A-major chord is sung in perfect intonation, all of the component tones reinforce and amplify each other when aligned at the nodes: the sum becomes greater than the parts. This figure illustrates how five sine waves, spaced according to the harmonic series, align at nodal points when sung in perfect tune (figure 2.5). Humans produce a much more complex sound wave, of course; for purposes of analysis, however, simple sine waves suffice.

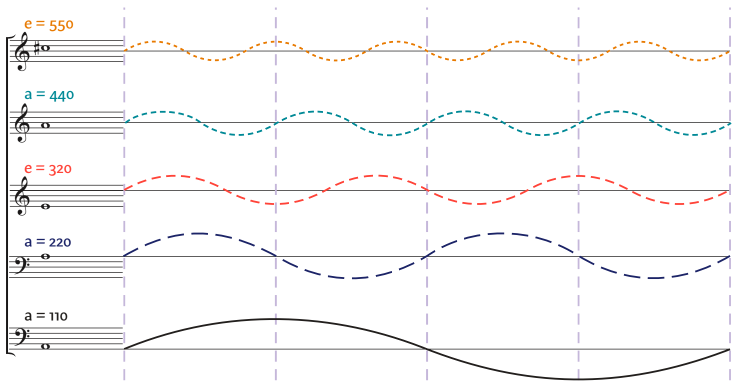


Figure 2.5 Demonstration of sine waves with perfect intonation.
[Source: Author.]

In physiological terms, vibrato is a fluctuation in the number of oscillations of a single pitch. A vibrato of 5-7 oscillations per second is deemed acceptable by most vocal pedagogues. In strictly numerical terms, the implications for tuning are obvious: the sine waves no longer align at the nodes. Even if one voice part is singing at the exact frequency (in this case the baritones) the mis-synchronization of the other parts will create the beating that is the hallmark of imperfect intonation (figure 2.6).

Composers in the nineteenth century did not have the advantage of modern acoustics and physics, but they understood instinctively that choral music sounds intrinsically better when sung with no vibrato; for, as the preceding

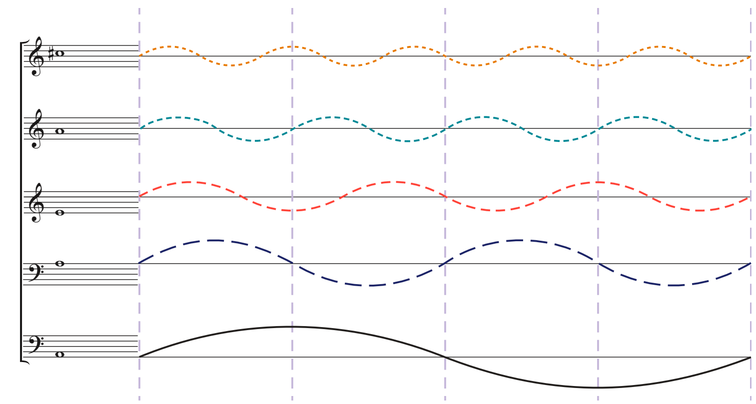


Figure 2.6 Demonstration of sine waves with imperfect intonation.
[Source: Author.]

graphs demonstrate, when the various voice parts line up at nodes, the overall sound is amplified and greatly improved.

III. ARTICULATION

> *In order to adequately expand the vocabulary of articulation signs, new markings were created (for example, -̇, ^̇, and -̣ ^̣), and traditional signs were used in new ways.*[68]

While there are dozens of symbols used by composers to notate articulation, phrasing, dynamics, ornaments, and so forth, these indications are at best ambiguous. “Notation is of its time and place and can only be properly understood in terms of the performance practices of that time and place. … our historical knowledge is always partial and serves only ever as context for our own interpretations; in this way such knowledge becomes freeing rather than binding for our interpretative ideas and skills.”[69]

Whereas the symbol for an eighth note has remained more or less constant throughout history, interpretation of the symbol has not. In German Baroque music, it might have been given only half its value; in the French Classic

school it may have been either elongated or truncated according to the conventions of *notes inégales* (unequal notes). The *realization* of the notation is in fact more important than the notation itself. Unlike the printed symbols, which do not vary once inked onto paper, ideas fluctuate about exactly what those printed symbols mean. Eventually, however, these beliefs about what the notation means are ingrained into the collective musical consciousness and become part of the permanent mindset of performance practice. Indeed,

> at the beginning of the twenty-first century musical notation conveys something quite different to us from what it did to musicians of the romantic period. This is not only because the sounds of our instruments, and our manner of playing them, has changed, but also because notation has come to be seen as increasingly precise in its meaning, with respect to the notes and the growing number of performance markings supplied by the composers. … Severe critical eyebrows would be raised at a modern performer who played or sang distinctly different rhythms from those written by the composer, who interpolated grace notes for the sake of a Portamento, and who introduced pronounced *rubato* where none was indicated. … Yet all these things would have seemed quite normal, acceptable, or even praiseworthy, to musicians of the romantic period.[70]

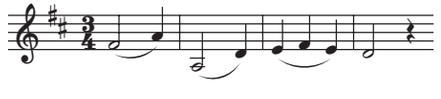
Once so established, core beeliefs are difficult to change: "A late-twentieth-century musician, who finds the habits of 70 or 80 years ago merely old-fashioned, may have some difficulty accepting that they might represent the end of a long tradition, stretching back to periods which we now think of as historical rather than old-fashioned."[71]

So, in addition to rethinking the types and numbers of instruments and voices used in the nineteenth century, the evolution of the interpretation of nineteenth-century notation must be scrutinized once again. To attempt to re-create the romantic artist's musical genius, we must examine how marks and symbols were used—and performed contextually, then reconsider them with an eye that is unfiltered by modernism.

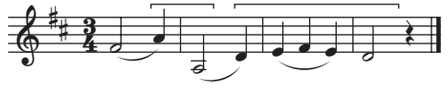
Because Riemann's *Musik-Lexikon* describes contemporaneous performance practices, it is an invaluable resource for scholars and performers. His in-depth entries, such as the one for "Articulation," provide insights into how composers and players understood and executed almost every aspect of musical composition and performance.

> Articluation, in language, the differentiation of the individual sounds, in the music the bringing out and stringing together of the individual tones, thus the slurring (legato) or staccato and their varieties. The lack of clarity of the verbs "articulation" and "phrasing" is one of the most serious obstacles to solving the problem of the latter. Articulation is, in the first place, purely technical, mechanical, while phrasing is primarily idealistic and perceptual. I articulate well when I connect the tones in the same slur and clearly articulate the last note of the slur:

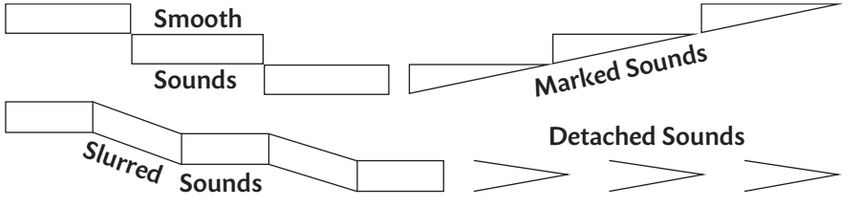
Brahms, *Symphonie No. 2*



I phrase when I understand that it is precisely the last under the next slur that forms a motif together:[72]



Riemann underscores the important distinction between legato and non-legato playing and singing, as does Garcia, who says that "If it was possible to accurately depict the several ways one could execute various articulations, one might do so with this graphic representation:—"[73]



A more technical definition appears in the Grove *Dictionary of Music and Musicians*:

> Legato (Ital., sometimes written *ligato*; Ger. *gebunden*; Fr. *lié*), "connected;" the sound of each note of a phrase being sustained until the next is heard. In singing a legato passage is vocalised upon a single vowel, on stringed instruments it is played by a single stroke of the bow. ... On wind instruments with holes or keys, a legato passage is played in one breath, the notes being produced by opening or stopping the holes; but a wind instrument on which the different sounds are produced by the action of the lips alone, as the horn, trumpet, etc., is incapable of making a true legato, except in the rare cases in which one of the notes of the phrase is produced by stopping the bell of the instrument with the hand.[74]

Riemann's definition is not unlike the one in the Grove *Dictionary of Music and Musicians:*

> Legäto (*ligato*, "tied"), that is, without pauses between the individual tones. The legato is achieved in singing when, without dropping off, that is without interrupting the breath, the degree of tension in the vocal cords is changed, so that the first note really transitions into the second note; similarly, the process is not interrupted with the wind instruments, but only the fingering or an adjustment of the embouchure. On the string instruments, notes are tied, 1) when they are played on the same string, by the bow not leaving the string and only the fingering is changed; 2) when they are on different strings, if the bow quickly glides to the other string.[75]

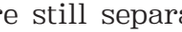
One way that composers indicated legato playing was with an extended slur, as Grove points out.

> Slur ... taken in its original and widest sense, signifies an effect of phrasing which is more commonly expressed by the Italian term legato, i.e. connected. ... and are performed with smoothness, if on a stringed instrument, by a single stroke of the bow, or in singing, on a single syllable. But although this was originally the meaning of the word, it is now used in a more restricted sense, to denote a special phrasing effect, in which the last of the notes comprised within the curved line is shortened, and a considerable stress laid on the first.[76]

Riemann saw that the slur could be (and sometimes was) confused with the identical symbol that is used to tie two notes together.

> Slur, 1) in musical notation the sign by which the representation of Legato required, the so-called tie or slur, the same sign which, connecting two notes at the same level, means the holding, lying down, non-re-hitting and then also called the connective arc; this terminology is by no means fortunate, and there are often situations

where it is by no means clear whether one is faced with a tie or slur of the one kind or of the other. It would therefore be desirable for the two types of tie or slur to be distinguished verbally as well as in notation. The tie sign that indicates legato could once and for all be called legato tie, while the other could be called holding tie. The holding tie should always reach exactly from note head to note head.[77]

A slur had numerous functions in nineteenth-century music, but its "most basic meaning is simply legato."[78] When used with other symbols, however, such as hairpin dynamic markings  slurs could also indicate phrasing. Long slurs spanning one or more measures delineated phrase structure while shorter slurs grouped one, two, or three notes into a motif. When combined with articulation marks, slurs subtly modified how the marks were normally executed. Slurs that connected notes marked with staccato dots generally denoted portato playing, or, according to Riemann, "*Anschlag*." He continues: "Non-legato is the softest type of staccato where the notes are held as long as possible yet are still separated from each other. Notated,  *i.e.*, connected staccato dots with a legato slur."[79]

Staccato dots were ubiquitous throughout nineteenth-century music. Riemann's definition is a brief tutorial about their use in string playing as well as singing:

The staccato can be achieved either through abrupt catching and letting go of the string with continuously changing bow strokes (*hochweise*). This is the most common way of playing staccato and is especially used during orchestra performances. Or it can be achieved through playing with a jumping bow or finally through a soft motion of the wrist while continuously striking the bow, which is considered the actual virtuoso staccato. The staccato during singing incorporates a closure of the glottis after every note. Its virtuosic performance is very difficult.[80]

The meaning of staccato dots, however, is not always precise. "In Romantic music … it is sometimes uncertain whether there is any intentional difference between notes with staccato marks and notes without any marking at all, for staccato marks were still often used in mixed passages of slurred and separate notes merely to clarify which notes were not to be slurred … Nevertheless, Romantic composers increasingly provided detailed information about where and how they wanted articulation in their music."[81]

Grove held the same view about the ambiguity of notation and included a detailed explanation of the many signs used in the nineteenth century to indicate the varying degrees of staccato, as well as the implications of staccato markings used in tandem with slurs.

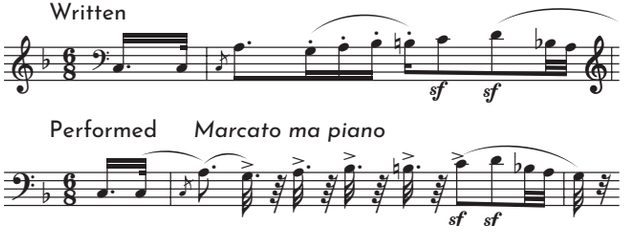
STACCATO (Ital; Ger. *abgestossen*), "detached," in contradistinction to legato, "connected." The notes of a staccato passage are made short, and separated from each other by intervals of silence … in singing, a staccato sound is produced by an impulse from the throat upon an open vowel, and instantly checked.

The signs of staccato are pointed dashes """, or round dots …· placed over or under the notes, the former indicating a much shorter and sharper sound than the latter.

When dots placed over or under notes are covered by a curved line, an effect is intended which is of great value in the rendering of expressive and cantabile phrases. This is called *mezzo*-staccato (half-detached), and the notes are sustained for nearly their full value,

and separated by a scarcely appreciable interval. On stringed and wind instruments indeed they are frequently not separated at all, but are attacked with a certain slight emphasis which is instantly weakened again, so as to produce almost the effect of disconnection … The following is an example of the use of *mezzo*-staccato, with its rendering, as nearly as it is possible to represent it in notes:[82]

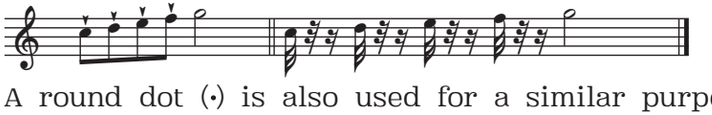
Beethoven: *Sonata in C, Op. 53*



Both dots · and wedges ' (also called strokes or dashes) were used to indicate staccato, which created then, as now, some confusion about the differences between the two symbols. In his *Violinschule*, Spohr used the wedge exclusively to indicate staccato. Other composers, however, were not so tidy; consequently, debates still exist about the duration of one sign versus the other and the amount of accent, if any, to apply. Grove must have recognized these disagreements, because he was quite precise in explaining the functions of the two.

The sign of staccato, written thus ('), and placed under or over a note indicates that the duration of the sound is to be as short as possible, the value of the note being completed by an interval of silence; for example—

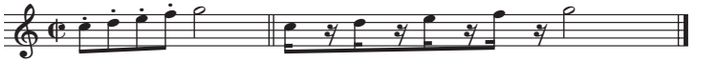
Written **Performed**



A round dot (·) is also used for a similar purpose, but with this difference, that notes marked with dots

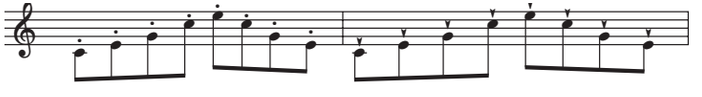
should be less staccato than those with dashes, being about one half, thus—

Written **Performed**

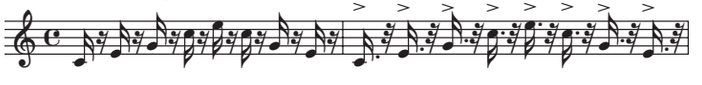


This distinction, which is enforced by all the most celebrated teachers of modern times, such as [Muzio] Clementi, [Carl] Czerny, and others, is, strange, today, often ignored by modern editors of classical compositions, and it is remarkable that in such valuable and conscientious editions of Beethoven's works as those of [Hans] von Bülow … [Ernst] Pauer … , and others, one sign should have been employed for the two effects.[83]

Garcia was equally as specific; furthermore, he wrote that wedges also indicate accentuation: "To detach sounds is to utter each individually by a distinct stroke of the glottis, and to separate them from one another by a slight pause. If, instead of leaving them immediately, they receive a slight prolongation, a kind of echo is produced. The first of these is indicated by dots; the second by dashes placed over the notes:[84]



which is equivalent to—



Clive Brown notes that ' or · "primarily indicated articulation, but could also imply accent … The strokes usually meant a more accented attack and a shorter duration than the dot. But there are exceptions to this—in German practice it could be stronger and longer than the dot."[85] He further asserts that > "is the most commonly used accent sign in romantic music. It will always indicate an accent that dies away."[86] Indeed,

Garcia states flatly that "To mark sounds is to lay a particular stress on each, without detaching them from one another: this will be attained by giving a pressure to the lungs; and by dilating the pharynx, as if repeating the same vowel for every note in the passage,—which is in effect done."[87]

Riemann has an unusual take on accentuation in music:

> Accent. Emphasizing single notes or chords through stronger emphasis. An accent on the downbeat or when a phrase begins is the natural result of the basics of musical expression—part of a constant *crescendo* and *diminuendo*, which is why confusion results when natural accents are mixed with the accents inserted by the composer. Moreover, actual accents are extra markings that disturb the assumed dynamic development. Furthermore, they even completely turn the dynamic development upside down. Usually the composer marks with (***sf*** , >, ^) … The wedge is seldom used now. The words accent, *Chute* and *port de voix* are used synonymously.[88]

Grove says that the > performed "in a marked decisive manner [is] equivalent to Marcato." The symbol, however, is used for single notes while *marcato* is used "for the whole passage."[89] Other characters were used by composers eager to explore every gradation of duration and nuance of accent.

The ^ "was not widely adopted until the mid-nineteenth century. Its relationship with > is unclear though from its shape [^] suggests an accent that is more sustained, without significant *diminuendo*."[90] Furthermore,

> — either alone of in combination with a dot $\dot{-}$ or $\dot{>}$, also came into general usage from about the middle of the nineteenth century. Normally it seems to have indicated a weighty but not sharp execution, probably less than > or ^.

> When combined with the dot it also indicated separation but less than the staccato mark … When horizontal lines were under on a succession of notes under a slur, they generally implied slight weight and infinitesimal separation. This style of performance was called portato.[91]

Liszt was particularly fond of the term rinforzando, abbreviated ***rinfz***; he used it on single notes (or chords) and on a series of contiguous measures, in which case it would be interpreted as a "sense of 'continuously lively strong.'"[92] Riemann defined it as a "Label for a strong *crescendo*."[93] Brown says rinforzando "could often indicate either an accent or a rapid (usually powerful) *crescendo*," noting that "Liszt often used it (generally written as *rinf.* or *rinforz.*) in the latter sense."[94] The Grove *Dictionary of Music and Musicians* also agrees with the idea that rinforzando, which he says is a "'reinforcing' or increasing in power," is used to "denote a sudden and short-lasting *crescendo*. It is applied generally to a whole phrase (however short) and has the same meaning as sforzando, which is only applied to single notes."[95]

Sforzando is interchangeable with sforzato, says Riemann:

> abbreviated ***sf***, ***sfz*** also ***fz*** [*forzato*] or for stronger accents, or ***sffz*** , forced, *i.e.* strongly emphasized, a symbol that applies only to a note or chord to which it is attached, which is why (for a more exact designation of the placement of the accent), it almost always appears as an abbreviation. For sharper accents in entire passage, instead of multiple repetitions of ***sf***, the more common "*sempre sforzato*" is written. The ***sf*** signifies only a relative strength, so that in piano it means somewhat ***f*** , or, for instance, *poco forte* or *mezzo-forte*.[96]

Grove basically agrees in his *Dictionary*'s entry: "Sforzando or sforzato, 'forced'; a direction usually found in its abbre-

viated form *sf*, or *sfz*. referring to single notes or groups of notes which are to be especially emphasized. It is nearly equivalent to the accent >, but is less apt to be overlooked in performance, and is therefore used in all important passages . . . "[97] Brown says there is no "difference between *sf* and *fz*"[98] and goes on to confirm that even though romantic composers inserted more and more articulation symbols into their music as the nineteenth century progressed, the accents "were largely left to the performer's experience or instinct."[99]

Riemann authored numerous books and articles, and was an energetic, prolific scholar; his edition of Schubert's *Impromptus, Op. 90*, published in the 1890s, includes a table of articulations in its preface. Even though some of the markings are no longer in use, Riemann's explanations are nevertheless instructive and provide a summation of many of the notational symbols used in Germany and Europe in the nineteenth century[100] (figure 2.7).

Hugo Riemann: "Table of Articulation Symbols," c. 1890.

The principal difference between editions with phrasing marks, and others, is in the use of the slur. The curved lines or slurs used to indicate the legato touch (very often in an incorrect manner in *Music for the Pianoforte*, originating from Violin-bowing) reveal the thematic analysis of a musical work, the union of motives into phrases and the disjunction of phrases from each other, thus supplying a long-felt want in musical Notation, namely, an unequivocal punctuation; enabling the performer (even the least talented) to give a correct interpretation of musical thoughts.

The analysis is rendered more detailed and complete by means of the following sign  , which shows the extent of the shorter motives contained within a phrase. The sign is sometimes doubled  , to point out the principal subdivision of a phrase; and it is always written obliquely  , where it falls upon a bar. This sign by no means indicates a disconnection of the phrase in performance, but is simply intended as an analytical mark; nevertheless, the expression cannot be correct unless the sign is thoroughly understood.

The remaining signs used are as follows:

- ∧ a slight prolongation in the time of the note.
- > a reinforcement of the sound.
- • the note to be more detached than half staccato.

Hugo Riemann: "Table of Articulation Symbols," c. 1890.

-  a light touch and not quite legato.
- full holding of the note until the beginning of the next one (legato touch).
- note to be held nearly the full length and slightly detached from the next one (*Non* legato, portato).
- the note to be struck sharply: quite staccato.
-  interruption of a phrase before its real end (generally to mark a repetition of some part of the phrase).
-  (comma) indicates a short pause not otherwise marked, especially before the re-entering of a theme.
- a double relation (double phrasing) of the notes included within the two slurs (crossing of phrases).

The legato touch should always be used, unless specially marked to the contrary, The last note under a slur should be detached, unless the tenuto mark (-) is placed above it or the slur joined to the next one, thus: The doubly-related notes should not be detached. It may be observed that, as a rule, a *crescendo* includes a very slight *stringendo*, and a *diminuendo* an equally slight *rallentando*. The *crescendo* and *diminuendo* should only be used where marked by the Composer. The directions *non crescendo* and *non diminuendo* are employed where the passage might otherwise be played in the opposite manner.[161]

Figure 2.7 **Franz Schubert: *Four Impromptus (Die Vier Impromptus)*, D. 899 (Op. 90), "Foreword (Zur Orientierung)" by Hugo Riemann, c. 1890.**
[Source: Bodleian Library, Oxford. Mus. 118 c.95 (9) Reproduced by permission.]

IV. ORNAMENTATION

Grace notes play the same role in music as flowers and climbing plants in the forest and meadow; their necessity is not important, but rather the joy that we perceive in their existence, their beauty.[101]

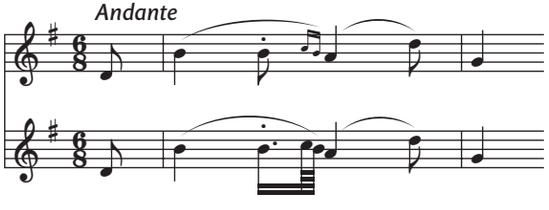
—Violinist Joseph Joachim

One of the most common misconceptions about nineteenth-century music concerns ornamentation, in particular, grace notes, the appoggiatura, and its German equivalent, the *Vorschlag*. The belief in modern times is that all grace notes were executed before the beat: that is, they took their rhythmical value from the preceding note.

There is almost total unanimity to the contrary, however, among nineteenth-century sources. A distinction must first be drawn between short appoggiaturas (which are largely synonymous with grace notes) that have a stroke across the stem and long appoggiaturas that do not. Spohr explains:

> The greater part of [embellishments] are played very quick, in order that the note before which they stand, or which they are intended to embellish, may lose as little of its value as possible. It is, however, frequently difficult to determine, from which note, (whether the preceding or following) the time required for the performance of the embellishment should be taken; and as no general rule can be given on this head … [102]

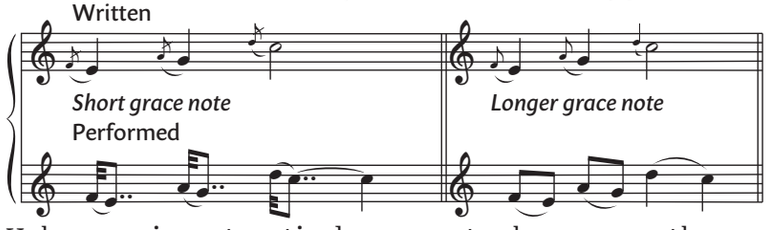
Louis Spohr, Violinschule, 174.



Violinist and pedagogue Christian Heinrich Hohmann published his *Praktische Violinschule* in 1861, in which he distinguishes between long and short grace notes, saying that short grace notes

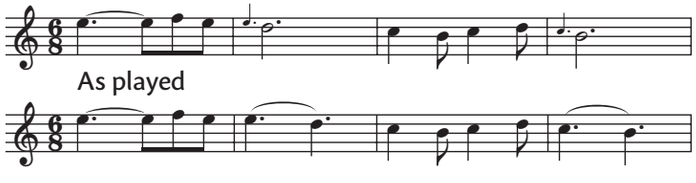
> should be emphasized sharply and should take as little time as possible. The long grace note shared with the main note is half of its length. But if it written in front of a dotted note the grace note receives 2/3 of the length and the main note 1/3. If the dotted note can be separated into two equal parts the grace note receives half. In notation, the short grace note is distinguished from the long one because it has a flag (𝅘𝅥𝅯) while the long one does not have one. This does not always apply, though, namely in older incorrect editions. The long grace note is not written any longer in new works.[103]

Christian Heinrich Hohmann, *Praktische Violinschule, 46.*

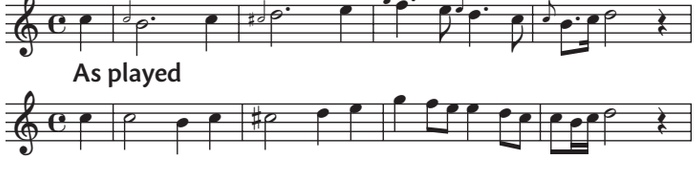


Hohmann is not entirely accurate, however; other writers late in the century describe both long and short grace notes. The rules about what portion of the main note's duration was accorded to the grace note were elaborate, precise, and generally uniform. Spohr says that

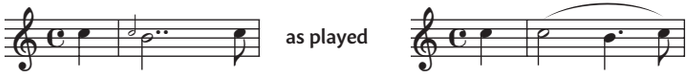
> Of the embellishments written in small notes, those of most frequent occurrence are the *long* and the *short* appoggiatura. The former, in modern compositions, is generally written in notes of the usual size.… When placed before a note divisible into two equal parts, the appoggiatura receives the half of its value.



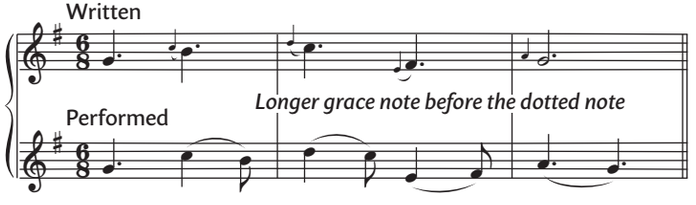
> If placed before a note followed by a dot, it obtains the full value of the note itself, which latter is then brought in upon the dot.



When there are two dots, the appoggiatura obtains the value of the note, and then comes in on the first dot.



As the appoggiatura always falls on an accented part of the bar, it is given with greater emphasis than the note before which it stands, with which it is always united in one bowing: because, as an appoggiatura, it belongs to this note, and in it finds its resolution. The short appoggiatura, (which as such, should always be marked with a cross stroke ♪, in order to distinguish it from the long one) deprives the note before which it stands, of scarcely any of its value.[104]

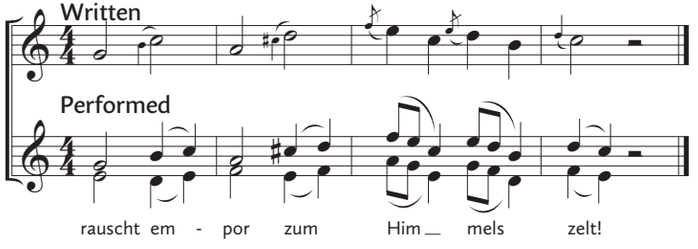


Garcia agrees with Spohr's proportions, saying that

An appoggiatura is, as its name indicates (*appoggiare,—to lean on*), a note on which the voice leans, or lays a stress, and to which it gives more perceptible [sic] value than to the resolutive note. This note is almost always foreign to the harmony, and should resolve itself on the real note of the chord … Appoggiaturas are written in two ways—in small or in ordinary-sized notes … The duration of the appoggiatura varies extremely. If a measure be even, an appoggiatura receives half the value of that note which it is intended to embellish; but if the principal note be dotted, or the measure uneven, an appoggiatura borrows from a note two-thirds of its value; finally, this little grace-note may be sung with rapidity. The character of a melody will show better than any precepts that might be advanced, what degree of importance ought to be given to an appoggiatura.[105]

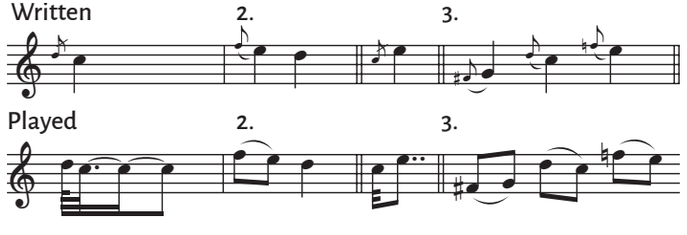
Andreas Rützel writes that the long appoggiatura is written with a longer duration on the "grace" note.

Andreas Rützel*: Lehrgang für den Praktischen Gesangunterricht*, 3, 151.

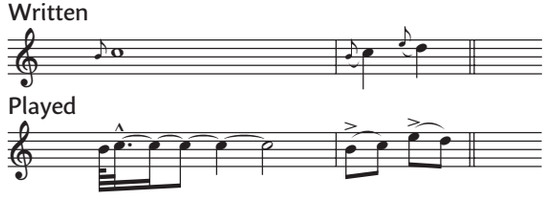


Grove's detailed entry on the appoggiatura includes dozens of examples from the literature, as well as practical instruction on how to properly realize them.

Appoggiatura (Ital. from *appoggiare*, to lean upon; Ger. *Vorschlag*, *Vorhalt*; Fr. *Port de voix*.) One of the most important of melodic ornaments, much used in both vocal and instrumental compositions. It consists in suspending or delaying a note of a melody by means of a note introduced before it; the time required for its performance, whether long or short, being always taken from the principal note. It is usually written in the form of a small quaver, semiquaver, or demisemiquaver, either with or without a stroke across the stem.

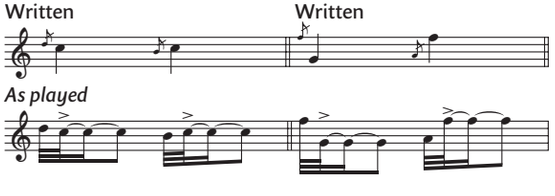


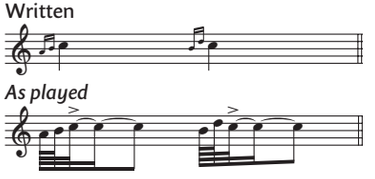
The Appoggiatura may belong to the same harmony as the principal note, or it may be one degree above or below it.... With regard to its length, the appoggiatura is of two kinds, long and short; the long appoggiatura bears a fixed relation to the length of the principal note ... but the short one is performed so quickly that the abbreviation of the following note is scarcely perceptible. There is also a difference between the two kinds in the matter of accent; the long appoggiatura is always made stronger than the principal note, while in the case of the short one the accent falls on the principal note itself. The appoggiatura, whether long or short, is always included in the value of the principal note.[106]



Grove's entry for the *Vorschlag* shows that it is distinct from the appoggiatura and executed according to its own rules.

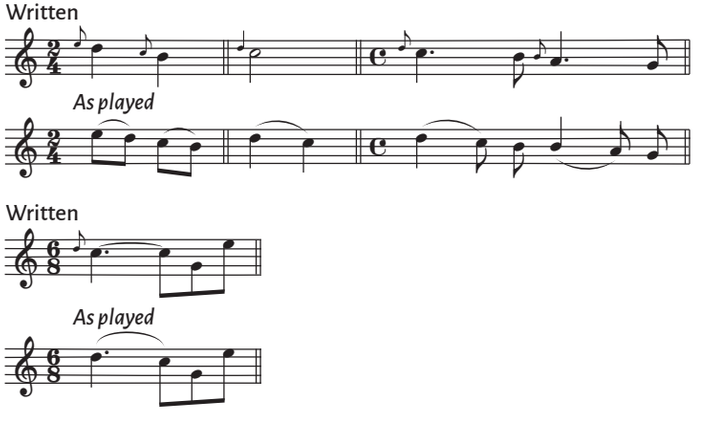
> VORSCHLAG (Ger.), an ornament made at the commencement of a note, and therefore the opposite of the *Nachschlag*, which is placed at the end. It usually consists of a note one degree above or below the principal note, as the note which it embellishes is called, though it may be more distant from it, and it may also consist of more than one note, in which case it has a special name.

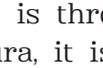




The *Vorschlag* is written as a small note or notes, and is not accounted for in the time of the bar. In order to make room for it, the principal note is slightly curtailed and its entrance delayed, as is shown in the above examples. This is in accordance with a rule which is insisted upon by all the best authorities, at least so far as regards the works of great masters, namely, that all graces must fall within the value of their principal note.

The *Vorschlag* in its ordinary form, consisting of a single note one degree above or below the principal note, is of two kinds, long and short. The long *Vorschlag*, generally known by its Italian name of Appoggiatura, has a definite proportional value, which varies with the length of the principal note, being one-half of a simple note two-thirds of a dotted note or the whole value of the principal note whenever the latter is tied to another of the same name.



> The short *Vorschlag*, also called *unveränderlich* (unchangeable) because its value does not vary with that of the principal note, is made as short as possible, and the accent is thrown on the principal note. Like the Appoggiatura, it is written as a small note, usually a quaver (a difference which produces no corresponding diversity in the rendering), and in order to distinguish it from the long *Vorschlag* it became customary about the middle of the last century to draw a small stroke obliquely across the hook of the note, thus  .[107]

Brown summarizes use of appoggiaturas and grace notes:[108]

> As a rule, except in Italian opera, the kinds of appoggiatura that functioned as sustained dissonances resolving onto a consonance a tone or semitone below, or more rarely above, were no longer written in small notes, or left to be improvised by the performer; they were incorporated into the standard notation. Single small-size notes (increasingly often with a line through the tail, as in modern practice) were used almost entirely to indicate grace notes; these were intended to be performed lightly and very rapidly either on or just before the beat, depending on the composer's practice. In most German keyboard playing an 'on-beat' performance was still theoretically the role … [however] the problem may be illusory, for the romantic approach to rhythmic flexibility will often have made it unclear precisely where the beat actually was, and as long as the grace notes are played lightly and rapidly they will make the proper effect.[109]

The question of whether to commence trills on the principal or auxiliary upper note was mostly settled in favor of

starting on the main note; the Grove *Dictionary of Music and Musicians* dates the practice to Johann Nepomuk Hummel (1827) and states that this rule is "laid down by contemporary teachers."[110] Spohr likewise directs that "According to the rule, every shake should both commence and conclude with the principal note, *i.e.* the note to which the shake is written."[111] Like Grove, Spohr cites Hummel as his source, as does Riemann:

> The trill is a note with a consistently even tempo, and is played according to its specified length. It is a frequently repeated modulation between two adjacent notes; namely the note above which it is written, and the note either a half or a whole step above it, as required, which is called the "Helping-tone."[112]

Both Grove and Riemann recommend commencing turns on the upper note. Mordents are discussed only in terms of pre-nineteenth-century music. In his discussion of the proper use of articulation, Spohr distinguishes between one kind of performance style that strictly adheres to the composer's printed notation and another that uses those same indications as a point of departure for greater interpretive freedom:

> By *style* or *delivery* is signified the manner in which the singer or player performs what has been invented and written down by the composer. This, if confined to a faithful rendering of the same, as expressed by notes, signs, and technical terms, is called a correct style; but if the performer, by additions of his own, be capable of intellectually animating the work, so that the hearer may be led to understand and participate in the intentions of the composer, it is termed a fine style, in which correctness, feeling, and elegance, are equally united.[113]

V. PORTAMENTO

As in singing and in violin playing, a careful, right and tasteful exercise of Portamento *indicates a well-educated performance.*[114]

—German violinist Christian Heinrich Hohmann

Opening one's mind to the possibility that the way music is performed today might not be the way it was performed in the past often proves surprisingly difficult. The nineteenth century, in particular, seems so close to us in time that we imagine that our views about how romantic music ought to be performed are consonant with those held by the great romantics themselves. Perhaps because master teachers of every musical discipline were trained by either a nineteenth-century artist or the pupil of a nineteenth-century artist, we spuriously conclude that an unbroken interpretative link exists between musicians of the two centuries.

Portamento in singing (as well as string and wind playing) has for so long been unemployed in musical performance that today it seems positively antique. Yet, Portamento was an integral component of expressive performance in the nineteenth century; like vibrato, composers assumed that players and singers would employ it tastefully and purely as a special effect. Of course, some practitioners used the *port de voix* (its French name) excessively; indeed, "leading musicians from Salieri in 1814 to Joachim in 1905 regularly cautioned against abusing it."[115] Even so, the pendulum of taste has swung from a nineteenth-century aesthetic in which there was on occasion too much Portamento to a twenty-first-century one in which there is no Portamento at all.

Brown says that "There were basically two classes of Portamento. The first involved gliding between notes sung to different syllables, or, on string instruments, played in separate bows, or, in the case of wind instruments, separately articulated. The other took place between two different pitches on the same syllable, between notes in the same bow, or between smoothly slurred notes."[116] Garcia (who refers to Portamento as "slurring") explains:

> Slurring is a method—sometimes energetic, sometimes graceful,—in colouring a melody; when applied to the expression of forcible sentiments, it should be strong, full and rapid. Examples:
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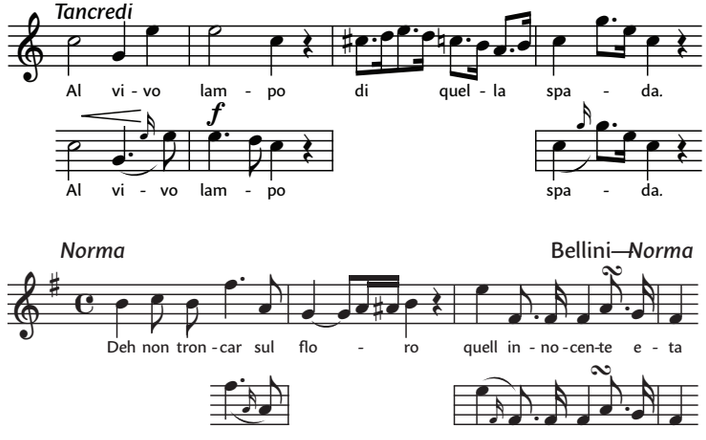
> 
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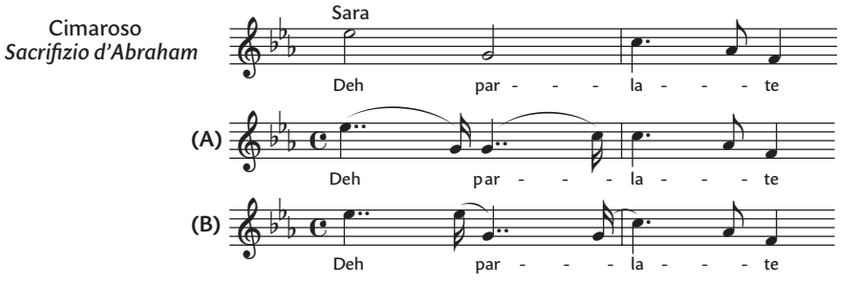
> A slur placed between two notes, each having its own syllable, is executed *by carrying up the voice with the syllable of the first note*; and not, as is frequently done, with the syllable of the second. The second note ought to be heard twice—once on the first syllable, and again on its own.

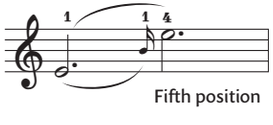
Most early nineteenth-century writers on singing state unequivocally that Portamento, in the sense of a slide, was a necessary part of the singer's equipment.[117] Brown notes that "Although composers only rarely indicated Portamento explicitly, it seems likely that there is a connection between this technique and the occurrence of slurs over notes set to

different syllables … [W]here [slurs] are found between notes on different syllables, it is always worth considering whether one of these types of Portamento may have been intended."[118]

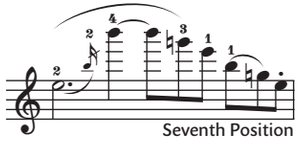


Other nineteenth-century observers are equally clear that the use of Portamento by string players largely derives from the example of singers; singing treatises, meanwhile, confirm that Portamento was an effect used and valued as much by singers as by string players.[119] Spohr's technical advice on how to accomplish difficult shifts in hand positions reveals much about the use of Portamento in early nineteenth-century string playing:

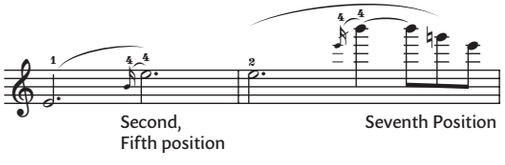
> When two notes lying at a distance from each other have to be played in one stroke of the bow … it is impossible to avoid the sliding of the hand from being heard in skipping from one to the other of them. In order, therefore, that this may not degenerate into a disagreeable whining, it must be accomplished in the following manner: — The finger with which the first note is stopped is so far moved forward, until that which has to stop the second note falls naturally on its place. Thus … the first finger is moved upward from E to B



> and the fourth finger then falls at once on the second E: similarly … the second finger is moved from E to B



> at which instant the little finger falls on the upper B. This shifting, however, must be done so quickly, that the chasm or interstice between the small note and the highest … shall be unobserved, and the ear cheated into the belief that the sliding finger has actually passed over the whole space from the lowest to the highest note. It is true that in opposition to the foregoing rule, many violinists are accustomed in such skips to slide with the finger employed for stopping the upper note and consequently to perform the above passages in the manner following:



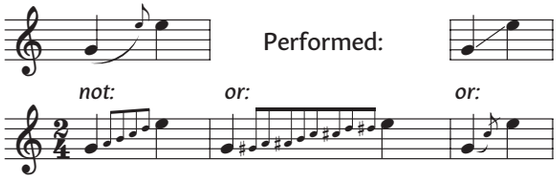
> But as the unpleasant whining before alluded to cannot then be possibly avoided, this method must be rejected as faulty.[120]

The entry on Portamento in the Grove *Dictionary of Music and Musicians* is uncharacteristically brief; fortunately, however, Riemann published a detailed analysis of what Portamento is, when and by whom it should be used, and the correct and incorrect methods of its execution.

> Portamento. (Italian Portamento, from *portar la voce*, "carry the voice;" French *Port de voix*), Slurs one note to the other and therefore slides the note to the next, which separates it from legato; when you ascend or

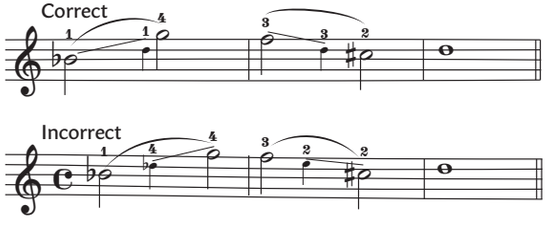
descend Portamento is executed more slowly than legato and therefore sounds more continuous and not disjointed … If Portamento is used too much it is a disgusting mannerism; if used seldomly it has a captivating effect. It is only used with the voice and string instruments. In some singing schools the voice, when using Portamento, has to go through the whole scale or chord in order to get to the second note, which is mistaken. There couldn't be anything more wrong. The effect is supposed to be more like taking the finger and sliding it up and down on a violin string fast so it's more of a steady change rather than hearing individual notes.

Usually the Portamento is not written but there are a few ways of writing:[121]



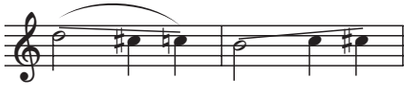
Hohmann supports Riemann's explanation of how to correctly perform a Portamento: "If there are two notes in different positions, then those two are supposed to be connected. The Portamento comes into use if the two notes cannot be taken with the same finger. Portamento, from portare, to carry, is one note to the other."[122]

Christian Heinrich Hohmann: *Praktische Violinschule*, 118.



Although Portamento was primarily limited to solo singing and instrumental playing (Italian opera in particular), it was not unknown in ensemble performances. Spohr stated explicitly that orchestral violinists should "abstain from … sliding from one note to another … "[123] yet Brown points out that Spohr "appears to have envisaged Portamento at times in his orchestral music, though only where he indicted it by the inclusion of fingering."[124]

Franz Joseph Frölich wrote in his *Vollständige Theoretisch-pracktische Musikschule [Complete Theoretical-Practical Music School)* that "the dragging of the voice (the so-called Portamento) should be connected with the first exercises [in this method], and more and more by correct, attentive and exact practice of the same the voice becomes nimble and receives power and fullness."[125] He goes on to say that the Portamento is most appropriate in soprano voices, less good in tenor voices and to be avoided in bass voices; he advises embellishing rising and falling half-steps with a Portamento: "Between 2 notes that fall only a half-step between one another, the Cercar[126] has the most proper place, namely:



(these signs mean that each sound melts into the other.)"[127]

Notwithstanding the fact that Portamento is viewed by twenty-first-century musicians as sentimental and of questionable taste, in reality "there is strong evidence that the practice of string-players in the early twentieth century derived from a long-established tradition" of using the device.[128] Portamento was seen by nineteenth-century composers and performers as an important means of heightening expression; as such, much Romantic music can benefit from a carefully calculated and judicious use of Portamento.

VI. PHRASING

The way in which figures, numbers of phrases, phrases, periods, and pieces, are finished, deserves our fullest attention. Rests in a melody are marked by a silence following the final note of phrases, or portions of phrases. This note ought to be lightly and instantaneously quitted; for were it to be too much prolonged, the thought would cease to be distinct and elegant.[129] —Manuel Garcia II

Slurs had many uses in romantic music. By themselves, they might indicate legato playing; combined with staccato dots, they denoted portato; moreover, in certain circumstances slurs signaled the singer or player to insert a Portamento. Composers also used slurs to indicate bowings or, with wind instruments, breath marks, although this practice was not altogether consistent during the nineteenth century.

Two types of slurs were employed to denote phrasing. The long slur, one that extended over several measures, might indicate breathing or bowing; or, if it was too long for one bow or breath, it delineated the length of the phrase. According to Riemann, long slurs implied an accent at the beginning of a phrase and or tapering off at the end; the last note beneath the phrase might even have its value diminished.[130]

A short slur that encompassed only two or three notes certainly indicated that the duration of last note beneath the slur should be reduced. "Brahms regarded the shortening of the last note in pairs as obligatory, whether or not a rest or staccato mark was indicated, and in a longer group as optional. … As a composer, Brahms did not concern himself with specifying all the refinements of phrasing that he might expect the performer to contribute."[131]

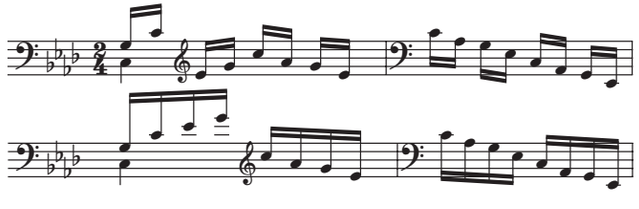
Riemann held well-formed and unequivocal views about phrasing and musical structure. His two major works on the subjects, *Musikalische Dynamik und Agogik: Lehrbuch der musikalische Phrasierung* (*Musical Dynamics and Agogics: Textbook of Musical Phrasing, Hamburg*), 1884 and *Vademecum der Phrasierung* (*Handbook of Phrasing*), Leipzig: M. Hesse, 1900 carefully scrutinize the many facets of musical phrasing. The essence of his entry in the *Musik-Lexikon* is much more straightforward and distilled than the books:

> Phrasing. Natural segmentation of musical thoughts. Unfortunately, the term phrasing is used in the sense of articulation, which has led to misunderstandings … Natural musical ideas are composed of the [various motivic] segments. Phrases are able to stand independently. Composers express phrases through dynamic means, because each phrase demands its own dynamic for example, and each phrase has only one dynamic peak or  also, or rarely .[132]

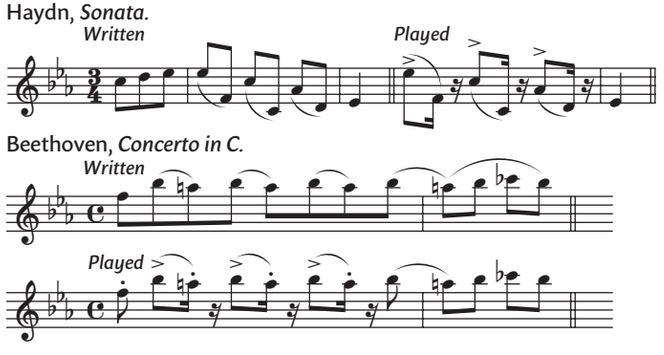
Grove had much to say on the subject, and offered concrete examples from the literature to explain his concepts.

> Phrasing … there are certain irregular forms of accent occasionally required by the phrasing … [which] sometimes have the effect of appearing to alter or add to the harmonies upon which the passage is founded, as in this excerpt by Schumann, where the additional accents demanded by the composer's method of writing in groups of two notes instead of four, seems to indicate an alteration of the tonic and [sub]dominant harmonies of C minor.

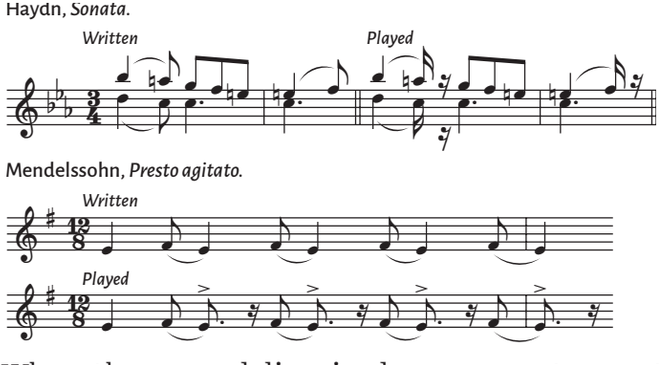
Schumann, *In der Nacht.*



When two notes of equal length in quick or moderately quick tempo are joined together by a curved line they are said to be slurred, and in playing them considerable stress is laid on the first of the two, while the second is not only weaker, but is made shorter than it is written, as though followed by a rest. The rule that the first of the slurred notes receives the accent holds good even when it is in an unaccented part of the bar.



Groups of two notes, of which the second is the shorter note, may also be slurred in the same way, but when the second is the longer note it must be but slightly curtailed, though still perceptibly, and there is no displacement of accent.



When the curved line is drawn over two notes of considerable length, or in slow tempo it is not a slur, but merely a sign of legato, and the same if it covers a group of three or more notes. In these cases there is no curtailment of the last note.[133]

As for Brahms' manner of phrasing and taking of time within phrases, Davies recalled:

> He belonged to that racial [sic] school of playing which begins its phrases well, ends them well, leaves plenty of space between the end of one and the beginning of another, and yet joins them without any hiatus … The sign, as used by Brahms, often occurs when he wishes to express great sincerity and warmth, allied not only to tone but to rhythm also. He would linger not on one note alone, but on a whole idea, as if unable to tear himself away from its beauty. He would prefer to lengthen a bar or phrase rather than spoil it by making up the time into a metronomic bar … expansive elasticity—in contradistinction to a real rubato (of course depending upon the musical idea)—was one of the chief characteristics of Brahms' interpretation.[134]

VII. TEMPO

> *A metronomical performance is certainly tiresome and nonsensical; time and rhythm must be adapted to, and identified with, the melody, the harmony, the accent and the poetry…. But how to indicate all this? I shudder at the thought of it.*[135]
>
> —Franz Liszt to his pupil Siegmund Lebert

Of the many things that vexed Richard Wagner, none seems to have troubled him more than matters related to tempo—how to establish it properly, maintain it steadily, and modify it tastefully. He believed that

> If one wants to summarize what the correct performance of a piece of music is for a conductor, it is based on his always setting the right tempo; for the choice and determination of that tempo immediately allow us to recognize whether the conductor understood the musical composition or not. The right tempo almost automatically gives good musicians who have a more precise familiarity with the piece of music the ability to find the best execution for it, because the conductor has already established the basis for it by designating the tempo. How difficult it is to determine the correct tempo is evident because the right tempo can only be found by ascertaining what is the correct execution of the piece.[136]

Liszt shared Wagner's views about tempo and encouraged his own players and students to apply tempo fluctuations and other expressive devices at their discretion;[137] Liszt's opinions, however, were never so hard as those of Wagner, who had nothing but scorn for conductors who were incapable of meeting his expectations:

> As a proof of my assertion that the majority of performances of instrumental music with us are faulty, it is sufficient to point out that our conductors so frequently fail to find the true tempo because they are ignorant of singing. I have not yet met with a German *Kapellmeister* or *Musikdirector*, who, be it with good or bad voice, can really sing a melody. These people look upon music as a singularly abstract sort of thing, an amalgam of grammar, arithmetic and digital gymnastics; to be adept in that which may fit a man for a mastership at a conservatory or musical gymnasium; but it does not follow from this that he will be able to put life and soul into a musical performance.[138]

Few performance aspects concerned nineteenth-century musicians more than tempo; indeed, how to correctly determine tempo was discussed frequently. Grove certainly believed in the importance of maintaining a regular pulse: "The power of rightly judging the tempo required by a piece of music, and of preserving an accurate recollection of it under the excitement caused by a public performance, is therefore not the least among the qualifications of a conductor or soloist."[139]

For Liszt and Wagner, establishing and modifying tempo went beyond the scope of everyday performance practice; the relationship between music and tempo was akin to a philosophy. Wagner talked about the "melos," defined in *On Conducting* as "melody in all its aspects." He said that "*right comprehension of the* melos *is the sole guide to the right tempo*; these two things are inseparable: the one implies and qualifies the other."[140]

In his exhaustive analysis of the different types of tempo modification employed in the nineteenth century, "Tempo Fluctuation in the Romantic Era as Revealed by Nineteenth-century Sources and Applied to Selected Choral Compositions," Ronald Mayhall points out that

> Underlying the divergent practices of tempo fluctuation present in musical performances of the nineteenth century were broader principles or philosophies out of which the various practices grew. … Some composers and performers saw their musical compositions and performances rooted in personal poetic expression. Yet, others saw musical compositions as the vehicles for the demonstration of their virtuosity. Others conceived musical performances as moments of grand, public spectacle. The use, degree, and location of tempo fluctuation in musical performance was greatly affect-

ed by the underlying philosophy held by respective composers and performers.[141]

H Two types of rubato existed in the nineteenth century. One, as perfected by Chopin, involved maintaining the basic pulse while allowing the melody to wander away from the beat; the forward movement, however, neither quickened nor slowed. The other type, associated with Liszt and Wagner, was known properly as *tempo rubato*. That Liszt incorporated frequent tempo fluctuations in his conducting was well known: "Anyone who has ever seen Liszt conduct an orchestral work will recall how he would push forward in one passage and hold back in another, here maintaining the tonal flow at an even pace for a time, there suddenly interrupting the movement."[142]

It is true that some conductors and players questioned whether tempo fluctuation was seemly in performance.[143] The appropriate inquiry here, however, is not whether to incorporate *tempo rubato* into romantic music; rather, one must determine the degree of its use. Riemann says that it "is the free treatment of passages of strong expression and passion that forcibly brings out the *stringendo-calando* in the shading of phrases, a feature which, as a rule, remains unnoticed."[144] Phrase structure and motion, as well as harmonic language, are two important musical components that indicate the use of *tempo rubato*: as harmonic tension increases, *tempo* is accelerated; as the accumulated harmonic tension is released, the pulse slows accordingly.

Verdi's metronome marks are authentic, but we also know that he was given to conducting with considerable rubato. Liszt added a narrative dimension to music when he introduced programmatic and literary elements; in order to be effective, narration needs flexibility as well as freedom from strict time-keeping. "Of immeasurable value to

story-telling, both oratorical and musical, is fluctuation in the rate of delivery. For the musical story-teller, decisions regarding these fluctuations are much easier for performers of vocal music than for instrumentalists: the text provides the interpreter of vocal music with a key to the musical thoughts of the composer."[145] Liszt himself acknowledged as much: "Time and rhythm must be adapted to, and identified with, the melody, the harmony, the accent and the poetry."[146]

Garcia states directly that "*Rallentando* expresses decrease of passion; and consists in slackening the rapidity of a measure, in all its parts at once, in order to enhance its grace and elegance. It is also used as a preparation for the return of a theme or melody. *Accelerando* is the reverse of *rallentando*, as it increases the velocity of a movement, and adds greater spirit and vivacity to the effect."[147] Riemann provides perhaps the most extensive explanation of the romantic conception of tempo modification. It is lengthy—even for him—but as it is included in the entry for "Expression," it will offer insights into how this particular expressive device contributes to romantic sensibility.

> In the matter of small changes of tempo, it may be remarked that hurrying implies intensification, and drawing back, the reverse; hence, as a rule, a slight urging, pressing forward is in place when the musical development becomes more intense, when it is positive; and, on the other hand, a tarrying, when it approaches the close. These changes must naturally be exceedingly minute in detached musical phrases, but can already become more important in a theme of a certain length; while for whole movements they are of such extent as to be seldom ignored in the notation.
>
> The swelling of tone is likewise an intensification, the decreasing of the same, a giving way; the natural

dynamic shading of a climax, and *diminuendo* from there to the end. Generally speaking, melodic movement goes hand in hand with dynamic shading, so that phrases growing in intensity have rising melodies, and those which show a decrease, falling. Of course, dynamic and *agogic* shadings must be used with economy; the difference of increase of tone and of movement must be less for a short phrase than for a whole theme, or for the working up of a development section.

A composer indicates, for the most part, any deviation from these very general rules; for example, a *diminuendo* combined with a rising melody, or with a *stringendo*; or a *ritardando* with a rising melody and *crescendo*; he surely commits a sin of omission if he does not point out what is irregular. Further, the rule holds good, that anything specially striking in the course of a passage of simple melody, rhythm, and harmony, should be made prominent, accentuated; especially, from harmonic considerations, chords which are foreign to the tonic, or detached, and sharply dissonant sounds.

A modulation to a new key is generally accompanied by a *crescendo*; the chords or notes by which it is introduced receive stronger accents than those to which, by reason of their metrical and rhythmical position, they are entitled. To soften a sharp dissonance by playing without emphasis is to hush it up, to draw attention away from it; it would cause it to be imperfectly understood, or rather misunderstood, and produce a bad effect similar to that of a false relation.

The composer is, however, at liberty, with full artistic consciousness, to demand quite contrary modes of performance, he can bring about quixotic modulations with *diminuendo*, or the roughest dissonances with a

pianissimo; his aim will be to give the impression of something strange, wonderful, legendary, uncanny, etc., and therefore, the avoidance of what is perfectly clear will be intentional. But even here the abnormal, the deviation from simple modes of performance, must be specially indicated.[148]

Wagner was not the only romantic master who had unvarnished opinions about tempo; Brahms did as well, and he shared his views with his friend George Henshel, conductor of the Boston Symphoy Orchestra:

> We know that Brahms had little patience with strictly metronomic tempi, such as those employed by his Viennese colleague Hans Richter, preferring instead considerable elasticity Yet he also did not approve of the sort of extreme flexibility he heard in the interpretations by his friend Hans von Bülow with the highly trained Meiningen Court Orchestra, preferring instead a course somewhere between the poles of Richter and Bülow. The English pianist Fanny Davies, who heard the composer perform on numerous occasions, has best elucidated his mode of delivery:
>
> Brahms' manner of interpretation was free, very elastic and expansive; but the balance was always there-one felt the fundamental rhythms underlying the surface rhythms. His phrasing was notable in lyric passages. In these a strictly metronomic Brahms is as unthinkable as a fussy or hurried Brahms in passages which must be presented with adamantine rhythm. . . . When Brahms played, one knew exactly what he intended to convey to his listeners: aspiration, Wild fantastic flights, majestic calm, deep tenderness without sentimentality, delicate, wayward humour, sincerity, noble passion.[149]

From his collaborations as a singer with Brahms, Henschel already knew something of the composer's preferences in pacing of music. Moreover, Brahms had written to him in February 1880:

> I think here [in the German *Requiem*] as well as with all other music the metronome is of no value. As far at least as my experience goes, everybody has, sooner or later, withdrawn his metronome marks. Those which can be found in my works good friends have talked me into putting them there, for I myself have never believed that my blood and a mechanical instrument go well together. The so-called "elastic" tempo is moreover not a new invention. "Con discrezione" should be added to that as to many other things.
>
> Is this an answer? I know no better one; but what I do know is that I indicate (without figures) my tempi, modestly, to be sure, but with the greatest care and clearness.[150]

VIII. RHETORIC

> *Because, to put it bluntly, rhetoric has gathered together and dominates, under its authority, the forces of all the arts.*
>
> —Socrates to Gorgias[151]

The confusion and darkness that has gathered about the term figures of Speech, is the opprobrium of all teachers, and the dismay of all students of Rhetoric … Quintilian was on the right track and marvelously near to success when he distinguished between Tropes and figures Proper; that is between the substitution of artful Terms for plain and literal ones, and of artful Modes of Statement for the artless and direct. But even with this admirable clew he was unable to find his way quite through the labyrinth, and his really valuable discovery has fallen into undeserved neglect, and is scarcely thought of now-a-days save as an added source of perplexity … No small part of our task would be- accomplished if we could only determine what figures of Speech really are. To this end we may broadly distinguish the contiguous realms of Grammar and Rhetoric as follows:—Grammar treats of the normal and commonplace uses of language; Rhetoric, of the uncommon and specially significant. The material is the same in both, but Grammar is the familiar and household Art; Rhetoric, the Fine Art.[152]

Thus begins the article "The Classification of Rhetorical figures" in the nineteenth-century journal *Modern Language Notes*.

There is no understanding of Rhetoric in music without an understanding of *Affektlehre*, or Doctrine of the Affects. This theory was critical to Baroque ideology, and has its roots in Ancient Greece. Plato divides the affects into four categories: Pleasure, Suffering, Desire, Fear; Aristotle characterizes eleven affects that are nothing more than mixtures of pleasure and displeasure (suffering): Desire, anger, fear, courage, envy, joy, love, hate, longing, jealousy and compassion.

Quintilian regards vocal music as an equal discipline alongside rhetoric due to structural similarities. He saw analogies between the up-and-down pitch used in spoken language and melody in music. In the Doctrine of the Affects in music, the respective types of affectations are assigned specific musical means of representation. In the Baroque, a composer did not try to portray his own feelings, but rather tried to trigger the desired emotion in the listener—in a technically mature, well-considered, and artful way. In musical figure theory, the technique of composition includes a "toolbox" of objectified

affects that can be represented musically. In this context, a text should not only be correctly interpreted in terms of declamation (emphasis, accentuation, lowering, length, brevity), but should also clarify the affects contained in the text.

It might seem surprising that romantic composers and other artists would be interested in an aesthetic theory based on Ancient Greek philosophies; however, nineteenth-century composers were also authors who were frequently published in well-known and widely read music journals and magazines. Moreover, the entire idea of romanticism itself is based on aesthetic ideals first promulgated by the Greeks. In their panoply of gods, Apollo—god of prophecy and oracles, music, song and poetry, archery, healing, plague and disease, and the protection of the young; and Dionysus, god of wine, vegetation, pleasure, festivity, madness and wild frenzy—represented opposing personal traits. Apollo stood for cool, measured reason while Dionysus was ruled by emotion, given to bouts of orgiastic drinking and sex.

Both Western cultural and musical histories share a single classification of time periods, which are aesthetically represented by either Apollo or Dionysus. Broadly put, the eons within which Ancient Greece, and later, classical Rome, were dominant, can be seen as a time of Apollonian influence: reason rather than emotion, brain rather than heart. During the medieval era, visual arts dominated, since for all intents and purposes, clergy were the only people who could read; consequently, in order to convey Biblical teachings to the illiterate masses, painters and sculptors created an iconography of figures meant to teach regular people about Christianity.

Historians sometime reckon the onset of the Renaissance as 1350—the year of Dante's birth. Anyone who has read his *Commedia* knows of his staggering depictions of the punishments of hell—*Contrapasso*, a term derived from the Latin words *contra* and *patior*, which mean "suffer the opposite."

Contrapasso refers to the punishment of souls in Dante's "Inferno," by a process resembling or contrasting with the sins committed by the unhappy souls that led to their damnation. His earth-shattering innovation was to write the *Commedia* in the vernacular—so that even those who were "unlettered," that is to say, who could not understand Latin—would be able to take pleasure in his work.

By the middle of the fifteenth century, when the wave of Greek scholars and émigrés fled their home upon the collapse of the Byzantine Empire, an entirely new generation of educated men brought their erudition and vast knowledge to Florence, where they were warmly welcomed by wealthy patrons including Lorenzo di Medici and Jacopo de' Pazzi, among others. Thus, the Renaissance, with its emphasis on humanism and higher learning, can be seen as a time of Apollo. With the coming of the Baroque in the late seventeenth century, aesthetic thought was once again influenced by emotions; indeed, the advent of ornamentation in music and visual arts became so overwrought that later theorists coined the pejorative term *Baroque*, as in Baroque Pearl—literally twisted and misshapen—to describe it.

As emotion once again gave way to Reason, the art of the eighteenth century was characterized by the transition from Baroque and Rococo to Neoclassicism. It was the century of revolutions, from the American to the French to the industrial, and it was also the century of Enlightenment and great archaeological discoveries. Architecture and painting drew from Greek and Roman models, and even though extravagant ornamentation remained the norm in Grand Opera, most any musician can instantly differentiate between a baroque and a classical instrumental or vocal work. The cerebral quality of the music matches the intellectual prowess of Mozart, whose instrumental parts and full scores are

free of the revisions that those of most mortals contain; anyone who can compose, correct and complete an entire symphony in his head is a sterling representative of the entire era.

Which brings us to the period that supplanted Neoclassicism—one that was ushered in by a genius whose musical aesthetic evolved from an analytical one to one governed by feelings—Beethoven, of course. His own personal taste reached its apotheosis in the *Symphony No. 9*, wherein he inaugurated the use of literary texts in a theretofore abstract musical form. *An die Freude* (*To joy*) by Friedrich Schiller is itself a paean to feelings. What better symbol of the commingling of the literary, visual and musical arts that came to characterize the nineteenth century. The period was known for its emphasis on emotion and individualism, as well as the glorification of all the past and nature, preferring the medieval rather than the classical. It emphasized intense emotion as an authentic source of aesthetic experience, placing new emphasis on such emotions as fear, horror and terror, and awe—especially that experienced in confronting the new aesthetic categories of the sublime and beauty of nature. Today it is known as romanticism and the 1800s themselves as the romantic period.

The application of *Affektlehre*, or Rhetoric, in the nineteenth century is skillfully discussed by K. Ph. Bernet Kemppers in his article "Die Affektenlehre und die Musikauffassung des 19. Jahrhunderts" (The Doctrine of the Affects and the Conception of Music in the Nineteenth Century), published in 1964 in *Actes du cinquième Congrès International d'Esthétique* (*Proceedings of the Fifth International Congress of Aesthetics*). Kemppers write,

> If it is perhaps true that philosophical-aesthetic thinking left the basis of the doctrine of affect in the 19th century, the conviction that music is the language of the heart,

i.e. the expression of human affects, certainly lived on in the consciousness of poets, composers, performers and musical laymen. And in the thinking of poets as well as composers, this conception clearly continues.

However, while affects had gradually found more or less stereotypical forms of expression in the course of the 17th and 18th centuries, sensitivity, *sturm-und-drang* and romanticism demanded that the tone poet spontaneously express his Affects in music from his own experience. The musical symbols for mourning, rejoicing, dying, arguing, death, lamenting, cheering, etc., that the Baroque had developed, and which had undoubtedly originally been musically designed from the experience of the idea, but had lost emotional value through constant repetition, and were to be replaced by spontaneously and individually felt expressive themes, melodies or motifs.

In vocal music, this power that stimulates, witnesses and stimulates the feeling, the affect comes from the word, the lyrics, the poems. While the Baroque masters rarely composed using texts by important poets, the masters of the Sturm-und-Drang and the Rococo, like the great classics, experienced a heyday of poetry to which they could not possibly remain indifferent. This is especially true for Germany, but also in France one experiences how the young opéra comique takes numerous themes from contemporary literature: the translation of *One Thousand and One Nights* from the Arabic, the bourgeois play, the English novel.

There is no earlier epoch in the history of music—with the possible exception of Greek antiquity—where the art of music was dominated by poets as much as the period between the mid-18th and early 20th century.

> The influence of German poets on music was not only a consequence of the suggestive power of their poetic achievements, but was also related to their conscious position on the problem of music, and especially instrumental music. Their mastery of language, their greater fluency in thinking and formulating toward the musicians, guaranteed the poets authority and prestige among the tonal artists, and gave their sayings influence on the thinking and work of the composers; while, on the other hand, the poets had a kind of holy reverence for the mystery of the rationally incomprehensible oracle-like art of music.
>
> The influence of literature, starting with the Rococo, is constantly increasing in *Sturm-und-Drang* and in classical music and culminates in Romanticism and only almost disappears in the 20th century. Romanticism, Realism and Impressionism, however, are still under their spell. The whole 19th century can thus be called the literary period of music.[153]

Greek authors such as Sophocles and Roman orators such as Cicero studied Rhetoric so that their plays and speeches would better persuade the listener toward their individual points of view. Much in the same way, nineteenth-century composers wanted audiences, and yes, critics as well, to subscribe to their new musical aesthetics. For traditionalists such as Schumann and Brahms, and the critic Eduard Hanslick, this meant not deviating from "Absolute Music;" for the New Germans, led by Liszt and Wagner, it was the addition of literature into classical music, and indeed, the fulfillment of nascent musical forms, such as the *Tondichtung* (Tone Poem).

The Roman educator and rhetorician Marcus Fabius Quintilianus, known today as Quintilian, wrote in his twelve-volume *Institutio Oratoria* (generally referred to in English as the

Institutes), wrote "a praise of music that was to be echoed and imitated many times over. Of particular relevance to music and rhetoric are the passages recalling that grammar and music were once united … [He] was much quoted in the Renaissance to support the argument that music affected the passions, an idea that was diffused through many other channels. The *Institutes* also helped to transmit some of those famous stories of the power of music over human behaviour."[154]

Joachim Burmeister's early seventeenth-century treatise *Musica Poetica* (1606) is a music-theoretical watershed: the culmination of a didactic German tradition of "musical poetics" traceable from Nikolaus Listenius through Heinrich Faber and Gallus Dressler, which complements *musica theorica* and *musica practica*. *Musica Poetica* was the beginning of a line of treatises that systematically explores the relationship between rhetoric and music. On the title page (figure 2.8), Burmeister outlines his conception of *Musica poetica*:

> *Musica poetica*, which Euclid names *μελοποιία* and defines as the use of subjects for harmonic treatment, with the aim of appropriateness to the propounded text, is that part of music that teaches how to compose the musical poem by joining the sounds of melodies into a harmony, adorned with the numerous *Affekts* of the periods for the purpose of bending the minds of men into being moved in various ways.
>
> Thus, the definition he proposes three things have to be considered.
>
> 1. sounds.
> 2. harmonies created by the connection of the sounds.
> 3. affective harmony.
>
> But, since sounds cannot be considered or divided without some certain symbolical signs, some letters of several orders were invented, that, when they are mixed


MUSICA
POETICA:
DEFINITIONIBUS ET
DIVISIONIBUS BREVITER DE-
lineata, quibus in singulis capitibus sunt hy-
pomnemata præceptionum instar συναλ-
λῶς addita, edita studiô
& operâ,
M. JOACHIMI BVRMEI-
STERI, Lunæburg. Schola Rostoch.
Collegæ Classici.
ROSTOCHII
Excudebat Stephanus Myliander,
ANNO M. DC. VI.

FIGURE 2.8 **Joachim Burmeister: *Musica Poetica: Definitionibus Et Divisionibus Breviter,* title page, 1606.** [Source: BURM, 1.]

with one another through some connexion or union, they present some characteristics, that will be considered as the first thing in this work. Then, so that the tones are not mixed in a bad way, but from their connexion some legitimate chords shall come, it is necessary that some certain ratio guides the structural operation. As third thing, so that such chords shall stem from the intention of the sound. and the structure of harmony is appropriate for exciting souls, it is necessary that they shall not be lacking these symbols, or they are divided from the laws of the terms, that state the way and the intentions of the Harmony, beyond which it shall not go. Such things shall be a sort of compendium of this little book, that we will list in these chapters, named

1. Characterization.
2. Voices.
3. Doctrine of sounds.
4. Structure of similar-sounding.
5. Clauses.
6. Modes.
7. Transposition.
8. Initiating Modulations.
9. Goal of Melodies and Harmonies
10. Writing of the Text.
11. Orthography.
12. figures or Ornaments.
13. Classes of Songs and Antiphons.
14. Analysis.
15. Imitation.[160]

For composers such as Liszt and Wagner, voracious readers and autodidacts, these aesthetic philosophies would have proved intoxicating. Wagner in particular, was knowledgeable about Ancient Greek philosophical ideas such as *Melos*, which he wrote about in conjunction with his obsession with choosing correct tempos. The rhetorical concept of *movere* (actual movement, such as stirring the audience) could be invoked for the constituent elements of music. An anonymous *De musica* critic described the advantages of chromaticism, and surprising harmonic changes: they "do not allow the listener to become numb but excite him with the newness of the sound to pay closer attention."[155] Furthermore, in his treatise *L'antica musica ridotta alla moderna prattica,* (1555) Don Nicola Vicentino urged the performers of his day to use freedom of rhythm by appealing to the example of the orator:

> the movement of the measure should be changed to slower or faster according to the words. The experience of the orator teaches us to do this, for in his oration he speaks now loudly, now softly, now slowly, now quickly, and thus greatly moves the listeners; and this manner of changing the measure has great effect on the soul.[156]

To modern readers, even well-informed historians of rhetoric, the doctrine of the figures can seem incomprehensible, tedious, even distasteful. It comes from the attempt to carry specific concepts in oratorical rhetoric into music. To begin with, the figures are sometimes described as the "colors" or "ornaments" of rhetoric, and to modern minds that might seem as if they could be stripped off, or dispensed with. Burmeister writes in *Musica Poetica*, that "The ornament, or musical figure, is a limited circumscribed musical device, which, both in harmony and melody—in any given period that begins with a phrase and ends with a phrase—departs from the simple rule of composition and nobly takes on more ornate dress and clothes [the music in such dress.]"[157]

Much analysis of the conflation of classical rhetoric has been made; it is useful to highlight some of the devices more frequently used not only in the seventeenth century, but in historical periods ever since. Helen Kathryn Rusak, in her master's thesis at the University of Adelaide, "Rhetoric and the Passion Motet," helpfully collated the disparate information into one chart, from which I excerpt (figure 2.11):

Figure 2.11 Glossary of Musical Rhetorical Figures.

ORIGINAL TERM	LATIN/GREEK ORIGIN	LITERARY MEANING	MUSICAL THEORETICAL MEANING
Abruptio	breaking off, rendering asunder		General pause of silence within a musical texture where silence is unexpected.
Anaphora	Greek: αναφορα, carrying back	Repeating the last word of one line or clause at the beginning of the next	When a voice part reflects the textual connotation of ascending with a corresponding melodic ascent. The repetition of a melodic statement or different notes in different parts.

Figure 2.11 Glossary of Musical Rhetorical Figures.

ORIGINAL TERM	LATIN/GREEK ORIGIN	LITERARY MEANING	MUSICAL THEORETICAL MEANING
Auxesis	Greek: αύξηση της ενίσχυσης	Words of clauses placed in climactic order	Repetition of a melody in the same part a second higher, i.e., *sequence*
Climax	Greek: σκάλα, ladder	Mounting by degrees	Repetition of a melody in the same part one step higher.
Ellipis	Greek: παράλειψη. to fall short, omit	Omission of a word easily understood	An unexpected new direction taken by a passage that has led to an expected conclusion.
Gradatio	Latin: a structure consisting of a succession of different heights	The ladder form, whereby the same repeated word the step preceding to the subsequent step	A large class of musical-rhetorical figures, many without specific names, all serving to illustrate words or poetic ideas, and frequently stressing the nature of the words. More accurate than the term "word painting."
Hypotyposis	Greek: σκίτσο, περίγραμμα, sketch, outline pattern	One of the two categories into which the Greek rhetorician Hermagoras divided the subjects of Rhetoric.	
Parenthesis	Greek: παρένθεση, to put aside	A word, phrase or sentence inserted as	Insertion, interpolation.

Figure 2.11 Glossary of Musical Rhetorical Figures.

ORIGINAL TERM	LATIN/GREEK ORIGIN	LITERARY MEANING	MUSICAL THEORETICAL MEANING
		an aside in a sentence complete in itself	
Passagio	Italian: passage extract		A passage of vocal embellishment emphasizing the text, which can include forms of melodic ornamentation such as *accento,* tremolo, *trillo, groppo* or *tirster mezza.*
Periphrasis	Greek: περίφραση, circumlocution	The use of a number of words to describe something for which a few would suffice	Use of many notes when one will do.
Subjunctio	Latin: add subordinate	Words may be doubled with a view toward amplification … or to excite pity … ironically, to disparage	where one pitch is repeated strongly in the very same part of the melody.

[Source: RUS, 81.]

Since music has two "planes," horizontal (melodic, rhythmic) and vertical (harmonic) it has a dimension beyond the reach of language.

> Of all the arts, music "is preeminently non-representational," presents "tonal structures" that can be mimetic, of course, and can have verbal meanings attached to them, but also exists independently of mimesis and lexis. Music can express feelings, "though even in this capacity it has its special ways of functioning, that make it incommensurable with language." A musical composition makes its emotive contents not so much general and abstract as "conceivable, so that we can envisage and understand them without verbal helps, and without the scaffolding of an occasion wherein they figure. … A composer not only indicates, but articulates subtle complexes of feeling that language cannot even name, let alone set forth."[158]

In and of itself, the awareness that rhetoric played an important role in the conception and growth of nineteenth-century music is meaningless; rather, by identifying certain musical figures, one is reminded to emphasize those very elements. Bach repeated certain motifs to create a fugal sequence and heighten tension. Wagner invented and perfected the leitmotif, which not only immediately connotes a specific character or entity; it also causes the listener to project into the musical future what the announcement of that leitmotif might bring—melodically, harmonically, theatrically: rhetoric at its most dramatic. romanticism is emotionalism, and thus intentionally strums the heartstrings of listeners in order to convey the hidden emotional messages that are present in all great music. The listening public relies on stylistically aware performers to press out these pearls of beauty into something that is comprehensible; by doing so we will have served our composers well—and, conversely, they will continue to serve us well.

IX. CLOSING THOUGHTS

Were I a newcomer to HIP, I might read this chapter, emit a grand sigh, and in the words of Winnie the Pooh, say, "Oh, bother." After all, expressivity seems to be an individual thing; indeed, several composers have remarked on the balance between having too many performance indications in the score—articulation symbols, slurs, tempo markings and such—and the desire for the individual performer to take a work and make it his/her own. What we've been taught about romantic music is not nearly so detailed or expansive as what I've included herein. So, it seems we can make a piece our own, within reason.

Composers, contemporaneous performers and authors make clear that one's individual interpretation is most valid when it takes their suggestions and uses them as a rough template. That is to say, yes, you can employ tempo rubato, but in the way the romantics did. Or phrase as it seems best to you, but in ways that Brahms would've recognized. The point is this: respecting the performance traditions and expectations placed by composers onto performers and work within those. There is no reason we can't make a piece our own, so long as the performance still resembles what Liszt or Gabriel Fauré or Ottorino Respighi would recognize.

Speaking personally, I don't much care for people telling me how a particular piece ought to be performed: too fast, too slow; softer here, louder there. After all, I am the best person in that room at that time on that day to perform a choral work by Hans von Bülow or an organ work by Josef Rheinberger. Yet, I was taught—and have come to internalize—that if I allow the composers to speak to me by way of their notations, as well as the performance traditions known to them, I can not only express my individuality as a performer; I can also be truer to what they expected to hear. Maybe not what they wanted to hear, mind you—not many performances satisfy our expectations.

Perhaps the one overarching theme in this chapter is the desire by composers, performers and commentators to move the listener.

Again and again we hear that the goal is not to inspire an emotional affect *in ourselves*, though that is a lovely aftereffect. They want us to take their myriad notes, slurs, articulations, tempo indications—you get the idea—and inspire an emotional affect *in the listener*. As I have said, the zenith of performance is bringing tears to the eyes of a listener. It is true that to achieve that we must do more—much more—than simply sing the words or play the notes.

We absorb a choral or instrumental work, then re-create that in a way that is true to the composer and the era; we must also invest ourselves into the performance so that when the final ***pp*** chords are finished, the audience will sit there momentarily in silence. Or after a triumphal end—think Beethoven *Symphony No. 9*—listeners leap to their feet and roar with choruses of "bravo!" Isn't that the reason we took private lessons as children? sang in high school choirs of questionable ability? spent incalculable hours in private practice and ensemble rehearsal?

In one way, musicians are crazy people. We devote ourselves to this vocation—and it is a life, not a career—with no guarantee of future success. Then we venture onstage, either alone or with choir or orchestra and invite the audience to evaluate what we are about to do. The "Sword of Damocles" hangs menacingly above our necks, and one can only hope it will be replaced by cheers and clapping hands and the adulation I believe we all crave in our heart of hearts.

Arthur Rubenstein once remarked that in his lengthy career, with hundreds of solo and orchestral performances, he had given exactly five perfect performances. That is an elusive goal that is rarer than the proverbial blue moon. It's nice for us when it happens, but likely won't cause any tears to fall. The audience may be awed by our technical mastery—is anything better than a soprano or tenor singing a high C with gusto and confidence? What I believe is better for the audience, however, is a performance that stirs something deep inside them. They will boast to friends that a brilliant choir sang in perfect intonation, with perfect diction and with perfect finesse; but, in their mind's ear they will remember the parts that made them close their

eyes and pray that the moment will never end. And that, I believe, makes worthwhile the effort and discipline needed to incorporate into your performances all or part of what has preceded this soliloquy.

NOTES

5 GARC, Part II, 49. "La grande loi des arts est l'expression; toute œuvre d'art qui n'exprime pas une idée, ne signifie rien."

6 J. J. Grandville. 1842. "Le Monologue De Baptiste," ed. Edouard Charton, *Le Magasin Pittoresque*, X, 208. "Baptiste a vide quelques excellentes bouteilles de la cave de son maître, en société avec ie concierge et le valet de pied. Ses compagnons, tout en lui versant force rasades, lui ont raconté des histoires à faire frémir. Mais Baptiste est un esprit fort; il ne croit pas aux voleurs. "On ne vole pas, dit-il; ce sont des contes!" Onze heures sonnent: les copieuses libations et l'envie de dormir ont alourdi ses paupières; il dit bonsoir à la compagnie, monte sans chandelle, et cherche à tâtons sa-porte dans un corridor obscur."

7 WIN, 165.

8 NOI, 1.

9 Riemann, Hugo. 1882. "Ausdruck." *Musik-Lexikon*. Leipzig: Bibliographischen Instituts. "Ausdruck (ital. Espressione, franz. Expression) nennt man die seiner Nuancierung im Vortrag musikalischer Kunstwerke, welche die Notenschriften nicht im einzelnen ausdrücken vermag, d. h. alle die kleinen Verlangsamungen und Verschiedenartigen sowie die dynamischen Schattierungen, Accentuationen und verschiedenartigen Tonfärbungen durch die Art des Anschlags (Klavier), Strichs (Violine ec), Ansatzes (Blasinstrumente, Singstimme) und welche in ihrer Gesamtheit als Ausdrucksvolles Spiel bezeichnet werden. Wollte man all die kleinen Accent durch— ‸ > oder *sf*; etc.— bezeichnen, welche dem kunstgerechten Vortrag eines Werks unerläßlich sind, so würde die Notenschrift sehr überladen werden; zugleich würde aber auch dem ausführenden Künstler alle subjektive Freiheit der Einbindung geraubt."

10 BAM, 293.

11 Jean-Baptiste Dupuits (des Bricettes), *Principes pour toucher*, quoted in WPH, 156.

12 Thomas Busby, *A Complete Dictionary of Art*, (London, 1806), and Wiener allgemeine musikalische Zeitung, ed. Ignaz von Schöholz, 1, (Vienna, 1813), quoted in BRO, 519.

13 Charles-Auguste de Béroit, *Méthode du violon*, (Paris, 1858), quoted in SHV, 135.

14 Miss Olga Rachster, "Vibrato," Grove, Sir George, ed. 1879. *Dictionary of Music and Musicians*, First ed. Vol. 5: 268. London: Macmillan and Co.

15 Moens-Haenen, G. "Vibrato." *Grove Music Online*. 2001; Accessed 3 Oct. 2019. https://doi.org/10.1093/gmo/9781561592630.article.29287.

16 Harry Collins Deacon, Esq., "Tremolo," Grove, Sir George, ed. 1879. *Dictionary of Music and Musicians*, First ed. Vol. 5: 147. London: Macmillan and Co.

17 Gunn, John. *The Art of Playing the German-Flute* (Marion, Iowa: Janice Dockendorff Boland, 1992), 18.

18 Nigel Fortune. "Italian 17th-Century Singing." *Music & Letters* 35, no. 3 (1954): 206-19. Accessed May 20, 2021. http://www.jstor.org/stable/729917.

19 Deacon, Esq., "Tremolo."

20 AVP, 58-59. "einer musikalischen Phrase Ausdruck" verleihe. Weiter erklärte er, wie man es auf einem Streich instrument technisch produzierte: durch „schnelles Oszillieren eines Fingers auf der Saite."

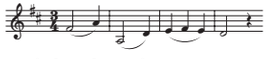
21 Stewart, H. C. 1933. “Vibrato versus Wobble: Some Impressions.” *The Musical Times* 74 (1083): 467.
22 MOZ, 243-4.
23 Wolfgang Amadeus Mozart to Leopold Mozart, Paris, 12 June 1778, in MOZL, 2:378. “Meissner hat wie sie wissen, die üble gewohnheit, daß er oft mit fleiss mit der stimme zittert—ganze viertl—ja oft gar achtl in aushaltender Note marquirt—und das habe ich an ihm nie leiden können. das ist auch wircklich abscheülich. das ist völlig ganz wieder die Natur zu singen. die Menschenstimme zittert schon selbst—aber so—in einem solchen grade, daß es schön ist—das ist die Natur der stimme.”
24 BRO, 517.
25 Spitzer, “Conducting.”
26 BRO, 521.
27 Kreitner, Kenneth, Louis Jambou, Desmond Hunter, Stewart A. Carter, Peter Walls, Kah-Ming Ng, David Schulenberg, and Clive Brown. “Ornaments.” *Grove Music Online*. 2001; Accessed 3 Oct. 2019. https://doi.org/10.1093/gmo/9781561592630.article.49928.
28 FPP, 468.
29 SVP, 175. “Zu den Ausschmückungen gehören auch noch die Bebung (tremolo) und das Wechseln der Finger auf einem Ton. Wenn der Sänger in leidenschaftlicher Bewegung singt oder seine Stimme bis zur höchsten Kraft steigert, so wird ein Beben der Stimme bemerklich, das den Schwingungen einer stark angeschlagenen Glocke ähnlich ist. Dieses Beben vermag der Geiger, wie man ches andere, der menschlichen Stimme Eigenthümliche, täuschend nachzuahmen. Es besteht in einem Schwanken oder Schweben des gegriffenen Tons, das abwechselnd ein wenig unter und über die reine Intonation hinausgeht und wird durch eine zitternde Bewegung der linken Hand in der Richtung vom Sattel zum Steg hervorgebracht. Diese Bewegung darf aber nicht zu stark seyn und das Abweichen von der Reinheit des Tons dem Ohne kaum bemerklich werden.

In alten Kompositionen findet man die Bebung zuweilen durch ein Reihe von Punkten … oder das Wort: tremolo vorgeschrieben; in neuern Sachen ist ihre Anwendung ganz dem Spieler überlassen. Er hüthe sich aber, sie nicht zu oft und am unrechten Ort anzubringen. Die oben bezeichneten Momente, wo die Bebung beym Sänger bemerkbar wird, deuten auch dem Geiger ihre Anwendung an. Er verwende sie also nur zum leidenschaftlichen Vortrage und zum kräftigen Herausheben aller mit *fz* oder > bezeichneten Töne.

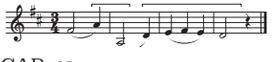
Man kann daher die Bebung in vier Arten eintheilen: 1.) in die schnelle, zu stark herausgehobenen Tönen, 2.) in die langsamere, zu getragenen Tönen leidenschaftlicher Gesangsstellen, 3.) in die langsam beginnende und schneller werdende zum Anwachsen und 4.) in die schnell beginnende und langsamer werdende zum Abnehmen lang ausgehaltener Töne.”
30 Seashore, Carl E. 1942. “In Search Of Beauty In Music.” *Musical Quarterly* 28 (3): 302-8. https://doi.org/10.1093/mq/xxviii.3.305.
31 Carl E. Seashore, ed., *The* Vibrato. (Iowa City. Univ. of Iowa Press, 1932), 108, quoted in STB, 138.
32 FIN, 471.
33 NOR, 3.
34 JJJ, 798.

35 AVP, 60-61. “dem Höhepunkt einer Phrase oder dem Fortgang einer Passage einen Hauch göttlichen Pathos.”
36 BAR, 192-193.
37 BRO, 529.
38 WPH, 156.
39 GAR, 69.
40 NOR, 3.
41 NOR, 4.
42 Auer had particularly little success with his famed pupil Jascha Heifetz.
43 AVP, 62-63.
44 AVP, 59.
45 Miss Olga Rachster, “Vibrato,” Grove, Sir George, ed. 1879. *Dictionary of Music and Musicians*, First ed. Vol. 5: 268. London: Macmillan and Co.
46 Harry Collins Deacon, Esq., “Tremolo,” Grove, Sir George, ed. 1879. *Dictionary of Music and Musicians*, First ed. Vol. 5: 147. London: Macmillan and Co.
47 AVP, 59-60. “künstlerisch vollkommen unehrlich” … “in Vogel-Strauß-Manier mittels Vibrato zurückzuziehen.” … “mitleiderregend fehlgeleitete”
48 BRO, 521.
49 BPW, 106.
50 BRO, 528.
51 NOR, 2.
52 NOR, 2.
53 PHI, 212, 468, 469, 470, 471.
54 SVP, 249.
55 BRO, 553-4.
56 For an extensive analysis and explanation of particular instances of composer-indicated vibrato in scores, see BPW, 108-110.
57 BPW, 106.
58 “[Portato is an] expressive re-articulation or pulsing of notes joined in a single bow stroke was described by Galeazzi as ‘neither separate nor slurred, but almost dragged’.” Bachmann, Werner, Robert E. Seletsky, David D. Boyden, Jaak Liivoja-Lorius, Peter Walls, and Peter Cooke. “Bow.” *Grove Music Online*. 2001; Accessed 3 Oct. 2019. https://doi.org/10.1093/gmo/9781561592630.article.03753.
59 BRO, 555.
60 PHI, 209-210.
61 BRO, 528.
62 WPH, 286.
63 NOR, 2.
64 NOR, 2-5.
65 Howard B. Rothman and Craig Timberlake, “Perceptual Evaluation of Singer’s Vibrato” in *Transcripts of the Thirteenth Symposium. Care of the Professional Voice*, (New York. The Voice Foundation, 1985). 1:57-9, quoted in STB, 141.
66 FIN, 469-470.
67 PHI, 462.
68 BEK, 12
69 PAS, 92.
70 BRON, 13.
71 PHI, 227.

72 Riemann, Hugo. 1887. “Artikulation.” *Musik-Lexikon*. Leipzig: Max Hesse. “Artikluation, in der Sprache die Unterscheidung der einzelnen Laute, in der Musik die Art Hervorbringung und Verkettung der einzelnen Töne, also das Schleifen (legato) oder Stutzen (staccato) und ihre Abarten. Die Vermengung resp,. die ungenügende Trennung der Vergrisse “Artikulation” und “Phrasierung” ist eines der schlimmsten Hemmnisse für die Lösung der Problems der letzteren. Artikulation ist in erster Linie etwas rein technisches, mechanisches, Phrasierung in erster Linie etwas ideelles, perceptionelles. Ich artikuliere gut wenn ich in die Töne unter demselben Bogen aneinander schließe und die letze Note unterm Bogen gut absetze:



ich phrasiere, wenn ich begreife, daß eben gerade die letze unterm nächsten Bogen zusammen ein Motiv bildet:



73 GAR, 13.

74 Franklin Taylor, Esq., “Legato,” Grove, Sir George, ed. 1879. *Dictionary of Music and Musicians*, First ed. Vol. 2: 665. London: Macmillan and Co.

75 Riemann, Hugo. 1882. “Legato.” *Musik-Lexikon*. Leipzig: Bibliographischen Instituts. “Legäto (ligato, “gebunden”), verbunden, d. h. ohne Pausen zwischen den einzelnen Tönen. Das Legato wird im Gesang erreicht, wenn, ohne abzusetzen, d. h. ohne den Atemausflutz zu unterbrechen, der Spannungsgrab der Stimmbänder verändert wird, so daß erste in den zweiten Ton wirklich übergeht; ähnlich ist der Vorgang bei den Atemstrom nicht unterbrochen, sondern nur die Applikatur oder Mundstellnug verändert wird. Auf den Streichinstrumenten werden Töne gebunden, 1) wenn sie auf derselben Saite gespielt werden, indem der Bogen die Saite nicht verläßt und nur die Applikatur verändert wird; 2) wenn sie auf verschiedenen Saiten liegen, indem der Bogen schnell auf die andre Saite hinüberreichtet.”

76 Franklin Taylor, Esq., “Slur,” Grove, Sir George, ed. 1879. *Dictionary of Music and Musicians*, First ed. Vol. 4: 483. London: Macmillan and Co.

77 Riemann, Hugo. 1887. “Bogen.” *Musik-Lexikon*. Leipzig: Max Hesse. “Bogen, 1) in der Notenschrift das Zeichen, durch welches Legato-Vortrag gefordert wird, der sogen. Bindebogen, dasselbe Zeichen, welches, zwei Töne derselben Höhe verbindend, das Aushalten, Liegenlassen, Nichtwiederanschlagen bedeutet und dann ebenfalls Bindebogen genannt wird; diese Terminologie ist keineswegs glücklich, auch kommen öfters Fülle vor, wo man im Zweifel sein kann, ob man einen Bindebogen der einen oder andern Art vor sich hat. Er wäre daher wünschenswert, daß die beiden Arten des Bindebogens sowohl in der Benennung als Aufzeichnung unterschieden würden. Der Bogen, welcher daß Legatospiel andeutet, könnte zweckmäßig ein für allemal Legatobogen heißen, der andre dagegen Haltenbogen. Der Haltebogen sollte stets genau von Notenkopf zu Notenkopf reichen.”

78 BRON, 21.

79 Riemann, Hugo. 1882. “Anschlag.” *Musik-Lexikon*. Leipzig: Bibliographischen Instituts. “der Non legato-Anschlag, die weichste Art des Staccato, wenn die Töne möglichst lang gehalten werden und doch noch gerade von den folgenden immer erkennbar abgetrennt (Notierungsart ····, d. h. Verbindung der Stakkatopunkte und des Legatobogens).”

80 Riemann, Hugo. 1882. “Staccato.” *Musik-Lexikon*. Leipzig: Bibliographischen Instituts. “Staccato. Bei den Streichinstrumenten wird das Staccato entweder durch ruckweises Erfassen und Wiederloslassen der Saite mit stets wechselndem Strich erzielt (die gewöhnlichste Art des Staccato, die besonders im Orchesterspiel zur Anwendung kommt) oder durch Spiel mit springendem Bogen oder des Hand gelenkes bei bleibendem Bogenstrich (das eigentliche Virtuosenstaccato). Das Staccato beim Gesang besteht in einem Schließen der Stimmritze nach jedem Ton; seine virtuose Ausführung ist sehr schwer.)”

81 BRON, 17-18.

82 Rev. J. R. Milne, “Staccato,” Grove, Sir George, ed. 1879. *Dictionary of Music and Musicians*, First ed. Vol. 4: 664. London: Macmillan and Co.

83 Franklin Taylor, Esq., “Dash,” Grove, Sir George, ed. 1879. *Dictionary of Music and Musicians*, First ed. Vol. 1: 664. London: Macmillan and Co.

84 GAR, 13.

85 BRON, 20.

86 BRON, 19.

87 GAR, 13.

88 Riemann, Hugo. 1882. “Accent.” *Musik-Lexikon*. Leipzig: Bibliographischen Instituts. “Accent, 1) Die Hervorhebung einzelner Töne oder Akkorde durch stärkere Betonung. Die Hervorhebung der stets auf den Taktanfang, die Taktmitte oder die Einsatzzeit eines Taktteiles fallenden Schwerpunkte der Phrasen sondern das natürliche Ergeb nis des die schlichte Grundlage des musikalischen Ausdrucks überhaupt bildenden, beständigen A‧- und A‧-Schwellens (crescendo und diminuendo) ist, so kann ihre Vermengung mit den Accenten vielmehr jene Extraverstärkungen, welche den selbstverständlichen Verlauf der dynamischen Entwickelung stören, eventuell sogar vollständig auf den Kopf stellen, und welche der Komponist daher gewöhnlich durch besondere Zeichen fordert (*sf*, >, ^). […] Die Bezeichnung durch Stücke ist indes eine seltene; die oben gegebenen Zeichen des einfachen Accentes werden vielmehr bald so, bald so verstanden und die Benennungen Accent, Chute, Port de voix als gleichbedeutend gebraucht.”

89 J. A. Fuller Maitland, Esq., “Marcato,” Grove, Sir George, ed. 1879. *Dictionary of Music and Musicians*, First ed. Vol. 4: 47. London: Macmillan and Co.

90 BRON, 19.

91 BRON, 20.

92 BRON, 93.

93 Riemann, Hugo. 1882. “Rinforzando.” *Musik-Lexikon*. Leipzig: Bibliographischen Instituts. “häufig einen Akzent oder ein plötzliches (und in der Regelstarkes) Crescendo.”

94 BRON, 19.

95 J. A. Fuller Maitland, Esq., “Rinforzando,” Grove, Sir George, ed. 1879. *Dictionary of Music and Musicians*, First ed. Vol. 4: 107. London: Macmillan and Co.

96 Riemann, Hugo. 1882. “Svorzato.” *Musik-Lexikon*. Leipzig: Bibliographischen Instituts. “abgekürzt *sf*, *sfz* auch *fz* [*forzato*] oder für stärkere Accenten, *sff* forciert, d. h. stark hervorgehoben, eine Bezeichnung, welche stets nur

für den Ton oder Akkord gilt, bei welchem sie steht, weshalb sie (zur genaueren Markierung der Stelle des Accents) fast immer abgekürzt erscheint. Folgt eine größere Anzahl scharfer Accente direkt aufeinander, so wird statt der vielfachen Wiederholung des *sf* bequemer 'sempre sforzato' vorgeschrieben. Das *sf* hat nur eine relative Stärkebedeutung, d. h. im piano bedeutet es etwas *f* bzw. poco forte oder mezzo-forte."

97 J. A. Fuller Maitland, Esq., "Sforzando," Grove, Sir George, ed. 1879. *Dictionary of Music and Musicians*, First ed. Vol. 4: 431. London: Macmillan and Co.

98 BRON, 18.

99 BRON, 15-6.

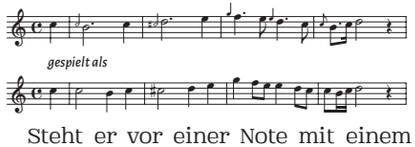
100 SCHB, v.

101 JJJ1, 144 "Die Verzierungen spielen in der Tonkunst dieselbe Rolle wie Blumen und Ranken in Wald und Flur; nicht ihre Notwendigkeit ist das Entscheidende, sondern die Freu de, die wir in ihrem Dasein, ihrer Schönheit empfinden."

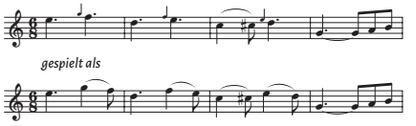
102 SVP, 174. "Die meisten von ihnen werden sehr schnell ausgeführt, damit sie der Note vor welcher sie stehen, oder der sie als Aus - schmückung angehängt sind, so wenig wie möglich von ihrem Werthe nehmen. Oft ist es aber schwer zu errathen, welcher Note (ob der vor hergehenden oder nachfolgenden,) die Zeit, die zur Ausführung der Verzierung erforderlich ist, entzogen werden soll. Da sich nun hierüber keine allgemein gültige Regel aufstellen lässt, so ist in folgendem die Vortragsweise der gebräuchlichsten solcher Verzierungen in regel mässiger Taktein theilung aus geschrieben worden."

103 HHM, 46. "Der kurze Vorschlag soll scharf betont werden und möglichst wenig Zeit in Anspruch nehmen. Der lange Vorschlag teilt sich mit der Hauptnote in den halben Wert derselben. Steht er aber vor einer punktierten Note, so bekommt der Vorschlag 1/3, die Hauptnote 2/3. Kann aber die punktierte Note in zwei gleiche Teile zerlegt werden, so bekommt der Vorschlag die Hälfte. In der Schreib weise unterscheidet sich der kurze Vorschlag von dem langen dadurch, daß er durchstrichen ist (𝅘𝅥𝅯), während bleibt der lange nicht durchstrichen ist. Die Angabe trifft jedoch nicht immer zu, namentlich bei älteren unkorrekten Ausgaben. Der lange Vorschlag wird in neueren Werken nicht mehr geschrieben."

104 SVP, 170-1. "Unter den, mit kleinen Noten ausgeschriebenen Verzierungen sind die am häufigsten vorkommenden der lange und kurze Vorschlag. Ersten findet man zwar in neuern Kompositionen in der Regel in grossen Noten und mit regelmässiger Takteintheilung ausgeschrieben […] Steht er vor einer Note, die sich in zwei gleiche Theile zerlegen lässt, so erhält er die Hälfte ihres Werthes, z. B."



Steht er vor einer Note mit einem Punkt, so erhält er den Werthder Note und diese beginnt erst mit dem Punkt, z. B.



Sind zwei Punkte da, so bekommt der Vorschlag den Werth der Note und diese beginnt mit dem ersten Punkt, z. B.

Da der Vorhalt immer auf das gute Takttheil fällt, so wird er stärker accentuirt als die Note, vor der er steht; auch wird er mit dieser stets in einem Bogenstrich zusammengezogen, weil er als Vorhalt zu ihr gehört und in ihr erst seine Auflösung findet. Der kurze Vorschlag (der als solcher, um ihn von dem langen zu unterscheiden, stets durch einen Querstrich bezeichnet seyn sollte) nimmt der Note, vor welcher er steht, fast nichts von ihrem Werth."

105 GAR, 61.

106 Franklin Taylor, Esq., "Appoggiatura," Grove, Sir George, ed. 1879. *Dictionary of Music and Musicians*, First ed. Vol. 1: 496. London: Macmillan and Co.

107 Franklin Taylor, Esq., "Vorschlag," Grove, Sir George, ed. 1879. *Dictionary of Music and Musicians*, First ed. Vol. 5: 380. London: Macmillan and Co.

108 BRON, 22-3

109 Franklin Taylor, Esq., "Shake," Grove, Sir George, ed. 1879. *Dictionary of Music and Musicians*, First ed. Vol. 4: 433. London: Macmillan and Co.

110 SVP, 154.

111 HUM, 385.

112 HUM, 385

113 SVP, 195.

114 HHM, 118. "Wie beim Gesang, so ist auch beim Violinspiel ein sorgfältig, richtig und geschmackvoll ausgeführtes Portamento eine Hauptsache des guten, geschulten Vortrages."

115 BRON, 25.

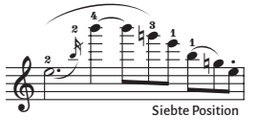
116 BRO, 565.

117 PHI, 217.

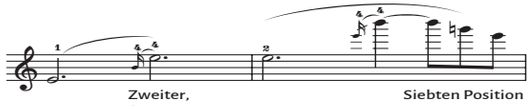
118 BRO, 570.

119 PHI, 216.

120 SVP, 108-9. "Sind zwei, entfernt von einander liegende Töne in einen Bogenstrich zusammen zu ziehen […] so lässt sich der Sprung von einem Tone zum andern nicht machen, ohne dass das Fortgleiten der Hand gehört wird. Damit dieses nun nicht in unangenehmes Heulen ausarte, muss es auf folgende Weise gemacht werden: Man rücke mit dem Finger des ersten Tons so lange fort, bis der des zweiten Tons auf seinen Platz niederfallen kann […] also mit dem ersten Finger von e bis h und lasse erst denn den vierten Finger auf das zweite e niederfallen; eben so […] mit dem zweiten Finger von e bis h

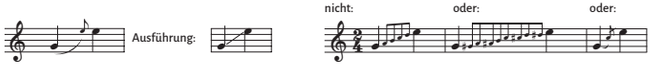


worauf der kleine Finger auf das hohe h niederfällt. Dieses Fortrücken muss aber so schnell geschehen, dass die Lücke von der kleinen bis zur höchsten Note […] nicht bemerkt und das Ohr des Zuhörers dahin getäuscht wird, dass es den ganzen Raum von der tiefen bis zur hohen Note gleichmässig von dem gleitenden Finger durch laufen glaubt. Manche Geiger pflegen zwar (im Wiederspruche mit der vorstehenden Regel) bey solchen Sprüngen mit dem Finger des hohen Tons fortzugleiten und daher die angeführten Stellen auf folgende Art zu spielen:

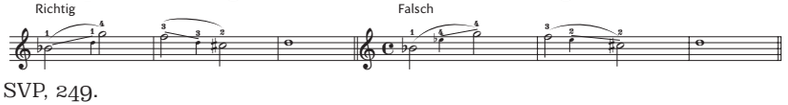


Da aber bey dieser Methode das unangenehme Heulen gar nicht zu vermeiden ist, so muss sie als fehlerhaft verworfen werden."

121 Riemann, Hugo. 1882. "Portamento." *Musik-Lexikon*. Leipzig: Bibliographischen Instituts. "Portamento (ital. Portamento, von portar la voce, 'die Stimmen tragen;' franz. port la voix), das Hinüberschleifen von einem Ton zum andern, vom Legato dadurch verschieden, daß die Erhöhung oder Vertiefung des Tons langsamer bewirkt wird und als eine stetige, nicht sprungweise erscheint. […] [E]s ist nur der Singstimme und den Streichinstrumenten eigen. Die Anweisung mancher Singschulen, daß die Stimme beim Portamento die Skala oder den Akkord zu durchlaufen hat bis zu dem verlangten zweiten Ton, ist ein großer Irrtum—es könnte kaum etwas Verkehrteres geben; der verlangte Effekt muß vielmehr durchaus derselbe sein, wie wenn man auf einer Violinsaite mit dem Finger schnell hinauf- oder herunterfährt, die wirklich stetige und nicht die stufenweise Tonhöhenveränderung. Das Portamento wird gewöhnlich nicht vorgeschrieben, man bedient sich aber wohl dafür folgender Schreibweise:"



122 HHM, 118. "Wenn zwei Töne in zwei verschiedenen Lagen zusammen gebunden werden sollen, kommt, falls die beiden Töne nicht mit dem gleichen Finger zu greifen sind, das Portamento in Anwendung. Portamento, von portare = tragen, einen Ton zumandern tragen."



123 SVP, 249.
124 BRO, 564.
125 FRÖ, 20.
126 Cercar: a slight anticipation of the following pitch before pronouncing the syllable attached to it.
127 FRÖ, 59.
128 PHI, 212.
129 GAR, 58.
130 BRON, 18.
131 BRO, 234.
132 Riemann, Hugo. 1882. "Phrasierung." *Musik-Lexikon*. Leipzig: Bibliographischen Instituts. "Phrasierung, Abgrenzung der Phrasen d.h. der mehr oder minder in sich geschlossenen natürlichen Glieder der musikalischen Gedanken (Sinngliederung), sei es beim Vortrag durch besondere Zeichen. […] Der Komponist deutet die Ausdehnung der Phrasen an durch die dynamischen Vorschriften; denn jede Phrase verlangtihre selbständige und einheitliche dynamische Ausstattung, d.h. hat nur einen dynamischen Gipfelpunkt oder auch <, aber seltener >."
133 J. A. Fuller Maitland, Esq., "Phrasing," Grove, Sir George, ed. 1879. *Dictionary of Music and Musicians*, First ed. Vol. 3: 712. London: Macmillan and Co.
134 BOZ, 78-79.
135 Liszt to Siegmund Lebert, Villa d'Este, 10 January 1870 in LZT, 2:156.
136 WAG1, 20. „Will mann alles zusammenfassen, worauf es für die richtige Aufführung eines Tonstückes von seiten des Dirigenten ankommt, so ist dies darin enthalten, daß er immer das richtige Tempo angebe; denn die Wahl und Bestimmung desselben läßt uns sofort erkennen, ob der Dirigent das Tonstück verstanden hat oder nicht. Das richtige Tempo gibt guten Musikern bei genauerem Bekannt wer den mit dem Tonstück es fast von selbst auch an die Hand, den richtigen Vortrag dafür zu finden, denn jenes schließt bereits die Erkenntnis dieses letzten von seiten des Dirigenten in sich ein. Wie wenig leicht es aber ist, das richtige Tempo zu bestimmen, er hellt eben hieraus, daß nur aus der Erkenntnis des richtigen Vortrages in jeder Beziehung auch das richtige Zeitmaß gefunden werden kann."
137 MAY, 137.
138 WAG1, 19-20. "Und wenn ich hiermit mich nicht scheue, mein Urteil über die allermeisten Aufführungen der klassischen Instrumentalwerke bei uns dahin auszusprechen, daß ich sie in einem bedenklichen Grade für ungenügend halte, so gedenke ich dies durch den Hinweis darauf zu erhärten, daß unsere Dirigenten vom richtigen Tempo aus dem Grunde nichts wissen, weil sie nichts vom Gesange verstehen. Mir ist noch kein deutscher Kapellmeister oder sonstiger Musikdirigent vorgekommen, der, sei es mit guter oder schlechter Stimme, eine Melodie wirklich hätte singen können; wogegen die Musik für sie ein sonderlich abstraktes Ding, etwas zwischen Grammatik, Arithmetik und Gymnastik Schwebendes ist, von welchem sehr wohl zu begreifen ist, daß der darin Unterrichtete zu einem rechten Lehrer an einem Konservatorium oder einer musikalischen Turnanstalt taugt, dagegen nicht verstanden werden kann, wie dieser einer musikalischen Aufführung Leben und Seele zu verleihen vermöcht."
139 Franklin Taylor, Esq., "Tempo," Grove, Sir George, ed. 1879. *Dictionary of Music and Musicians*, First ed. Vol. 5: 67. London: Macmillan and Co.
140 WAG1, 19. "Nur die richtige Erfassung des Melos gibt aber auch das richtige Zeitmaß an: beide sind unzertrennlich; eines bedingt das andere."
141 MAY, 160.
142 AMB, 254.
143 BNI, 25.
144 Riemann, Hugo. 1882. "Rubato." *Musik-Lexikon*. Leipzig: Bibliographischen Instituts. "Tempo rubato heißt die freie Behandlung des Tempo in besonders Ausdrucksvollen und leidenschaft lichen Stellen, welche das für gewöhnlich unmerkliche stringendo-calando der Phrasenabschattierung merklich hervortreten laßt."

145 MAY, 253.

146 Liszt to Siegmund Liebert, Villa d'Este, 10 January 1870, in LZT, 2:156. "Zeitmass und Rhythmus müssen sich der Melodie, der Harmonie, dem Accent und der Poesie fügen, identifizieren."

147 GAR, 52.

148 Riemann, Hugo. 1882. "Ausdruck." *Musik-Lexikon*. Leipzig: Bibliographischen Instituts. "Was zunächst die kleinen Tempoveränderungen anlangt, so ist zu bemerken, daß daher in der Regel ein geringes Treiben, Drängen am Platz sein wird, wo die musikalische Entwickelung noch eine ansteigende, positive ist, ein Nachlassen dagegen, wo dieselbe umkehrt, sich zum Schluß wendet; diese Veränderungen müssen natürlich in den einzelnen musikalischen Phrasen sehr kleine sein, dürfen aber für ein länger ausgesponnenes Thema schon bedeutender werden und erreichen für ganze Sätze eine Ausdehnung, welche die Noten schrift nur selten ignoriert. Das Anwachsen der Tonstärke ist gleich falls eine Steigerung, das Abnehmen ein Nachlassen; die naturgemäße dynamische Schattierung einer musikalischen Phrase ist daher das Crescendo bis zu ihrem Schwerpunkt und das Diminuendo von ihm nach dem Ende hin. Gewöhnlich geht die melodische Bewegung damit derart Hand in Hand, daß die sich steigernde Phrase zugleich melodisch steigend, die abnehmende fallend ist. Es versteht sich, daß mit den Schattierungen der Dynamik und Agogik haus hälterisch umgegangen werden muß und die für eine kurze Phrase aufgewandten Unterschiede der Tonstärke und Bewegung geringer sein müssen als die für ein ganzes Thema oder die Steigerung in einem Durchführungsteil. Die Abweichungen von diesen allgemeinsten Regeln wird der Komponist meist an zeigen, z.B. ein Diminuendo bei steigender Melodie oder beim Stringendo, desgleichen ein Ritardando bei steigender Melodie und Crescendo; sicher begeht er eine Unterlassungssünde, wenn er das Irreguläre nicht als solches kenn zeichnet. Ferner gilt die Regel, daß das Besondere, d.h. im einfachen melodischen, rhythmischen, harmonischen Verlauf Auffallende, hervor gehoben, accentuiert wird, zunächst in harmonischer Beziehung das Auf treten von Akkorden, die der Tonika sehr fremd sind, oder die Einführung einzelner scharf dissonierender Töne; die Modulation in eine andre Tonart wird regelmäßig im Crescendo geschehen; die Akkorde oder Töne, welche sie einleiten, werden stärkere Accente erhalten, als ihnen nach ihrer metrischen und rhythmischen Stellung zukommen. Eine scharfe Dissonanz durch accentloses Spiel mildern wollen, hieße sie vertuschen, die Aufmerksamkeit von ihr ablenken; der Effekt wäre ein nicht genügendes Auffassen derselben, ein Nicht verstehen, Unklarheit, von ähnlich schlechter Wirkung wie der Quer stand. Doch kann natürlich der Komponist mit künstlerischem Vollbewußt sein die gegenteilige Vortragsweise verlangen, er kann im Diminuendo die abenteuerlichsten Modulation en machen, kann die krassesten Dissonanz en im Pianissimo bringen; der erzielte Ein druck wird dann der des Fremdartigen, Sonderbaren, Märchenhaften, Unheimlichen sein, eben zufolge der absichtlich vermiedenen vollen Klarheit. Aber es muß auch hier das Abnorme, die Abweichung vom schlichten Vortrag, besonders verlangt werden."

149 BOZ, 79.

150 BOZ, 78.

151 Διότι, διά να ερείπωνε με μίαν λέξιν, η ρητορική έχει συγκεντρώσει υπό την εξουσία της όλων των τεχνών τας δυνάμεις και δεσπόζει επ' αυτών.

152 Bradley, C. B. 1886. "The Classification of Rhetorical figures." *Modern Language Notes* 1, no. 8: 140-42. Accessed 18 July 2021. doi:10.2307/3045326.

153 Bernet Kempers, K. Ph. "Die Affektenlehre und die Musikauffassung des neunzehnten Jahrhunderts" In *Actes du cinquième Congrès International d'Esthétique*. Amsterdam 1964. *Proceedings of the fifth International Congress of Aesthetics edited by Jan Aler and Congrès International d'Esthétique*, 5, 969-71. Berlin, Boston: De Gruyter Mouton, 2019. https://doi.org/10.1515/9783111694696-214. "Wenn es vielleicht richtig ist, dass das philosophisch-ästhetische Denken die Basis der Affektenlehre im 19. Jhrt. verlassen hat, so lebte doch bestimmt im Bewusstsein der Dichter, der Komponisten, der ausübenden Künstler und der musikalischen Laien die Überzeugung fort, dass Musik die Sprache des Herzens sei, also Ausdruck menschlicher Affekte. Und im Denken der Dichter sowohl als der Komponisten klingt diese Auffassung deutlich fort.

"Während jedoch die Affekte im Laufe des 17. und 18. Jhrts. allmählich mehr oder weniger stereotype Formen des Ausdrucks gefunden hatten, verlangten Empfindsamkeit, Sturm-und-Drang und Romantik, dass der Tondichter aus eigenem Erleben heraus seine Affekte spontan in Musik zum Ausdruck brächte. Die musikalischen Symbole für Trauer, Frohlocken, Sterben, Streiten, Tod, Klagen, Jubeln, usw., welche der Barock entwickelt hatte, und die zweifellos ursprünglich auch aus dem Erleben der Idee musikalisch gestaltet worden waren, jedoch durch stetes Wiederholen an Gefühlswert eingebüsst hatten, sollten durch spontan und individuell empfundene expressive Themen, Melodien oder Motive ersetzt werden.

"Diese, das Gefühl, den Affekt anregende, zeugende und stimulierende Kraft entstammt in der Vokalmusik dem Worte, dem Texte, dem Gedichte. Während die Barockmeister nur selten Texte von bedeutenden Dichtern komponiert haben, haben die Meister des Sturm-und-Dranges und des Rokoko, so wie die grossen Klassiker eine Blütezeit der Poesie erlebt, der gegenüber sie unmöglich gleichgültig bleiben konnten. Das trifft zumal für Deutschland zu, aber auch in Frankreich erlebt man wie die junge opéra comique zahlreiche Themen der zeitgenössischen Literatur entnimmt: der Übersetzung von Tausend und einer Nacht, dem Bürgerlichen Schauspiel, dem englischen Roman.

"Es gibt keine frühere Epoche in der Musikgeschichte—das Griechische Altertum vielleicht ausgenommen—wo die Tonkunst so sehr von Dichtern beherrscht wurde, als die Zeit zwischen Mitte des 18. und Anfang des 20. Jahrhunderts.

"Der Einfluss der deutschen Dichter auf die Musik war nicht nur eine Folge der suggestiven Kraft ihrer poetischen Leistungen, sondern hing ebenfalls mit ihrer bewussten Stellungnahme zum Problem der Musik, und in besonderm Masse der Instrumentalmusik zusammen. Ihre Beherrschung der Sprache, ihre den Musikern gegenüber grössere Gewandtheit im Denken und Formulieren, gewährleistete den Dichtern Autorität und Ansehen bei den Tonkünstlern, und verlieh ihren Aussprüchen Einfluss auf das Denken und Schaffen der Komponisten; während, anderseits, die Dichter eine Art heilige Ehrfurcht vor dem Rätsel der rational nicht zu erfassenden orakelhaften Kunst der Musik hatten.

"Der Einfluss der Literatur nimmt, anfangend mit dem Rokoko, im Sturm-und-Drang und in der Klassik ständig zu und kulminiert in der

Romantik um erst im 20. Jhrt. nahezu zu verschwinden. Romantik, Realismus und Impressionismus jedoch stehen noch in ihrem Banne. Das ganze 19. Jhrt. kann die literatur-bedingte Periode der Musik genannt werden."

154 Vickers, Brian. "figures of Rhetoric/figures of Music?" *Rhetorica: A Journal of the History of Rhetoric* 2, no. 1 (1984): 1-44. Accessed July 18, 2021. doi:10.1525/rh.1984.2.1.1., 5-6.

155 Anon., "De Musica," in *Concilia Germaniae*, ed. Johann F. Schannat and Joseph Hartzheim, vol. VIII (Cologne: J. W. Krakamp & Christiani Simonis , 1571), pp. 203-208, quoted in Palisca, Claude V. "A Clarification of "Musica Reservata" in Jean Taisnier's "Astrologiae," 1559." *Acta Musicologica* 31, no. 3/4 (1959): 150. Accessed July 18, 2021. doi:10.2307/931390. "non sinunt torpere auditorem, sed ad attendendum soni novitate excitant."

156 M. Don Nicola Vicentino, *L'antica Musica Ridotta Alla Moderna Prattica* . . . , vol. 4 (Roma: Antonio Barre, 1555), 94. "e la esperienza, dell'oratore l'insegna, che si vede il modo che tiene nell'orazione, che hora dice forte, & hora piano, & più tardo, & più presto, e con questo muove assai gl'oditori, & questo modo di muovere la misure, fà effetto assai nell'animo … "

157 BURM, 55. "Ornamentum, sive Figura musica est tracts music's, tàm in Harmonia, quàm in Melodia certâ periodô, quæ â Clausula intitium sumiu & in Clausulam destinit, circumscriptus, qui à simplici compositionis rationeel discedit, et cum virtute ornatiorem habitum assumit & induit."

158 Vickers, 30, 42-43.

159 GARC, Part II, 49. "La grande loi des arts est l'expression; toute œuvre d'art qui n'exprime pas une idée, ne signifie rien."

160 BURM, 1. "Musica poetica, quam Euclides μελοποιία nominat, definita, esse usum harmonicæ tractationi subjectorum, ad decorum propositi argumenti, est illa Musicæ pars, quæ carmen musicum docet conscribere, conjungendo sonos Melodiarum in Harmoniam, varijs periodorum affectionibus exornatam, ad animos hominum cordaque in varios motos flectenda.

"Hæc definitio tria proponit consideranda. 1. Sonos. 2. Concentus ex sonorum connexione exortos. 3. Harmoniam affectuosam. Quia vero soni absque certis figurativis considerati discernique nequeunt, literæ diversorum ordinum funt inventæ, quæ quando inter se connexione vel copulatione commiscentur, characterismum pariunt, qui primo loco in hoc opere consideratur. Deinde, ne soni perperam connectantur, fed ex corum connexione legitimi concentus proveniant, oportet operationem syntaxeos certaratio dirigat. Tertio ut concentus cum mente sonifiant, & Harmoniæ corpus sit ad animos permovendos moderatem, oportet figuris non destituatur, nec lebigus terminorum sit solutu, quæ ipsi Harmoniæ modum finesa, statuunt, quos ultra citraque, non vagetur. Hæc funto venuti periocha hujus libelli, quæ bisce capitibus persequemur, quorum.

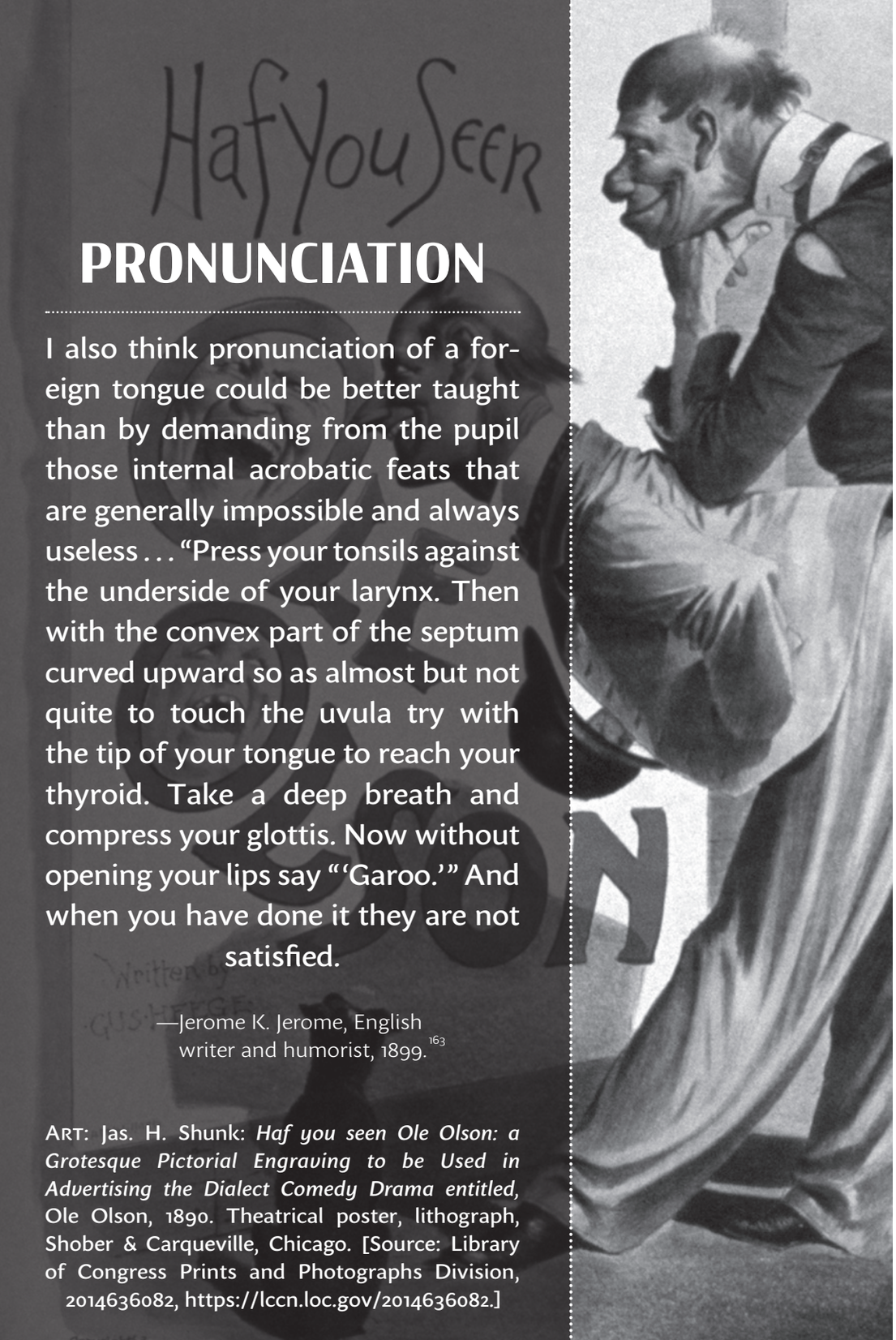
"1. Characterismo. 2. Vocibus. 3. Doctrina sonorum. 4. Consonantiarum syntaxi. 5. Clausulis. 6. Modis. 7. Transpositione. 8. Ratione inchoandi modulamina. 9. Fine Melodiarum & Harmoniarum. 10. Applicatione textus. 11. Orthographia. 12. Figuris seu ornamentis. 13. Generibus carminum & Antiphonorum. 14. Analysi. 15. Imitatione."

161 Schubert *Impromptus*, *Op. 90*. „Tafel mit Artikulationsymbolen, Vorwort." Hugo Riemann, ca. 1890. „Was die Ausgaben mit Phrasierungszeichen hauptsächlich von andern Ausgaben unterscheidet, ist die Verwendung des Bogens in ganz anderm Sinne, nämlich zur Abgrenzung von Hauptgliedern der musikalischen Gedanken (Motive, Phrasen). Der Phrasenbogen giebt also der Notenschrift,

was ihr bisher fast ganz fehlte: eine unzweideutige Interpunction, welche erst eine correcte Declamation auch dem minder genial beanlagten Spieler er möglicht. Die Gliederung durch das Lesezeichen  , für Haupteinschnitte verdoppelt  , über dem Taktstrich schräg gestellt  das Lesezeichen bedeutet für den Vortrag keineswegs die Vorschrift des Absetzens, sondern soll lediglich als Sinnzeichen verstanden und gar nicht weiter markiert werden; der Ausdruck wird aber nur dann correcte ausfallen, wenn es wirklich aufgefasst wird.

„ Die übrigen Zeichen der Ausgabe sind folgende; es bedeutet:
„ ∧ eine geringe Verlängerung der Note (agogisch er Accent).
„ > verstärkte Tongebung (dynamischer Accent).
„ — volles Aushalten des Tones bis zum Eintritt des folgenden (Legato-Anschluss).
" ⫠ fast volles Aushalten, aber Absetzen vor dem neuen Tone (Non legato, portato).
" • leichtes Absetzen, Halbstaccato.
" ▾ scharfes Abstossen, wirkliches Staccato.
" ⌣ (meist nur nach einer Note mit) leichtere Tongebung und unvollkommene Bindung (Abzug).
"  Abbrechen einer Phrase vor ihrem eigentlichen Ende (worauf meist zurückgegriffen wird).
" , (Komma) die Einschaltung einer (meist kurzen)
"  (Bogenkreuzung) Zusammenfallen von Ende und Anfang zweier Phrasen (Phrasenverschränkung).

"Wo eine andre Vortragsart nicht verlangt ist, gilt legato als natürliche und selbstverständliche Art der Tonverbindung; die letzte Note unterm Bogen wird abgesetzt, wenn nicht über derselben der tenuto-Strich (-) steht. Auch das Zusammenlaufen der Bögen in eine Spitze:  dispensiert vom Absetzen der letzten Note. Als Regel für die Nüancierung des Tempo merke man, dass sich mit dem crescendo ein (selbstverständlich geringes) *stringendo* und mit dem *diminuendo* ein (ebenso geringes) Nachlassen verbindet. Doch dürfen die »agogischen Schattie rungen« nur dann merklich hervortreten, wenn sie der Componist aus drücklich fordert. Die Vorschriften *non crescendo* and *non diminuendo* verbieten eine sonst natürliche und selbstverständliche dynamische Schattierung."



PRONUNCIATION

I also think pronunciation of a foreign tongue could be better taught than by demanding from the pupil those internal acrobatic feats that are generally impossible and always useless . . . "Press your tonsils against the underside of your larynx. Then with the convex part of the septum curved upward so as almost but not quite to touch the uvula try with the tip of your tongue to reach your thyroid. Take a deep breath and compress your glottis. Now without opening your lips say "'Garoo.'" And when you have done it they are not satisfied.

—Jerome K. Jerome, English writer and humorist, 1899.[163]

ART: Jas. H. Shunk: *Haf you seen Ole Olson: a Grotesque Pictorial Engraving to be Used in Advertising the Dialect Comedy Drama entitled,* Ole Olson, 1890. Theatrical poster, lithograph, Shober & Carqueville, Chicago. [Source: Library of Congress Prints and Photographs Division, 2014636082, https://lccn.loc.gov/2014636082.]

FIGURE 3.1 Félix Edouard Vallotton: *Les Chanteurs (The Singers)*, lithograph (zinc) on yellow wove paper, 1893.
[Source: National Gallery of Art, Washington, DC, Rosenwald Collection, 1952.8.480.]

When the idea of including a chapter on pronunciation was discussed, a colleague told me that the subject of pronunciation is itself an entire book. He is correct: there are dozens of books on pronunciation that are written specifically for singers; there are also books on pronunciation written specifically for choral professionals; and, many have either audio tracks on a disc or recordings available online with aural demonstrations of material found in the book. Moreover, there are books aimed specifically at philologists, which are far more detailed than any choral professional would ever need, and outside the scope of this work. *(In order to aid comprehension an official International Phonetic Alphabet table is included herein as Appendix A, p. 236.)*

Notwithstanding the above, I nevertheless decided to make good use of that plethora of sources and dive into the morass

of global language pronunciation. Surely the manner in which we pronounce the texts of art songs, choral Masses, anthems or major symphonic works ought to be included; indeed, not much in the world of music is more expressive than the words used by composers to create our own particular genre: vocal and choral music.

I. LATIN WITH NINETEENTH-CENTURY PRONUNCIATION

In *A Short History of Latin Pronunciation*, Cheryl Lowe writes that

> There are many twists and turns to the pronunciation history of a very old language like Latin. The pronunciation of the ancient Romans, called the classical pronunciation, was modified by Christians in the Middle Ages, when Latin became the language of the church and of the educated class. You may see this pronunciation referred to by a number of names: ecclesiastical, medieval, Church, Christian, or Italian. This pronunciation is still used today in the Catholic Church, though very little since Vatican II, and in music schools for choral classical music, where it is slightly modified for the demands of open vowels in singing. After the rise of modern languages, and the decline of Latin as a universal language, each nation's schools tended to speak Latin in their own native accents.[164]

Pope Pius X issued the *Motu Proprio* in 1903 that stated, in part, that "the language proper to the Roman Church is Latin." Although the document explicitly forbids singing "anything whatever in the vernacular," it implies that the ecclesiastical pronunciation is the standard for all liturgical actions in the Church. Because of the central position of Rome within the Catholic Church, an Italian pronunciation of Latin became commonly accepted, but this was not the case until the latter part

of the nineteenth century. Indeed, "We should also note here that—though it is frequently forgotten—modern Church Latin did not exist outside Italy as a universal ecclesiastical, or international, pronunciation of Latin until the early twentieth century."[165]

Before then, the pronunciation of Latin in church was the same as the pronunciation as Latin in other fields, and tended to reflect the sound values associated with the nationality of the speaker, meaning, as we will see below, Germans pronounced sung Latin as if it was German; the same for the French singers. The rise of HIP and the availability of pronunciation guides has led to a revival of regional pronunciations (See Appendix B, p. 237). Nevertheless, we will concentrate on the three primary pronunciations of sung Latin In the nineteenth century: Italian (also known as Ecclesiastical or church Latin), German and French.

Italianate Latin

The pronunciation norms for North American Latin and British choirs derives from the principles of Roman liturgical Latin; however, during the years these norms have tended to blend the speech habits of modern Italian with the "pure" rules of Roman Latin. This version of Latin is usually referred to as "Italianate Latin" and is the modern adaptation of the Latin language most prevalent in sacred choral singing today; thus, it is likely most familiar to singers and conductors. With regard to vowels, <*e*> and <*o*> are the ones most affected, since they are the only ones with dual pronunciations in standard Italian. The Roman <*e*> (=[ɛ]) will sometimes be realized as the close [e] of Italian, and <*o*> (=[ɔ]) as [o], in stressed syllables only. The guidelines that generally apply for this are simple because they are already familiar from Italian: use close [e] only in environments where that vowel would occur in Italian words. This is not so much a happy coincidence as it is an expected result,

since choral conductors and singers generally have at least some familiarity with pronouncing Italian.

The rule in Italian that states that open stressed syllables will employ close [*e*] and [*o*] accounts for much of the disparity in vowels between Roman and Italianate Latin. The pronunciations [mi.sɛ.ˈɾɛ:ɾɛ] and [ˈkɾɛ:dɔ], rather than [mi.ze.ˈɾe:ɾe] and [ˈkɾe:do], are likely to require concentration to differentiate. The Greek word *miserere* exemplifies the other primary difference between Roman and Italian—that of the intervocalic <s>, which is always [s] in Roman; however, among some conductors a trend has arisen in some quarters to voice it ([z]) intervocalically, which is only appropriate for Greek words.

Even after the proclamation by Pius X, nationalistic ties to pronunciation grew strong and resistance fomented. The aged philologist and monk, Abbott Rousselot, wrote in 1928:

> Love Latin in the guise which its centuries with us have given it, fitting it to the growth of our language: because it has never ceased to be ours. Don't force it to take up a foreign or harlequin disguise that would distance it from us, and which would produce, in the French language if it adopted such a disguise, blemishes which hurt our ears, a lasting embarrassment for our eyes.[166]

In a 1912 letter to the Archbishop of Bourges, Pope St. Pius X states, "The question of the pronunciation of Latin is closely bound up with that of the restoration of the Gregorian Chant … The accent and pronunciation of Latin had great influence on the melodic and rhythmic formation of the Gregorian phrase and consequently it is important that these melodies should be rendered in the same manner in which they were artistically conceived at their first beginning."[167] Pius X thanked him for implementing Roman (Italian) pronunciation of Latin in his archdiocese; yet, in the official church documents produced

by Pius X, there are no mentions of pronunciation whatsoever. Nevertheless, within a span of seventy years, Pius's desires brought practically the whole choral world into a uniform pronunciation of Latin due to his efforts to preserve *Unus cultus, unus cantus, una lingua: One worship, one chant, one language*.[168]

W. W. Story, in his 1879 article "The Pronunciation of the Latin Language," does not temper his thoughts about the emergence, then hegemony, of Italianate pronunciation of classical Latin:

> Through all the illiterate ages, when the darkness of ignorance was over the land, the Italians retained the true pronunciation, but they knew not how to write or read. On the revival of letters, they began by respelling and rewriting according to their pronunciation; and this spelling will give us the traditional pronunciation. Now, the extraordinary fact is, that there is not a single name, if there be a single Latin word, beginning with "j," that is not written in Italian with "gi," and sounded hard like the English "j." The modern Italians in reading Latin pronounce "j" as if it were a vowel, but the true pronunciation evidently survives in their common speech; and, as we have had occasion before to observe, in the pronunciation of names of persons it would be very difficult for any change of a vital character to take place. When we find this rule of changing the "j" of the Latin into hard "gi" in Italian an invariable one, extending over hundreds of words, it is difficult not to believe that this was the real ancient pronunciation.[169]

Fortunately, searching online for "Italianate Latin Sung Pronunciation" produces scores of results; while some are not of much value to a choral conductor, Andrea Angelini provides some informative history and comments on Italiante Latin:

The Latin language developed as one of the dialects of the Italian Peninsula, in the area around Rome, in pre-classical times. The other "Italic" dialects died out, but some influence on pronunciation remained, for instance, in the northwest region, Gallia Cisalpina, where the substratum was Celtic, as in transalpine Gaul.

Regional dialects of Italian have long persisted in educated speech, and there was—and is—local differentiation in the speech in the important musical cities. Apart from the alternatives of Florentine and local models, Latin in musical cities may have been influenced by the presence, from the thirteenth to the mid-sixteenth centuries, of French and Flemish singers and directors, who had great prestige.

There had, however, been changes in Latin pronunciation since the classical period, as in the vernacular dialects and languages. In the early centuries a major change began in the sound of *c* and *g* before the front vowels *e* and *i*. The classical [*k*] and [*g*] (used in the "restored classical" school Latin), which are stops produced on the soft palate, moved forward to the hard palate and beyond, and came to be sounded in the ranges of [*kj*], [*tj*], [*tʃ*], [*ts*], [s], and [*gj*], [*di*], [*dʒ*], and [*ʒ*] respectively. The exact quality of the sound relevant to Latin (and to the vernacular) depended on the time and place. There were considerable differences in the sounds of these stops between countries and (sometimes) centuries.[170]

Comparing Angelini's prose explanation of pronunciation guidelines for pre-1900 Italianate Latin to spoken guidelines given by Douglass Seaton in OUP's *Ideas and Styles in the Western Musical Tradition* provides for an informative discussion (figure 3.2):

FIGURE 3.2 Comparison of Latin Pronunciation Guidelines.

ANDREA ANGELINI	DOUGLAS SEATON
CONSONANTS	
c: [*k*] before *a, o, u,* or a consonant. [*t͡ʃ*] before *e, æ, i,* and *y*. *ch:* [*k*]	The consonants *b, d, f, k, l, m, n, p, s, t,* and *ʊ* are pronounced as in English. *c* before *e, i, y, æ, œ* is pronounced *ch*: *coelo* (cheh-loh).
g: [*g*] before *a, au,* or a consonant. times in Roman use [*ʒ*]; in Venice, Mantua, possibly [*dj*]; Milan [*d͡ʒ*].)	*c* is pronounced *k*: *cantus* (kahn-toos).
gn: [*ɲ*], prolonged in Tuscany and central and southern Italy.	*cc* before *e, i, y, æ, œ* is pronounced *tch*: *ecce* (eht-cheh).
h: Always silent in present use, but between vowels (*mihi, nihil*) it was often sounded.	*ch* is pronounced *k*: *cherubim* (keh-roo-beem).
i, j: consonantal: [*j*], but in early centuries of our period probably [*d͡ʒ*].	*g* before *e, i, y, æ, œ* is soft (as in gel).
qu, ngu: [*kw*], [*ngw*] (probably following the style of *u* in the northwest.	*genitum* (jeh-nee-toom); otherwise, *g* is hard (as in go): *gaudeamus* (gah-oo-deh-ah-moos).
r: Slightly rolled [*r*] notably when before another consonant (*carnis, parce, parte*).	*gn* is pronounced *ny*: *agnus* (ah-nyoos).
s: [s], but between two vowels it is "slightly softened" (often not at the end of a word).	*h* is silent, except in special instances, when it is pronounced *kh*: *mihi* (mee-khee) and *nihil* (nee-kheel).
se: [*sk*] before *a, o, u,* or a consonant. [*ʃ*] or a doubled [*t͡ʃ*] before *e, æ, œ, i,* and *y*.	*j* is pronounced as *y*: *Jesu* (yeh-soo).
th: [*t*]	*qu* is pronounced as *kw*: *qui* (kwee).
ti + vowel: [*t͡si-*], including *Pontio*.	*r* is lightly rolled with the tongue.
u/ʊ consonantal: [*ʊ*]	*sc* before *e, i, y, æ, œ* is pronounced *sh*: *ascendit* (ah-shehn-deet).

Figure 3.2 Comparison of Latin Pronunciation Guidelines.

ANDREA ANGELINI	DOUGLAS SEATON
x: [*ks*] but tending toward [*gz*] between vowels (*exercitus*).	*th* is pronounced as if the *h* were absent, as in *Thomas*.
xc: [ksk] before a, o, or a consonant. [k*ʃ*] before e or i (excelsis): or [ks t͡ʃ] or [kt͡ʃ].	*ti* before a vowel and, after any letter except *s*, *t*, or *x*, is pronounced *tsee*: *gratia* (grah-tsee-a).
z: [d͡ʒ]	*x* is pronounced *ks*: *ex* (ehks). *xc* before *e, i, y, æ, œ* is pronounced *ksh*: *excelsis* (ehk-shehl-sees).
CONSONANTAL GROUPS	
Double consonants are sounded twice, but not rigorously so; *ecce* is given in *Liber usualis* as "et-che;" i.e., with [*t-t͡ʃ*]. However, awkward groups have probably often been simplified, especially in vernacular Latin, for instance sanctus may have had [*nt*] or [*ɲt*].	
VOWELS	
e, æ, œ: [ɛ], but somewhat less open than in "bed." (No English diphthongs should be introduced into Italianate Latin.)	*e* is pronounced as in egg: *ante* (ahn-teh).
i: [*i*], not [*ɪ*].	*i* is pronounced as in machine: *filii* (fee-lee-ee).
o: [ɔ] (but regionally [*o*] in some words: see *e* above). Again no diphthongs.	*y* is pronounced the same as *i*: *Kyrie* (kee-ree-eh).
u: [*u*], not [*ʊ*] or [ʌ].	*o* is pronounced as in tone: *omnia* (ohm-nee-ah).
y: [*i*] rather than the classical [*y*].	*u* is pronounced as in ruler: *unum* (oo-noom).
DIPTHONGS	
	æ and *œ* pronounced as *e*: *saeculum* (seh-koo-loom). *au* and *eu* are treated as single syllables; each vowel is pronounced distinctly.
[Source: Angelini, Andrea. "Italianate Latin for Choirs." *Andrea Angelini: Choral Conductor, Composer*, 10 July 2014. www.andrea-angelini.eu/italian-latin-for-choirs/.]	[Source: Seaton, Douglass. *Ideas and Styles in the Western Musical Tradition*. New York: Oxford University Press, 2017.]

In England as well as in Europe, the difference between long and short vowels has been ignored—all of them being given the quality of long vowels. The same is true to a lesser extent in America, where English speakers often do not have a good ear for vowels. Latin was, and is, a universal language; because national languages do not have a standard pronunciation, a universal language has even less of one. English is now a universal language; still, each nation speaks it with its own native accent. This distinction may have held before 1900, but today it is fair to say that the vast majority of singers and choral conductors pronounce sung Latin in the Italian or ecclesiastical manner. Notwithstanding this supposition, many conductors—especially those in agreement with HIP—will study Latin, then teach, their singers alternate possibilities. For our purposes, this means German and French pronunciations.

Germanic Latin

Until the last twenty years or so, the notion that perhaps another Latin pronunciation was appropriate for composers from German-speaking countries seemed a bit far-fetched. One can easily hear the differences between a choral work by a composer such as Schumann, Liszt, or even Brahms, performed by a choir singing a Germanic dialect as opposed to the same work, and even the same choir, singing with Italianate pronunciation. To German-speaking choirs, pronouncing Latin as if it were a Germanic language is second nature. The end result is that German vowels and consonants supplant Italian vowels and consonants; consequently, fundamentals of pronunciation color the tonal production so that a words such as "excelsis," [ɛks ˈshel sis] in Italian pronunciation is very much different than "excelsis" in Germanic pronunciation [ɛks ˈtsel sis].

Applying Germanic pronunciation to Latin choral works from the 1800s seems an easier stepping-stone, since there are dozens of choral scores with Latin (primarily Masses) texts that

easily carry over from one to the next. That is to say, the Germanic Latin pronunciation of a *Mass* by Mozart is identical to the Germanic Latin pronunciation of a *Mass* by Schumann. The accusation that these distinctions are too rarefied deny the basics of performance practices. For, if sound is indeed the basis of all musical performance, then how a choir sings the texts of a work fundamentally changes the sound of the performance. One only has to listen to the "Gloria in excelsis Deo" from the Bach *h-Moll-Messe*, as sung by the Leipzig Thomanerchor in the Thomaskirche and the identical work sung by the Winchester Cathedral choir: the distinction is clear, even an Italianate Latin pronunciation does not turn Bach's work on its head. If the use of period pronunciation can be used in performances of classical works, it will help break down the resistance to the use of HIP into choral works from the romantic era.

Nevertheless, what follows is a transliteration of Italiante Latin into German performance practices, in the hopes that more conductors will integrate the distinction into the performance (figure 3.3).

FIGURE 3.3. Germanic Pronunciation of Latin

VOWELS

In contrast to classical Latin pronunciation, the distribution of long and short vowels does not obey any complex rules; there are only guidelines. These are:

Long vowels can only be used in stressed syllables if their vowel is long at all. Example: "Romani," the "Romans" = [ˈʁo.ma.ni]; "Facere," "do," "make"= [ˈfa(ː).t͡ʃə.ʁə].

As in (High) German, a vowel that comes before a double consonant is always pronounced briefly. Example: "stella," "star" = [ˈstɛ la].

Vowels in open syllables are always elongated. Examples:

- Latin "globus," "ball"=[ˈgloːbʊs]
- Latin "pink," "Rose"=[ˈʁoːza]
- Latin "Venus" = [ˈveːnʊs] / [ˈfeːnʊs]

FIGURE 3.3. Germanic Pronunciation of Latin

As in German, there is a correspondence between vowel quality (vowel opening) and vowel quantity (length):

Letter	Pronunciation	Letter	Short Vowel	Long Vowel
A /a	[aː]	O / o	[ɔ]	[oː]
E / e	[eː]	U / u	[ʊ]	[uː]
I / i	[iː]	Y / y	[ɪ] / [i] / [ʏ]	[iː] / [yː]

Notes:

- The short <*e*> in unstressed syllables is weakened to *Schwa* [ə] (e.g., "*facere*," "*tun*," "*machen*"=[ˈfa(ː).t͡ʃə.ʁə], like German "*Bitte*"=[ˈbɪ.tə]).
- The short <*i*> is also closed at the end of the word (e.g., "*Romani*," the "*Römer*"=[ˈʁo maːni], like German "*Willy*"=[ˈvɪ li]). Before vowels (except <*i*>) it is pronounced like a German <*j*> [j]. Two <*i*> are separated by a stroke of the glottis (e.g., *Iulii* = [ˈjuːliʔi]).
- The <*y*>, which was used in Latin to reproduce the Greek *Ypsilon*, is pronounced either as a *ü*-or an *i*-Laut sound, depending on the convention, the latter being the older variant. In this case, the above-mentioned *i*-rule also applies to the *y*.

VOWEL DIAGRAPHS[171]

In classical Latin there were four diphthongs, which are realized differently in German:

- The Latin <*ui*> is realized as [ʊi], for example as a sequence of <*U*> and <*i*>.
- The Latin <*eu*> is realized as [ɔɪ], as in German "*euch*" [ɔɪç].
- The Latin <*œ*> is pronounced like a German <*ö*> [øː] and is always long.
- The Latin <*æ*> is pronounced like a German <*ä*> [ɛː] (or also [eː]) and is always long.

CONSONANTS

For almost all consonants there is a clear phoneme-grapheme[172] correspondence. (This is always the same as in German):

Letter	Pronunciation	Letter	Pronunciation	Letter	Pronunciation
<*b*>	[*b*]	<*d*>	[*d*]	<*f*>	[*f*]
<*g*>	[*g*]	<*h*>	[*h*]	<*i*>	[*i*]

FIGURE 3.3. Germanic Pronunciation of Latin

Letter	Pronun-ciation	Letter	Pronun-ciation	Letter	Pronun-ciation
<b>	[b]	<d>	[d]	<f>	[f]
<g>	[g]	<h>	[h]	<i>	[i]
<m>	[m]	<n>	[n]	<p>	[pʰ]
<qu>	[kv]	<t>	[tʰ]	<x>	[k(ʰ)s]
		<z>	[t͡s]		
<qu>	[kv]	<t>	[tʰ]	<x>	[k(ʰ)s]

- As you can see, the <p> and the <t> are pronounced as spoken in German. The glottic stroke is appended to a word that begins with a vowel letter. There are several options for the following consonants:
- <c> is placed before <a>, <o> (except in the connections <æ> and <œ>) and <U> like a German <k> [kʰ] and before <æ>, <e>, <i>, <œ> and <y> pronounced like a German <z> [t͡ʃ]
- <r> is pronounced either [r], [ʀ] or [ʁ] depending on the regional variety of German.
- As in German, <s> is normally voiced [z] before a vowel, but is pronounced as a double letter voiceless [s].
- <t> is usually pronounced like a German <t> [tʰ], but before <i> followed by another vowel like a German <z> [t͡s] .
- <v> is either pronounced like a German <v> [f] or (in a variant based on the classic) like a German <w> [v].
- The digraphs <th>, <ph> appearing in Greek foreign and loan words and <ch> are as in German [tʰ], [f] and [c] (after <æ>, <e>, <i> and <y> and at the beginning of the word), or [x] (after <a>, <o> and <U>) pronounced.
- As in German, <b>, <d>, <g> and <s> are subject to Final-Obstruent Devoicing.[173]
- Here are a few liturgical phrases with corresponding IPA transliteration to demonstrate Latin texts with German pronunciation:

  Angelus ad Pastores ait: Annuntio vobis gaudium magnum quia
  [an ge lus ad pas 'to rɛs 'a nun ti o 'vo bis 'ga:u di um 'mag num 'kvi a]
  natus est vobis hodie Salvator mundi. Alleluia. Facta est cum angelo
  ['na tus est 'vo bis 'o di ɛ sal 'va tor mun di a lɛ 'lu ja 'fak ta est kum 'an gɛ lo]
  multitudo caelestis exercitus Laudantium Deum et dicentium:
  [mul ti 'tu do t͡se 'lɛs tis ɛk zer 't͡si tus la:u 'dan ti um 'de um et ti 't͡sen ti um]
  Gloria in excelsis Deo et in terra pax hominibus bonae voluntatis. Alleluia.

FIGURE 3.3. Germanic Pronunciation of Latin

['glo ri a in ɛks 't͡sel sis 'de o et in 'te ra paks o 'mi ni bus 'bo nɛ vo lun 'ta tis a lɛ 'lu ja]
Hosanna! Benedictus qui venit in nomine Domini.
[ho 'za na bɛ ʁɛ 'dik tus kvi 've nit in 'no mi nɛ do mi ni]

VOWELS			
A	Lengthened in accented, open syllabes. In Saxony For the ending -AS	[a] or [ɑ] [ɔ] [əs]	
AO		[ɑo]	
E	In stressed open syllables For est and et In all closed syllables and unstressed open syllables	[e] [est] and [et] [ɜ]	e.g., *miserere*=[mizɛ' rerɛ] e.g., *miserere*=[mizɛ' rerɛ]
Æ		[ɛ]	
Œ		[ɛ]	
EI		[ɛi]	
ES	In final position	[ɛs]	
EU		[ɔy]	
I	In stressed, open syllables In unstressed, and all closed syllables	[i] [ɪ]	e.g., *hominis* = ['ho-mi-nis]
VOWELS			
IS		[Is]	Except his = [his]
O		[ɔ]/[o]	
Œ	In Saxony, Austria and the South	[e] or [ɛ] [ɛ] [ø]	Spellings are usually with *Æ*, i.e., *celi/cœli/cæli*.
U		[ʊ]/[u]	
Y		[y]	
CONSONANTS			
A	Lengthened in accented, open syllables. In Saxony. For the ending -*AS*	[a] or [ɑ] [ɔ] [əs]	

FIGURE 3.3. Germanic Pronunciation of Latin

B	Before *E, I, O* or *Y* in Saxony	[*b*]	
C	Before front vowels Otherwise	[*ts*] [*k*]	
CC	Before front vowels Otherwise	[*kts*] [*k*]	
CH	After *A* After a front vowel or consonant Initial position or before a consonant	[*x*] [*ç*] [*k*]	
D	In final position	[*t*]	
G		[*g*]	
GN		[*ɲn*]	
H		[*h*]	
J		[*j*]	
R	In final position	[*r*] [*ɾ*]	i.e., rolled/trilled i.e., flipped e.g., pater
S		[*s*] [*z*]	Except in compound words e.g., *desuper*, where it is [*s*]
CONSONANTS			
SC	In initial position Medially before front vowel Otherwise	[*ts*] [*sts*] [*sk*]	
SCH		[*sk*]	
SP/ST		[*sp*] and [*st*]	
T		[*t*]	
XC	Before front vowels	[*ksk*] [*ksts*]	
V		[*f*] or [*ʊ*] [*ʊ*]	[*CU/QU/GU/SU* (when *U+a* forms one syllable): *U* is treated as German *V*, e.g., *lin*

FIGURE 3.3. Germanic Pronunciation of Latin

			gua=[-gva], (but not in *suum* or *quum*)
Z	Also possible, but were considered incorrect	[*ts*] [*sd*] or [*ds*]	

[Source: "Deutsche Aussprache des Lateinischen." http://www.shorturl.at/fpAHV (Accessed: 6 March 2021), 28–33.]

This is a prose explanation of the preceding tables:

1. Long <*i*> and <*u*> are [*iː*] and [*uː*]. When <*i*> and <*u*> are short, use [*ɪ*] and [*ʊ*], as in German;
2. Long <*e*> and <*o*> are [*eː*] and [*oː*]. When <*e*> and <*o*> are short, use [*ɛ*] and [*ɔ*], as in German. Unstressed <*e*> (*sedet*) can vary between [*ɛ*] and [*ə*], as in German, but tends to [*ɛ*] in some words, or on longer-held notes. The safer bet in unstressed syllables is [*ɛ*], which is never wrong, as [*ə*] can be.
3. <*æ*> is [*e*], or possibly [*ɛ*]. <*œ*> is [*ø*].
4. Syllabic <*y*> is [*yː*] (*Kyrie*) or [*ʏ*] (*hymnus*), not [*i(ː)*].[174]
5. <*b*> and <*d*> devoice to [*p*] and [*t*] in coda position. Also <*bs*>, <*bt*> become [*ps*], [*pt*].
6. Initial or intervocalic <*c*> followed by <*e*>, <*æ*>,<*œ*>, <*i*>, <*y*> is [*ts*], not [*t͡ʃ*]. <*cc*> followed by those vowels is [*kts*], not [*tt͡ʃ*] or [*tts*]. All other <*c*>s are [*k*].
7. <*ch*> will be [*k*], [*ç*] or [*x*] according to context.
8. <*g*> (*agimus, Virgine*) is [*g*] in all environments, never [*d͡ʒ*].
9. <*gn*> (*Agnus*) is [*gn*], never [*ɲ*] or [*gɲ*].
10. <*h*> (*homo*) is pronounced [*h*], never silent. Intervocalic <*h*> (*mihi, nihil*) was [*ç*] until the late eighteenth century, then softened to [*h*].
11. <*ng*> is [*ŋg*], not [*nd͡ʒ*]. Final <*nc*> is also [*ŋk*]. Intervocalic <*nc*> is [*nts*].
12. <*qu*> is [*kʊ*]. <*ngu*> is [*ŋʊ*].
13. Initial and medial <*s*>, followed by a vowel (*Sanctus, transiʊit, Jesum*), are voiced [*z*]. In compound words, intervocal-

ic <s> is [s] (*desuper*). Also tends to [s] in *eleison* (Greek). All other <s> environments are [s], including final <s> (*omnipotens*), even before or after a voiced consonant (*baptisma*). Initial <s> in clitics often retains [s], as in *suam, sub*. In Austria, German initial <s> is [s], and transfers thus into Germanic Latin there as well.

14. <sc> + <e>, <æ>, <œ>, <i>, <y> is [sts], not [ʃ]. On the other hand, <sch> is [ʃ], not [sk].
15. <-ti-> (*gratias, deprecationem*) is [t͡ʃi], except <-sti-> is [ti] (*hostias*).
16. Intervocalic <x> is [ks] (*exaudi*), not [gz]. Intervocalic <-xc-> (*excelsis*) is [kstz] or, less formally, [ktz].
17. <z> is [t͡ʃ], not [d͡ʒ].
18. The glottal stroke [ʔ] before a vowel-initial word finds its way into Germanic Latin to a varying extent, depending on context and taste.[175]

French Latin

Hardly any conductors know about alternative Latin pronunciations; even fewer recognize the value of employing them; indeed, most regions of Europe have their own historical Latin pronunciations, and incorporating the appropriate pronunciation can augment performances of that region's repertoire, while making those performances more historically accurate. Moreover, one of the most singular variants of Latin pronunciation is the French. Once choral conductors and other performers understand the subtleties of French Latin, many idiosyncrasies of French choral repertoire (often very confusing to conductors and performers) will become less mysterious.

Fortunately for modern, intrepid conductors, there is a large library of contemporaneous documents that explain the rules of French Latin as they existed in the nineteenth century; indeed, the *Bibliothèque nationale de France* alone holds more than one dozen such documents, including French grammar

primers and French-Latin dictionaries. Exploring every region with its own variant of Latin pronunciation is simply beyond the scope of this book; nevertheless, we can add French Latin to our discussion and thus examine the three leading regions.

We will focus on three primary sources: *Traité De La Prononciation Latine* by L' Abbé Ayrald de Lacombe (1851); *Méthode Pratique Et Simultanée De Lecture, D'écriture Et D'orthographe, 2e Partie. Lectures Courantes by Messrs. Léon Auguste Molliard, Prefect of studies at the school of Sainte-Barbe, and retired military officer Hinard* (1863); and *Élémens De La Grammaire Française …* by Charles François Lhomond (1829).

Among the rules furnished by L' Abbé Lacombe in *Traité De La Prononciation Latine* include:

> The First General Rule: correct pronunciation of Latin consists in voicing all the letters, consonants as much as vowels.
>
> Thus, 1° if there are double consonants, each one sounds as if pronounced separately. 2° If a letter ends a word and begins another, an almost imperceptible pause between the two words is marked, so that the letter can provide its own sound.
>
> The purpose of the Second General Rule is to give syllables a low or high pitch, pure or nasal sound. The sound becomes low by rounding the lips and pushing them forward; on the contrary, it becomes acute when contracting the lips. The sound is pure when it comes largely through the mouth; it becomes nasal when it comes out in small part through the mouth, and largely through the nose.
>
> The Third General Rule is based on the emphasis (cantus), which is nothing more than a voice inflection on certain syllables. This voice inflection is achieved by raising or lowering the voice: in the first case, it is *l'accent aigu*; in the second, *l'accent grave*.

Raising and lowering the voice successively results in the circumflex accent. Nowadays, only the acute accent remains written, and in the liturgy alone. There was no point in emphasizing the grave accent, since the grave inflection is natural on the syllable that precedes the one that admits the acute accent.

The circumflex accent was replaced by the acute accent, since, in such a position, as soon as the voice rises, it needs to drop on the same syllable. If, then, we indulge in reading Latin, and the accent is not where it should be, we need to carefully make up for this gap, according to what we are going to state.

1° If the words are dissyllable, the emphasis must always be on the penultimate. 2° If they are polysyllables, and the penultimate is long in nature, it carries the accent; but if the penultimate is brief or unclear, the antepenultimate receives the accent, whatever its quantity.

Note 1° Any penultimate long of its nature is marked with circumflex accent, and therefore is prolonged by two beats. Nevertheless, the acute accent alone, which aims to extend the syllable that receives it by a time and half, is felt when the word which contains this penultimate is followed by a monosyllable which cannot be separated by a pause. But if it is placed on the antepenultimate,[176] it is barely noticeable.

Note 2° In the words followed by enclitics[177] *ne* (dubious), *que, ve, ce, met*, etc., or *ne* (interrogative), or *cum* returned after the word it governs, the particle is supposed to be part of the word and the accent is placed according to the preceding rules.

Note 3° In the liturgy, the penultimate, although short, in the vocative[178] of words ending in *ius*, takes on the accent.

Note 4° In the reading of verses, we observe the same rules as for prose. Only, when a dissyllable, the first part of which is brief, is preceded by a monosyllable with which it forms a dactyl,[179] the monosyllable is emphasized.

Note 5° All the syllables that precede the accent must last the entire time, without ever exceeding it.

Note 6° There is no circumflex accent on colloquial Latin.[180]

Messrs. Molliard and Hinard offer their own rules in their *Méthode Pratique Et Simultanée De Lecture*:

General Rules of Pronunciation for the Reading of Latin.

All final consonants are pronounced.

As in French, the letter *e* has the open sound *è* and is open in front of a consonant, which makes a syllable with it.

Laudat	ludit	pater	monet	vicibus
		pronounced		
Laudatte	luditte	patère	monette	vicibusse

The letter *e* has the sound of a closed *é*, if it does not make a syllable with the consonant that follows (as in *pater*).

ei, in some rare cases, is pronounced like the French *eille*: *hei mihi! suaveis*. But most often *e* is detached from *i* in pronunciation (*deinde* as *déindé*).

The ending *eus* is generally pronounced *eusse*.

Jube	Deus	leo	rei	diei	suadeat	mea
			pronounced			
Jubé	Déusse	Léo	Réi	Diéi	Suadéatte	Méa

EXCEPTION. In only a few words (*Europa, heu, seu*, etc.), *e* forms a diphthong with *u*, and *eu* is pronounced as in French words: *le feu, le jeu*, etc.

oi and *ai* do not form a diphthong, as in French—and is pronounced as if there were an umlaut on *i*.

au does not diphthongize on the final *aus* and is pronounced *aüsse*.

Esaus	coi	proïndé	Sheath	coi	aio	Laius	Baiis
			pronounced				
Ésaüsse	Esaï	proïndé	Caïné	coï	aïo	Laïusse	Baiis

æ and *œ* are pronounced like *é*.

They are pronounced *è*, if they form syllable with the consonant that follows. *Cæ* and *cœ* are pronounced as *cé*.

---

u after *g* and *q*:

1° Silent before *o* and *u* (*guo, quo, quu* pronounced as *go, co, cu*).

2° *i, e, æ, œ* can be heard in front of (*gui, gue, guæ, qui, que, quæ*, are pronounced as *gui, gué, eui, eué*).

3° Pronounce *ou* in front of *a* (*gua, qua*, as *goua, coua*).

---

en or *em*, in the body of the text, are always voiced.

Unda, unde, fallunt, ludunt, rumpit, sumptibus, umbra.

Except *hunc, nunc, tunc*, in which *un* is pronounced as in French.

At the end of the words, and before *m* or *n*, the following diphthongs take an open sound:

am	em	im	om	um	an	en	in	on
			pronounced					
àme	ème	ime	ôme	ôme	àne	ène	ine	ône

Notice that the ending *um* is pronounced *ôme*.

am, em, um are pronounced as final (*àme, ème, ôme*), in compound words like:

Plerumque, quemvis, quemdam, quamvis, tamdiu, etc.

---

ch is always hard, and is pronounced *k* (as in or*ch*estra).

gn is always hard (and is pronounced like the English word sta*gn*ant).

Two *L*s, which follow each other, are never pronounced with secondary palatal[181] articulation.

ti, before a vowel, is pronounced *ci* (as in French words: *portion, partial*).

But after *s* or *x*, *t* keeps its alphabetical value and is pronounced as in the French word question.

ACCENTS.

The circumflex accent lengthens, as in French, the sound of the vowel on which it is placed: *Monuêre, rosâ, amârunt, hâc, ô (Deus), nostrûm*.

The grave accent does not modify the pronunciation of the vowel it is on: *Ultra, quàm, cùm, benè, malè, forls*.[182]

And finally, in *Élémens De La Grammaire Française*, Charles François Lhomond provides these guidelines:

Instruction on the Pronunciation of Latin

When you are proficient at reading French, you can read Latin easily. The differences in pronunciation are limited to these:

1°. *Ai, ei, oi, or*, are always pronounced in two distinguished vowels, each of which keeps its own sound. Ex, *Danai, fidei, introitus, prout*, etc.

2°. *Au* is pronounced like *ô*. Ex. *Laus, laudate, auctor*. Except in a few proper names. ex. *Nicolaus, Danaus*, pronounce *Nicola-us, Dana-us*.

3°. *Ae, ce*, and all *e* that end the syllables, are pronounced *é*: *Poenoe*, pronounce *pene*.

4°. *An, am*, are pronounced like our vowel *an*. Ex. *Angelus, vocantis, amant, ampliùs*.

On and *om*, *un* and *um*, are pronounced like our vowel *on*: Ex. *Mentis, fons, compas, promptes, unda, fugiunt*. However, *un* is pronounced as in French in some words, Ex. *Nunc, hunc, tunc*. But when the syllables *an, am, en, em, on, om* end the words, or they are followed by *m* or *n*, the *a, e, i*, and *l'a, l'e, l'i, and l'o* keep their natural sound, and the consonant *m* or *n* that follows them should be voiced. Ex. *Titan, annus, musam, flamma, amnis, lumen, partem, dein, innixus, hymnus, immotus, Damon, connexus, omnis*, etc. A final *um* is pronounced *ome*: *Domum, priorum vanum*, etc.

5°. All consonants that are not followed by a vowel are pronounced: Ex. *Fons, dicunt, psalmus, promptus, emptor*, etc.

6°. *Ch* is always pronounced like *k*. Ex. *Charitas, chorus, Anchises*, etc.

7°. *Gn* is pronounced hardly, as in these French words *gnostique, gnomonique*. ex. *Magna, igne, agni*, etc.

8°. The syllables *qua, quoe, qui, quo, quu*, are pronounced *koua, kuoe, kui, ko, ku*; ex. *Quarè, quercus, quilibet, quotannis, equus; Kouare, kuercus, kuilibet, kotannis, ekus*.

9°. *Ti*, followed by a vowel, is pronounced as the French *ci*: *Gratia, actio, actium, prudentioe*, etc.

10°. *En, em* is never pronounced as *an* or *ain*. In relation to the accents on Latin words, let's just say that the acute stress placed on the antepenultimate or on the penultimate syllable is intended to slow down, and that in two-syllable words, the emphasis is always assumed if absent from the first syllable; but we must be careful not to press too long. It would be an equal fault not to mark the pause enough, or to press too much.[183]

With so much prose information given herein, making sense of it all can be challenging. In his book, *Latin Pronunciation for Singers: A Comprehensive Guide to the Classical, Italian, German, English, French, and Franco-Flemish Pronunciations of Latin*, Sri S. Silva provides a pronunciation chart that covers 1800-1900s; for our purposes, we will focus on the 1800s (figure 3.4):

FIGURE 3.4 French Latin Pronunciation, 1650–1900s.

VOWELS			
A		[ɑ]	Very forward
AM/AN	When followed by the phonemes [k], [g], or [p], when followed by *M* or *N*, or when not followed by any other consonant	[ɑm] and [ɑn] respectively	e.g., *namque*=[nam-], *flammam*=[flamam]
AU		[o]	
E/AE/OE	[ɛ]/[e]	[ɑm] and [ɑn] respectively	Except "*et*" which was traditionally pronounced [*et*]. *E* before a weak consonant (e.g., *GN*, *L*, and *R*) may have been more closed (e.g., *Emanuel*, where the second *E* is [*e*] even though it is found in a closed syllable).
EM/EN	If followed by another consonant	[ɛ] with both consonants sounded	e.g., semper = [sɛm̆pɛr]. [Harold] Copeman[184] advises that the nasal consonant may be left out when singing
I/Y		[i]	
IM/IN	Earlier in the period Later in the period	[im] and [in], respectively [ɛm̆] and [ɛn̆], respectively	
O		[o] /[ɔ]	
OM/ON	Before M and N + consonant other than M or N. Where there are two nasal consonants, denasalization occurred and either both consonants	[ɔ̃]	e.g., fons was [f ɔz̆] e.g., omnes = [ɔmnɛz] or

FIGURE 3.4 French Latin Pronunciation, 1650–1900s.

	were pronounced, or the second only.		
U	At the end of a word, or before a non-nasal consonant	[y]	
UM/UN	before M, MM, MN and for–umque	[om], [ɔm], or [ʌm]	e.g., cum, autumnus
-UNC-		[œ̃]	e.g., defunctorum = [defœ̃torɔm]
CONSONANTS			
BS		[s]	
BT		[t]	
BV			
C	Before E, I, Æ/Œ, and Y Otherwise	[s] [k]	
CC	Before a back vowel or a consonant. Otherwise	[k] [ʃ]	
CH		[t]	
CT		[t]	
G	Before front vowels	[d͡ʒ]	
GN		[gn]	
I/J		[ʒ]	
QU	qua = [kwa] que/que=[kẅe] (I suggest the French glide, as such: [kɥe]) wvw qui = [kẅi] (I suggest: [kɥi]) quo = [ko] quu- = [kum] or [kom]. But equus = [ekys]/[ekyz]		
S	Until 1900s	[s]	
S	Between vowels and in liaison In all other positions, even final	[z] [s]	
SC	Before E, I, Æ/Œ, and Y Otherwise	[s] [sk]	
T	In all positions	[t]	

FIGURE 3.4 French Latin Pronunciation, 1650–1900s.

TI + vowel	sti- -xti-	[si] [sti] [ksti]
X	 EX+ vowel	[ks] [gz]
Z		[z]

[Source: Sri S. Silva, *Latin Pronunciations for Singers: A Comprehensive Guide to the Classical, Italian, German, English, French, and Franco-Flemish Pronunciations of Latin* (Middletown: Sri Silva, 2017), 58–59.]

Pronunciation charts are exceedingly helpful when one needs to transliterate one or two characters; nevertheless, charts such as figure 3.6 make identifying what is familiar, what is slightly changed, and what is unquestionably altered straightforward. Between figures 3.4 and 3.5 an interested choral professional should be able to decipher any nineteenth-century French choral works with a Latin text.

FIGURE 3.5 Contrasting the *Gloria in excelsis Deo* between Liturgical and French Latin.

TEXT	LITURGICAL LATIN	FRENCH LATIN
Gloria in excelsis Deo. Et in terra pax hominibus bonae voluntatis	[glɔria in ekʃɛlsis deo ɛt in tɛra paks ɔminibus bɔne vɔluntatis	[gloria i nɛksɛlsi zdeo ɛ ti ntɛra paks ominibyz bone volɔtatis
Laudamus te. Benedicimus te. Adoramus te. Glorificamus te.	laudamus tɛ bɛnɛdikamus tɛ adoramus tɛ glɔrifikamus tɛ	lodamy ste benedisimy ste adoramys ste glorifikamy ste
Gratias agimus tibi propter magnam gloriam tuam,	gratsias ad͡ʒimus tibi prɔpter maɲam glɔri-am tuam	grasia zaʒimy stibi propter magna gloriã tyam
Domine Deus, Rex cælestis, Deus Pater omnipotens.	dɔminɛ dɛus rɛks t͡ʃ ɛlɛstis dɛus patɛr ɔmnipɔtɛns	domine dey sre kselɛstis dey spatɛ rɔ̃nipotɛ̃z
Domine Fili unigenite Jesu Christe. Domine Deus, Agnus Dei, Filius Patris,	dɔminɛ fili uni-d͡ʒenitɛ jɛsu kriste dɔminɛ dɛus aɲus dɛi filius patris	domine fili yniʒenite ʒezy krite domine dey sagny zdei filiy spatris

FIGURE 3.5 Contrasting the *Gloria in excelsis Deo* between Liturgical and French Latin.

TEXT	LITURGICAL LATIN	FRENCH LATIN
Qui tollis peccata mundi, miserere nobis. Qui tollis peccata mundi, suscipe deprecationem nostram.	kwi tɔlis pɛkata mundi misɛrɛrɛ nɔbis kwi tɔlis pɛkata mundi suʃipe dɛprɛkatsiɔnɛm nɔstram	kwi toli spɛkata mʊndi mizerere nobis kwi toli spɛkata mʊndi sysipe deprekasione notram
Qui sedes ad dexteram Patris, miserere nobis.	kwi sɛdɛs ad dɛksteram patris misɛrɛrɛ nɔbis	kwi sɛdɛ za dɛksterâ patris mizerere nobis
Quoniam tu solus sanctus. Tu solus Dominus, Tu solus altissimus, Jesu Christe. Cum Sancto Spiritu, In gloria Dei Patris. Amen.	kwɔniam tu sɔlus sanktus tu sɔlus dɔminus tu sɔlus altisimus jɛsu kristɛ kum sanktɔ spiritu in glɔria dɛi patris amɛn]	koniâ ty soly sâtys ty soly zdominys ty soly zaltisimys ʒezy krite kɔ˜sâto spirity in gloria dei patris amɛn]

To sum up, being conscious of multiple systems of Latin pronunciation related to geographic regions and historical periods enhances the stylistic unity and beauty of choral music—since these multiple pronunciations are truer to the pronunciations understood by the composers. It seems self-evident that when composers wrote vocal music, they made compositional choices based on the Latin sounds that were familiar to them and thus adopted those. If twenty-first-century performers want to reproduce the sounds of nineteenth-century Latin when singing music from the 1800s, the end outcome will be more stylistically appropriate and significantly more appealing than if they use the contemporary, universal pronunciation of Latin that hardly resembles the authentic pronunciation.

Hence, choral conductors who are mindful of HIP might consider pronunciations that are at least close to what the composer expected to hear when preparing a piece of romantic music.

Naturally, we must take into account when deciding whether to incorporate historical Latin the skill level of our singers and how much rehearsal time is available; still, if stylistic accuracy is one of our performance goals, appropriate historical Latin pronunciation is essential. Experience tells us that singers will reach the expectations that are set for them; consequently, if period pronunciation is one performance goal, motivated choral singers will strive to meet the goal.

II. UNITED STATES

A search for maps that identify the various dialectical regions of the United States returns more than thirty results; some maps are relatively simple, with fewer than five regions; others, however, contain many more, such as the eighteen found in figure 3.6. Most anyone who has spent significant time in the United States, and who has also traveled, can easily recognize the difference between a speaker from the Deep South and one from California; or between a Brooklynite and a Texan.

The notion of singing music by nineteenth-century American composers with period pronunciation might strike some readers as fussy, or, perhaps even absurd. That being said, listening to a choral work with an Appalachian pronunciation–sung with its distinctly nasal timbre and bright vowels–produces a completely different effect than if the piece is performed with "standard" American English pronunciation.

Happily, the Library of Congress has created the American English Dialect Recordings: The Center for Applied Linguistics Collection,[185] whose sole duty is to capture speech samples from thirty-three states, the District of Columbia, Puerto Rico, and two Canadian provinces (British Columbia and Ontario). While these informative oral histories are not from the 1800s, one can safely assume that most of the American dialects from the nineteenth-century were still in place come the twentieth- and twenty-first centuries.

FIGURE 3.6 Eighteen Regions of the United States. Based on English Dialect.
[Source: "18 Regions of the U.S. Based on English Dialect," 21 May 2011. https://www.shorturl.at/kGPVY, Accessed 3 March 2021.]

Keep in mind that the Queen's English (received pronunciation), which is spoken by the British aristocracy and the educated classes, is different than the English language spoken in Wales—or, for that matter, the East End of London, with its Cockney tones; indeed, one can find an exhaustive chart that denotes the variants in English pronunciation in the United States and abroad. In its entirety, it is too much to reproduce herein; nevertheless, the included representative examples

will provide a clear indication of the large number of English pronunciation variants that exist in different parts of the world, by both older and younger speakers. Keep in mind, however, that this example represents approximately only about one-half of the available online resources.

When considering incorporating period pronunciation for choral works with English texts, one notes that in this online resource, there are more than two dozen regional/national dialects or accents. On one hand, this trove of information gives choral professionals a wide variety of period dialects from which to choose; on the other hand, a conductor would want to take a hard look at the viability—or desirability—of applying a geographically appropriate pronunciation to choral works programmed for performance.

While selecting the dialectical regions from figure 3.6, I chose the older or more conservative options; furthermore, empirical observation suggests that many regional accents are deeply ingrained into local culture and may well remain so indefinitely; hence, the accent heard in the speech patterns of twenty-first-century Bostonians probably sounds similar to the speech patterns heard in 1820s Boston; furthermore, this single online resource contains more than twenty English-speaking countries, including Australia, New Zealand, South Africa; finally, the many regional dialects within each nation will quickly overwhelm any conductor.

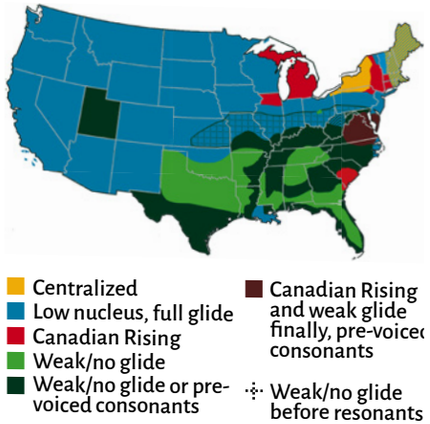
In practical terms, only the conductor can decide whether investing significant time teaching IPA to the choir will be repaid by the results. Part of such a test might include determining just how great would be the contrast between modern and period pronunciation. A choral work by New Englander Ned Rorem, for instance, would surely benefit from a New England accent; and, if the audience is unaccustomed to hearing the particular nasal twang that is part of the dialect, the performance is likely to have a greater impact.

Given the large number of immigrant communities that exist in the United States, those same newcomers, along with peoples that have existed for hundreds of years, contribute to the expansion and diversification of United States English. History shows that immigrants, while contributing to the "Melting Pot," also retain a connection to their homeland, or their parents/grandparents' homeland. The result is that a person can travel across town—instead of across the ocean—and enjoy a meal of nona's rigatoni while easily conversing in English with the waiter.

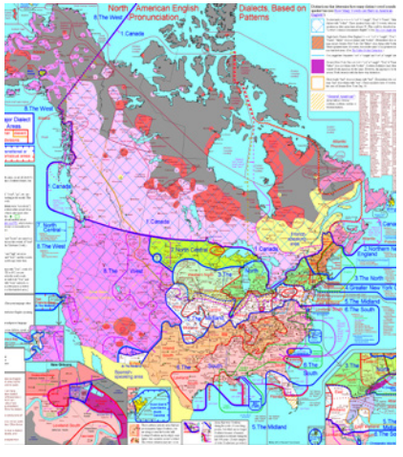
Native-born immigrants might speak American English with an Italian accent, which they would have picked up from family; or maybe that family's children would have learned American English with the accent that was prevalent in the city where they were reared. One defining characteristic of American language is its lack of either written- or unwritten-rules regarding the addition of new words into the American English vocabulary.

In a country with 328 million inhabitants, that there are multiple pronunciation maps, such as in figure 3.7, should not be surprising. What might be startling is that there are more than three dozen. Plus, each map is distinct: compare the information overload of figure 3.7, B to the blank spaces of figure 3.7, C. Amid the large number of maps, there are many such disparities: one map with twenty pronunciation regions next to another with only five or six. And the differences do not stop there: most likely the geographical regions will not match other maps, nor will the size of the region, nor the description of the pronunciation, or dialect, as it is sometimes called. Such a wide variety of styles and types of choral music allows choral professionals to choose music that may be lesser known, such as shape note music; on the other hand, such a large library of choral music might seem overwhelming, especially if the adventurous conductor wants to investigate choral performance practices.

A. Pronunciation of /"ai."/ late-nineteenth-century speakers.



B. North American dialects, based on English pronunciation patterns.



C. Which state has the most standard American English accent?

D. What Dialect Do You Speak? A Map of American English.

FIGURE 3.7 Four Maps of the United States with Varying Pronunciation Patterns. [Sources: A. Hermoine_Krafta, https://tinyurl.com/uf2m-dyd7; B. https://aschmann.net/AmEng/; C. https://tinyurl.com/pu27k85j; D. www15.uta.fi/FAST/US1/REF/dial-map.html.]

African American

Derived from English dialects combined with African roots, the Gullah language has been spoken for generations; indeed, many African Americans in the South still speak it today. Like many of the first enslaved persons in this country, a great part of the speech patterns reveal a similar correlation to the languages spoken on the Western Coast of Africa. It is believed

that the spoken language of Krio in Sierra Leone is directly correlated to the Gullah dialect.

Gullah is spoken by people in the United States on the coastal regions of North and South Carolina, Georgia, and Florida. There are smaller speaker groups in Detroit and New York; and, in 1977, there were a total of around 125,000 speakers, few of whom were monolingual. They are closely related to the Afro-Seminole or the Black Seminoles, and linguistic influences consist primarily of West African languages. English is usually the written language, although a dictionary exists and it has independent orthography and grammar.

Gullah was developed by enslaved Africans who toiled in the early South Carolina rice plantations; there were large numbers of enslaved persons there, who were forcibly transported from various West African countries to America. It was also needed to communicate with each other, and with their English-speaking masters. Given the cruel and rigid slave system, plantation owners and overseers would never have allowed their "property" to speak a language that the white men did not understand.

James Weldon Johnson writes in his 1912 *Autobiography Of An Ex-Colored Man* that "It is indispensable to the success of the singing, when the congregation is a large one made up of people from different communities, to have someone with a strong voice who knows just what hymn to sing and when to sing it, who can pitch it in the right key, and who has all the leading lines committed to memory. Sometimes it devolves upon the leader to 'sing down' a long-winded, or uninteresting speaker."[186]

The traditional spiritual texts are almost exclusively religious in content and tell of the lives of the beaten, battered and yearning; in short, enslaved peoples. These emotional songs, some of which have gained international fame, mostly describe tableaux from the Old Testament that are similar to those of the enslaved, who identified themselves with the

"chosen people" of Israel—able to flee from captivity; this analogy helped enslaved persons to defend themselves mentally against the devaluation of the mercantile system. The sadness is explained not only by the precarious living conditions of enslaved persons, but also by the mourning for relatives who had died, especially during the wave of deportations in the Second Middle Passage. Many texts focus on motherless children and robbed parents; however, there were also love songs and satirical texts that parodied the world of enslaved persons, including plantation owners, along with texts that secretly spread abolitionism news.

After 1838, opponents of slavery organized the Underground Railroad, with its own religiously coded language. The area without slavery was described as "My Home, Sweet Canaan" or "The Promised Land;" it was on the northern side of the Ohio River, which was called "Jordan" in the coded language. In "Wade in the Water," the escapees wade through the water to shake off the dogs of the pursuers. The chariot in "Swing Low, Sweet Chariot" stands for the Big Dipper. Spirituals were typically sung in a call-and-response form, with a leader improvising a line of text followed by a unison chorus of singers providing a solid refrain.

Black spirituals use microtonally flatted notes, syncopation and counter-rhythms marked by hand clapping. It also stands out because of the singers' striking vocal timbre that features shouting, exclamations of the word "Glory!" and "raspy, shrill falsetto tones." The vocal style abounded in free-form slides, turns and rhythms that were challenging for early publishers of spirituals, which were known as "sorrow songs." Songs like "Sometimes I Feel Like a Motherless Child," and "Nobody Knows the Trouble I've Seen," describe the enslaved persons' struggles and their identification with the suffering of Jesus. Other spirituals are more joyful: "jubilees," or "camp meeting songs," that are fast, rhythmic and syncopated. Examples include "Rock My Soul" and "Fare Ye Well."[187]

Prof. Felicia Barber uses Johnson's *Autobiography* to create two tables of pronunciation rules; indeed, the pronunciation directions are taken from it and provide telling differences between Johnson's rules and those in figures 3.8 and 3.9.

FIGURE 3.8 Phonological Features Found in James Weldon Johnson's *Treatise on Dialect.*

[Source: Barber, Felicia. 2018. "Gaining Perspective: A Linguistic Approach to Dialect Found in African American Spirituals." *The Choral Journal 58, no. 7,* June/July 2018, 27. Accessed 19 March 2021. https://www.jstor.org/stable/26412946.]

Consonant Rule	IPA Transcriptions
↳ "th" as in "that" or "than" becomes "d"; "th" as in "thick" or "thin" becomes "t."	"th" = /d/ that - /dæt/
↳ This rule holds good at the end as well as at the beginning of words and syllables.	"th" = /t/ thick = /tik/
↳ "de," the dialect for "the," is pronounced "dee" when it precedes words beginning with a vowel sound, and "duh" before those beginning with a conxcsonant sound.	"the" = /di/ or the = /dʌ/
↳ In "this," it follows the rule for the article "the."	
↳ Suppress the "r" except when it is in the initial letter of the syllable.	"door" = /do/
↳ The "g" in "ing" endings is generally dropped and sounds like French "m" and "n."	"going" = /gown/
Vowel Rule	**IPA Transcriptions**
↳ "a," "e" and "u" between two consonants in an unaccented syllable are uniformly rendered by the sound of "u" in "but."	/ʌ/
↳ The sound is sometimes broadened almost to the "a" in "father."	/ɑ/
↳ Examples: "never" = "nevuh" or as "nevah."	"never" = /nɛvɑ/ "never" = /nɛvʌ/
↳ "e" "better" the first "e" has the usual	first "e" - /ɛ/

FIGURE 3.8 Phonological Features Found in James Weldon Johnson's *Treatise on Dialect.*

short "e" sound, and the second "e" follows the above rule. ↳ Example "bettuh" or "bettah."	second "e" - /ʌ/ "better"=/nɛvʌ/ or "better"=/bɛtɑ/
↳ "u" The word "to" is always pronounced "tuh."	"to" = /tʌ/
↳ /o/ The "or" and "our" combinations are generally sounded "oh," ↳ Examples: "do" or "doh" for "door," and "monuh" or "monah" for "mourner."	/o/ /do/ or /doə/ /monə/
↳ This word "mourner" does not signify one undergoing grief, but one [an individual] undergoing repentance for sins.	

Phonological Features	Examples
1. Replacement–Stopping of syllable-initial fricatives /θ/, /ð/→ /t/, /d/	1. this = dat /dɪs/
2. Replacement–Labialization of interdental fricatives /θ/ becomes /f/ 3.	2. breath = breff /brɛf/
Deletion–Vocalization of postvocalic /r/	3. for = fo' /fo/
4. Deletion–Loss of /r/ after consonants	4. hundred = hund'd hʌndɪd/
5. Deletion–Intervocalic /r/ loss with syllable loss	5. tolerable = tolable / tɑləbl/
6. Consonant cluster reduction, especially word final	6. child = chil' /t͡ʃajl/
7. Deletion of initial or medial unstressed syllable	7. away = 'way /wej/
8. Deletion - Final Unstressed /n/ for /ŋ/ in present participle (deletion of /g/)	8. going = goin' /gowɪn/
9. Other Alteration of unstressed /n/ for /ŋ/ (deletion of /g/)	9. morning = mawninin / mɑunɪn/
10. Addition of Consonant–/t/ in Final position	10. loss = lost /lɔst/
11. Addition–/j/ After Velar Stops /k/ and /g/ before vowels followed by /r/	11. scared = sk'yerd /skjɛɹd/
12. Alteration of Diphthongs /aj/ for /ɔj/	12. boiler = biler /bajləɹ/
13. Merger of /ɛ/ and /ɪ/	13. again = agin / ə gɪn/
14. Glide reduction /aj/ to /a/ Diphthongs become Monophthongs	14. wide = wade /waːd/

The musical styles that grew out of African American spirituals influenced music for generations to come; in addition to gospel, which took root in the late 1800s, there is also rhythm & blues. Because the singing styles are so similar, it seems reasonable to draw pronunciation guides for rhythm & blues from spirituals. The enormous influence that African American spirituals have had on many musical genres reminds us that enslaved persons, despite oppressive suffering, produced a style and form that has remained just as powerful in modern times as it was in the seventeenth and eighteenth centuries. Spirituals are as worthy of performance practice studies as are any symphonies by Brahms or Mahler.

Metropolitan New York Accents

In 1867, New York historian and editor Mary L. Booth wrote,

> Fit language, indeed, is the English for such a nation; as yet a mass of crude material, gathered from the lexicons of every dialect that sprung from the confusion of tongues, to be molded by time, and use, and the master-hand of genius, into a symmetrical form, perfect because all-comprehensive, and fitting to become a universal language the only tongue that should be spoken by the people of a New World.[188]

The term "Melting Pot," coined in 1908 by Israel Zangwill, is synonymous today for New York; calling the City a "Smorgasbord of cultural identities, languages, beliefs, ideology, and English accents" might be a better term. The first distinctively New York voices were not an amalgam of foreign immigrants; rather, they were the localized speech of native urban delinquents—boys who dominated the streets in lower Manhattan, particularly in the Five Points district already infamous for dissolution and crime.

FIGURE 3.9.

A. Phonology of Consonants in Gullah.

Consonants	Bilabial	Labiodental	Dental	Alveolar	Post-alveolar	Palatal	Velar	Labial-Velar	Glottal
Nasal	m			n		ɲ	ŋ		
Stop	p b			t d		c ɟ	k g	kp gb	ʔ
Ejective	pʼ			tʼ			kʼ		
Fricative	ɲ ß	f v	ɲ ð	s z	ʃ ʒ			ʃ	h
Trill				r					

B. Phonology of Vowels in Gullah.

	Front lax	Front tense	Central	Back lax	Back tense
High	ɲ	i	ɲ	ʃ	u
High-Mid		e	ɲ		
Low-Mid	ɲ		ʌ		
Low	æ a	ɲɲ		ʃ	ɒ

These sentences are examples of how Gullah was spoken in the nineteenth century:

Uh gwine gone dey tomorruh. I will go there tomorrow. [I'm going to go there tomorrow
We blan ketch 'nuf cootuh dey. We always catch a lot of turtles there.
Dem yent yeddy wuh oonuh say. They did not hear what you said.
Dem chillun binnuh nyam all we rice. Those children were eating all our rice. [Them children been eating all our rice]
'E tell'um say 'e haffuh do'um. He told him that he had to do it.
Duh him tell we say dem duh faa'muh. He's the one who told us that they are farmers.
De buckruh dey duh 'ood duh hunt tuckrey. The white man is in the woods hunting turkeys.
Alltwo dem 'ooman done fuh smaa't. Both those women are really smart.
Enty duh dem shum dey? Aren't they the ones who saw him there?

Now Jedus been bon een Betlem town, een Judea, jurin de same time wen Therefore when Jesus was born in Bethlehem of Judea, in *Herod been king. Atta Jedus been bon, some wise man dem dat study bout de* the days of king Herod, lo! astronomers, came from the east *staa dem come ta Jerusalem fom weh dey been een de east. 2An dey aks say,* to Jerusalem, and said, Where is he, that is born [the] king of *"Weh de chile da, wa bon fa be de Jew people king? We beena see de staa wa* Jews? for we have seen his star in the east, and we have come *tell bout um een de east, an we come fa woshup um op." Wen King Herod yeh* to worship him. But king Herod heard, and was troubled, *dat, e been opsot fa true. An ebrybody een Jerusalem been opsot too. He call* and all Jerusalem with him. And he gathered together all the *togeda all de leada dem ob de Jew priest dem an de Jew Law teacha dem. E* princes of priests, and scribes of the people, and inquired of *aks um say. "Weh de Messiah gwine be bon at?" Dey tell King Herod say, "E* them, where Christ should be born. And they said to him, In *gwine be bon een Betlem town een Judea. Cause de prophet write say.* Bethlehem of Judea; for so it is written by a prophet

[Source: Jeff Stevens, (3 May 2005). "Gullah." faculty.washington.edu. Retrieved 18 March 2020.]

Grammatically, English is most closely aligned to German; still, without those sometimes incomprehensible umlauts, German immigrants had difficulty pronouncing words that looked familiar on paper, yet did not match what they were hearing in the grandiose Tower of Babel that was 1850s New York City. For instance, while Italian vowels perhaps sounds most similar to English vowels, there is one troublesome difference: 90 percent of Italian words end in vowels; consequently, American vocabulary, which has more words ending in consonants, flummoxed new Italian immigrants. The result was that these new English speakers added a schwa [ɔ] to the end of English words; the result, which can be heard even in modern times among speakers whose first language is Italian, results in the English word speak being pronounced as *speak*-uh ['spɪ:kˌɔ].

Comments on New York speech did not at first reflect the polyglot and polydialectal city. The uppertendom were a numerous and powerful group, but they did not represent a broad picture of Manhattan, which, in the 1850 census numbered a little more than 500,000. "When William Cullen Bryant first came to New York about 1820 (from his native Massachusetts), he made a list of distinctive expressions that were not reported fifty years later as characteristic of New York English: diphthongs in *forty* and *born*, a full final syllable in *taken* and *mistaken*, a syllabic final consonant in *barrel*, a short vowel in *jist* 'just' and *sich* 'such,' and various past tenses and past participles that were not familiar to him (*like have went, I seen, I guʊ* [for gave])."[189]

The founding of the American Dialect Society (ADS) in 1889 provided a forum for discussing New York English; thus, we possess scholarly and reliable empirical accounts of the New York pronunciation. E. H. Babbit, in his article in *Dialect Notes*—the journal of the American Dialect Society—writes

> By the census of 1890, forty percent of the inhabitants [of Greater New York City] are of non-American birth, and as many more of non-American parentage. A few years ago, New York contained more Irish-born persons than any other city in the world, and more German-born than any other except Berlin and Vienna. A New Yorker who has four American-born grandparents is a rarity, and, as the above figures show, a great majority have not one.[190]

Babbit points out that the entire raison d'etre for metropolitan New York is commerce. He also posits that the average New Yorker engages in all the myriad endeavors necessary to obtain the "almighty dollar," the "foremost object of all activity."[191] Babbit further deduces that "New York is such a colossus that its inhabitants find full occupation for their observing powers without looking at the rest of the world, and it is rare to find one who has any but the most general ideas of what life is elsewhere in America. In spite of diverse origins, the population of New York is singularly homogeneous socially and intellectually, as soon as you get below the distinct upper classes."[192]

The whole point of this elaborate explanation, Babbit says, is to "treat clearly the language conditions which correspond." His insight into nineteenth-century life in the city is so informative that it is quoted at length:

> The upper classes live a life of their own, travel a great deal, and educate their children in private schools, in which most of the teachers are not New Yorkers. Their language is therefore independent of the environment to a large extent, though there are individuals who have all the local peculiarities, and very few escape some of them. The foreigners who learn English here, of course learn the kind of English current here. The Americans and Britishers who come here with other kinds are relatively not numerous, and soon modify their pronunciation to conform to the current usage … If they come as children

they conform completely very soon. I think that no child under ten retains any trace of any other pronunciation after two years in the New York school and street life. The influence of the parents is almost infinitesimal,—quite otherwise than in rural districts. The children in most cases see very little of their fathers, and often hardly more of their mothers. The teachers in the New York public schools are generally, natives, or, in a few cases, Irish. From these and the older children the local speech goes down to the younger ones. Adults or youths in the teens are slower to change their habits, yet I have met plenty of cases in which there was practically complete and surprisingly rapid adoption of the New York pronunciation by such persons.

On the whole, then, there is a distinct New York variety of English pronunciation, used by a large majority of the inhabitants, and extending over a considerable district. It is most marked in the lower classes, who do not travel nor come under outside influences; but it is rare to find any person who learned to speak in New York who cannot be recognized before he has spoken two sentences. The extent of the majority can be only roughly determined, but my estimate is as follows: Ten percent is a liberal allowance for the upper classes who are educated out of great local peculiarities. Perhaps ten percent more is liberal for foreigners who from home influences speak a different variety of English (fifteen percent is the total, and surely a third of these must be young enough to have conformed). Other foreigners either speak no English at all, or, so far as they do not speak "broken," speak the New York variety. Probably, therefore, three-fourths of the whole population of New York and the immediate vicinity is a fair estimate [of people who speak English].[193]

Babbit continues with detailed descriptions of the vowels and consonants of what he calls "VNY," or the English accent that includes Manhattan Island and the commutation districts. He felt that New York was distinct from the rest of the country, a view that was confirmed by his colleague, B. S. Monroe. Speaking about his study of dialect in the southern tier of New York counties at the same American Dialect Society meeting, Monroe writes that "at the opening of the new century, New York grew more and more to dominate the cultural, commercial, and political life of the nation, yet its distinctive English was widely despised and even scorned."[194]

The *World Heritage Encyclopedia* contains an entry on "New York City English" that puts into chart format many of the same descriptors of the nineteenth-century vowels as found in Babbit's book (figure 3.10):

FIGURE 3.10 A Chart Of All Vowels of New York City English.

[Source: Anon. "New York City English." In *World Heritage Encyclopedia*. Project Gutenberg Literary Foundation, 2018.]

PURE VOWELS (MONOPHTHONGS)		
	New York City Phoneme	**Example Words**
/æ/	[æ]	act, pal, trap
	New York City Phoneme	**Example Words**
PURE VOWELS (MONOPHTHONGS)		
/ɑː/	[ɪə~eə~ɛə]	ham, pass, yeah
/ɒ/	[ä]	blah, bother, father, lot, top, wasp
/ɔː/	[ɔə~oə~ʊə]	all, dog, bought, loss, saw, taught
/ɛ/	[ɛ]	dress, met, bread
/ə/	[ə~ɜ]	about, syrup, arena
/ɪ/	[ɪ~ɪ̈]	hit, skim, tip
/iː/	[i~ɪi]	beam, chic, fleet
/ɨ/	[ɪ~ɪ̈~ə]	island, gamut, wasted

FIGURE 3.10 A Chart Of All Vowels of New York City English.

/ʌ/	[ʌ]	bus, flood, what
/ʊ/	[ʊ̟]	book, put, should
/uː/	[u] or [ʊu]~[ɤʊ]~[ɤu]	food, glue, new
DIPTHONGS		
/aɪ/	[ɑɪ~ɒɪ] [ɑi~ʌɪ]	ride, shine, try bright, dice, pike
/aʊ/	[aʊ~æʊ]	now, ouch, scout
/eɪ/	[eɪ~ɛɪ]	lake, paid, rein
/ɔɪ/	[ɔɪ~oɪ]	boy, choice, moist
/oʊ/	[oʊ~ʌʊ]	goat, oh, show
R-COLORED WORDS		
/ɑr/	[ɒə] (older: [äə]) (intervocalic: [ɒɹ])	barn, car, park
/ɪər/	[ɪə~iə] (intervocalic: [ɪɹ~iɹ])	fear, peer, tier
/ɛər/	[ɛə] (intervocalic: [ɛəɹ])	bare, bear, there
/ɜr/	[ɜ˞] (older: [ɜɪ~əɪ])	burn, first, herd
/ər/	[ə~ɜ] (intervocalic: [əɹ])	doctor, martyr, pervade
/ɔr/ /ʊər/	[ɔə~oɐ] (intervocalic: [ɔɹ~oɹ])	hoarse, horse, poor score, tour, war, cure, Europe, pure

Got-caught distinction: The /ɔ/ vowel sound of words like talk, law, cross, and coffee and the often homophonous /ɔr/ in core and more are tensed and usually raised more than in General American, varying on a scale from [ɔ] to [ʊ], while typically accompanied by an inglide that produces variants like [oə] or [ʊə]. These sounds are kept strongly distinct from the /Father-bother variability: The vowels in father and as in bother are typically merged, as in most of the United States, remaining backed as [ɑ]. However, a subset of words with /ɑ/ as in lot feature a lengthened and diphthongized variant, [ɑə] or even the rounded ɑ~ɒ/ in words like lot, mock, wash, and bra;

FIGURE 3.10 A Chart Of All Vowels of New York City English.

therefore, cot is something like [kʰɑt] and caught is something like [kʰoət]. [ɒə]. This variant may appear before a word final voiced stop, /dʒ/, or /m/ (e.g., *cob, cod, cog, lodge, bomb*). It also may variably occur before voiced fricatives (e.g., bother), /ʃ/ (e.g., wash), and in the words on, gone, John, and doll. Short-a split system: New York City English uses a complicated short-a split system, in which all words with the "short a" can be split into two separate classes on the basis of the sound of this vowel; thus, for example, words like badge, class, lag, and mad, are pronounced with an entirely different vowel than words like bat, clap, lack, and map. In the former set of words, historical /æ/ is raised. In the former set of words, historical /æ/ is raised and tensed to an ingliding gliding vowel of the type [ɛə~eə] or even [ɪə]. The latter set of words, meanwhile, retains a lax, low-front, typical [æ] sound.

A strongly related (but slightly different) split has occurred in the Philadelphia and Baltimore dialects. Although the lax and the tense reflexes of /æ/ are separate phonemes in these dialects, their distribution is largely predictable.

The author includes a chart that contrasts the differences between open and closed vowels, including geographical variants (figure 3.11):

FIGURE 3.11 A Chart of the New York City Short-a Split Compared to General American /æ/ Tensing and the Philadelphia and Baltimore Short-a Split.

[Source: Anon. "New York City English." In *World Heritage Encyclopedia*. Project Gutenberg Literary Foundation, 2018.]

Environment		General American	Baltimore/ Philly	
CONSONANT TYPE	**SYLLABLE TYPE**			**EXAMPLE WORDS**
/r/	Open		la [æ]	arable, arid, barrel, barren, carry, carrot, charity, clarity,

Figure 3.11 A Chart of the New York City Short-a Split Compared to General American /æ/ Tensing and the Philadelphia and Baltimore Short-a Split.

				Gary, Harry, Larry, marionette, maritime, marry, marriage, paragon, parent, parish, parody, parrot, etc.; this feature is determined by the presence or absence of the Mary-marry-merry merger
/m/, /n/	Close	tense	tense [eə]	Alexander, answer, ant, band, can (the metal object), can't, clam, dance, ham, hamburger, hand, handy, man, manly, pants, plan, ranch, sand, slant, tan, understand, etc.; in Philadelphia, began, ran, and swam alone remain lax
/m/, /n/	Open		lax [æ]	amity, animal, banana, camera, Canada, ceramic, family (there is a degree of variance with "family"; both [eə] or [æ] can be heard, depending on the speaker), famine, gamut, hammer, janitor, manager, manner, manic, Montana, panel, panic, planet, profanity, salmon, Spanish, etc.; in NYC, this group also includes the exceptions am (the verb) and can (the verb)
/b/, /d/, /dʒ/, /g/, /ʃ/, /ʒ/, (and poss. though w/ variance) /z/		lax [æ]	lax [æ]	add, ash, bad, badge, bag, bash, cab, cash, clad, crag, dad, drab, fad, flag, halve (varies by speaker) glad, grab, jazz (varies by speaker), kashmir, mad, magnet, plaid, rag, sad, sag, smash, tab, tadpole, tag, etc.; in NYC, this environment has a lot of variance and many exceptions to the rule; in Philadelphia, bad, mad, and glad alone become tense. Similarly, in New York City, /æ/ before /dʒ/ is often tense even in open syllables

Figure 3.11 A Chart of the New York City Short-a Split Compared to General American /æ/ Tensing and the Philadelphia and Baltimore Short-a Split.

and /v/			(magic, imagine, etc.)
/f/, /s/, /θ/		tense [eə]	after, ask, basket, bath, brass, casket, cast, class, craft, draft, glass, graph, grass, half, laugh, laughter, mask, mast, pass, past, path, plastic, wrath, etc.
Environment	**General American**	**Baltimore/ Philly**	
all other instances of /æ/		lax [æ]	act, agony, allergy, apple, aspirin, athlete, avid, back, bat, brat, cabin, café, cafeteria, cap, cashew, cat, Catholic, chap, clap, classic, diagonal, dragon, fashion, fat, flap, gap, gnat, latch, magazine, mallet, map, mastiff, match, maverick, Max, pack, pal, pallet, passion, passive, rabid, racket, rally, rat, sack, sat, Saturn, savvy, slack, slap, tackle, talent, trap, travel, etc.

Note: The NYC, Philadelphia, and Baltimore dialects' rule of tensing /æ/ in certain closed-syllable environments also applies to words inflectionally derived from those closed-syllable /æ/ environments that now have an open-syllable /æ/. For example, in addition to pass being tense (according to the general rule), so are its open-syl lable derivatives passing and passer-by, but not passive.

- Pre-/r/ distinctions: New York accents lack most of the mergers that occur with vowels before an /r/, which are otherwise common in other varieties of North American English:
- Mary-marry-merry three-way distinction: The vowels in words like marry ['mæɹi], merry ['mɛɹi], and Mary ['meɹi]~['mɛəɹi] do not merge, instead showing either a two- or even three-way contrast.
- Conservative /oʊ/ and /u/: /oʊ/ as in goat does not undergo fronting; instead, it remains [oʊ] and may even have a lowered starting point. This groups New York with the "North class of dialects rather than the "Midland" in which /oʊ/"

Figure 3.11 A Chart of the New York City Short-a Split Compared to General American /æ/ Tensing and the Philadelphia and Baltimore Short-a Split.

is fronted. Relatedly, /u/ as in goose is not fronted and remains a back vowel [uː] or [ʊu]. This lack of fronting of /oʊ/ and /u/ also distinguishes New York York from nearby Philadelphia. Some speakers have a separate phoneme /ɪu/ in words such as tune, news, duke (historically a separate class). The phonemic status of this vowel is marginal. For example, reports that New Yorkers may contrast [duː] do with [dɪu] dew though they may also have [dɪu] do. Still, dew is always [dɪu] and never [duː].

- Backed /aɪ/ and fronted /aʊ/: The nucleus of the /aɪ/ diphthong is traditionally a back and sometimes rounded vowel [ä~ɑ] or [ɒ] (ride as [ɹɑɑd]), while the nucleus of the /aʊ/ diphthong is a front vowel [æ~a] (out as [æʊt~aʊt]). The sociolinguistic evidence suggests that both of these developments are active changes. The fronted nucleus in /aʊ/ and the backed nucleus in /aɪ/ are more common among younger speakers, women, and the working and lower middle classes.

This detailed (figure 3.12) discussion of pronunciation in Greater New York in the 1800s concludes with the all-important consonants, which are as varied and distinct from the rest of the United States as are regional vowels:

Figure 3.12 Consonants as Pronounced in the Greater New York Area.

[Source: Anon. "New York City English." In *World Heritage Encyclopedia*. Project Gutenberg Literary Archive Foundation, 2018.]

While the following consonantal features are central to the common stereotype of a "New York accent," they are not entirely ubiquitous in New York. By contrast, the vocalic (vowel) variations in pronunciation as described above are far more typical of New York area speakers than the consonantal features listed below, which carry a much greater stigma than do the dialect's vocalic variations:

Non-rhoticity (or r-lessness): The traditional New York-area accent is non-rhotic; in other words, the sound [ɹ] does not appear at the end of a syllable or immediately before a consonant; thus, there is no [ɹ] in words like park [pʰɒək] (with vowel backed and rounded due to the low-back chain shift), butter [ˈbʌɾə], or here [hɪə]. However, er, modern New York City

Figure 3.12 Consonants as Pronounced in the Greater New York Area.

English is variably rhotic for the most part, since non-rhoticity is slowly losing ground, as discussed above, especially on the outskirts of the Greater New York City dialect region, such as in northeastern New Jersey. Non-rhoticity now happens sometimes in New Yorkers with otherwise rhotic speech if Rs are located in unaccented syllables. Non-rhotic speakers usually exhibit a linking or intrusive R, similar to other non-rhotic dialect speakers.

Laminal alveolar consonants: The alveolar consonants /t/, /d/, /n/, and /l/ may be articulated with the tongue blade rather than the tip indicates that this articulation may, in some cases, also involve affrication, producing [ts] and [dz]. Also /t/ and /d/ are often pronounced with the tongue touching the teeth rather than the alveolar ridge (just above the teeth), as is typical in most varieties of English. With /t/, glottalization is reported to be more common in New York speech than in other American dialects, appearing, for example, before syllabic /l/ (e.g., bottle [ˈbɑʔ̪ɬ]).

Th-fortition: As in many other dialects, the interdental fricatives /θ/ and /ð/ are often realized as dental or alveolar stop consonants, famously like [t] and [d], or affricates [tθ] and [dð]. Labov found this alternation to vary by class with the non-fricative forms appearing more regularly in lower and working class speech. Unlike the reported changes with /r/, the variation with /θ/ and /ð/ appears to be stable. Intrusive /g/: In addition to the ubiquitous alternation of [ŋ] and [n] in -ing endings, the speech of some New Yorkers shows [ŋg] as a variant of /ŋ/. This variant is another salient stereotype of the New York accent and is commonly mocked with "Long Island" being pronounced [ɬɔəŋˈgɑɪɬn̈nd] (rather than General American's [ɬɒŋˈäɪɬn̈nd]) popularly written Lawn Guyland. Reduction of /hj/ to /j/: New Yorkers typically do not allow /j/ to be preceded by /h/; this gives pronunciations like /ˈjumən/ and /judʒ/ for human and huge.

In the 1892 volume of *Dialect Notes*, C. H. Grandgent wrote,

> In a circular issued, on behalf of the Phonetic Section, in the summer of 1890, I requested members of the Modern Language Association of America to write out, in phonetic spelling, their pronunciation of paragraph 38 of [Henry] Sweet's *Elementarbuch des gesprochenen Englisch [Elementary Book of Spoken English]* … Contributed by Mr.

> L. F. Mott, of New York City … who is a good representative of that part of cultivated New York society whose speech has not yet been affected by Anglomania. He has not the traditional ëî of his native city; both his ë and his v are, I think, like mine.[195]

Figure 3.13 demonstrates the result of Grandgent's challenge. The left column is an approximate transliteration of the IPA as it appears in Sweet's *Elementarbuch des Gesprochenen Englisch*, which is shown in the middle column. In the far right column are the changes Mr. Mott made to Sweet's original in order to conform the pronunciation to his own geographical area: New York City.

FIGURE 3.13 NYC Accent Compared to General American Pronunciation. [Source: Sweet, Henry. *Elementarbuch Des Gesprochenen Englisch: (Grammatik, Texte Und Glossary).* Leipzig: Tauchnitz, 1904, 198; Grandgent, C. H. "English Sentences in American Mouths." *Dialect Notes* IV (1892): 198–203.]

ENGLISH TRANSLATION	ORIGINAL IPA FROM SWEET	ADJUSTED TO NYC ACCENT
I had hardly any breakfast this morning. But I don't feel at all hungry. I'm rather thirsty though.	-aiæd:hadli eni brefəst ðis :mɔniŋ ˋ, bətai dount :fiklə tɔl haŋgri. aimraadə p̃əəstið.	-ahiæd:hadli enibre·kfəst ðism·ɔniŋ, bətaid·ount fil ət·ɔl hɐŋgri. aimr·adə pëstí ðou.
What'll you have to drink? I should like some water. Have a cup of tea. That'll do you more good. It'll refresh you.	:whotljuhævtə driŋkˋ? aiʃəd:laiksəm wɔtə. :hævə:kapəv tij; ðætl:duwju məə gud. itlri freʃju.	hwatl yuh·æv tədr·iŋkˋ? aiʃud laik səmw·ɔtə. hæv ək·ɐp ət·î; ðætl dûyu məə gud. itlrifr·eʃyu.
Have another! Half a cup please.	hævə nəðe! haafəkap plijz.	hæv ən·ɐðe! haf ək·ɐp plîz ˉ.
I know a man who thinks nothing of drinking six cups of tea straight off. But then he drinks it very weak.	:ainouə mænuwpiŋks napiŋəv driŋkin siks kapsəv tij streit ɔf; bət:ðenij driŋksit veri wijk.	ain·ou əm·æn ˆ hûp·iŋks nɐpiŋ əvdr·iŋkin ˉ siks kɐps əvt·î strêt·ɔf ˋbətð·en ˉ hidr·iŋksit veri wik ˋ.
It must be very bad for him. It quite spoils his digestion.	itməsbiveri bædforim ˊ. jes ˋ, it kwait spoilzizidi dʒestʃən.	tm·ɐstbi veri bædfɔrim ˊ. yes itsp·oilz hiididʒ·estʃən

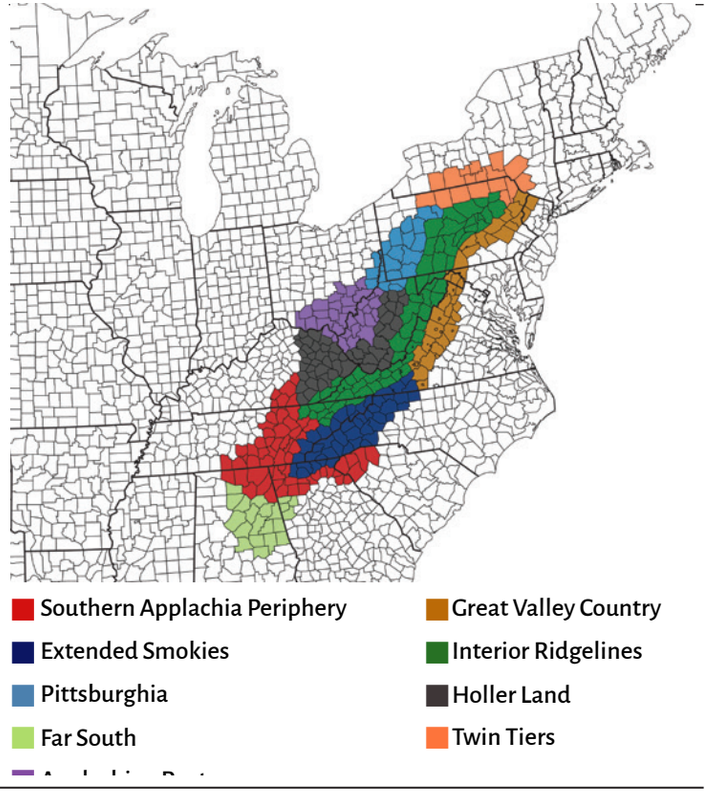
The classic New York dialect is centered on middle- and working-class White Americans, and this ethnic cluster now accounts for less than half of the city's population; even within it there is even some degree of ethnic variation. The variations of New York City English are a result of the layering of ethnic speech starting with the native Lenape[196] tribe and the influence from the waves of immigrants that settled in the city, from the earliest Dutch and English, followed in the 1800s by the Irish and western Europeans (typically of French, German, and Scandinavian descent). Over time these collective influences commingled to give New York its distinctive accent. And, from the multitude of ethnicities, languages and accents, we now address one of the most insular geographical areas in the nation, namely, Appalachia.

Appalachian Dialects

If ever there was a region in the United States with its own distinct pronunciation and dialect, it is Appalachia (figure 3.14); indeed, there is ongoing controversy about how to even pronounce the word Appalachia. The local residents say Appa-latch-uh (æpəˈlæt͡ʃə) while those people who are considered "outsiders" say Appa-lay-cha (æpəˈleɪʃə). People who were born and raised in the area often believe that is the proper way to say the word; if you pronounce it any other way, you will likely be corrected. There is a rich history of folk music in Appalachia, both instrumental and vocal; extensive research has been conducted for decades, with an outpouring of results that leave many scholars overwhelmed. Our interest extends to choral singing only—both with and without accompaniment.

People who grew up in Appalachia have particular rules about grammar and pronunciation. Historian Troy D. Smith has published a thorough explanation of how English has been modified to create a practically new language:[197]

Figure 3.14. Map of Appalachian Regional Pronunciations.
[Source: Stone, Lyman. "Where Is Appalachia?" Medium. In a State of Migration, January 13, 2017. https://medium.com/migration-issues/where-is-appalachia-2d240d74161b.]



The SUFFIX –"ing" (e.g., winning, spinning, twisting) drops the "g," becoming winnin,' spinnin,' and twistin'; however, words ending in–"ing" but not as a suffix (e.g., thing, bring, sing) do NOT drop the "g." Instead, the vowel becomes a nasalized "a:" thang, brang, sang. The same thing happens with words ending in–"ink" (think becomes thank, stink becomes stank). "Anythin'" is incorrect; "anythang," correct.

Thing = thang *Sing = sang* *Single = sangle*

Fire is pronounced the same as far. In fact, all words with the–"ire" sound are pronounced–"ar." Want is pronounced the same as won't. On is pronounced the same as own. Can't rhymes with ain't. A long "o" sound at the end of a word becomes–"er."

Tire = tar	*Hire = har*	*Wire = war*	*Retire = retarr*
Iron = Arn	*Irish = Arsh*	*Fellow = feller*	*Window = winder*
Potato = 'tater	*Fellow = feller*	*Yellow = yeller*	

In addition to pronunciation alterations in Appalachian speech patterns, locals also created aberrations that changed the syntax and grammar of speech. For instance, *The Kentuckian in New York Or, the Adventures of Three Southern* by William Caruthers, is filled with these dialectical alterations that were intended not only to demonstrate the pronunciation peculiarities: these elements identified the speaker as a lower income, less educated person: "But I'm told the yankees always sings a psalm before they go to battle;" or "Our gals and boys stands up before the parson a few minutes."[198]

Extensive research has been conducted since the 1930s to determine the origin of the Appalachian dialect. One popular theory is that the dialect is a preserved remnant of sixteenth-century (or "Elizabethan") English in isolation, though a far more accurate comparison would be to eighteenth-century (or "colonial") English. Regardless, the Appalachian dialect studied within the last century, like most dialects, actually shows a mix of both older and newer features.

In his article "Exploring the Roots of Appalachian English," linguistic historian Prof. Michael Montgomery writes of a possible trans-Atlantic origin for Appalachian English: "For decades, folklore researchers and collectors have prowled the hills of Southern Appalachia to study the spread of Scottish, Irish and English traits and to capture the echoes of Early American immi-

grants in song, in story, and in voice."[199] A link has even been proposed between Appalachian "moonshining corn whiskey and *King James' Ulster Plantation*."[200] Furthermore, the "unorthodox claim that such personality traits as hospitableness, love of leisure, propensity for violent behavior, and aversion to work were carried over from Ireland, Scotland, and the 'Celtic Fringe' areas of the British Isles to the American South in general."[201]

The evidence for how Appalachian English was pronounced is contained in hundreds—perhaps thousands—of recordings of residents that began when portable recording equipment became readily available. Among those recordings was a study of thirty-six men and ten women, all residents of Appalachia, conducted by Montgomery. What is most significant about this particular series of interviews is that many of the interviewees were born before 1900; in fact, some were born as early as 1840; some were grandchildren of the area's original settlers.

> The speech of these older residents from the Smoky Mountains represents the earliest, and probably the most isolated, variety of Appalachian English to which we have direct access; this variety will thus be referred to as Early Appalachian English here. These people, all subsistence farmers, typically had resided their entire lives in remote coves and isolated homesteads and had very little contact with either formal schooling or life in settlements, which were usually at least a day's hike away. Most interviews comprise stories of bear hunting, panther hunting, moonshining, and the like.[202]

As part of a wide-ranging research program, Joseph Sargent Hall made a far reaching linguistic survey of the Great Smoky Mountains National Park and its environs during the summer of 1937 as a student technician of the National Park Service (figure 3.15). The subjects of the study were primarily those native

FIGURE 3.15 Steve Woody, a life-long resident of the Great Smoky Mountains, was eighty-six years old when this photograph was taken. A Civilian Conservation Corps youth is operating the controls of a machine that recorded Mr. Woody's speech as a part of a linguistic survey in Great Smoky Mountains National Park, North Carolina-Tennessee.

[Source: Hall, Joseph Sargent. *Mountain Speech in the Great Smokies.* Washington, DC: National Park Service, 1941.]

inhabitants who, for one reason or another, have been allowed to remain within the bounds of the park. Hall's research was published by the National Park Service in 1941 as *Mountain Speech in the Great Smokies*. All of the important vowel and consonant sounds and their variations were transcribed, and a word-list of some three or four hundred items was compiled; furthermore, recordings of a number of old English ballads and traditional American pieces have been made.[203]

The following year, Hall published the transcribed recordings into IPA alphabet and published it as *The Phonetics of Great Smoky Mountain Speech*.[204]

VOWEL SOUNDS OF STRESSED SYLLABLES.

1. [i].

This sound, which is derived from Middle English long close e or open ɛ, shows no important variation from general American usage either as to length or quality. … Lengthening of the vowel may be illustrated by a sentence transcribed from one of the phonograph records: [wi ˈdɪdn̩t ˈhæv ˈmʌt͡ʃˈti:m], "We didn't have much of a (baseball) team." … Diphthongization ordinarily occurs only before l, as in feel [fiəl], steal [stiəl]… [e] or [eɪ] may appear in place of standard English [i] in a few words with Middle English open e.

2. [ɪ].

This vowel, derived from Middle English î, may be sounded with no difference from general American usage … On the whole [ɪ] however, is unstable as in much of English regional speech; it has a tendency both to diphthongize slightly and to vacillate between raised and lowered sounds … The variability of [ɪ] may be observed first in the universal tendency to diphthongize it in monosyllables under emphasis and in the prolonged end-clause or end-sentence position. Such breaking is often attended within tense, narrowed first element and a falling pitch in the second. Examples: 'If you carry on like [ˈðɪ͡ɪs]'; 'We didn't get nothin' that [ˈtrɪ͡ɪp]";

3. [e].

This vowel differs from general American [e] only in being more susceptible to diphthongization … The diphthong [eɪ] nearly always for [e] … Emphasis or drawl always produces diphthongization, polysyllables, or syllables with secondary stress:

"I'll see you all later." [ɑlˈsi jəl ˈleɪtəˑ]

"That's on the Far Winter range." [ˈðæts ɔn ðə ˈfɛ ˈwɪntəˑ reɪn̩d͡ʒ]

4. [ɛ]

This vowel, which is normally the development of Middle English ĕ or of an early modern shortening of Middle English (ɛ̆) (in the latter case often spelled ea), is represented by a variety

of developments in the Great Smokies. In some cases it remains unchanged; in others, under especial stress or drawl, it may become a diphthong [ɛ˛ɛ], [ɛə], or [ɛjə]; [ɕa], or [ejo]; it may also become [ɪ] or [æ], especially in combination with a nasal; or, it may become [e], particularly before [g] and the palatal aspirants; before r, it may be retracted to [ɛ], Besides these developments, there are a few words in which [ʌ] is substituted for [ɛ], and some dialectal survivals of [i] for ME [ɛ̆].

VOWEL SOUNDS OF UNSTRESSED & PARTIALLY STRESSED SYLLABLES.

1. Initial Syllables.

There is considerable diversity in the treatment or the vowels of initial unstressed or partially stressed syllables. The most frequent sounds are [ə], [əˑ], [ɪ], [ɪ̈] [ə], [əˑ], [ɪ], [ɪ̈] but under partial or secondary stress [i], [ɛ], [æ], [o], [u] also appear. In view of the complexity of the data to be examined, and because there is a degree of correlation between sound and spelling (except, of course, in the case of [ə]), the most convenient method of classifying the sounds in question is to arrange them according to the spelling.

A. Spelling with *a*.

(1) In open syllables, the unstressed vowel spelled with a is usually pronounced [ɔ] by all speakers … In less educated mountain speech, the aphesis of [ə] is fairly common as in about [bæʊt], account [kæʊnt] (in such expressions as, "Hit ain't no 'count."), accuse [ķjus], alarm clock [loəˑm klɑk], appear [pɪəˑ]. All of the dialect writers take notice of such forms, but it seems safe to say that the clipping of initial [ə] is not so frequent as is indicated in their writings. More usual than the loss of the vowel is a weakened form of [ə].

(2) In closed syllables or under partial stress, the sound is [æ]. Examples: accepted [˛æˈsɛptəd] (once; unusually

[ɪkˈsɛptəd]), admit [ædˈmɪt] … Here also the initial vowel or syllable may be dropped from certain words. Accept, it is reported, is sometimes [sɛpt].

(3) Miscellaneous. The following words do not fit into the classifications given above, or require special comment. Authority [əˈθɑrətɪ]. Carolina [kæəˈlaɪnɔ], [kæəˈlaɪnə], [kəˈlaɪnəˌ], etc.

B. Spelling with *e*.

(1) Words spelled with e show the usual variety of treatment. In cases of partial stress, or of stress shifted to the first syllable, the sounds are [i], [ɪ], or [ɛ] unobscured. In cases where stress is absent, the sounds are [ə], [əˌ], or weakened varieties of [i], [ɪ], [ɛ]. As always, the degree or stress exerts a direct influence upon the quality and quantity of the vowel.

(a) In one group, [i] consistently appears. In most of the words here included, Smokies speakers exhibit the tendency especially common in the South to transfer the chief stress to the initial syllable. Exs: Cement [ˈsi mɛnt], create [kriˌeɪt] or [ˌkriˈeɪt],v December [ˈdiˌsɛmbəˌ] or [ˌdiˈsɛmbəˌ].

(b) The prefixes be-, de-, re-. Words possessing these prefixes are grouped together because they display similar treatment of the unstressed vowel. The sounds are [ə], [ʏ], [ɪ] and [i], each of which may be used in the words so spelled. Here especially the degree of stress is important, for, although the most common sounds are [ɪ] and [ĭ], under partial stress they may become [ɪ] or [i].

(c) Words with the spelling em-, en-, es-, ex-. Words so spelled have a vowel which varies [ɛ], [ɪ], [ĭ], [ə]. Under partial stress the sounds are [ɛ] or [ɪ]; when stress is absent the sounds are [ɪ] obscured, [ĭ], or [ə]. In the syllable ez-, [ɛ] is perhaps the most frequent sound, but [ɪ] is common; many Smokies speakers tend to place a shade more stress on this prefix than is customary in general

American. In the syllables em-, en-, [ɪ] is probably more common than any other sound.

(d) Words with the spelling em-, en-, es-, ex-. Another group of words spelled with e is characterized chiefly by [ə], although in some of them [ɪ] or [ĭ] may occasionally be heard. But aphesis of [ə] is common, for example, elect [lɛkt], election [ˈlɛkʃən], eleven [ˈlɛvn] (also [ˈlɛbm̩/n̩]. Three variants or changes of the vowel are to be noted: Before [l], as in elect, electric, etc., [ə] may be replaced by [ɪ]. Kentucky, usually [kənˈtʌkɪ] (not [kɛn]), is frequently [kenˌtʌkɪ] in the speech of old-timers.

(e) Miscellaneous. There follows a brief list of words which do not fit into the classifications given above, or for which the data are too scant to permit conclusions.

Eclipse, heard only as [klɪps], as in,

The sun comes in [klɪps]. Ferocious [frˈroʃəs].

Jerusalem usually [d͡ʒəˌ] but once [d͡ʒɪˈrusiləm].

Tremendously, once, in a "recorded bear tale," told by a man ninety-six years of age of Hartford (Cocke Co., Tenn.): [wi ˈit ə ˌtriˈmɛndəslɪ ˈlɔt əʊ ˈðæt ˈbæəˌ], "We eat (ate) a tremendously lot of that bear."

C. Spelling with *i*.

(1) Words spelled with i in the initial unstressed syllable are pronounced with [ɪ], [ĭ], [i], [aɪ], and in a few cases with [ə]. In one group, the tendency to shift the stress to the initial syllable is seen once more.

(a) The largest group of words has [ɪ] or [ĭ], though the former sound is the more common.

Distill and without sometimes suffer apheresis of the unaccented syllable: [stɪl], [ðæʊt].

Two variations in the vowel sound deserve notice. In words like civilian and disgust, in which the unstressed syllable precedes the main accent, [ɪ] may be obscured to [ĭ], but not in words like *discomfit* [ˌdɪskəmˈfɪt] and disre-

member. Many old people and probably others pronounce *impossible* [ɑn'pasəb•l], [nn], [ɔn], which is no doubt a case of confused prefix (unpossible).

(2) In a second group the vowel is also [ɪ], but the stress is usually shifted to the first syllable … Guitar is still prevailingly ['gɪˌtɑə˞]; rarely, in jocular language, it is ['gɪtˌfɪd], which is possibly a bit of ephemeral slang.

(3) In a third small group, the sound is or may be [aɪ]. This diphthong always appears in idea; … the primary accent is always on the initial syllable: ['aɪdɪ]. For piano, old-fashioned speakers say [paɪ'ænə˞], but others say [pi'ænə˞]; otherwise, sound the word as in general American.

D. Spelling with *o*.

Words spelled with o in the initial unstressed syllabic are divided into several groups according to the vowel sound used. One group, the largest, contains [ɔ], with occasional variants [ʌ], [o]; another contains [o] unreduced and manifests a tendency to shift the primary accent to the first syllable; a third, in which o appears before r, is characterized by the sounds [ə˞], [ɔə˞], [ɑə˞].

(1) The most frequent vowel for words spelled with o is [ɔ]. In a few of these words, however, other sounds may sometimes be heard. In commence, [ə] occasionally becomes [ʌ], and the chief stress may be transferred to the first syllable: [ˌkʌ'mɛns] or ['kʌˌmens]. Contrary is never stressed on the initial syllable, as in general American, always being pronounced [kɔn'trærɪ]. A colorful example of its use is in the sentence [hiz 'kwæɔ kən'trærɪ nˌ 'min], "He's queer, contrary and mean!"

(2) One small group of words is characterized by partial stress on the initial syllable, or by a shift of the principal stress to that syllable. Since, with one exception (police), they are always pronounced with [o] unobscured, they are considered together.

E. Spelling with *u*.

Words spelled with u in the initial unstressed syllable are divided into three chief groups: (a) a group sounded with [ə]; for example, succeed, suggestion, supply, support, surprise (usually with loss of r [sə'praɪz]), surround, suspicion v., although under slight stress the sound in succeed and suggestion may be [ʌ]; (b) a group with [u] or [ʊ]—for example, curiosity [kj ur], rheumatics [rum-], musician [mjuz]; (c) a group spelled with [ʌn], variously pronounced with [ʌn], [ɑn], [ʊn], [ɔn].

By better educated speakers, all of these words are pronounced with [ʌ] but by a number of old people, and very likely others, some of them are pronounced with the low-back vowels, unrounded and rounded, and with secondary accent.

At this point in Hall's book, he begins the discussion on Medial Syllables, which is quite long; in the interest of space, we will exclude Medial Syllables and move ahead with Consonants.

THE CONSONANTS.

The consonants of Great Smokies speech conform so closely to those of general American speech that it is unnecessary to give a detailed description of each. There may be some differences, for example, between the standard and the local articulation of the b in bear; but the writer is unable to perceive them. Differences affecting consonants lie chiefly in their loss in certain cases where they are ordinarily pronounced, their addition where unadmitted by standard speech, assimilation, dissimulation, voicing of voiceless sounds, unvoicing of voiced sounds, and apparent substitutions of one sound for another. Many of the phenomena here discussed are widespread in English colloquial and dialectal speech; and some, though perhaps not many, may be limited to the Southern Appalachian region. It is no doubt impossible to single out any feature in the pronunciation of the Great Smoky Mountains as peculiar to that area. The sources of population from which the region was settled were essentially the same as those from which a great part of the South was settled. Furthermore, the people

in the counties studied were never, as a group, completely isolated; there was always some contact with cultural centers like Knoxville and Asheville, which in turn received influences from abroad. These factors prevented Great Smokies speech from becoming a dialect possessing sharp divergences from the speech of surrounding areas.

In each of the ensuing sections wherein general phenomena (like the loss and addition of sounds) are treated, the consonants will be considered in the following order: plosives, fricatives, affricates, nasals, laterals, and semi-vowels. In the final sections of this chapter, however, certain consonants which show unusual treatment will be individually considered.

A. Initial loss. The consonants most susceptible of initial loss are [ð], [h] and [w]; and instances of elision are limited chiefly to words of commonest use, like pronouns, adverbs, and auxiliary verbs.

Loss of [ð] has been observed in this, that, these, those, there, than, then, though. The omission is frequent in such phrases as like this, like that, back thereɪ over there, up there: [laːk͡ːɪs], [laːk͡æt], [bæk͡æəˑ], [ˈovəɛ̯ˑəˑ].

The pronoun it [hɪt] (OE hit) preserves its initial historical (h), except when unstressed; e.g., [aːˈdōʊn̆t rɪˈmɛmbəˑ bæʊt ˈhɪ͡ːɪt] "I don't remember about it." Even unstressed hit often occurs without initial loss, as in the sentence: [aˈdōʊn ˈnoʊ hæʊ ˈlɔŋ hɪts ˈbm] "I don't know how long it's been." But unstressed hit, like he, him, her, etc., usually occurs without [h]: [a ˈgɛs ɪts bm ˈtɛn ˈfɪftin ˈjɪəˑ əˈgoʊ].

Here [hjɪəˑ], [hjəˑ] may lose its (h) in the phrase "Come here!" [ˈkʌm ˈjɪəˑ]. Heir, herb, honest, hour, humble, humor occur without [h]: [æəˑ], [ɜb], ([jɜb)], [æʊəˑ], [ˈʌmbəl], [ˈjuməˑ]. Hospital and human are [ˈhɔspɪtl] and [ˈɦjumən].

[w] often disappears in was, will, would when preceded by a personal pronoun; for example, I was, he will, they will, you would, etc.: [aˑz], [hi ˈl], [ðe ˈl], [ju(ə)d].

B. Medial loss. Medial loss of consonants is much more common than initial loss and affects a wider range of speech sounds.

[p] was absent in once in Baptist [ˈbædɔs]; the usual forms are [ˈbæbdɪs] and [ˈbæbtɪs].

[bl is sometimes dropped in bumble-bee, tremble, and tumble, and likely too in Cumberland Gap, which is [ˈkʌmərlɔn ˈgæp] on a disc. Probably is [ˈprɑbɔlɪ], [ˈprɑblɪ].

[t] is usually unsounded between [k] and [l] and in the medial combination [st], and is sometimes lost after [n], as in the following words: directly, exactly, perfectly, chestnut, frosting [ˈfrɔsn̩], joists, roasting ears ('corn') [ˈroʊsn̩ ˈjɪəˑz]; county, gentleman, lantern, mantle, mountain [ˈmæʊnm], plenty, twenty.

[d] after [n] is in most cases not sounded before [I], [z], or some other consonant, as in the following words: bundle, candle, handle, kindle, kindling, landlord; hands, pounds, reminds, Sugarlands; grandma, grandpa [ˈgræn̩pɔː], hound-dog, hundred [ˈhʌnəˑd] (but usually [ˈhʌndəˑd], sand-pile.:

Similarly, after [n] before a vowel, [d] is sometimes omitted in yonder [ˈjænəˑ]. After [I], syncope[205] of [d] is usual in colds, fields, Shields, and occasional in children [ˈt͡ʃɪləˑn] … Childish is clearly [ˈt͡ʃaɪlɪʃ]. There is frequent omission of [d] before [n] in couldn't and didn't: [kʊnt] and [dɪnt]. [k] and [g], respectively, were absent in single occurrences of [ˌæˈsɛptəd] for accepted and [səˈd͡ʒɛstʃen] for suggestion. The former, if it is not a spelling pronunciation, may reflect the schoolmaster's disapproval of such forms as [ɛkˈskeɪp] for escape. Asked is usually [æst] although it is still pronounced [ækst] by some isolated or illiterate people.[206]

Including all of Hall's research and conclusions regarding consonants herein would undoubtedly be helpful in a practical sense; however, there is simply inadequate space. Yet, since Hall's entire publication is available online, it will be only a small inconvenience to locate the PDF, download it without charge, locate the points

that are relevant to your choral works, and make the alterations that seem best suited for your singers and audience.

III. EUROPEAN-LANGUAGE ACCENTS/DIALECTS

During the nineteenth century, despite the porous boundaries that attempted to contain the many languages that were spoken then—as well as today—it is easy to see that the spoken languages were easier grouped into native localities, that is to say "Romance" instead of, for instance, French or Spanish (figure 3.16). This method of identifying spoken languages that were too unruly to remain tidily within national boundaries helps to see how languages were able to trespass those borders and enable a reader to quickly, and simply, note those countries, such as Norway and Sweden, that were derived from the Germanic roots, as well as others, such as Finland, that were unaffiliated with one root language.

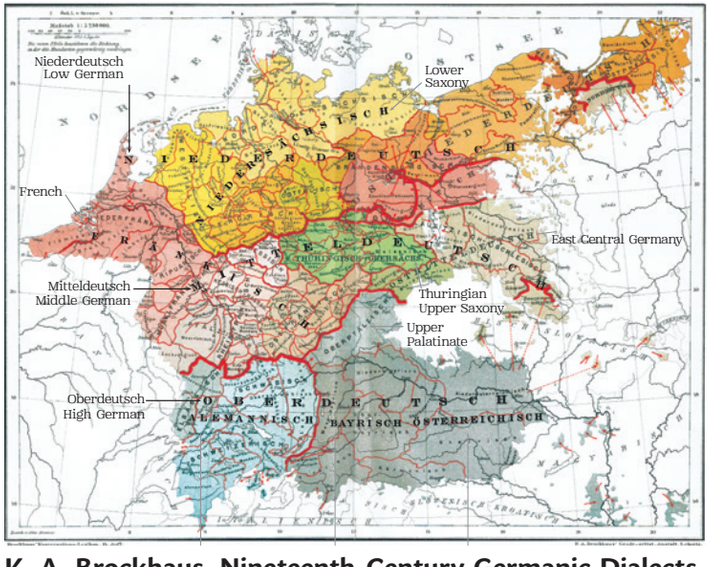


FIGURE 3.16 K. A. Brockhaus, Nineteenth-Century Germanic Dialects, 1894.
[Source: Brockhaus, K. A. Konversations-Lexikon (Encyclopedia), 14th Edition, Volume 4, 989, Leipzig, 1894.]

As any of us who have studied a foreign language knows, there are similarities between Romance languages and between languages from the 1800s that were grouped together and known as Germanic, Slavic, Baltic, etc. The difference between accents and dialects is much less murky than that between dialects and language. The bad news is that there are some disagreements on what those differences are.

In most uses, "accent" and "dialect" are used interchangeably. Accent seems to be used far more than dialect, as "dialect" sounds slightly more scientific. The definition of accents and dialects used most often by people who work with language is that accents are just one part of a dialect. An accent refers to how people pronounce words, whereas a dialect is all-encompassing. A dialect includes the pronunciations, grammar and vocabulary that people use within a group.

Another definition that has been used to explain the difference is that dialects refer to the way people speak their mother tongue, and accents refer to how someone speaks another language: someone speaking English with an Italian accent, for example. This doesn't really capture all of the ways "accent" is used, however, because having a New York accent doesn't mean you ever spoke another language. Closer to the first definition, some people use "accent" for pronunciation and "dialect" for the words people use. This can be useful for writers to talk about these two aspects differently. Unless otherwise specified, however, the first definition is likely the one that's being used. For the most part, accent is how a person pronounces words, and dialect includes a person's pronunciation, grammar, and vocabulary.[207]

Germany, Austria & Switzerland

The German dialects are the stand-alone forms of the German language that were developed independently from Old and Middle-High German, or Old and Middle-Low German, genetically independent of the written or standard German language. In

their entirety, they form part of the continental Germanic or West-Germanic dialect continuum. The dialects are divided into High German and Low German, i.e. the dialects of the "higher" and the "lower" countries. The dialects of the higher lands were affected to a greater or lesser extent by the so-called High German phonetic shift, which did not affect the dialects in the lower lands. The High German dialects, for their part, are divided into Central-German and Upper-German dialects.

In their purest form, Low-German, most Upper-German, High-Franconian dialects, and even some Middle-German dialects are incomprehensible to those who only know standard German; however, all German dialects belong to the dialect continuum of High-German and Low-German. In the past (until roughly the end of World War II) there was a dialect continuum of all continental West Germanic languages, as almost every connected dialect pair was perfectly understandable for both sides.

German was one of the most widely spoken languages in the United States in the nineteenth and early twentieth centuries. Today, German is still the second most common language in South and North Dakota. The vast majority of German-born United States citizens today do not understand German, but they still count themselves among the German Americans who, according to census results with self-disclosure of main ancestry, form the largest "ethnic group" in the United States, with almost 50 million, even larger than the Irish or English-born Americans. This can be explained by the fact that the Germans immigrated in different waves, and to different places, during the course of several centuries; plus, there was little contact between the migration destination areas—that is, between the grandchildren of the migrants on the east coast and the newly arrived migrants on the Prairie.

German, of course, has always been associated with music; these interesting facts regarding German as a sung language are relevant to our discussion:

- Compared to the spoken theater stage, (classical) vocal music uses a slightly varied pronunciation.
- In order to make the sung language easier to understand, the schwa [ə] is often sung as [ɛ].
- In classical music, the *r* is always pronounced with the tip of the tongue as [*r*]. This also applies to the ending [*-er*], unless the *r* at the end of the word is simply left out.
- The glottal stop in the initial vowel is sometimes perceived as unpleasant in music, and is often left out in favor of an aspirated tone approach, which, however, leads to technical vocal problems and to an impairment of the intelligibility of the text.[208]

Apart from that, consonants are usually pronounced much more forcefully in classical music than in spoken German. This also serves to improve speech intelligibility. There are several prominent books from the nineteenth century that discuss grammar, syntax and the addition of "loan words" from other languages, particularly French. Dr. Heinrich Bauer's *Complete Grammar of the New High German Language* (*Vollständige Grammatik der neuhochdeutschen Sprache*), published in Berlin in 1827, provides a remarkable time frame for the evolution of the German language:

> Until about 1800, standard German was almost solely a written language. At this time, people in urban northern Germany, who spoke dialects very different from Standard German, learnt it almost as a foreign language and tried to pronounce it as close to the spelling as possible. Prescriptive pronunciation guides of that time considered northern German pronunciation to be the standard. However, the actual pronunciation of standard German varied from region to region … The first dictionary of the Brothers Grimm, which was issued in sixteen

parts between 1852 and 1860, remains the most comprehensive guide to the lexicon of the German language.[209]

Decades later, in 1880, grammatical and orthographic rules–that became the basis for Standard German–first appeared in *Der Duden [Duden Handbook]* by Konrad Duden. Even though the International Phonetic Association was founded in 1886, there do not appear to be transliterations codifying German pronunciation during the nineteenth century. Stage German was based on the sound values of the written language and gained a great reputation as "pure standard German" in the course of the nineteenth century. Strictly speaking, it is essentially a North German pronunciation of the New High German written language, which was originally based on Southern German pronunciation habits.

In his treatise *Deutsche Bühnenaussprache: Nach Den Beratungen Zur Ausgleichenden Regelung Der Deutschen Bühnenausprache (German Stage Pronunciation: After the Consultations on the Compensatory Regulation of German Stage Pronunciation),* Theodor Siebs provides a rare insight into the status of public vocal performance:

> It used to be widely believed that the pronunciation of singing was a legitimate model for pronunciation in oral presentations. This perception must be rejected as a matter of principle, because if there is any dependency at all, then only the opposite relationship can be assumed, since speech undoubtedly has priority.
>
> And, in fact, there is a close relationship between oral presentation and singing. In the latter case, too, the language appears coarsened, especially in long-lasting tones; the vowels in particular become, as it were, microscopically enlarged, and thus the same requirements arise even on a larger scale, since the increased length and strength of the sung note should not change the timbre of the vowels. Thus, the singer can learn a great deal from spoken presentation; plus, all opera singers also have to cope with speaking roles, and furthermore, recent music dramas require a pronunciation technique that has to be the same as that needed in to spoken drama. That is why we believed, the concerns of singers must be taken into account, especially since we were able to do this with a small number of additions, according to the judgment of several excellent experts.[210]

In the nineteenth century, North German pronunciation became the most influential. Various factors played a role. On one hand, Prussia had become the dominant power, especially since the founding of the German Empire, on the other hand, in many areas of northern Germany, dialects had been given up in favor of the standard language, so that the speakers achieved natural fluency in oral use of the standard language.

Modern pronunciation dictionaries generally agreed with Siebs's pronunciation, even if they differed from it in various details. Siebs goes into great detail, highlighting a single vowel or a single consonant, using German vocabulary to demonstrate, albeit in written form, how a word should be pronounced. Following ninety-three pages, Siebs begins a pronunciation dictionary, wherein hundreds and hundreds of words have a phonetic spelling, the rules of which are explained on pp. 19-26. Siebs offers pronunciation entries (figure 3.17):

FIGURE 3.17 German Pronunciation Examples Taken From Siebs' *Deutsche Bühnenaussprache.*
[Source: Theodor Siebs, Deutsche *Buhnenaussprache: Hochsprache...* (New York: Ungar, 1944), 177, 182, 186.]

Administration– at˛mi˛nistra˛tsi˛ón		Camera obscura– kámərа opskúra
Theater– te˛á˛tər	Toxikologie– toksi˛ko˛lo˛gī´	Typographie– tu¨pograf í

Remember that Siebs was referencing High German (*Hochdeutsch*), now known as Standard German; it is spoken by the vast majority of German speakers around the globe. Siebs gives the recalcitrant actors what for:

> Despite the care and the striving for unity, the pronunciation on the stages in the German-language regions and in the mouths of the individual actors is not uniformly the same, but rather shows certain differences, which are explained mostly by the influence of the typeface or the dialect; these are spoken partly consciously, partly unconsciously. Because they disturb the unified artistic representation of the works for the stage and mislead those who might consider the stage pronunciation as a pattern, they have been eliminated by an equalizing regulation.[211]

Riemann proved to be a remarkable resource for most musical expressive devices; along with music history, he also provides definitions that explain problems—along with solutions—as with this definition of Pronunciation:

> In recent times special emphasis has been placed on clear pronunciation, since in the modern direction of vocal compositions from song to opera the singing of the text is more a heightened speaking, usually with only one note on each syllable; in Italian opera, where it sometimes seems as if the text underlay only serves as a pretext for engaging the singing voice, clear pronunciation is of far less importance than the beauty of the tone formation and therefore takes a back seat to the latter. It must be admitted, however, that the different natural resonances (when speaking) cannot entirely avoid leading to a difference among several vowels.; thus, in the interest of beautiful, serene singing, it is not so terrible

> if a certain sharpness is taken from the *I*, *E*, and *Ä* on one hand, and a certain dullness is taken from *U* and *O* on the other. This can be achieved without the entire vocalization being drowned in a middle *Ö*-like sound and the entire singing assuming an instrumental character. Pronouncing the consonants *L* and *R* causes particular difficulties for the singer, especially before *A*, because in the former, the strongly curved tongue easily remains in its position and impairs the resonance and in the latter there is a tendency to give the *A* resonance close to the palate; both can easily be avoided through conscientious practice, if one only takes care that the pronunciation of the consonant is quick and sharp, but afterwards every remnant of the same in the mouth position is eliminated. The palate R can also be replaced by the tongue R.—Another problem that is not so easy, and to which by far not enough attention is paid, is that of the correct division of syllables in singing.[212]

Long before the time of Manuel Garcia II and his laryngoscope, the German doctor and philologist Joachim Heinrich Campe published an exhaustive study in 1807 about spoken language, *Wörterbuch Der Deutschen Sprache (Dictionary of the German Language)*. Volume 1—of five—is 1,038 pages; it covers much more material than can be addressed herein; that being said, there is much of great value within its covers. As shown in figure 3.16, there were three primary dialects in early nineteenth-century Germany, with sharp differences of opinion about each, as Campe describes:

> The mother tongue of each larger people tends to split into several often rather different accents or dialects, according to the needs and differences of the inhabitants of the various provinces of the country.

This is also the case with our German language, which has been divided for ages now primarily into High German (Alemannic) and the Low German (Sassic, Low German) dialect; the former is spoken in southern Germany, the other in northern Germany.

From the various dialects, High German—actual, pure, and correct German—the true German language has been formed; one must be careful not to call it a dialect or even the High German accent, because in no province of Germany has High German been spoken; yes, no single German can ever speak pure High German, since the High German language is nothing but the book language or written language of the most educated Germans, freed from everything that the dialects allow in the individual provinces, or levied elevated for common use in these provinces.[213]

Campe gives directions on diction, with detailed instructions.

Most commonly, the "ie" denotes just a stretched simple "i," so that the e has become a mere stretch sign of the "i," and has completely lost its own tone: love, dear, loved, lovely, this, four. That is why such syllables with "ie" need to have neither the syllable tone nor prosodic length; thus, article "the" is always (prosodically) short, and in the words "Liebelei" and "hienieden" the syllables "lei" and "nie" have the word tone, although in them, as in all similar ones, the "ie" always retains the full extended pronunciation of the "i." The "ie" is also pronounced monosyllabically in many foreign words, even if it is often two-syllable in its mother tongue, especially when it is derived from French: Officier, Grenadier, Barber, Courier, for also Infantry, Copy, Melody, Harmony, Poetry, Geographie. In recent times there has been a lot of conflict in the use of such words, with some accentuating these Greco-French words at the end in the French style, pronouncing the "ie" monosyllabically, e. g.: comedy, ceremony; others not placing the tone on the two-syllable pronounced i.e.: Kosmodi—e, ceremony; some even say tragedy (tragédie) with monosyllabic "ie." Finally, the "i" of "ie" often transforms into a true consonant, the so-called 'J', such that merely the e remains in the vowel, and this always occurs at the beginning of a syllable or a word: jemand, jeßt.[214]

The divisions between the three primary dialects meant that some speakers of High German could not understand speakers of Low German. As the century progressed, Middle German was more or less phased out; by the beginning of the twentieth century the country spoke only High and Low German, and by the end of World War II, only High German—known today as Standard German—remained.

It is worth noting that there was significant resistance among Germans to the practice of "borrowing" foreign vocabulary into German; ironically, the borrowed words that most bothered Germans were French; and, because the French maintain stringent regulations about what words will be accepted into the official French language—after having been "Frenchified," of course. Unlike the United States, which maintained a policy of "Any word is welcome," most European countries worked diligently to contain the purity of their languages, because their language was integral to their national identity. Since the United States was such a fantastically large nation, with an open arms policy to immigrants, there simply was no means of "protecting" English from foreign languages, including "British English."

Three examples of different pronunciations include: 1) The "je" sound is unique to the French language, "j" as in "garage." 2) Another oddity of pronunciation is the "θ" sound, as in "thus," which is voiced only in English; many languages, however, use

"th," which is spelled "Thomas," but pronounced "Tomas." 3) The Greeks (and most of the world) write the great mathematician's name "Pythagoras," but pronounce it "Pitagoras;" this pronunciation is documented in the nineteenth-century *Universal Pronouncing Dictionary of Biography and Mythology*.[215]

English is considered a Germanic language; yet it has incorporated many elements of Romance languages such as vocabulary, syntax, and grammar. According to *Duden*, German has 300,000 to 500,000 words.[216] The so-called standard vocabulary is estimated at around 70,000, the rest belongs to technical languages, jargons and regional dialects. English, according to *Webster's Third New International Dictionary, Unabridged*, is estimated to have roughly 750,000 words.[217] It is little wonder that English has so many words: the number of immigrants who entered the United States between 1880 and 1914 was 110,000 per day.[218] Accordingly, the language burgeoned, as did the number of people who entered the country and added their vocabulary, syntax, and grammar to North American English.

"When Germans travel to German-speaking Switzerland for the first time, many will probably have a similar experience as the anonymous writer of 1795, who was quite perplexed by the refusal of the Swiss to use the standard German language in oral expression."[219] The dialect around Zurich belongs to the High Alemannic subgroup of Alemannic, a dialect group forming part of Upper German. It is the dialect spoken in the city and in most parts of the canton of Zurich. In their article on "Zurich German," Herrn Fleischer and Schmid include helpful transliterations of Zurich German into IPA. If Herr Bickel is correct and the "German-speaking Swiss language situation has not changed fundamentally in the last 200 years,"[220] then one might safely assume that the IPA pronunciation tables found in "Zurich German" will be relevant to our discussion.

These tables were created using a recording of a sixty-seven-year-old male from the town of Meilen, some fifteen kilometers

southwest of Zurich. It represents the dialect of an older, linguistically somewhat conservative generation (figures 3.18-3.21)

FIGURE 3.18 Swiss-German Consonants as Spoken in Zurich, Part 1.
[Source: Fleischer, J; Schmid, S (2006). "Zurich German." *Journal of the International Phonetic Association*, 36(2):243–255.]

	Bilabial	Labiodental	Alveolar	Post-Alveolar	Velar
Plosive	pb̥		td̥		
Affricate		p͡f	t͡s	t͡ʃ	
Nasal	m		n		
Trill			r		
Fricative		fv̥	sz̥		
Approximant		ʋ			j
Lateral Approximant			l		

FIGURE 3.19 Swiss-German Consonants as Spoken in Zurich, Part 2.

p	[ˈhuːpə]	b̥	[ˈhuːb̥ə]	t	[ˈlɒtə]	d̥	[ˈlɒd̥ə]
k	[ˈhɒːkə]	gˈ	[ˈhɒːgˈə]	p͡fˈ	[zo̥iˌp͡fə]	t͡sˈ	[ˈbu̥t͡sə]
t͡ʃˈ	[ˈtæt͡ʃə]	k͡xˈ	[ˈhok͡xə]	m	[ˈt͡ʃɒːmə]	n	[ˈt͡ʃɒːnə]
ŋ	[ˈtsˈɒŋə]	f	[ˈofə]	v̥	[ovə̥]	s	[ˈhɒsə]
z̥	[ˈhɒzə̥]	ʃ	[ˈtuːʃə]	ʒˈ	[nuːʒə̥]	x	[ˈlɒxə]
ɣˈ	[ˈmɒɣˈə]	h	[hɒnd̥]	l	[ˈmɒːlə]	r	[vo̥ːrə]
ʋ	[ʋɒnd̥]	j	[jɒːr]				

Figure 3.20 shows consonants, but displays only phonemes and does not contain allophones

FIGURE 3.20 Swiss-German Vowels as Spoken in Zurich.

i	[ˈz̥ibə̥]	e	[ˈd̥enə]	ɛ	[hɛr]	æ	[gˈæl]
y	[ˈv̥yli]	ø	[ˈbø̥gˈə]	œ	[ˈb̥lœf]	u	[bu̥rux]
o	[ˈholə]	o	[ˈholə]	ɒ	[ˈmɒnə]	ə	[ˈʒˈʋɛxə]
iː	[ˈz̥iːbə̥]	eː	[ˈd̥eːnə]	ɛː	[hɛːr]	æː	[gˈæːl]
yː	[ˈv̥ɣ̊ːli]	œː	[ˈtœːrfə]	uː	[bu̥ruːɣ̊]	oː	[ˈhoːlə]
ɒː	[ˈmɒːnə]						

Zurich German (figure 3.21) has the eleven vowel qualities shown in the quadrilateral. In this analysis, the system distinguishes four degrees of height (close, close-mid, open-mid, open) and three series on the anterior vs. posterior axis (front, central, back). Additionally, lip-rounding is relevant for front vowels.

FIGURE 3.21 Swiss-German Diphthongs as Spoken in Zurich.
[Source: Fleischer, J; Schmid, S (2006). "Zurich German." *Journal of the International Phonetic Association,* 36(2):243–255.]

ei̯	[vɐ̯rei̯]	æi̯	[næi̯]	oi̯	[noi̯]	ie̯	[nie̯]
ye̯	[myə̯d̥]	uə̯	[ʏuə̯]	æu̯	[æu̯]	ou̯	[zo̞u̯]

In the Swiss-German diglossic situation, dialect is usually not written. There is no officially recognized standard orthography for Zurich (or Swiss) German … The most important points to be aware of are: long vowels are rendered by doubling the respective vowel grapheme (thus, e = /e/, ee = /eː/); openness of vowels is rendered by the grave accent, thus, e = /e/, è = /ɛ /; *schwa* is represented by ɔ (as in the Standard German orthography).[221]

France

> Of all the modern languages, the French language is perhaps the one that, by its sweetness, its correction, its purity, its elegance, its harmony, and above all, by the beauty of the immortal masterpieces it possesses, has arrived at its highest degree of perfection: it therefore deserves our attention, not only in relation to the logic of its construction and its syntax, but still under that of its pure and correct pronunciation, the negligence of which would endanger the duration of the language itself, and, consequently, its universality in Europe.[222]

Thus begins the most important work on nineteenth-century French pronunciation available today: *Prononciation De La Langue Française Au XIX. Siècle Tant Dans Le Langage Soutenu Que Dans La Conversation (Pronunciation Of The French Language In The Nineteenth Century In Both Formal Language And Conversation)* by Joseph de Malvin-Cazal.

> Indeed, men who know the history of languages (and examples are numerous), know that it is always by pronunciation that the alterations of an idiom begin, alterations which, although insensitive at first, end, in the long run, by changing the forms of language, and by making it somewhat unrecognizable at long intervals. As long as the taste and the knowledge are not fixed, this disadvantage can be useful, in that it leads to improvements; but when a people has reached the most beautiful centuries of its civilization, when it possesses works beyond which it is probable that the human mind will not reach, it is then that it is useful and necessary to stop the the course of the variations which ill-informed men would like to impose on language, to raise awareness of its instability, to fix the doctrine of its pronunciation, and to disseminate its instruction and principles everywhere.
>
> We will end by saying that, to perfect this *Treatise on Pronunciation of the French Language in the Nineteenth Century,* we did not rely enough on our own knowledge to neglect those drawn from the commerce of educated and polite people, men of letters. of a deep knowledge, and of a fairly large number of famous authors and grammarians, who have more or less dealt with the mechanical part of languages; but if, by taking advantage of the enlightenment of others, which it is impossible not to do in a work of this nature, our personal merit seems to receive some diminution, we shall find ourselves sufficiently compensated, if the public deigns welcome it with favor, and see it as a good book.[223]

Malvin-Cazal dedicated his magnum opus to the l'Academie Francaise, created a work whose table of contents fills four-

teen out of a total of 492 pages. Malvin-Cazal works his way through each French vowel, with every accent, masculine and feminine forms, open and closed, as well as nasal, in minute prose explanations. Even the author realizes that his explanations are somewhat verbose:

> What we have just said of the nasal vowels an, in, on, un, and of the assemblages am, im, om, um, which often have the value of the sounds presented by the former, especially before the letters p and b, is no doubt sufficient to determine their initial, medial or final sound; but, wishing to put before the eyes of the reader all of their most general pronunciation, we have gathered it in the small table which follows, to which we have added the groups en and em, of which we have, in the first place, given the various oral values (figure 3.22).[224]

FIGURE 3.22 R-colored Vowels of Various Hiberno-English Dialects.
[Source: Joseph Malvin-Cazal, *Prononciation De La Langue Française Au Xix. Siècle Tant Dans Le Langage Soutenu Que Dans La Conversation.* (Paris: Impr. Royale, 1846), 83.]

	AN	IN	ON	UN	EN	AM	IM	OM	UM	EM
Initial . . .	an	on	on	u	an	an	in	on	om	an
Médial . . .	an	in	on	on	an	an	in	on	on	an
Final . . .	an	in	on	un	in	am	im	on	om	èm

Fortunately, the *Dictionnaire général de la langue française; du commencement du XVIIe siècle jusqu'à nos jours* (1900), offers a more condensed–yet thorough–explanation of French pronunciation as it existed at the end of the nineteenth century:

> French today has at least twelve pure vowels and four nasal vowels. These vowels present, depending on the nature of the words in which they are found, differences in length. In general, pure vowels are long when followed, in the same syllable, by a soft consonant; they are short when the consonant is strong; in the other cases they are average. Nasal vowels are long when followed by a pronounced consonant; otherwise they are average: they are never brief.
>
> The vowels also present, according to their place in the word, differences of intensity, being pronounced with more force when they are accentuated, that is to say struck with the tonic accent, and being pronounced less strongly when they are stressed. are unstressed or dull.
>
> The vowels considered in figure 3.23 are all stressed.[225]

FIGURE 3.23 French vowels in *Dictionnaire général de la langue française.*
[Source: Adolphe Hatzfeld, Arsene Darmesteter, and M. Antoine Thomas, *Dictionnaire General de la Langue Francaise* (Paris: Librairie Ch. Delagrave, 1926), xxv–xxvii.]

PURE VOWELS			EXAMPLES	ORTHOGRAPHIC FIG.
1. **A open**	Long:	ȁ	(la) vague	vàg'
	Med:	à	lame, femme	làm', fàm'
	Short:	ă	acte,	àkt'
2. **A closed**	Long:	á	pâte	pát'
	Med:	á	pas (négation)	pá
	Short:	ắ	does not appear to be in use	
3. **E open**	Long:	è	è tête, peine, aime	tèt' pèn' èm'
	Med:	è	paix, procès, perte	pè, prò-sè, pèrt'
	Short:	ĕ	secte	sèkt'
4. **E closed**	Long:	é	does not appear to be in use	
	Med:	é		
	Short:	ĕ	bonté does not appear to be in use	bon-té
5. **I**	Long:	ī	dire, lyre	dir, lir
	Med:	i	dit	di
	Short:	ĭ	dite	dit
6. **O open**	Long:	ȍ	ò mort	mòr
	Med:	ò	homme, pensum	òm', pin-sòm
	Short:	ŏ	poste	pòst'
7. **O closed**	Long:	ó	ó hôte, rose, pauvre	ót', róz', póvr
	Med:	ó	beau	bó
	Short:	ŏ	does not appear to be in use	

FIGURE 3.23 **French vowels in *Dictionnaire général de la langue française.***

8. OU	Long:	o	ou douze	douz'
	Med:	ū	ou doux	dou
	Short:	ou	ou douce	dous'
9. EU open	Long:	e	eu neuve	neuv'
	Med:	ū	does not appear	
	Short:	e	to be in use	
		ū	neuf	neuf'
10. EU open	Very short:	e	me, te, se, le, de	me, te, se, le, de
11. EU long	Long:	e	heureuse	eu-reuz'
	Med:	u	heureux	eu-reu
	Short:	é	does not appear to be in use	
12. U	Long:	ū	dur	dur
	Med:	u	du	du
	Short:	ŭ	duc	duk'
NASAL VOWELS				
			EXAMPLES	**ORTHOGRAPHIC FIG.**
AN = ā, nasal of a open	Long:	ān	tante, chambre,	tant', chanbr',
	Med:	an	science, fente	syans', fant'
			sang, champ	san, chan
EN = e, nasal of è open	Long:	iñ	limbe, sainte,	linb', sint',
	Med:	in	feinte, Reims	fint', Rins'
			rien, saint, faim,	ryin, sin, fin,
			rein, vin	rin, vin
ON = ô, nasal of ô open	Long:	ōn	honte, onze, once	hont', onz', ons'
	Med:	on	bon	bon
EUN = œ, nasal of eu open	Long:	ūn	humble	unbl'
	Med:	un	commun	cò-mun
DIPTHONGS				

There used to be pure diphthongs: ia, ie, ii, io, iu, iou, ieu; ua, ue, ui, uo, uu; oua, oue, oui, etc. ai, ei, ou, etc., and nasal diphthongs: ian, ien, ion; uan, uen, uon, etc. It was also pronounced as diphthongs oi and oin.,

Hatzfeld follows these excellent and instructive descriptions of French vowels with an exceedingly detailed explanation of French consonants and their pronunciation in the nineteenth century. In the interest of space, we will examine a table of consonants included in Malvin-Cazal: "As we did for the vowels, we are also going to put before the reader's eyes the general table of consonants consecrated by national usage to represent the fundamental articulations of the French language."[226] Malvin-Cazal continues:

> The collision of the final articulations of words with the initial articulations of the following words is so opposed to the genius of our language, that the most general rule of pronunciation with regard to them is to remove the final consonants in speech, so that their subtraction does not brings no obstacle to the clear and exact emission of the initial consonants of the following words.
>
> This rule even extends to certain medial consonants, when their emission is too hard or too embarrassing to leave the following consonant all its clarity, and the sound which supports it with all its fullness, all its harmony.
>
> But since the rule which prescribes the suppression of final consonants in front of other consonants has quite a few exceptions, and the laws which establish these exceptions are fixed, we are going to make one known for each of our consonants.
>
> Among the twenty graphic characters representing all the simple movements of the organs of speech, there are five whose articulation never varies, whatever their position in the written words; and fifteen of which the key varies, according to the vowels or the consonants to which are joined. The five consonants whose intonation is constant and invariable are: *B, V, R, N, J.*[227]

Figure 3.24 will make known the variable consonants in their emission, and indicate in a general way in which part of the words they are.

FIGURE 3.24 Consonants Whose Articulations are Variable.
[Source: Malvin-Cazal, 257.]

At the beginning, between, and at the end of words.	At the beginning, and between single words.	At the beginning of single words.	Between, and at the end of single words.	Between single words.	At the end of single words.
P, S, Y, CH, G, H.	GN, C.	II	M, L, LL.	T.	F, D, Z.
6	2	II	3	1	3
15					

Figure 3.25 lays out in graphic format his guidelines about pronouncing consonants:

FIGURE 3.25 Table of Twenty Consonants as Shown in *Prononciation de la langue Française au XIX.*
[Source: Malvin-Cazal, 255.]

CLASSES	GENRÉ	QUALIFICATIONS	STRONG	WEAK
Five Labials	PURE	Closed	P	B
		Nasal	II	M
	DENTAL	Sibilant	F	V
Fourteen Linguals	DENTAL	Closed	T	D
		Sibilant	S	Z
	PALATAL	Semi-Closed	R	L
		Nasal — *pure*	II	N
		Nasal — *palatalized*	II	GN
		Palatalized	LL	Y
		Palato-Alveolar Fricative	CH	J
	GUTTURAL	Closed	C(KQ)	G
		one aspirant	II	H
			8	12
			20	

United Kingdom

RECEIVED PRONUNCIATION

When the Germanic tribes from the northwest of mainland Europe began to settle in Britain in the fifth century, they brought with them dialects distinct from their native Germanic languages. The Angles settled mainly in the Central Lands and in the East; the Jutes in Kent and along the south coast; and the Saxons in the region south and west of the Thames. During the past 1500 years, British accents have continued to develop, affected by patterns of migration and large-scale social change, not to mention the promotion of "standard" accents since the seventeenth century.

There was great debate among philosophers and philologists, beginning in the eighteenth century, as to the efficacy of pronouncing dictionaries. In 1791, John Walker published *A Critical Pronouncing Dictionary, and Expositor of the English Language*, in which he discusses the views of other thinkers, including English critic, biographer, essayist, poet, and lexicographer Samuel Johnson–known to most as Dr. Johnson:

> Equally indefinite and uncertain is the general rule that those are to be considered as the most elegant speakers who deviate least from the written words … if the whole body of respectable English speakers were equally divided in their pronunciation of the word busy, one half pronouncing it bew-ze, and the other half biz-ze, that the former ought to be accounted the most elegant speakers; Dr. Johnson's general rule, therefore, can only take place where custom has not plainly decided.
>
> But, still it may be objected to such an undertaking, that the fluctuation of pronunciation is so great as to render all attempts to settle it useless. What will it avail us, it may be said, to know the pronunciation of the present day, if, in a few years, it will be altered?[228]

The accent that Dr. Johnson says is used by the "most elegant speakers," is today called "Received Pronunciation."

> There is a lot of debate as to who actually coined the term "Received Pronunciation." Some say Walker, but others, including the British Library, say it was created in "1869 by the linguist, A. J. Ellis, but it only became a widely used term to describe the accent of the social elite after the phonetician, Daniel Jones, adopted it for the second edition of the *English Pronouncing Dictionary* (1924)." The usage of the word "received" in the title still remains the same: it means approved or accepted.
>
> Received Pronunciation wasn't always a staple of Great Britain. In fact, "until the end of the eighteenth century, everyone in England spoke a local dialect. Pronunciation was considered an inherited trait." Before then, a person's place in society was determined by birth, rather than wealth and occupation. And, education wasn't mandatory and almost unattainable by most people, but eventually, once school was seen as important, reading and writing were taught, and with that came teaching the "proper" way to talk. Then, there was a switch: people were able to rise in class by working hard, earning a lot of money, and having an education. It was obvious as to who the higher class was because they all sounded the same. This is where Received Pronunciation began. This dialect at the time was used by the court and bureaucratic Londoners, and as London grew in importance, many people began to mimic aspects of Londoners, especially in speech, shaping the cultural "sound" of Victorian England and southern England … Received Pronunciation was, and still is to an extent, an important social marker. Even now, Received Pronunciation is still taught to non-English speakers as the proper pronunciation.[229]

As shown in figure 3.26, Walker helpfully adds instructions for residents of Ireland, and Scotland who want to learn to speak with a received pronunciation accent.

FIGURE 3.26 Walker's *Instructions on How to "Obtain a Just Pronunciation of English."*

[Source: John Walker, *A Critical Pronouncing Dictionary and Expositor of the English Language* (London: G. G. J. and J. Robinson, 1791), vii.]

Rules to be observed by the Natives of IRELAND in order to obtain a just Pronunciation of English.

The chief mistakes made by the Irish in pronouncing English, lie for the most part in the sounds of the two first vowels, a and e; the former being generally sounded by the Irish, as in the word ba r, in most words where it is pronounced a, as in day, by the English. Thus the Irish say, pa tron, ma tron, the vowel a having the same sound as in the word fa ther; whilst the English pronounce them as if written *paytron*, *maytron*.

Rules to be observed by the Natives of IRELAND in order to obtain a just Pronunciation of English.

The chief mistakes made by the Irish in pronouncing English, lie for the most part in the sounds of the two first vowels, *a* and *e*; the former being generally sounded by the Irish, as in the word *ba r*, in most words where it is pronounced *a*, as in day, by the English. Thus, the Irish say, *patron*, *matron*, the vowel a having the same sound as in the word *father*; whilst the English pronounce them as if written *paytron, maytron*.

This vowel is short; thus *evasion, adhesion, emotion, confusion*, have the *a, e, o, and u* long; and in these instances the Scotch would pronounce them like the English; but in vision, decision, &c. where the English pronounce the *i* short, the Scotch lengthen this letter by pronouncing it like *ee*, as if the words were written *vee-sion*, *decee-sion*, &c. and this peculiarity is universal.

There is scarcely any part of England remote from the capital where a different system of pronunciation does not prevail. As in Wales they pronounce the sharp consonants for the flat, so in Somersetshire they pronounce many of the flat instead of the sharp

The accentuation, both in Scotland and Ireland (if by accentuation we mean the stress, and not the kind of stress) is so much the same as that of England, that I can scarcely recollect any words in which they differ … if this accent

Figure 3.26 Walker's *Instructions on How to "Obtain a Just Pronunciation of English."*

or stress were upon different syllables in different countries, what is verse in England would not be verse in Scotland or Ireland; and this sufficiently shows how very indefinitely the word accent is generally used.

The list of topics related to pronunciation that he includes is expansive, including a chart by Prince Louis Lucien Bonaparte. While it is interesting to view, the amount of text required to simply explain it precludes its usefulness. Rather, a modern pronunciation chart for received pronunciation based on the Cambridge Online Dictionary is more practical for our purposes (figure 3.27). The authors are careful to point out that "The majority of people from the U.K. do not speak with an received pronunciation accent,"[230] which is echoed in the Received Pronunciation Group Report: "only 3-5% of English speakers from Britain actually speak the dialect natively."[231]

In his magisterial study *On Early English Pronunciation*, philologist Alexander J. Ellis outlines the scope of his investigation

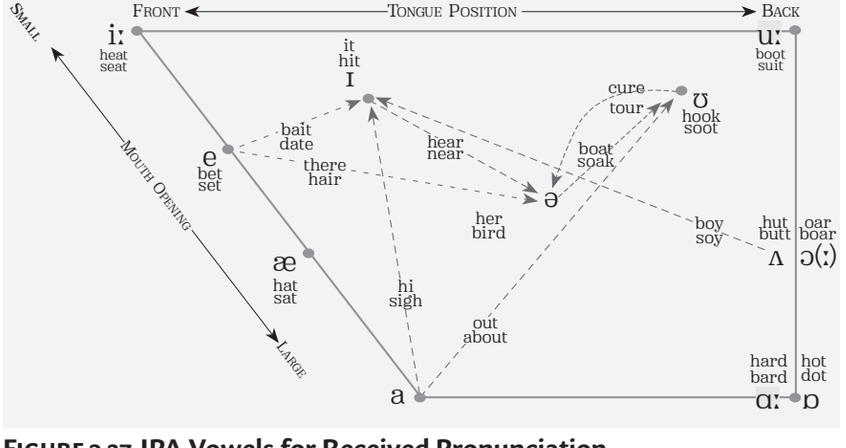


Figure 3.27 IPA Vowels for Received Pronunciation.
[Source: "Received Pronunciation Vowels." *English Notes*, 3 April 2017. https://english.philograph.com/received-pronunciation-vowels/.]

in the title: *Containing an Investigation of the Correspondence of Writing with Speech in England from the Anglosaxon Period to the Present Day, Preceded by a Systematic Notation of All Spoken Sounds by Means of the Ordinary Printing Types*. Unsurprisingly, this was a multiyear endeavor.

In Volume 4, the section that starts with the nineteenth century opens with: "1. Educated English Pronunciation." He goes on: "My object in the present section is to examine, so far as I can in a small compass, the pronunciation at present used by educated English speakers, without attempting to decide what is 'correct.'… ``We merely wish to know what are the sounds which educated English men and women really use when they speak their native language."[232]

Ellis authors an exhaustive explanation of English vowels under the subheading "An Examination of Mr. Melville Bell's[233] Twenty-Six Key-Words to English Speech Sounds." It fills sixty-seven pages, and is far too detailed to even digest herein. In earlier volumes, Ellis gives a text in Anglo-Saxon, Icelandic, Gothic, and Wycliffte English. He then presents a comparison of Bell's pronunciation (in characters that are precursors to modern IPA, including many that are now unknown), which he says is intended to represent a modern pronunciation; and his own, "such as I should employ naturally if I had to read the passage to a large audience."

And he does not stop there. Walker proceeds to name and describe four faults of Londoners (figure 3.28):

Figure 3.28 Four Faults of Londoners.
[Source: Walker, viii.]

Pronouncing s indistinctly after st.
The letter *s* after *st*, from the very difficulty of its pronunciation, is often founded inarticulately. The inhabitants of London, of the lower order, cut the knot, and pronounce it in a distinct syllable, as if *e* were before it; but this is to be avoided as the greatest blemish in speaking: the three last letters

FIGURE 3.28 Four Faults of Londoners.

in *pots, fists, mists*, &c., must all be distinctly heard in one syllable, and without permitting the letters to coalesce. The same may be observed of the third person of verbs ending in *sts* or *stes*, and in persists, *wastes, hastes*, &c.

Pronouncing *w* for *v*, and inversely.

The pronunciation of *v* for *w*, and more frequently of *w* for *v*, among the inhabitants of London, and those not always or the lower order, is a blemish of the first magnitude. The difficulty of remedying this defect is the greater, as the cure of one of these mistakes has a tendency to promote the other. Thus, if you are very careful to make a pupil pronounce veal and vinegar, not as if written weal and winegar, you will find him very apt to pronounce wine and wind, as if written *vine* and *vind*.

Not sounding *h* after *w*.

The aspirate h is often sunk, particularly in the capital, where we do not find the least distinction of sound between *while* and *wile*, *whet* and *wet*, *where* and *were*, &c … Thus let *while* be written and sounded *hoo-ile*; *whet, hoo-et; where, hoo-are*; *whip, hoo-ip*; &c. This is no more, as Dr. Lowth observes, than placing the aspirate in its true position before the w, as it is in the Saxon, which the words come from; where we may observe, that though we have altered the orthography of our ancestors, we have still preserved their pronunciation.

Not founding *h* where it ought to be sounded, and inversely.

A still worse habit than the last prevails, chiefly among the people of London, that of sinking the h at the beginning of words where it ought to be sounded, and of sounding it, either where it is not seen, or where it ought to be sunk. Thus we not unfrequently [sic] hear, especially among children, heart pronounced art, and arm, harm.

And Walker's Final Words on the Subject:

But though the inhabitants of London have this manifest advantage over all the other inhabitants of the island, they have the disadvantage of being more disgraced by their peculiarities than any other people. The grand difference between the metropolis and the provinces is,

FIGURE 3.28 Four Faults of Londoners.

that people of education in London are free from all the vices of the vulgar; but the best educated people in the provinces … are sure to be strongly tinctured with the dialect of the country in which they live. Hence it is, that the vulgar pronunciation of London, though not half so erroneous as that of Scotland, Ireland, or any of the provinces, is, to a person of correct taste, a thousand times more offensive and disgusting.

It is probably a safe bet that if the composer of a nineteenth-century choral work was part of the upper establishment, as were most, then his or her works were most likely intended to be sung with a received pronunciation accent; otherwise, composers from districts outside Metropolitan London or Cambridge and Oxford might very well have expected a different regional or socioeconomic class accent. Of course, the most famous of these, which is still in use today, is Cockney.

COCKNEY ACCENT

Of course, Walker had something to say about the manner of speaking in the British Isles, including these words, that hold back nothing:

> I shall conclude these remarks with a few observations on the peculiarities of my countrymen, the Cockneys; who, as they are the models of pronunciation to the distant provinces, ought to be more scrupulously correct.[234]

In the 1811 *Dictionary of the Vulgar Tongue*, Francis Grose defined Cockney as

> A nick name given to the citizens of London, or persons born within the sound of Bow bell, derived from the following story: A citizen of London, being in the country, and hearing a horse neigh, exclaimed, Lord! how that horse laughs! A by-stander telling him that noise was

called neighing, the next morning, when the cock crowed, the citizen to shew he had not forgot what was told him, cried out, Do you hear how the cock neighs?[235]

According to the *Oxford English Dictionary*,

> The word cockney has resolutely resisted any simple etymology. It is first noted in 1362, when it meant a 'cock's egg'—that is, a defective one … All sorts of individuals would once have spoken the London dialect, even if the great push for linguistic 'purity' during the seventeenth and eighteenth century prohibited such 'vulgarisms' from the aspirant middle class … The first recorded use of Cockney language is dated 1776. But it has been suggested that a Cockney style of speech is much older, with Matthews offering examples from the sixteenth century onwards … Indeed, early Cockney is primarily a matter of pronunciation, as reverse-engineered from the recorded spelling of words such as frust (thrust), farding (farthing), anoder (another), and so on.[236]

As William Matthews points out in *Cockney Past and Present*,

> The humours of Cockney character and Cockney speech have always been grateful to *Punch*,[237] and in no other source is it so easy to trace the changes in the dialect. The earliest Cockney dialogue in *Punch* is strictly in the style of Dickens and Thackeray. Thus, the two verse-letters which Mr. John Thomas of Belgravia sent to his cousin, Mr. Robert Snaffles, describing the Coronation of the Czar in 1856, which were published in October 1856, admirably burlesque the earliest form of literary Cockney:[238]
> *Otel, Arrowgit, Hoctober forth.*

> *EER Bob, hiʊe nothink helse to do, soʻʊe thyme to write u wurd*
> *Of the rooshin Koronayshun whot i sor & thort & erd:*
> *Hand tho i finds m diphycult hi meen to rite in rimes,*
> *As MISTUR BRIGHT did laitly wich I red m in the Times.*[239]

Unless you are anticipating authoring a Cockney lyric for a choral composition, then the ubiquitous rhymes are less important than the pronunciation of these lines. Cockney vowels are only slightly different from RP: for example, the RP /ʌ/ is more open /æ̟/. Some of the diphthongs are wider than in RP. For many people this is the most characteristic feature of the Cockney accent: /ʌʊ/ in *goat* instead of /əʊ/ and /ʌɪ/ in *face* instead of /eɪ/.

One of the main characteristics of Cockney is the presence of the glottal stop instead of the /t/ sound. H-dropping is also prevalent. J-dropping is also found as in American English. Plus, the use of /ʊ/ for /ð/ and /f/ for /θ/ is characteristic of this accent. And, raised vowel in words like *trap* and *cat* so these sounds like [*trep*] and [*cet*].

As Ben Trawick-Smith writes at *Dialect Blog*,

- **London vowel shift**: The vowel sounds are shifted around so that Cockney day is pronounced IPA [dæɪ] (close to American "die") and Cockney buy verges near IPA [bɒɪ] (close to American boy).
- **Glottal Stopping**: the letter *t* is pronounced with the back of the throat (glottis) in between vowels; hence, better becomes IPA [*be*ʔə] (sounds to outsiders like *be'uh*).
- **L-vocalization**: The *l* at the end of words often becomes a vowel sound; thus, *pal* can seem to sound like *pow*.
- **Th-Fronting**: The *th* [*θ*] in words like think or this is pronounced with a more forward consonant depending on the word: *thing* becomes *fing*, this becomes *dis*, and *mother* becomes *muhʊah*.[240]

SCOTTISH STANDARD ENGLISH

The close relationship between Scots and English during the centuries has led to the emergence of a compromise form, Scottish Standard English. Because of the coexistence of two different languages in the country, Scots and English, people are thought to act on a continuum ranging from Broad Scots to Scottish Standard English. Scottish speakers drift on this continuum according to the situation, exhibiting more or less distinctive Scots features.

The type of English spoken in Scotland is more difficult to define than anywhere else in the United Kingdom. Since the Union of Parliaments in 1707, the official written language in Scotland was aligned with that in England. As such, standard English has been used as the language of religion, education and government, making it the socially respected form adopted by the rising middle class, local accents.

Still, Scottish-English is easily recognizable by its pronunciation: speakers generally hold vowels longer than other English speakers around the globe; moreover, Scottish speakers are rhotic—they pronounce the <r> sound after a vowel in words like farm, first, and better. In addition to Standard Scottish English, the local vernacular, Scots, a dialect derived from Old English, is closely related to the dialects of Northumbrian, especially in rural communities; indeed, large numbers of speakers would certainly claim to speak Scots, not English.

This table of Standard Scottish is instructive in how Scottish people speak English; it was created by the University of Edinburgh, and includes more detailed pronunciation maps of Scottish cities (figure 3.29).

FIGURE 3.29 Standard Scottish.

[Source: Heggarty, Paul; et al., eds. (2013). "Accents of English from Around the World." University of Edinburgh.]

all: [ɔːɫ]	fight: [fʌ̞ɪ̈tʰ]	ice: [ʌ̈is]	oak: [okʰ]	swear: [sweˑəɹ]
ash: [a̠ʃ]	fish: [fɪʃ]	in: [ɪ̠n]	one: [wʌ̈n]	tear: [tʰiˑəɹ]
bath: [ba̠θ]	five: [fɑ̈ˑev]	is: [ɪ̠z̥]	open: [ˈopʰəň]	ten: [tʰɛˑn]
better: [ˈbɛtʰəɹ]	foot: [fʉtʰ]	knee: [niː]	out: [ɐʉtʰ]	thing: [θɪŋ]
bite: [bʌ̞̈itʰ]	four: [fo̞əɹ]	lamb: [ɫa̠ːm]	oven: [ˈʌ̈vəň]	thorn: [θɔ̞ːɹn]
blood: [blʌ̈d]	full: [fʊˑɫ]	leaf: [ɫif]	over: [ˈo̞vəɹ]	three: [θɾiː]
bone: [bo̞ən]	good: [gʉd̥]	liver: [ˈɫɪ̠vəɹ]	quick: [kʰwɪk̟ʰ]	thunder: [ˈθʌ̈ndəɹ]
brother: [ˈbɹʌ̈ðəɹ]	goose: [gʉs]	long: [ɫɔˑŋ]	rain: [ɹe̞ːn]	toe: [tʰo̞ː]
calf: [kʰa̠ːf]	green: [gɹin]	mid: [mɪd̥]	red: [ɹɛːd̥]	tongue: [tʰʌ̟ŋ]
cold: [kʰo̞ːɫd̥]	hand: [haˑ̈nd̥]	milk: [mɪɫ̠kʰ]	right: [ɹʌ̈itʰ]	tooth: [tʰʉθ̟]
corn: [kʰɔ̞ːɹn]	head: [hɛˑd̥]	moon: [mʉn]	ring: [ɹɪŋ]	top: [tʰɔpʰ]
cow: [k̟ʰɐˑʊˑ]	hear: [hiˑəɹ]	mother: [ˈmʌ̈ðəɹ]	salt: [sɔːɫtʰ]	two: [tʰʉː]
daughter: [ˈdɔtʰəɹ]	heart: [hɒˑɹtʰ]	mouse: [mʌ̈ʉs]	see: [siː]	warm: [wɔ̞ːɹm]
day: [deː]	holy: [ˈho̞ɫi]	mouth: [mʌ̈ʉθ]	seven: [ˈsɛv̞̈əň]	wash: [wɔˑʃ]
drink: [dɹɪŋ̟k̟ʰ]	home: [ho̞m]	nail: [neˑʌ̆ɫ]	sharp: [ʃɑːɹpʰ]	what: [ʍɔtʰ]
ear: [iˑəɹ]	honey: [ˈhʌ̈ni]	naked: [ˈneˑkɪ̠d̥]	sit: [sɪtʰ]	white: [ʍɐitʰ]
earth: [ɛ̞ːɹθ]	horn: [hɔ̞ːɹn]	name: [neːm]	six: [sɪks]	wind: [wɪ̠nd̥]
eat: [itʰ]	hound:[hɐˑʉˑnd̥]	needle: [ˈnidəɫ̆]	snow: [sno̞ː]	wool: [wuːɫ]
eight: [etʰ]	house: [hɐʉs]	new: [njʉ̠ː]	sore: [so̞əɹ]	word: [wəːɹd̥]
eye: [ɑ̞ɪ]	hundred:[ˈhʌ̈ndɹəd̥]	night: [nʌ̈itʰ]	stone: [sto̞ən]	yard: [jɑ̟ːɹd̥]
fast: [faˑ̈st]	hunger: [ˈhʌ̈ŋgəɹ]	nine: [nʌ̈in]	stool: [stʉˑəɫ]	year: [jiˑəɹ]

HIBERNO-ENGLISH

Within the Republic of Ireland, there are a group of accents associated with major metropolitan areas, as well as Ireland as a whole: Supraregional Ireland; this grouping is known as Hiberno-English.

English was first taken to Ireland in the late twelfth century, and despite many vicissitudes, remained there, becoming the first language of the majority of the population during the course of several centuries. At first, English was a minority language; Anglo-Norman was the more important of the languages taken to Ireland. In addition, the Irish language that was spoken by the entire native population in the late Middle Ages remained that of the majority until well into the 1800s.

Although English ultimately became the dominant language in Ireland, the centuries following the initial invasion were characterized by a decline in English due to a strengthening of native Irish. The dialects of the northern province, Ulster, are quite different from those in the south; the main reason for this is that those dialects derive from Lowland Scots and forms of northern English, which were taken to Ulster during the plantations of the seventeenth century. These varieties led to forms of English that are easily recognizable in the north to this day.[241]

In his article, "The English Language in Ireland," Jeffrey Kallen writes,

> Dental and alveolar sounds show recurring themes in Irish English, particularly in the loss of phonetic [θ] or [ð], where use of a purely interdental fricative is often found regularly only in Ulster English. Outside of Ulster, the alternatives to [tθ] and [dð] are phonetically varied, including alveolar stops, dental stops, and a widely-used affricate which includes a dental stop a secondary non-strident fricative element, as in [tθ] and [dð]. The phonetic realisation of /t/ and /d/ provides a great deal of variation in Irish English. Unstressed vowels followed by /r/ often trigger dentalisation, as seen in ['splɪnd̪ər] 'splendour', ['lad̪ər] 'ladder', and ['mɑd̪ərn̪] 'modern', though it can occur in other environments as well.

> Ulster English can be characterised by its points of similarity to Scottish English and Scots, especially in the use of central or front vowels in the GOOSE and FOOT lexical sets.[242] … Centralisation of the vowel can lead to the neutralisation of vowel quality contrasts between, for example, foot [fʉt] and food [fʉt], but vowel length differences … may establish contrastive sets. Outside of the Ulster dialect zone, GOOSE words are a well-defined class with [u], but the FOOT and STRUT lexical sets show the variable assignment of [ʊ], [ʌ], and intermediate vowels such as [ɔ̝] in words such as bush, push, cushion, pudding, foot, soot, and stood.[243]

These pure vowel sounds are defining characteristics of Irish English (figure 3.30):

FIGURE 3.30 Pure Vowels of Various Hiberno-English Dialects.
[Source: "Hiberno-English," http://shorturl.at/cwKS1 (accessed 7 June 2021).]

English Diaphoneme	Ulster	W & SW Ireland	Local Dublin	New Dublin	Supraregional Ireland	Examples
flat /æ/	[äː~a]	[æ]		[a]	[æ~a]	add, trap
/ɑː/, broad /æ/	[äː~ɑː]	[æː~aː]		[aː]		bath, dance
conservative /ɒ/	[ɒ]	[ä]		[ɑ~ɒ~ɔ]	[ɑ]	lot, wasp
divergent /ɒ/	[ɔː~ɒː]	[aː~ä]		[ɔː]	[ɒ]	loss, off
/ɔː/	[ɔː~ɒː]	[aː~ä]		[ɒː~ɔː~oː]	[ɒː]	bought, saw
/ɛ/	[ɛ]					dress, bread
/ə/	[ə]					about, syrup
/ɪ/	[ë~ɘ~ɪ̈]	[ɪ]				hit, skim, tip
/iː/	[i(ː)]					beam, chic
/ʌ/	[ʌ̈~ʊ]		[ʊ]	[ɤ~ʊ]	[ʌ̈~ʊ]	bus, flood
/ʊ/	[ʉ(ː)]	[ʊ]				book, put
/uː/		[ʊu~uː]			[ʊu~ʉu]	food, glue

[5] STRUT is typically centralized in the mouth and often somewhat more rounded than other standard English

varieties, such as received pronunciation in England or General American in the United States.

- There is a partial trap-bath split[244] in most Irish English varieties.
- There is inconsistency regarding the lot-cloth split and the cot-caught merger; certain Irish English dialects have these phenomena while others do not. The cot-caught merger by definition rules out the presence of the lot-cloth split. Any and many are pronounced to rhyme with nanny, Danny, etc. by very many speakers, i.e. with each of these words pronounced with /æ/.[245]

In addition to the single vowels shown in figure 3.30, Irish-English also contains gliding vowels shown in figure 3.31.

FIGURE 3.31 Gliding Vowels (Diphthongs) of Hiberno-English Dialects. [Source: "Hiberno-English," http://shorturl.at/cwKS1 (accessed 7 June 2021).]

English Diaphoneme	Ulster	W&SW Ireland	Local Dublin	New Dublin	Supraregional Ireland	Examples
/aɪ/	[ɛɪ~ɜɪ]	[æɪ~ɐɪ]	[əɪ~ɐɪ]	[ɑɪ~ɐɪ]	[aɪ~ɑɪ]	bright, try
/aʊ/	[ɐʏ~ɛʁ]	[ɐʊ~ʌʊ]	[ɛʊ]		[aʊ~ɛʊ]	now, ouch
/eɪ/	[eː(ə)]	[eː]	[eː~ɐɪ~ɛɪ]			lame, rein
/ɔɪ/	[ɔɪ]	[əɪ~ɑɪ]	[aɪ~äɪ]	[ɒɪ~oɪ]	[ɒɪ]	boy, choice
/oʊ/	[oː]		[ʌo~ʌɔ]	[əʊ]	[oʊ~əʊ]	goat, oh

- The first element of the diphthong MOUTH, as in ow or doubt, may move forward in the mouth in the east (namely, Dublin) and supraregionally; however, it may actually move backwards throughout the entire rest of the country. In the north alone, the second element is particularly moved forward, as in Scotland.
- The first element of the diphthong CHOICE, as in boy or choice, is slightly or significantly lowered in all geographic regions except the north.

- The diphthong FACE, as in rain or bay, is most commonly monophthongised to [eː]. Furthermore, this often lowers to /ɛ/ in words such as gave and came (sounding like "gev" and "kem").

And, finally, one of the most defining features of Irish-English, R-colored vowels (figure 3.32). Rhoticity: Every major accent of Hiberno-English pronounces the letter "r" whenever it follows a vowel sound, though this is weaker in the local Dublin accent due to its earlier history of non-rhoticity.

FIGURE 3.32 R-colored Vowels of Various Hiberno-English Dialects. [Source: "Hiberno-English," http://shorturl.at/cwKS1 (accessed 7 June 2021).]

English Diaphoneme	Ulster	W&SW Ireland	Local Dublin	New Dublin	Supraregional Ireland	Examples
/ɑːr/	[ɑɻ~ɑɹ]	[æːɹ~aɹ]		[äːɹ~ɑɹ]		car, guard
/ɪər/	[iːɹ~iəˑ]					fear, tier
/ɛər/	[(ɛ)əˑː]	[ɛːɹ~eɹ]				bare, there
/ɜːr/	[əˑː]	[ɛːɹ] or [ʊːɹ]		[əˑː]		burn, first
/ər/	[əˑ]					doctor, per
/ɔːr/	[ɒːəˑ~ɔːɹ]	[äːɹ~ɑːɹ]		[ɒːɹ~oːɹ]		for, war
	[oːəˑ~oːɹ]	[ɔːɹ]	[ɒːɹ]	[oːɹ]		four, wore
/ʊər/	[uːɹ~uəˑ]					moor, tour
/jʊər/	[juːɹ~juəˑ]					cure, pure

- The distinction between /ɔːr/ and /oʊr/ is almost always preserved, so that, for example, horse and hoarse are not merged in most Irish accents.

IV. ITALY & THE IBERIAN PENINSULA

Italy

Proportionate to its size, Italy has more distinct dialects than most any other European country (figure 3.33). In the North is the world-famous Venetian dialect, which is incomprehensible to most every Italian citizen outside the Veneto;

FIGURE 3.34 Regional Languages and Dialects in Italy Today.
[Source: "Lingue dell'Italia," htto://www.shorturl.at/orBDM (Accessed 9 June 2021)]

Florence, the birthplace of modern Italian is accent-free; Rome and the Romagna have their own Romanesco dialect; and, of course, Sicilian is considered a separate, minority language—distinct from standard Italian.

In ancient times, Latin was also a daily spoken language, which, due to its prestige and the political-military power of the Romans, came to be adopted by many different peoples. Spoken Latin has never ceased to exist but, during the centuries, it has gradually transformed: languages, like many other aspects of human cultures, are naturally subject to change with the passage of time.

Since Latin was used in a vast territory, it was inevitable that the progressive change led to the formation of innumerable languages different from region to region, although clearly recognizable by their common background. Almost all the Italian dialects have this origin: they are not at all the result of incorrect Italian, as some believe, and they are not even the result of a confused and inextricable mixture of different languages; rather, they derive instead from the ancient spoken Latin, albeit with the contribution and influence of other languages, ancient and modern. The official Romance languages, such as Italian, are essentially ancient dialects which, for various reasons, have achieved particular prestige.

Until the thirteenth century, almost every printed book or document was produced in Latin, as was dialogue in ecclesiastical settings, and legal forums throughout the Roman Empire. All that changed when Durante di Alighiero degli Alighieri, known as Dante, penned his masterpiece, the three-volume *Commedia*, in literary Tuscan. Linguists rightly consider him the creator of modern Italian.

As in other European countries, grammars were published to teach students how to read, write, and speak Italian. In the nineteenth century, authors and publishers began to focus their efforts on schools; once compulsory education took root

in the unified Italian Republic, the demand for grammars became great. But publishers also recognized the need to service the market for foreigners; thus, they continued to produce books that helped older children and adults master the Italian language.

Raffaello Fornaciari wrote several grammars, one of which we will examine. In *Grammatica Italiana Dell'uso Moderno (Italian Grammar in Modern Usage)*, he explains the somewhat convoluted means of Italian vowel mutation:

Mutation of Vowels

§1. Often the same word has two forms with different vowels, one of which is to be regarded as primitive, because it corresponds to the origin of the word, the other as changed. This vowel is most often unstressed, but sometimes it is also the same tonic vowel as the word. Let us speak first of the unstressed vowels.

§2. In the first syllable of a word, the unstressed *e* is attenuated many times in *i*, as shown by the double forms *decèmbre, dicèmbre* [December]; *nepote, nipote* [nephew]; *demónio, dimónio* poetic [demon]; *leóne*, lesser-used *lióne* [lion]; and, in general, the prefixes *de* and *re*, which either are changed into *di* and *ri*, or have both forms. Ex. *devóto*, *divóto* [devote], *desèrto*, *disèrto* [desert].T h u s also sometimes at the end of the word: *avante, avanti* [forward]; *domane, domani* [tomorrow]; *lúnge, lúngi* [far away]. The forms in *e* are poetic.

Similar affinity is found in analogous cases between *o* and *u*. Hence, we have a little-used *focile* and a fucile [rifle]; little-used *molino* and *mulino* [miller]; *olivo* and *ulivo* [olive]; *obbedire*, *ubbidire* [obey]; *officio*, *uffizio* [office].

§3. Other times, even in the first syllable, e and i are strengthened into a. Hence, the double forms dendro, dandro; meraviglia, maraviglia [marvelous]; selvatico, salvatico [wild]; innaffiare, annaffiare [water v.]; sterpáre and strappáre [tear] with metathesis;[246] tenaglia (antique) tanaglia [stretch].

§4. Sometimes the consonant that follows or precedes them affects the change of unstressed vowels:

t tends to change the preceding vowel into *e*, as attested by the double forms: *guarnire, guernire* [fortify]; *árbero* (poetic) *álbero* [tree]; *garófano, gherófano* [garófano is a kind of flower]; *separare, sceverare* [sort out]; and the suffixes *-eria, -erello, -ereccio*, etc., where the initial *e* is often an attenuation of archaic a. Ex. *rubare* makes *ruberia*, etc … [steal]; from *beccaro, beccheria* [butcher]; from *beccaro* derives *beccheria* etc. The double forms *sciocarèllo, sciocchèrello*, [stupid], are still used; *pazzaréllo, pazzérello* [crazy]; *boscaréccio, boscheréccio* [of the forest]; *casaréccio, caseréccio* [homemade], and others.

§5. Consonants *b, p*, make contact with *i* or *e*, which tends to change them to *u*. This is seen in double forms *scipare* (antiq.) *sciupare* [squander]; *officina* [workshop], *fucina* [forge], with *aferesi*;[247] *ribelle*, *rubello* [rebel]; *ebriaco* (antiq.) *ubriaco* [drunk]: the consonants *m* and *v* in contact *i, e, u* tend to change into: *o*. Ex. *riverto, rivéscio* poetic *rovescio; diveniare, doveniare; mínimo, ménomo; dévo, dovére; pierano, porano; dimani, domani; diménda, doménda; divízia poet. dovizía; eremíta, romíto with aferisi; ruina, rovina; manuale, manovale; contínuo, contínovo* (antiq.); *Cápua, Cápova* (antiq.).

§6. The consonant *l* tends to change the vowel with which it is in contact into o in the syllable following the accented one. This can be seen in the double forms of *débile* [weak] versus the poetic *debole* (the ancients also said *nóbole, útole* and so forth. For *nóbile* [noble] and *útile* [helpful]); *angelo, angiolo; scándalo, scándolo* (little used):

The guttural consonants *c, g* and nasal *n, m*, tend to change the vowel that precedes them in the syllable after the accented one. So the double forms *crónica, crónac-*

a;[248] *tónica, tónaca; pampino, pampano; giovine, giovane; canonico, canonaco* (used by the lower classes); *Geronimo, Girolamo*. This same [rule] explains the quite archaic forms *prolago, astrolago* and similar instead of *prologo* [prologue] and *astrologo* [astrologer], etc.

§7. In general, the change of voice is supported by the two opposing tendencies of language, which are called assimilation and dissimilation. For the first, an attempt is made to repeat the same sound; for the second, instead, to avoid repetition. The assimilation partially explains the changes in §3 for example savatico instead of the primitive selvatico [wild]. Other examples are *maladetto* for *maledetto* [cursed]; and the terminations *-ere* instead of *-ero*, as in *corriéro, corriére* [courier]; *cavaliéro, cavaliere* [knight]; *leggiéro, leggiére* [to read, (little used)]; and many others. From dissimilation are created forms such as *nemíco* instead of primitive *nimíco* [enemy], *litigáre* [argue], *leticare* [argue], and others.

§8. Tonic vowels, i.e. those on which the accent of the word falls, can be subject to change, which manifests itself in some double forms: changes of *e* into *i*: before *n*, as in *saracèno, saracíno*: in front of two *t*: *rispetto,* rispitto [obsolete form]; *dispetto, dispitto*, [obsolete form]: the forms of *profitto e diritto* [profit, law] have this origin: in front of another vowel: *Déi, Dío, Díi; réo, río* [poetic]; *miéi, mío*.

§9. *e* tonic (corresponding from the short Latin *e*) when not followed by a double consonant, converts into *ie*. E.g., *féro* poet. *fiéro* [fiery]; *altéro, altiéro* [presumptuous]; *intéro, intiéro* [complete]; *léve* (poetic) *liéve* [light]; *tepido, tiepido* [tepid] and others.

In the same way, the stressed *o* (corresponding to a short Latin *o*) become the diphthong *uo* when not followed by double consonant, it passes into the diphthong *uó*. E.g., *bóno, buóno* [good]; *cocere, cuocere*, [cook]; *córe, cuóre* [heart]; *fóco, fuóco* [fire]; *ómo, uómo* [man]; *lóco, luógo* [space]; *móro, muójo* [I die]; *nóvo, nuóvo* [new]; *tóno, tuóno* [tone]; *róta, ruóta* [wheal]. The forms with simple *o* are, for the most part, left to poetic language, although still used, in speech, by the people of Florence.

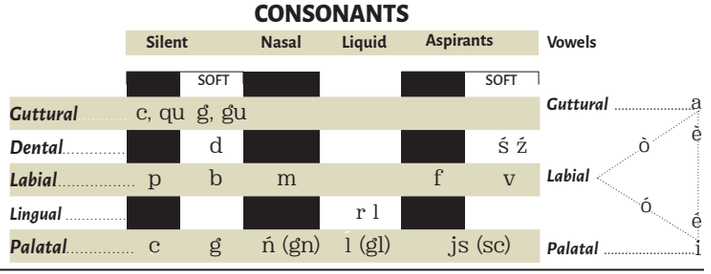
§10. *i* (corresponding to the Latin short *i*) regularly passes into *e*, especially when followed by two consonants or a *z*: as it still appears when finding the double form *lice, léce* [it is allowed, (both forms are poetic)], *plíco, piégo* [packet]; *cíppo, céppo* [stone/tombstone]; *nítido, nétto* (with *sincope*) [internal vowel drop]; *avarízia, avarézza* [avarice]; *franchigia* [allowance] *franchézza* [sincerity]; *vizio* (vice), *vezzo* (beauty); *principe, prènce* (from the obsolete *prèncipe*) [prince]; *limbo, lembo*, many of which have different meanings.

§11. *u* (corresponding to Latin short *u*) regularly passes into *o*. This [phenomenon] explains the double forms *cubito, gomito, numero, novero, cuneo* etc.; *lúto* (poetic) *lóto*, In verbs there is often an alternative between *u* primitive and *ó*. Ex. *condurre, condótto* [mercenary]; *fóndere, fúso[melt]*. Poets often go back to the Latin *u*; and they use, especially in rhyme, *spelúnca* for *spelónca*; *scúlto* for *scólto*, etc.

§12. Sometimes a vowel, for the sake of pronunciations, changes its place in the same word, which is called metathesis. Rare are the metathesis of vowels in the written language, such as *schioppo* [musket], *scoppio* [explosion], which are used in different meanings; and in *bálio* from the antiquated and primitive *bailo* [bearer]. But in the mouth of the plebs are frequent. e.g., *pianère* instead of *panière*; *rispiarmo* instead of *risparmio* [save].[249]

Signor Fornaciari also included a convenient diagram of consonants (figure 3.34); but, because his descriptions of consonants are so lengthy, we will examine another author's instead.

FIGURE 3.34 Sounds in the Italian Language.
[Source: Malvin-Cazal, 255.]



One of the more important theorists about nineteenth-century language was Angelo Cerutti, of Naples. His *Grammatica Filosofica Della Lingua Italiana [Philosophical Grammar of the Italian Language]*, published in 1831, offers a unique look at the Italian language in an era before a unified Italy. Cerutti's book contains interesting explanations of the pronunciation of vowels and consonants. We will reproduce portions of the section on consonants (figure 3.35). which are particularly useful as they compare accents from different regions on the peninsula.

FIGURE 3.35 Consonants, from Angelo Cerutti's *Grammatica Filosofica Della Lingua Italiana.*

[Source: CERU, 276–280.]

B The Neapolitan pronunciation blends the simple *B* with the double *B*, and it does not differentiate between *globo* [globe] and *gobbo* [hunchback], *libro* [book] and *libbra* [pound], *abile* [skilled] and *abbaco* [abacus], *abitare* [to inhabit] and *abbandonare* [to abandon].

To avoid this misunderstanding and find the sweetest sound of the simple *B*, one should think of the similarity it has with the *V*; thus, who wants to say *libro* should bring their lips near each other almost in the same way as to say *livro*; the double *B* needs to be pronounced with greater vibration and force.

C In *ce* and *ci*, *C* is pronounced softly in Italian; it is pronounced hard before *a, o, u*; so, if you want to precede all the vowels with an equally hard *C*, it is appropriate to add the *H* in the first two cases and write *chi* and *che*; wanting it equally soft, it will be advisable to add an *i* in the second position and write *cia, cio, ciu*; in these sylla bles the *i* is silent, and only serves to indicate the soft sound of the *C*.

And it should be noted that *C* followed by *H* and before I also receives another sound between the hard and the soft just mentioned, which is what you hear in *occhi* [eyes], *orecchi* [ears], *chiave* [key] and in many other words, and that should not be confused with the sound in words such as *fianchi* [hips], *stecchi* [sticks], *fiocchi* [flakes]. This sound is said to be crushed or broken and should be distinguished with a different character—as was proposed by [Gian Giorgio] Trissino among the new letters of his alphabet.

This broken *CH* takes place in the words in which *i* precedes a vowel and in those that result from it such as *specchio* [mirror], *specchi* [mirrors], *apparecchio* [apparatus], *apparecchi, apparecchino* [they should prepare], etc. But the initial chi, although not followed by vowel, is always broken, according to good Tuscan pronunciation; such as chi as a relative adjective [today it would be called an interrogative pronoun /who], *chinare* [to bend] etc. and so in their compounds *chiccehessia* [any person], *dichinare* [to refuse, to let go], *inchinare* [to bend down]. However, [here] we do practice differently. This same hardness is preserved by the *C* attached to any other consonant in the same syllable, such as *cla, cle, cli, clo, clu, cra, cre, cri, cro.*

Ce, Ci, as if it were *Ze, Zi*, saying *Zerto, Zittà, Zima* in place of *Certo* [certain], *Città* [city], *Cima* [summit]. The Tuscans mostly pronounce *Ce, Ci* as *Sce, Sci* saying *Non sc'era, Non sci è stato*, in place of *non c'era* [he was not there], *non ci è stato* saying *Zerto, Zittà, Zima* in place of *Certo* [certain], *Città* [city], *Cima* [summit].

D One should not confuse this letter with *T* and say *quanto* for *quando*, *salto* for *saldo*, etc. *D* is articulated by resting the tip of the tongue on the upper teeth and pushing the voice moderately. The *T* sits on the tip of his tongue a little lower: that is, between the upper and lower teeth and by pushing the voice more strongly.

G *G* diversifies its sound like *C* when it immediately precedes a vowel. Before *H, G* has a sound similar to *ga, go, gu;* where an L follows, the sound is sometimes broken, as has been observed of *C*, and this is always the case when the *i* forms a diphthong with another vowel, or in a word that derives from another one in which this condition occurs. The difference of the two sounds can be observed

FIGURE 3.35 Consonants, from Angelo Cerutti's *Grammatica Filosofica Della Lingua Italiana.*

distinctly in *ghigno* [grin] and *ghiaccio* [ice], in *ghirlanda* [garland] and *ghiotto* [gluttonous], in *vegghi* for *vegga* (2. person of the *verb vedere*, to see) and *vegghi* from [the verb] *vegghiare* [to wake].

Ghiro [doormouse] and *ghiribizzo* [whim] are pronounced variously from different people; since there is no diphthong, the sound of *GH* should be hard.

G followed by *L* also has the hard and the broken sound: the first one, more rare, can be heard in he words *Angli* [English], *negligenza* [negligence], *gloria* [glory], etc.; the other one before the diphthong, in words such as *scagliare* [to throw/hurl], *cogliere* [to pick/to grasp], *biglietto* [ticket], and in those resulting from it [the diphthong], such as *foglio* [sheet], *fogli* [sheets], etc.

A broken sound is also made with the pronoun *egli*, the pronoun and article *gli* and all their compounds such as *cogli* [compound form of preposition con and of article *gli*], *negli* [compound form of preposition *in* and *of* article *gli*] and *gliele* [association of the indirect pronoun *gli* with the accusative pronoun *le], gliene* [association of the indirect pronoun *gli* with the pronoun *ne*]; the latter case is the only one in which *GL* is followed by a diphthong in the beginning of a word. The people of Romagna and the Lombards change the broken *GL* into the quite different sounds of *LI*, *LLI* saying *alio*, *filio*, *orgolio* and others *allio*, *fil-lio*, *orgollio* for *aglio* [garlic], *figlio* [brother], *orgoglio* [pride].

The Venetians are generally incapable of this articulation and usually either entirely banish the [*L*] saying *figgi* for *figli* [sons], *consiggi* for consigli [advices] etc., or carry it before the *G* by saying *filgi* and *consilgi*. *ignudo* [naked]. The Romans have the bad habit of making this sound heard even in the words *niente* [nothing] which they utter *gnente*.

G followed by *N* has such a sound that does not have almost anything to do with the two letters, but forms a new articulation, another letter, such as *compagna* [companion] *campagna* [country], One of the notable defects of our pronunciation is to say the simple *G* as a double [*G*] twice before *E* and *I*, confusing, for example, *rege* [king] with *regge* [holds] *ragia* with *raggia* [from *raggiare*, radiate] and say *caggione* for *cagione* [cause], *Pariggi* for *Parigi* [Paris]. To avoid this disgrace, the Tuscans generally pronounce the simple *G* like the French *J*. It would be useful to imitate them avoiding though a shameful affectation.

FIGURE 3.35 Consonants, from Angelo Cerutti's *Grammatica Filosofica Della Lingua Italiana.*

Another defect of ours, or at least of many, is to make the *G* heard in the middle of the final diphthong *EA*, as if they could rhyme *astrea* [sign of the zodiac called Libra] and *strega* [witch] together, and so we hear it pronounced *assemblega* for *assemblea* [assembly], *contega* for *contea* [county], etc.

P The pronunciation of *P* when it is accompanied by *M* or *N* is sometimes confused because it is very close to the sound of *B*, like *sblende* for *splende* [shines], *sblendore* for *splendore* [splendor]; but whoever pronounces it correctly will distinguish *rompa* [he/she breaks] from *romba* [rumble], and knows to distinguish the *B* in *tromba* [trumpet] from *P* in *pompa* [pump.] To this end, it should be noted that to pronounce the *P*, the same movement of the lips is made as for *B*, but these press against each other before opening them, and the voice is sent out with greater force. The pronunciation by some in Naples of *abrile* for *aprile* is too low class to be spoken about here.

S This letter has a double sound: the *l'aspro* [hard] or *gagliardo* [vigorous] (today it is called voiced) and the *dolce* [sweet] or *rimesso* [remitted] (today it is called voiceless); this second one is less frequent.

The first is produced by approaching and joining the teeth together and immediately separating them, and the second is formed by not separating them, which produces a certain buzz. Those who know French can distinguish one from the other in uttering these words *nous savons* (hard S) and *nous avons* (soft S). Here are some main rules:

1. When it is at the beginning of a word and it is followed by a vowel, for example, in *sole* [sun], *sillaba* [syllable], etc. However, and exception occurs when [*S*] is derived from the Greek or Latin *X*; hence, it will be pronounced softly in *Senocrate*, *Santippo*, *Senofonte*, *Serse*.

The compound words retain the sound that the *S* has in the first word: therefore the *S* is hard in *riserba* [re serves], *risuona* [resounds] and *risegna* [makes again], *parasole* [parasol]: it is soft in *Artaserse*.

2. When it is double, like *cássero* [fortification], *oppresso* [oppress], etc.

3. When preceded by a consonant, such as *colsero* [they caught], *pensare* [to think], *arsura* [overhwelming heat/thirst].

4. In all adjectives that have the ending in *-oso*, such

FIGURE 3.35 Consonants, from Angelo Cerutti's *Grammatica Filosofica Della Lingua Italiana.*

bellicoso [bellicose], *specioso* [very beautiful] and many others; as well as in all the adverbs that derive from it, which are *bellicosamente, speciosamente*, etc.

5. In all words ending in *ese*, such as *arnese* [tool], *borghese* [bourgeois], *comprese* [included], *forese* [farmer], except for *cortese* [polite], *chiese* as a plural of *chiesa* [church] but not *chiese* from [the verb] *chiedere* [to ask], *paese* [town] and perhaps a few more words.

6. Before *C, F, P, T*, like *scola* [school], *sforzo* [effort], *vesta* [dress], *studio* [study], *cesta* [basket].

1. Before *B, D, G, L, M, N, R, V*, such as in *sbarrare* [to lock], *sdegno* [disdain], *sguardo* [look], *slegare* [to untie], *smania* [eagerness], *snello* [slender], *sradicare* [to uproot], *sventare* [to foil].

2. And when it is preceded by *U*, like *causa* [cause], *accusa* [accusation], *Medusa*; an exception is noun *fuso* [spindle] that has the hard *S* to be distinguished from the participle *fuso* [*meltes*/from *fondere*].

3. And when it is preceded by a vowel and followed by *I* to which succeeds another vowel, such as in *cortesia* [courtesy], *Asia*, *Elisio*.

4. And finally in the ending in *-esimo*, such as *battesimo* [baptism], *cristianesimo* [christianity], *millesimo* [thousandth]. Around the pronunciation of the hard or soft *S* we fall into continuous errors, and therefore it is better to use a lot of care to avoid them.

We can make another serious mistake by confusing the assenzo, compenzo, denzo.

In Rome this confusion takes place even more frequently, and—with great pain to the ear—one hears zole, zignore, perzona instead of *sole* [sun], *signore* [sir], *persona* [person] and also *polzo* for *polso* [wrist] *inzegna* for *insegna* [teaches/sign], *corzo* for *corso* [course].

Z The *Z* also has two sounds, hard and soft (today they are called voiced and voiceless); the second is rarer than the first. The hard resembles the *TS*, and it is heard in *zuppa* [soup], *zoccolo* [hoof], *prezzo* [price]; the soft is similar as in *DS* and can be found in *zanzara* [mosquito], *zelo* [zeal], *orzo* [barley]. Distinguishing these two sounds is very important; therefore, we give the following three rules that may be of some help, so that it not always necessary to always consult a pronunciation dictionary.

1. Double *Z* is mostly hard, such as in *aguzzare* [sharpen], *corazza* [armor], *stizzoso* [snappy]. And always had in

FIGURE 3.35 Consonants, from Angelo Cerutti's *Grammatica Filosofica Della Lingua Italiana.*

diminutives in *uzzo*, and *uzza* such as *animaluzzo* [little animal], *boccuzza* [small mouth], etc.

2. Preceded by *L* or *N, Z* is almost always hard, for example in *alzare* [to lift], *balzo* [jump], *filza* [row], *baldanza* [boldness], *ardenza* [ar dor], *raggiranzare* [to deceive].

3. The initial *Z* is more often hard than soft. Some distinguish and name a third, thin/subtle *Z* that holds the middle between the two previous ones; they say it is the simple [*Z*] that precedes the diphthongs *ia, ie, io*, such as in *grazia* [grace], *letizia* [joy], *benefizio* [benefit], *uffizio* [office]. And [Lionardo] Salviati added a fourth, on which we need not dwell, because sometimes too much precision—as too little—is not a good thing.

The Lombards, the Venetians, and mainly the Piedmontese and Genoese, pronounce *S* for *Z*, saying, as an example, *grasia, prestesa, pasiensa* in place of *grazia* [grace], *prestezza* [promptness], *pazienza* [patience].

Before closing these orthoepic[250] observations, it is useful to note that we are limited to those that are of greatest importance, omitting to mention some letters that have almost unnoticeable differences in pronunciation; this would be too much for elementary instruction. What has been said is enough to make it clear what care should be taken in the study of orthology, or as others say *ortoepia*, so far too neglected in every part of Italy, except in Tuscany where nature is the master [people pronounce correctly naturally], and where we do not notice any defect mentioned above.

Our fellow citizens, then, in addition to the rules we have given, should think about escaping two common defects, namely that of rushing too much in speaking or reading, thus mumbling the sounds, and pronouncing silent all the final sounds; the other of speaking with an overwhelming voice, like those who get excited in fights and bacchanals.

And the people of Upper Italy—especially the people from Romagna, the Lombards, and the Venetians—should be aware of their frequent defect of pronouncing double consonants simple, especially when they are near the beginning, or near the middle of the word; and, on the contrary, at the end of [a word] doubling the simple ones. For example, many pronounce, and some also write, *arivo, cativo, difetoso* instead of *arrivo* [arrival], *cattivo* [bad], *difettoso*

[defective [defective] and for the opposite, *statto, Vendutto, Catenna* instead of *stato* [been], *veduto* [seen], *catena* [chain]. Sometimes even men of letters from those regions run into such distortions.[251]

Because of the large number of accents, Appendixes C (p. 238) and D (p. 239) contain tables detailing vowel/consonant pronunciations in multiple dialectical regions.

Spain

The origin of the Spanish language is Vulgar Latin, propagated in Spain since the end of the third century BCE, which was imposed on the Iberian languages and Basque. … Before the arrival of the Romans, the Iberian Peninsula was populated by various communities. On both sides of the Pyrenees, various peoples who had a common language of Basque were grouped together. In the south, the natives established commercial relations with the Phoenicians. Around the seventh century BCE, the Celts, coming from southern Germany, invaded the peninsula and settled in Galicia and Portugal … The publication of the first Castilian grammar by Elio Antonio de Nebrija in 1492, the date of the discovery of America and the capture of Granada by the Catholic Monarchs, establishes the initial date of the second great stage in the shaping and consolidation of the language.

Until the emergence of radio and television in society … it was relatively easy to diagnose by phonetic habits and intonation the belonging of a given speaker to his or her corresponding dialectal area. … From the medieval Iberian linguistic map, various linguistic entities emerged, some becoming languages and others, with the passage of time, transforming into dialects of some of them. Among the varieties related to Spanish are: Leonese, which was spoken from Asturias to the lands of Cáceres and which, by the end of the fifteenth century, had left its place as a language in conflict with Castilian to occupy the position of a mere dialectal variety; Aragonese, with a situation analogous to Leonese, which was spoken in the kingdom of Aragon and whose natural borders are the Pyrenees to the north, the Iberian mountain range to the west and the limits of Catalonia and Valencia to the east. From the fourteenth century, as a consequence of the conquest of Andalusia by the Castilians, Andalusian emerged, which integrated some features of Mozarabic, as an authentic dialect of Castilian.

Extremaduran, which began as a border variety of Leonese and Castilian, has consolidated as one of the few dialects still identifiable today because of its implosive aspirations and its peculiar lexicon. Riojano, which was spoken in La Rioja, and which so decisively influenced the written Castilian of early times, was a dialectal variety of Aragonese. Another border dialect still used is Murcian, in which Castilian, Aragonese and Valencian, a Catalan variety, converged. … In 1713 the Royal Spanish Academy was founded. Its first task was to establish the language and to sanction the changes that speakers had made to the language over the centuries.[252]

In 1841, D. José Gómez Hermosilla published his *Principios De Gramática General*, from which we gain many interesting insights into the pronunciation of Spanish in the mid-1800s: "The vowel represented by the French visual diphthong *eu* is its muted *e*, or rather, long pectoral *e*, and this a darker and more degraded *e* than the closed *e*; but underneath an *e*: the French *u* is a mixture of the common *i* and *u*, *yo* the German *a* is a mixture of the Castilian *a* and *o*. The nasal vowels of French are the common ones, emitted in part by the nose, &c. &c."[253]

Hermosilla goes on to make an unusual calculation, and claim:

> And if we consider, finally, that there is no vowel that does not begin with an aspiration, and we count this as a kind of general articulation; we will have one more, and in all there will be eighteen and eight. Now: multiplying this number by five, which is the number of vowels, we will have ninety articulated voices, truly distinct. And as these ninety articulated vowels can be short or long, and have a low or high-pitched tone, one can see that each one of them can be pronounced four different ways, or, which is the same, that the number of complete sounds, or the natural syllables, is that of ninety multiplied by four, equal to three hundred and sixty. From which it can be inferred that a syllabic writing should consist of three hundred and sixty different characters, each of which would represent one of the natural syllables, that is to say, one of the complete sounds that result from the various combinations of vowels, [and the] articulations, quantities and tones that alter them.[254]

Unlike other Spanish grammars published in the nineteenth century, Hermosilla includes consonants. Much of it is given over to philosophical disputations about language and the alphabet; what few instructions about actual pronunciation of consonants is elementary and almost certainly known to most every reader.[255]

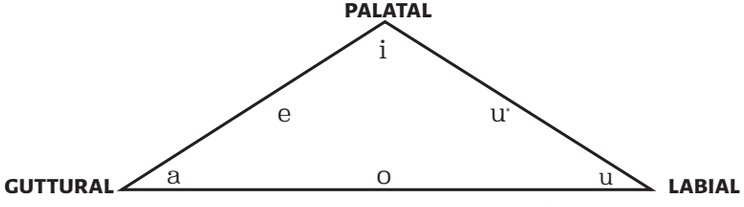
And, finally, there is an excerpt from an adaptation of Aesop's fable *Boréas and Helios*, also known under the title The North Wind and the Sun. The transcription is from Mexican Spanish; consequently, the phonemes /θ/ and /ʎ/ are not present, being replaced by /s/ and /ʝ/, respectively.

El Viento del Norte y el Sol discutían porsaber quién era el más fuerte de los dos. Mientras discut an, se acercó un viajero cubierto erto en un c lido abrigo. Entonces decidieron que el más fuerte ser a quien lograse despojar al viajero de su abrigo. El Viento del Norte empez, soplando tan fuerte como pod a, pero entre más fuerte soplaba, el viajero más se arropaba. Entonces, el Viento desisti. Se llego el turno se quit su abrigo. Entonces el Viento del Norte tuvo que reconocer que el Sol era el más fuerte de los dos.[285]

[el 'βjento ðel 'norte jˌe̯l'sol disku'tiam por sa'βer 'kjen eɾa ˌe̯l 'mas 'fwerte ðe loz 'ðos 'mjentɾaz isku'tian ˌse̯ ‿aser'ko‿u̯m bja'xero ku'βjerto̯‿en jertǫ‿en uŋ 'kaliðǫ‿a'βɾiɣo ǀ en'ton sez esi' jeroŋ k‿el 'mas 'fwerte se' ɾi.a kjen lo'ɣrase espo'xaɾ al βja'xero e swa'βɾiɣo el 'βjento ðel ˌnort ‿empe'so so'plando taŋ 'fwerte ˌkomo po' i.a ǀ 'perǫ‿entɾe 'mas 'fwerte so'plaβa el βja'xero 'mas ˌse̯ ‿aro'paβa ǀ en'tonses el 'βjento esis'tjo ǀ se ʝe'ɣǫ ‿el 'turno ejo se ki'to swa'βɾiɣo ‖ en'tonses el 'βjento ðel 'norte 'tuβo ke rekono'ser ˌke el 'sol 'eɾa‿e̯l 'mas 'fwerte ðe loz 'ðos][286]

Francisco Orchelli was a well-known linguistic theorist who was prominent in mid-1800s Spain. But the most striking thing about the Orchellian contribution is its famous vowel triangle: "as well as the vowels stopped with respect to time, that is, at their greater or lesser pause, they are long or short; thus with respect to the place of their detention they have various sounds. The most used are five: guttural, palatal and labial, namely: a, i, u; with two means, which are: the e, between guttural and palatal; and the o, between guttural and labial. Those last two middle vowels can come closer to one of their two extreme points, and therefore be more or less open."[256]

The nineteenth-century philologist Antonio María García Blanco, who obviously knew of the pioneering work of Manuel Garcia II, provided a detailed explanation of Orchelli's triangle:



u references the French y*

> These vocal motions, or vibrations of the air moved by the organs, are carried out in three cardinal points of the mouth, namely: throat, palate and lips, or in the inter-

mediate spaces: if the reflection of the air is made in the throat, the organic movement sound is the vowel a, if in the palate the vowel i, and if in the lips the u: therefore the vowels a, i, and u are cardinals of a triangle that can be considered to be drawn from the throat to the lips, and from each of these points to the palate: these are the fundamental vowels of all language.[257]

Hermosilla has equally unique ideas about consonants, which he posits later on in *Principios De Gramática General*:

If we then carefully examine the articulations that result from the various ways in which the parts adjacent to the throat can compress the air in all its transit, we will find that if those that are absolutely diverse are well counted, then there will be no more than 17, namely, those that we call *b, d, f, g* (soft), *ch, j, k* (or strong *c*), *l, ll, m, n, ñ, p, r, s, t, z* (or soft *c*). In fact, represented by these same characters, or by other equivalent ones, and modulated with some variety in different countries due to the effect of climate, they are the only ones found in the languages we know, which even the ones we consider distinct are reduced. For example, the one represented in several alphabets, by the so-called υ of *corazón*, the *f* is pronounced faintly and softly.[258]

Portugal

The origin of the Portuguese language is linked to Latin; the transformation of Latin into Portuguese was due to conflicts and political-historical-geographic changes in the Roman people. Around the third century BCE, Romans occupied the Iberian Peninsula through military conquests; as a result, Roman habits, institutions, living standards and, above all, language were imposed on the vanquished.

After a few centuries, Latin dominated the languages and dialects spoken in various regions. In this way, several languages were formed within the domain of Rome, that is to say, the Roman Empire, where the Romance languages, also called Neo-Latin, from which Portuguese originates.

"European-Portuguese" is the name given to the linguistic variety of Portuguese spoken in Portugal. The so-called "standard variety" of Portuguese is, according to some authors, constituted by the "set of linguistic uses of the educated classes in the Lisbon-Coimbra region."[259] Other authors consider European Portuguese as the central-southern variety used in Lisbon by educated speakers. At the end of the nineteenth century, the linguist and great pioneer of phonetics Aniceto dos Reis Gonçalves Viana, despite recognizing the existence of what he called an "average standard" that would exist in the "center of the kingdom, between Coimbra and Lisbon," ended up describing the "normal pronunciation" (i.e., referential or orthophonic) of the original Portuguese according to the use of Lisbon. Today, Portuguese is regulated by *Academia de Ciências de Lisboa* [Lisbon Academy of Sciences].[260]

Russell Walker contends that "There are four defined 'qualities' of Portuguese vowels, known as open, closed, reduced, and nasal. These are not really hard-and-fast rules of pronunciation; rather. they categorize the ranges of sound that the vowels can represent. It is important to recognize these distinctions, because certain words rely on them to make their meaning clear. For example, the word 'jogo' can mean either 'game' or 'I play,' depending on whether the pronunciation of the first 'o' is open or closed."[261]

European Portuguese underwent great changes beginning in the seventeenth century, so much so that words

that were regularly in use in 1800 are no longer part of the standard modern Portuguese lexicon. One unusual source for Portuguese pronunciation at the end of the seventeenth century comes from a German grammar written in order that German businessmen could learn the language and sell their wares, or trade goods in Portugal proper.

One, authored in German, was published in 1778: *Portugiesische Grammatik; Nebst Einigen Nachrichten von der Portugiesischen Litteratur . . .* [*Portuguese Grammar; Along With Accounts From Portuguese Literature . . .*] by Johann Andreas von Jung. After some seventy pages of literature summations, Jung finally commences the Grammatik portion of his work: "The Portuguese make an effort to write the way they speak, and to hear in their speech all the letters they write. But some of their letters have a different tone than in German, so I will try to express these in German, so that the reader is able to reach the true pronunciation of them without much effort."[262] Jung expresses the pronunciation guidelines in German (for a German reader remember), as shown in figure 3.36:

FIGURE 3.36 *Portuguese Grammar*, from Johann Andreas von Jung.

[Source: JUNG, Part 1, 2–8.]

ABOUT VOWELS

A	is pronounced as in German and Latin: amór, die Liebe [love]. It is long or short, depending on whether there is an accent above it, as will be shown below.
E	as in German: édificar, bauen [to build]. In all those beginning with an es where the s is followed by a consonant, the e is seldom heard and is only expressed by the tongue slapping against the roof of the mouth; as: escóla, die Schule [school], esta [are], ist [is], almost like scola, sta [school, stay].
I	as in German: *indicar* [indicate], *anzeigen* [display]; *intimar* [intimar], *anzeigen* [show], *bekannt machen* [make known].
Y	is exactly the same as the preceding *i*, only with the difference that the syllable seems to become a little longer as a result, although the *y* itself is not thereby heard more

FIGURE 3.36 *Portuguese Grammar*, from Johann Andreas von Jung.

	more strongly; as: *Rey* [King], *der König* [the King]. Before *a* and *o* it is heard stronger, almost like *j* in German: *joya* [jewel, (Latin)], *ein Kleinod* [a gem], *joyo* [jewels, (Latin)], *das Unkraut* [weed].
O, U	as in German and Latin: *absoluto* [absolution], *durchaus* [absolutely].

ABOUT CONSONANTS

B	As in German.
C	sounds like s before *e* and *i*; before *a, o* and *u*, like *k*; but if it has a tick below (Portuguese *plica*, French *cedilla* [ç]), it takes on the tone of the German ß or *ſs*; as *çapato* [shoe, (French)], *ein Schuh* [a shoe, reads "ssapato"]; *açoute* [whip (French)] *eine Peitsche* [a whip, reads "a-ſsohte"] *C* before *y* sounds like in Latin and German, as *Cyclopa* [Cyclops], *Cylindro* [Cylinder], *Cypreste* [Cypress], *Cuthera* [Cutter]. For *ch* see *H*.
D, F	As in other languages.
G	*G* before *a, o* and *u*, as in German; just before *e* and *i* as in French. If *g* before *e* and *i* is to have the German sound, it is written like in French *gue* [than], *gui* [who]; as: *guerre & der Krieg* [the war, reads *gerra; guisa* [guies], [the kind, reads *gisa*]. If *g* stands in front of *ua*, then both of them must actually be heard; as *guarda* [guard], *die Wache* [the guard, reads *gu - arda* in three syllables.]
H	if it is in front of a vowel, *h* has no sound at all; as: *homem* [men], *der Mensch* [human being, reads *omeng*]; *herder* [heir], *der Erbe* [the heir] reads *erdeyro*; *honrado* [honored], *geehrt* [honored, reads *onrado*]. This letter [*h*] is used by the Portuguese after *c, l, n*, in a way that is unique to it, namely: *Cha, che, chi, cho, chu*, which is pronounced like German *schau, sche, schi, scho, schu*; as: *chave & der Schlüssel* [the key]; *chegar & ankommen* [arrive]; *chinéla & ein Pantoffel* [slipper]; *chorar & schrein* [cry]; *chapar & saugen* [suck]; like *schawe, schigar* and so on. *Lha, lhe, lhe, lho, lhu* is read like the French *lle* in *fille, ein Mädchen* [a girl]; or almost like in German *tja, lje, lji, ljo, lju*; as: *abelha & eine Biene* [a bee, reads *abel-ja*]; *mulher & eine Frau* [woman, reads *muljer*]; *colhido & gesam melt* [gathered, reads col-jido]; *filho & ein Sohn* [son, reads *filjo*]; *olhudo & voller Augen* [full of eyes, reads ol-judo]. Only one single Portuguese word with its entire lineage is connected with *lh*, namely *lhana, aufrichtig, redlich* [sin

FIGURE 3.36 ***Portuguese Grammar*, from Johann Andreas von Jung.**

	cere, honest]; of which *Lhaneza & Aufrichtigkeit* [sincerity] and *Lhanamente*, [*das Adverbium* (the adverb)]; but even in these, *lh* sounds like *lj*. *Nh* is pronounced like *nj* or like the Spanish ñ (for example in *España*) pronounced *n*, as: *unha* [fingernail], der *Nagel am Finger* [the nail on the finger], reads *unnia* or *unja*; *dinheyro & Geld* [money, reads *dinjeiro*]; *grunhir, grunzen*, [grunt reads grunjir]; *linho & Flachs*, [flax reads linnio]; *nenhum & niemand* [no one, reads *nennjung*].
J	the connected *i*, as in French, *j*, as in *jamais*.
L	both single and double, as in German, for *lh* see at *H*.
M	at the beginning of a word, as in German; only at the end of the word it is read as nasal, namely *am* like French *en* or *an*, *em* like French *in*, or like German *en* in *enge* [tight], *im* like *in*, *om* like French *on*, *um* like *un* in *Lunge* [lung]; as: *cawam & eine Rohle* [a raw material, almost like *cawang*]; *bem* [almost like beng]; *assim* [thus, almost like assing]; *bom & gut* [good, almost like *bong*]; *algum & jemand* [someone, almost like algung]. NB. Instead of am, ão is often written, e.g., instead of *rezam* [reason], one also spells *rezão*. Here are the words that come from Latin, except those in which the *em* retains its Latin pronunciation, as *emperador & der Kaiser* [emperor]; of these are the words that come from Latin, except in which the *em* retains its Latin pronunciation, as *emperador*, the emperor; *exemplo & ein Beispiel* [example]. *Am, im, om, um* in the beginning or in the middle of the word retain their natural sound; only *em* is everywhere, whether it be in the beginning or in the middle, read as *eng*; as *engano & der Betrug* [deception, reads eng-gano]; *dizemlhe & sie sagen ihm* [they tell him, reads *disenglje*].
N, P	as in German.
Qu	before a reads *kw*; as *qual*, which reads *kwal*. *Que* and *qui* reads *ke* and *ki*; *quebrar & brechen* [break, reads *kebrar*]; *queixa & die Klage* [complaint, reads *kei-scha*]; *queyxada & der Kinnbacken* [jaw bone, reads *kei-schada*]; *quinta & ein Landhaus* [cottage, read *Kinta*]. *Quo* is like *kuo*; as: *quotidiano & täglich* [daily, reads *ku-otidiano*].
R	*s* and *ss* as in other languages; however, the simple *s* is a bit sharper in all cases than in German.

FIGURE 3.36 ***Portuguese Grammar*, from Johann Andreas von Jung.**

T	likewise; even *ti* is always neatly pronounced and not pronounced like *ci*, even if a vowel follows; *fatiar & schneiden* [cut, reads fathiar and not faciar]; *fatia de pam & ein dünner Schnitt Brot* [a thin slice of bread, reads *fathia de pang*].
V	as *w* in German.
X	as *sch*; *queyxada & der Kinnbacken* [jaw bone, reads *kei-schada*]; *queyzarfe & sich beklagen* [lament, reads *keischarfe*], but in the words beginning with *a* and *e*, and coming from Latin, it retains its Latin sound; as in *axungia*, *exemplo*.
Z	is pronounced like *s*; as: *produzir & hervorbringen* [produce, reads *produfir*]; *prezar & gelten* [apply, reads *presar*]; *rezão & die Ursache* [reason, reads *resang*].[263]

Of course, there were grammars in Portuguese. Consider the *Nova Grammatica Ingleza e Portugueza (New Grammar English and Portuguese)* of Manoel de Freitas, written in 1812. His format is similar to that of Herr Jung; however, most of the text is written in such an obscure historical dialect that even professional Portuguese translators have difficulty understanding it. Nevertheless, a few excerpts should suffice as to the content regarding pronunciation: "Accento, is a particular strength of voice, resting something more on a certain letter or syllable of a word, to be better heard, than the other syllables in the same word; for example: in the word presúme, the outside of the voice should be on the letter *u*, which makes the second syllable *súme*, and which receives the accent."[264]

At the opposite end of the century, other linguists were creating their own grammars, such as Bento José de Oliviera. By this time, Portuguese had become its modern manifestation, so de Oliviera had an easier time of collating and organizing material into a textbook. He methodically works through each vowel and consonant, explaining their pronunciation in prose (figure 3.37).

FIGURE 3.37 ***About Pronunciation*** **from Bento José de Oliviera.**
[Source: OLI, 139–140.]

VOWELS **The oral ones are pronounced either open, closed or muted. The open or closed sound comes from their respective accents only, and the muted ones from their position.**

A *A*, as an article and the end of word is pronounced very softly. Two successive soft *aa* are pronounced as an acute "*aa*": *portáberta* (open door), *a ábelha* (the bee), *contráregra* (against the rule). In some cases, however, they maintain their soft sound.

E *E*, a conjunction, sounds almost like *i*, and at the end of words it is silent: *e este* (i êst). This vowel also sounds like an i either at the beginning or in the middle of some words: *egual, crear, theoria, pateo*, etc. (*igual, criar, thioria, patio*). At other times it sounds almost *ã*: *empenho* [effort], *desenho* [design], *tenha* [you have], *Mascarenhas, ferrenho* [fierce], etc. (*empânho, desânho, tânha*, etc.); etc like the *ei* em: *igreja, desejo, ensejo seja, veja* etc. (*deseijo, eagreija, enseijo*, etc.).

O *O*, as an article, and at the end of words has the sound of *u*: *o livro* [the book], *corpo* [body], *preto* [black] (*u livro, u corpo, u preto*). In the middle of some words, *o* also sounds like *u*: *concorrer* [compete], *consolidar* [consult], *coordenar* [coordinate], *introduzir* [introduce], etc.

I, U *I* and *u* retain their original sound, even when altered by the acute accent: *viviflco* [live], *vivifico* [vivify], *únto* [together], *untúra* [anointing]. The pronunciation of *I* in many words is confused with the silent *e*: *inimigo* [enemy], *opinão* [opinion], *particípio* [participate]

CONSONANTS **The *l*, *r* and soft *s* consonants are called liquid because they easily run in conjunction with other consonants: *claro* [clear-, *cravo* [carnation-, *ciência* [science-, *casto* [chaste-. *C* followed by *a, o, i*, stands for *c* or *k: capa, fraco, escuro.***

C Before *e*, *i*, and *c* "*cedilha*" (*ç*) before *a, o, u*, has the value of *ss*: *cedro* [cedar], *cifra* [cipher], *taça* [cup], *poço* [well], *doçura* [sweetness]. It is not pronounced in *anedota* [anecdote], *santo* [saint], *synecdoche* [synecdoche] and in many other Latin derived words.

G, Q *G* and *q*, gutturals, before *e*, that have an unpronounced *u*: *guerra* [war], *guita* [twine], *quer* [want], *quilha* [keel], (except *güela*). This *u*, therefore, is heard before *a, e, i, o,* in words of Latin origin: *qüadro, qüunto, eqüestre, argüir, qüinqüê nio, sangüineo, qüota*, etc. *G* followed by *e* or *i* makes a *j* sound: *gente* [men], *gigante* [giant].

FIGURE 3.37 ***About Pronunciation*** **from Bento José de Oliviera.**

H This letter alone has no phonetic value; it is used only as an etymological mark of distinction.

Placed after *c, l, n, t* and *r*, the letter *h* forms the compound consonants *ch, lh, nh, ph, th* and *rh*. In addition to *p* (*ph*), the *h* gives this letter the value of *f* in words derived from Greek: *pharol, physic*.

Ch makes a hissing *x* sound in all proper Portuguese words: *chamar* [call], *chave* [key], and in words of Greek origin, a *k* sound: *Achiles, monarquia, máchina*. Exceptions to this are: *chirurgia* [surgery], *chirurgião* [surgeon], *schisma* [schism] and *catecismo* [catechism], in which *cha* sounds like *s*.

R, rr The single *r* at the beginning of words and in the middle following *l, m, n, s, e*, always has a strong sound, as does the double *rr* between vowels: *reino* [kingdom], *melro* [black], Menor [minor], *honra* [honor], *Israel* [Israel], *arrasa* [raze], *ferro* [iron]. The single *r* between vowels is soft: *era* [epoch], *fóra* [outside]; it is strong after the prefixes *ab, de, oh, pre, pro, sub: abrupto* [abrupt], *derogar* [lure], *obrepção* [obligation], *prorompper* [interrupt], *subrepticio* [surreptitious].

S has three values:

1.º As a *ç* at the beginning of words, and in the middle preceded by consonant or doubled (*ss*): *sala* [room], *ensaio* [rehearsal], *tosse* [cough];

2.º Almost as a hissing *x* at the end of words, in the beginning or in the middle of words after the vowel that makes a syllable and is followed by a consonant: *homens* [men], *errada* [wrong], *injusto* [unjust];

3.º of *z* between vowels: *rosa* [pink], *todos os homens* [all men] (rosa, *todozozómens*), and after some consonants: *trânsito* [transit], *transigia* [condescend], etc. Therefore, it retains the sound of the *ç* or singular *s* between vowels and the ending simo of the ordinal [numbers]: *vigésimo* [twentieth], *centesimo* [hundredth], etc.; and after the prefixes *a, anti, pre, pro,* re: *asymetria* [asymmetry], *antisocial* [antisocial], *pressupor* [*presup pose], prosse guir* [proceed], *resurgir* [resurface]. Exceptions are: *desolador* [desolate], *desolação* [desolation], *obsequio* [obsequious], *presumir* [presume] and *resumir* [summarize], whose s is commonly pronounced as *z*.

X Aside from its primitive sound, *X* (*che*) has following other values in words of Latin transcription: as a *cç–fixo* [fixed], *fluxo* [flow], *reflexo* [reflection] (*ficço, flucço, refeço*); as a *ç* or *ss–reflexão* [reflection], *syntaxe* [syntax], (*refleção,*

FIGURE 3.37 ***About Pronunciation*** **from Bento José de Oliviera.**

sentasse); as a *z* or *s*—*exacto* [exact], *exemplo* [example], *excepto* [exception], *experiencia* [experience] (*ezacto, ezemplo, escepto, esperiencia*). In the prefix *ex* sometimes the *x* paired with the *e* vowel creates a diphthong sound of *ei*, as in *ex-ministro* (*eisministro*).[265]

V. LOW COUNTRIES

A general written language already existed in the second half of the nineteenth century in Holland. As far as the spoken language, in addition to the dialects, there was a General Civilized Dutch, which adapted to the written language again and again; it also probably had a limited number of local variants. Only a rather small circle controlled this general colloquial language at that time: the term civilized, therefore, refers to the small upper layer of society. In the lower social environments, lower classes sought to impress the outside by using proper speech in public while dialect was spoken at home.

At the end of the nineteenth century, the language environment changed profoundly. It was at this time that the term General Civilized Dutch was used for the first time to emphasize the pursuit of more natural language use. However, General Civilized Dutch is spoken by few people, since the written language and the various dialects differed quite a bit; moreover, the bridging of spoken and written language, in addition to a true culture change, also meant learning a brand-new language for many. As a result, the difference between spoken language and written language became almost unbridgeable in the Netherlands. In 1804, the first official spelling of Dutch was established; it was generally well received, but the desire to arrive at one spelling for the Netherlands and Flanders remained. So, in 1851, it was decided to jointly make a large dictionary, which made possible a more unified language pronunciation.

The first Dutch grammar of the nineteenth century in the strictest sense was *De Nederduitsche Spraakkunst* (1805) by

Petrus Weiland. It is a prescriptive–written language grammar, and contains only the written language regulations of Dutch, some of which still apply today. His work is not only prescriptive, it is highly descriptive, as this long-winded explanation of the pronunciation of vowels confirms:

> The *A*, with which our *A B C* begins, is the simplest and lightest vowel, which, through the most unforced opening of the mouth, is propagated without difficulty. As soon as the tongue comes a little nearer to the palate, the still brighter *E* arises; and from these, as the tongue approaches the palate, the *I* is formed, as the highest sound that the human organs of speech can produce. To pronounce the *O*, the voice sinks again to *A*, and gives the vowel, through the rounding of the lips, a different shape, which gives rise to the *O*. The lowest vowel formed by the strongest rounding, or closing of the lips, is *U*. There is therefore, in pronouncing the vowels, from *A* to *U*, a sufficiently proportional constriction of the mouth, or rounding of the lips; so that, at the *A*, the mouth is most open, at the *E* less, at the *I* less, at the *O* still less, and at the *U* the least open; with this distinction, however, that, in pronouncing *A, E,* and *I*, the tongue approaches the palate more and more, while in pronouncing the *O*, the tongue returns to the same distance from the palate at which it was when pronouncing the *A*; which also takes place with regard to U; though the voice, in pronouncing each of these letters, exerts equal forces.[266]

The Dutch sound system has sixteen vowel sounds (figure 3.38): seven long vowels, six short vowels (including the schwa) and three diphthongs. They can be subdivided on the basis of length and vowel height and along the dimensions fore-back and rounded-unrounded. In addition, there are a number of loaner phonemes and semi-diphthongs. The long vowels e and

Figure 3.38 **Dutch Pronunciation from Petrus Weiland.**
[Source: Hüning, Matthias. "Structuur En Geschiedenis Van Het Nederlands Een Inleiding Tot." Niederländische Philologie FU Berlin, 5 December 2013. http://neon.niederlandistik.fu-berlin.de/nl/nedling/phonology/vocals.]

Vowel Subdivisions.

	Front	Front, rounded	Back	Back, rounded
HIGH	i	y		u
MIDDLE	e ɪ	ø œ		o ɔ
LOW	ɛ		a ɑ	

LONG VOWELS

/i/ het riet [ri:t] (*the reed*) de fiets [fi:ts] (*the bicycle*)
/y/ de muur [my:r] (*the wall*) de buur [by:r] (*the neighbor*)
/u/ moeten [mutə(n)] (*must*) Koen [kun] (*can*)

LONG VOWELS

/e/ alleen [ɑle:n] (*only*) weten [we:tə(n)] (*know*)
/ø/ teut [tø:t] leunen [lø:nə(n)] (*lean*)
/o/ boven [bo:və(n)] (*above*) loom [lo:m] (*loom*)
/a/ het raam [ra:m] (*the window*) betalen [bəta:lə(n)]

Besides seven long and six short vowels, Dutch has three diphthongs : :i, œy and ɑu.
/ɛi/ het eiland [ɛ ilɑnt] (*island*) de rij [rɛi] (*row*)
/œy/ het geluid [ɣəlœyt] (*sound*) de ui [œy] (*onion*)
/ɑu/ houden [hɑudə(n)] (*hold*) de kous [kɑus] (*stocking*)[t284]

o are slightly diphthongized in the north of the Dutch language area. Dutch has seven long (*i, e, y, ø, u, o, ɑ*) and six short vowels (*ɪ, œ, ɔ, ɛ, ɑ, ə*).

Weiland devotes considerable space to consonants, but does not offer any pronunciation guidelines or descriptions; rather, his focus is more on the morphological history of the Dutch language and how various letters found their way into it.

The phoneme system of Dutch has nineteen consonants (figure 3.39). These can be classified according to the way they are articulated, the place of articulation and the voicing. What is striking about the consonant inventory of Dutch is that it has

no voiced counterpart to the [*k*] as German has it in a word like *gut* [gu:t]. The phoneme [*x*] and the voiced pendant [ɣ] are experienced as 'typical Dutch', which can also occur at the beginning of a word: *chaos* [xɑ:ɔs] and *geven* [ɣe:və] (give). Recent trends with regard to Dutch consonants are a devoicing of the fricatives *z, v* and ɣ and a new *r*-allophone: the *Gooise* r.[267]

FIGURE 3.39 **Phoneme System of Dutch.**
[Source: Hüning, Matthias. "Structuur En Geschiedenis Van Het Nederlands Een Inleiding Tot De Taalkunde Van Het Nederlands." *Niederländische Philologie FU Berlin*, 15 December 2013.]

Subdivision of Consonants

THE PLOSIVES

/p/ *de pan* [pɑn] (pan) *Jaap* [ja:p]
/b/ *beter* [be:tər] (better) *de tabel* [tɑbɛl] (table)
/t/ *tof* [tɔf] (cool) *het bed* [bɛt] (bed)
/d/ *diep* [di:p] (deep) *de bedden* [bɛdə(n)] (beds
/k/ *kat* [kɑt] (cat) *beker* [be:kər] (cup)
Plosives are produced by closing off the airflow completely and then letting the air escape in one go. Dutch has /p/, /b/, /t/, /d/ and /k/. In addition, the plosive /g/ occurs in some loanwords, as in the word goal.

THE FRICATIVES

With fricatives or rubbing sounds, the air is forced through an almost complete constriction so that a "rubbing" sound is created. Dutch has the fricatives /s/, /z/, /f/, /v/, /x/, /ɣ/, /h/ and /ʃ/. In addition, some French loanwords contain the sound /ʒ/, the voiced variant of /ʃ/, as in the word *rouge* [ru:ʒ].
Besides seven long and six short vowels, Dutch has three diphthongs: *:i, œy* and *ɑu*.

THE NASAL

/m/ *de maan* [ma:n] (moon) *de emmer* [ɛmər] (bucket)
/n/ *het nut* [nœt] (utility) *de aandacht* [a:ndɑxt] (attention)
/ŋ/ *lang* [lɑŋ] (long) *vangen* [vɑŋə(n)] (catch)
/ɲ/ *de ranja* [rɑɲɑ] (orange) *oranje* [ɔrɑɲə] (orange)
Nasals or nasal sounds are formed by letting the air escape (only) through the nose. Common nasals are the /m/ and the /n/, in addition there is the /ŋ/, which can only occur at the end of a word or morpheme as in the word ring. The /ɲ/ occurs in words like orange or oranges.

FIGURE 3.39 Phoneme System of Dutch.

THE PLOSIVES

/l/ *de liefde* [li:fdə] (love) *halen* [ha:lə(n)] (fetch)
/r/ *het rijm* [rɛim] (rhyme) *de buren* [by:rə(n)] (neighbors)

Liquids or flow sounds are produced by allowing air to escape through the sides of the tongue. In Dutch, the /l/ and variants of the phoneme /r/ are examples of a flow sound. In the case of the flow sound *r* we are dealing with a so-called 'trill' in which either the tip of the tongue or the uvula is made to vibrate.

As a last group, there are the sliding sounds or semivowels such as /ʍ/ and /j/ where hardly any constriction takes place in the oral cavity during the formation. Sometimes they are not even counted as consonants but are considered allophones of the vowels /u/ and /i/ respectively.[268]

	OBSTRUENTS		SONORANTS		
	Plosives	**Fricatives**	**Nasals**	**Liquids**	**Slides**
Labial	/p/, /b/	/f/, /ʋ/	/m/		/ʍ/
Dental/Alveolar	/t/ /d/	/s/, /z/	/n/	/l/, /r/, ([r])	
Palatal		/ʃ/	/ɲ/		/j/
Velar/Uvular		/x/, /ɣ/	/ŋ/	/r/, ([ʀ])	
Glottal		/h/			

Consonants can be further subdivided according to the way they are articulated, i.e., the way or degree to which the constriction of the airflow occurs.

VI. FINLAND

Until 1809, Finland still belonged to Sweden; thus, literature published in the first decade of the nineteenth century, like other literature published during Swedish rule, is considered to belong to the period of old literary Finnish. The literary language began to slowly revive as early as the early 1810s, but it was not until the 1820s that Eastern Finnish dialects began to be more pronounced. The struggle between Eastern and Western dialects for hegemony in the evolving Finnish language is especially evident in the language of the 1830s—even the 1840s; finally, the new orthography gradually became

fully established during the course of the nineteenth century. Most of the phonological and morphological features that were still subject to variations started to take on modern forms by the start of the 1870s; indeed, the period of Modern Finnish is considered to have begun by 1880.

It is often said that modern Finns no longer speak dialects, or that the original Pälkäne or Liperi dialect is no longer spoken. The notion that dialects would no longer be spoken is largely due to the fact that one is accustomed to thinking that only Finns born before the end of the nineteenth century spoke the correct dialect. This is not the way to see it; but, just as right is the "broken" Finnish of everyone, whether the speaker was born in the last century or twenty years ago. As figure 3.40 demonstrates, there are many dialects in Finland—both historically and in modern times; in fact, there are probably three times as many dialects as are shown on the map, since each region has its own subregions—each of which speaks with its own distinct dialect.

The nature of the language involves constant change, so the spoken language of Finns is not the same now as it was one hundred years ago. At one point, the change in language was reflected in a multitude of variations: people living in different areas speak differently, people of different ages speak differently, people in different situations speak differently.[269]

In an email, Mietta Lennes, Project Planning Officer at Kielipankki, The Language Bank of Finland, at the University of Helsinki, replied to my question about pronunciation of Finnish in the nineteenth century:

> One thing to consider is that in the 1800s, many of the officials and more educated Finns would still speak Swedish as their mother tongue, or they might in many cases have been practically bilingual in Swedish and Finnish. Many songs were translated from other languages, especially

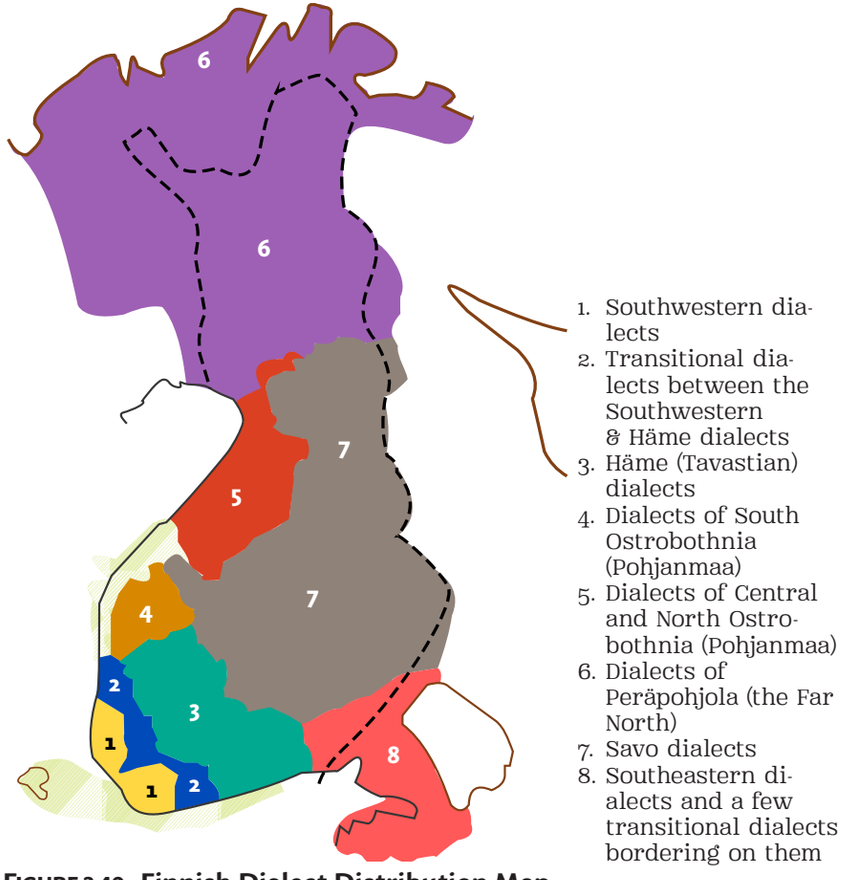


FIGURE 3.40 Finnish Dialect Distribution Map.
[Source: "Finnish Dialects - Institute for the Languages of Finland." Institute for the Languages of Finland. Accessed June 17, 2021. https://www.kotus.fi/en/on_language/dialects/finnish_dialects_7541].

from Swedish. If the translations were made by a non-native Finnish speaker, the lyrics tend to sound very clumsy to a native, if the rhythm and melody often do not match the prosody of spoken Finnish... This makes it even more difficult to compare the actual pronunciation variation/differences, if you are particularly interested in songs.

> Regarding orthography and standard written language, Finnish is often said to have a very close grapheme-to-phoneme relationship, i.e., each alphabetical character roughly corresponds to a given type of speech sound, a double character denotes a long sound, etc. Those people who were literate in the 1800s would learn to write according to a similar orthographical system; so, if you find the words for a song that was sung in Finland in the 1800s, you can expect that the words would sound pretty much the same today–if the singers are native Finnish speakers. ... All Finns are taught "standard Finnish" in school, but of course there is pronunciation variation between the different parts of Finland and between different groups of people; hence, the dialects or "local accents" have not been completely lost.[270]

Moreover, there are more than two dozen Swedish dialects still active in Finland in modern times, and they belong to the group of Eastern Swedish dialects. The dialects of Finnish-Sweden have their roots in ancient Sweden, which spread to Finland from central Sweden with immigrants from the twelfth century; they are spoken in Finland in four areas: *Ostrobothnia*, *Åland*, *Åboland*, and *Nyland*.

The Swedish dialects of Finland can be considered conservative. They retain many features encountered only in peripheral, mainly northern, Swedish dialects. For instance, they preserve many Old Swedish diphthongs, such as in stein (sten) "stone", höi (hö) "hay" and bröut (bröt) "broke." In many Finland-Swedish dialects, the consonants *g, k, sk* are pronounced "hard" when preceding a frontal vowel, such as in *gära* or *göra* (göra) "do/make," *kärrå* (kärra) "cart/barrow" and *skära* "cut," but in other dialects they may alternatively be pronounced djära, tjärrå, stjära or as affricates or fricatives as in Standard Swedish.[271]

Prof. Lennes suggested these IPA maps (figures 3.41-3.42). She assures me, these are accurate since "grapheme-to-phoneme mapping has not changed in two hundred years."

FIGURE 3.41 Finnish Vowels.

[Source: "Finnish Dialects—Institute for the Languages of Finland." *Institute for the Languages of Finland*. Accessed June 17, 2021. https://www.kotus.fi/en/on_language/dialects/finnish_dialects_7541.]

IPA	Example	English approximate	IPA	Example	English approximate
		SHORT			LONG
ɑ	pouta	like father, but shorter	ɑː	poutaa	father

FIGURE 3.42 Finnish Vowels.

IPA	Example	English approximate	IPA	Example	English approximate
		SHORT			LONG
æ	pöytä	cat	æː	päivää	mad
e	terve	let	eː	eesti	pay
i	viha	city	iː	siika	see
o	oksa	like more, but shorter	oː	koostaa	more
ø	pöly	somewhat like nurse	øː	säröön	somewhat like bird
u	surma	influence	uː	suu, ruoan	cool
y	kesy	somewhat like cute	yː	ryyppy	somewhat like cube

FIGURE 3.42 Finnish Diphthongs.

IPA	Example	English approximate	IPA	Example	English approximate
ɑi̯	aika	eye	iy̯	siistiytyä	no English equivalent
ɑu̯	aura	how	oi̯	koittaa, koittaa	coin
æi̯	äiti	main	ou̯	outo	role
æy̯	täytyy	no English equivalent	øi̯	töitä	French feuille

FIGURE 3.42 Finnish Diphthongs.

IPA	Example	English approximate	IPA	Example	English approximate
ei̯	ei, hei	pay	øy̯	pöyristyä	rope
eu̯	neutraali	Spanish neutro	ui̯	muita	ruin
ey̯	keskeytyä	no English equivalent	uo̯	Suomi	somewhat like woah
ie̯	kieli	somewhat like yes	yi̯	syitä	somewhat like we
iu̯	viulu	few	yø̯	yö, työtä	French pollueuse

VII. SCANDINAVIA

Birgitta Lindgren, Nordic secretary at the Scandinavian Language Council, writes of the connection between, and history of, the three Scandinavian languages:

> The Scandinavian languages (Danish, Norwegian and Swedish) are so similar to each other that one could well judge them as dialects of the same language. But since they each have their own written language and are also the main language in each country, they are described as different languages. Although there are differences in comprehension problems, the similarities are so great that there is a spontaneous mutual understanding and a tradition that people who know one of these languages interact with each other without anyone having to switch to another language, each can speak their language. This is not entirely unique in the world, but neither is it completely common.
>
> Historically, the Scandinavian languages (Danish, Norwegian and Swedish) have arisen from the same language—Umordian. Around 800, it is usually believed that the different languages began to develop. Because even those who do not have a Scandinavian language as a mother tongue still to a greater or lesser degree master a Scandinavian language, Nordic language comprehension covers in principle the entire Nordic region. The majority of the vocabulary is so similar in the Scandinavian languages that up to 75% of the words in a Danish or

Norwegian text are immediately comprehensible once the systematic differences have been realized (figure 3.43).[272]

FIGURE 3.43 Differences Between Danish, Norwegian and Swedish.

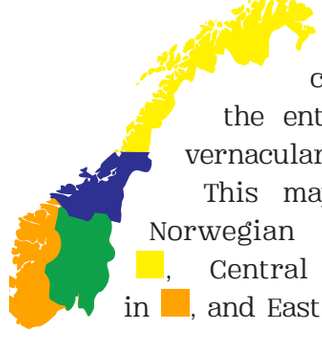
[Source: Lindgren, Birgitta. "Grannspråk: Om Nordiska Språk (Neighboring Languages: About Nordic Languages)." *Skolverket (The National Agency for Education)*, 9 June 2020. https://www.skolverket.se/skolutveckling/inspiration-och-stod-i-arbetet/stod-i-arbetet/grannsprak-om-nordiska-sprak.]

	DANISH	NORWEGIAN	SWEDISH
Character Types	æ, ø	æ, ø	ä, ö
Alpha. Order	æ, ø, å	æ, ø, å	å, ä, ö
Ending Vowels	bade, lampen	bade/bada, lampen/ lampa	bada, lampan
Long & Short	have, give	ha/have, gi/gjeve	ha, ge/giva
Final Consonant	væg, top, hat	vegg, topp, hatt	vägg, topp, hatt
Neg. Particle	u-: uvilje	u-: uvilje	o-: ovilja
	b, d, g: gab, rig, fod	p, t, k: gap, rik, fot	p, t, k: gap, rik, fot
	k/kk: tak, takke	kk: takk, takke	ck: tack, tacka
Consonants	hv: hvid, hverken	hv/kv/v: hvit/kvit, verken	v: vit, varken
	v: mave, skov	v/g: mage/mave, skog	g: mage, skog
	vn: havn	vn/mn: havn/hamn	mn: hamn
	nd: kande	nn: kanne	nn: kanna
	ld: fald	ll: fall	ll: fall
	a: sang	a/o: sang/song	å: sång
	å: hånd	a/å: hand/hånd	a: hand
	e: hest	e: hest	ä: häst
	æ: præst	e: prest	ä: präst
	e/æ: mel, mælk	e/jø: mel/mjøl, melk/mjølk	jö: mjöl, mjölk
Vowels	u: kunst, bund	u/o: kunst, bunn/ botn	o: konst, botten
	y: byde, syg	y/ju: by(de), syk/sjuk	ju: bjuda, sjuk
	e: ben, sten	ei/e: ben/bein, stein	e: ben, sten
	ej: vej	ei/eg: vei/veg	äg: väg
	ø: høst	ø/au: høst/haust	ö: höst
	øj: øje	øy/au: øye/auge	ög: öga

Norway

When Norway gained political independence in 1814, its written language was Danish, as it had been for centuries. Occasional details, especially in vocabulary, not infrequently revealed a Norwegian origin, but there were fewer such deviations from the pure Danish as Norwegians' reading and writing skills improved. The spoken language of Norwegian-born people in the eighteenth and nineteenth centuries was still Norwegian, but it was far from uniform. On one side were the rural dialects, which had developed harmoniously from Old Norse and were unaffected by the Danes, but which varied greatly from district to district. On the other side, there was the language of people with bookish education; most had been educated in Denmark, but the Danish phonetic system then, as now, deviated too much from the Norwegian for it to be possible to speak Danish. Instead, this situation can be compared to modern times: when Norwegians read or sing a Danish text, it is pronounced as if it were Norwegian.

There was a national conflict about how to establish a true Norwegian language, headed by dueling philologists: Knud Knudsen and Ivar Andreas Aasen. Knudsen wanted to give the literary language a more Norwegian flavor by adapting the orthography and syntax to Norwegian usage, and by using Norwegian words instead of foreign derivatives whenever possible. Aasen, on the other hand, spent years visiting most of the different dialectical regions of Norway assembling dialects, from which he created Nynorsk–a written language for the entire country based on the Norwegian vernacular.



This map shows the four main groups of Norwegian dialects: Northern Norwegian in , Central Norse in , West Norwegian in , and East Norwegian in . Spoken Norwegian is

characterized by relatively large dialectal differences and strong, vivid dialects. The dialectal differences can be attributed, among other things, to large geographical distances, and that the mountainous landscape limited contact between people in the past.

In the East Norwegian dialects, the unstressed final vowels were weakened to *e* or dropped completely in words with long–and thus more stressed–roots, but remained unchanged in words with short roots. Another distinguishing factor of the East Norwegian dialects is that they have a heavy "l" where words are spelled with *l* or *rd*. The most audible difference is that East Norwegian dialects have a low pitch, while West Norwegian and North Norwegian have a high or descending pitch, which means that a word like *Bergen* has a low pitch in the East, but a high or falling pitch in the West and the North.

These modes of speech can be considered both standard languages and sociolects.[273] The cultivated way of speaking differs from the surrounding dialects mainly in morphology, and does not belong to either the East Norwegian or the West Norwegian dialect. In a linguistic sense, they are not Norwegian dialects, but part of the spoken language that together form modern Norwegian (figure 3.44).[274]

FIGURE 3.44 Monophthongs in Norwegian.
[Source: Lindgren, Birgitta. "Grannspråk: Om Nordiska Språk (Neighboring, DEM, 134.]

	FRONT				MIDDLE		BACK	
	Unrounded		Rounded					
	Long	Short	Long	Short	Long	Short	Long	Short
Closed	iː	ɪ	yː	ʏ	ʉː	ʉ	uː	u
Middle	eː	e	øː	ø			oː	ɔ
Open	æː	æ					äː	ä

Most Norwegian dialects have eighteen monophthongs and six diphthongs. There are variations between the dialects in the realization of the vowels, but the variation in the diphthongs

is greater. The six diphthongs are written as *ei, øy, au, ai, oi, ui*. The first three are conventional, which can be traced back to Old Scandinavian diphthongs, and several Eastern dialects have a monophthong instead of a diphthong (such as *stenrøs* instead of *steinrøys*). The Eastern Norwegian local pronunciation of the diphthongs is [*æ i øy æʉ ai ɔy ʉi*], the Central Norwegian pronunciation of the first three is [*ei øy øʉ*]. The diphthongs have some common features, e.g., all of them are ascending, except the last one, which is different, both by having two high vowels and by only occurring in a few words: (*å*) huie and (*i*) hui (and hast).[275]

One can count three consonant systems in Norwegian dialects (figure 3.45). In southern and western Norway, you have the simplest system. Eastern Norway also has retroflexes, and Nordafjells has both retroflexes and palatalisation.

FIGURE 3.45 Consonants in Norwegian.
[Source: DEM, 135.]

	Bilabial/Labiodental		Dental/Alvelor		Postalveolar	Retroflex	
Plosive	p	b	t	d		t^{2}	d^{2}
Nasal	m		n			$ɳ^{2}$	
Fricative	f		s		ʃ	$ʂ^{2}$	
Liquid			$ɾ^{3}$, l			$ɽ^{4}$, $ɭ^{2}$	
Approximate	ʋ						

	Alveolopalatal	Palatal		Velar		Uvular
Plosive		c^{1}	$ɟ^{1}$	k	g	
Nasal		$ɲ^{1}$		ŋ		

	Alveolopalatal	Palatal		Velar	Uvular
Fricative	$ç^{2}$	ç			$ʁ^{3}$
Liquid		$ʎ^{1}$			
Approximate			j		

Notes: 1. North of *Sognefjorden* and *Mjøsa*
2. These consonants are used in dialects with retroflexes, but are perceived as a fusion of *rt, rd, rn, rs, rsj* and *rl*.
3. [ɾ] and [ʁ], so-called rolled-*r* and Skarre-*r*, are allophonic sounds.
4. Eastern Norway, Trøndelag, Nordmøre, Romsdal and southern Nordland.
**Skarre-r is a pronunciation variant of the phoneme /r/, which is characteristic of dialects in Southern and Western Norway.*

Norwegian vowels can be short or long. Phonologically, Norwegian consonants do not have a difference in length. Although it is possible to measure a small difference in length between consonants, this always depends on the vowel length, and the difference is far smaller than it is for long and short vowels. The difference between weak and stressed syllables depends on length. A stressed syllable in Norwegian is one with a consonant and/or with a long vowel that rhymes with the syllable.[276]

Denmark

Since the eighteenth century, the Danish language community has changed from great variety to one whose linguistic impact is much smaller. There are still differences in pronunciation, depending on the generation, region, and social group; however, regional conditions in particular have been reduced. About fifty thousand people lived within the ramparts of the city of Copenhagen during prehistory; in the conglomerate states' second largest cities, Odense, Altona, and Bergen, there lived less than 10,000. Copenhagen was probably dominated by Copenhagen and Zealand speakers, but the city was characterized by the meeting between many languages and dialects. German was heard everywhere, as was the main language for nearly 20 percent of the inhabitants—Norwegian.

All Danish dialects (figure 3.46) come from one and the same language: Indo-European, which gradually split up when the indigenous people—who are believed to have inhabited the southern Russian steppes down to the Black Sea—emigrated in various directions. Thereby, Indo-European was divided into several different "families," including the Germanic. Determining how many dialects there are in Denmark is impossible, as is drawing sharp boundaries between the dialects. In the strictest sense, the Danish language is spoken differently in each parish, in each family—yes, even by each

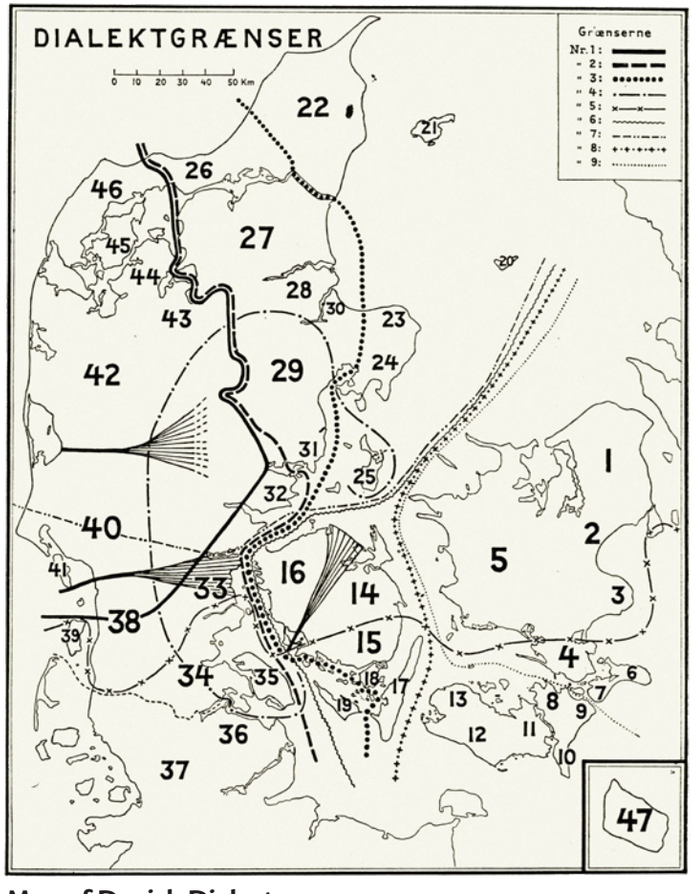


FIGURE 3.46 Map of Danish Dialects.
[Source: "Kort over Danske Dialektgrænser (https://www.dansksproghistorie.dk/76)." *Dansk Sproghistorie (Danish Language History)*. Accessed June 17, 2021. https://www.dansksproghistorie.dk/76.]

individual person—but no one will call all these nuances in the speech dialect differences. It is therefore not the dialects that have fixed boundaries, it is the individual linguistic peculiarity and the individual word that has a certain geographical distribution and a limit for this distribution.[277]

Because there were no fixed spelling rules in Denmark at the beginning of the nineteenth century, pinning down any sort of

pronunciation guidelines—or even descriptions—is next to impossible. The "Central Administration issued guidelines for spelling for the first time in 1739, when the *Latinskoleforordningen* (*Latin School Ordinance*) of 17 April required schools to ensure that pupils were 'accustomed to a good and useful orthography in their own language.'" The *11. maj 1775 angaaende Skoele-Væsenets Forbedring (Ordinance of 11 May 1775 Concerning the Improvement of the School System)* was not much help; and the … "ordinance also demanded that 'the cultivation of the mother tongue should be put to the test,' which did not happen." According to the *Kongelig* resolution af 11. Juli 1800 (Royal Decree of 11 July 1800), the teachers now had to "follow the Orthography used by the best and most classical Prose writers of the Fatherland." Of course, "all these different directives made it difficult for the teachers to know what was correct."[278]

In his 1896 book, *Det Danske Sprogs Historie i Almenfattelig Fremstilling (History of the Danish Language in General Comprehension),* Niels Matthias Petersen provides some useful information about the pronunciation changes in Danish that occurred around the turn of the twentieth century:

> The most important change that has taken place with the spoken language is that the scope of the dialects has been narrowed; even in the beginning of the nineteenth century, Jutland was common as a spoken language in the Jutland market towns … but now the dialects are no longer heard, so to speak, in the Danish market towns or in the whole among 'people outside the peasantry.' Several Letters, which were formerly silent, are now pronounced … In other words, in particular, g and d are always silent, while at least quite often we pronounce them.
>
> *Hyrde* (shepherd) is always pronounced in the national language of today with a clear *d*, but even a back in the nineteenth century it was silent. … In a long series of words, *g* was pronounced before and after a vowel as *j* or *ʊ* (those as the last part of the diphthongs that are not usually spelled, *ø, aʊ* or *au*) and *b* as *ʊ*.
>
> Also the older generation's pronunciation of *ʋiolet, ʋiolet, ʋiolin, ʋridbor* as *ʋiolin, ʋiolet, ʋiolin, fritbor* (drill) is close to being considered vulgar. … The strangest change has taken place with the word *Fiende* (enemy); when instead of *Bierg*, what began to be written was *Bjerg* (mountain) it also meant that many wrote *Fjende* for *Fiende* (enemy) … and this spelling has gradually evoked the brand-new pronunciation form with *j*; but as late as 1823 J. L. Heiberg declared it a gross linguistic error to write Fjende, when one "always" pronounced the word with a clear *i*.[279]

Petersen also includes pronunciation guidelines (figure 3.47) for Danish vowels and consonants as practiced in the 1800s:

FIGURE 3.47 Danish Consonant Sound Signs and Other Distinctive Letters. [Source: Petersen, Niels Matthias. *Det Danske Sprogs Historie i Almenfattelig Fremstilling.* Copenhagen: J. Salmonsen, 1896, 156.]

ð	open d as in Danish glad
ə̇	like e in Danish Hale
l̨	cf. Denmark
n̨	mouilleret n, like Italian gn in ogni
o̥	in Old Norse-Icelandic Words: short å
ʀ	in the Rune inscriptions: one from ordinary r different r—sound
ɯ	as sound-sign: like English w in well
ɣ	open *g* like in Danish *Dag*
χ	like German *ch* in *Macht*
ŋ̊	like ng in Danish bange
	Dot after a letter (sø·ɣ , kom·) denotes long sound (without glottal stop)
	Apostrophe after a letter (bø'y) denotes glottal stop
	Curl under a letter (a̰, æ̰, ø̰) denotes nasal vowel, (a like French en)
	Curl over a letter (ĕ ŏ) is used a couple of times to denote short vowel

Danish has a complex vowel system that distinguishes at least fifteen vowel qualities, most of them having short and long varieties. There is also a contrast between roundedness and unroundedness. The central vowels occur only in unstressed syllables. Figure 3.48 shows the many other miscellaneous signs and characters in Danish.

FIGURE 3.48 Vowel Sound Signs and Other Distinctive Letters.
[Source: Gutman, Alejandro, and Beatriz Avanzati. 2013 "Danish." *The Language Gulper.* http://languagesgulper.com/eng/Danish.html.]

	Front		Central	Back	
	UNROUNDED	ROUNDED	UNROUNDED	UNROUNDED	ROUNDED
High	i iː	y yː			u uː
High-mid	e eː	ø øː	ə		o oː
Low-mid	ɛː	œ œː	ɐ	ʌ	ɔ ɔː
Low	a			ɑ ɑː	ɒ ɒː

There are at least nineteen diphthongs whose first element is a short vowel and another nineteen whose first element is a long vowel. Danish phonology (figure 3.49) is characterized by the lack of contrast between voiceless and voiced consonants, except between [*f*] and [ʋ]. In the stops, the contrast is between unaspirated and aspirated, even if in writing it seems otherwise as [*ph*], [*th*], [kh] are written *p, t, k*, and [*p*], [*t*], [*k*] are written *b, d, g* [ð] is a "soft" *d* related in some way to English *th* but while the latter is a dental fricative the Danish sound is, in fact, a semivowel similar to [*l*]. [ʁ] is an *r*-like sound pronounced at the back of the throat.

Figure 3.49 Consonant Sound Signs and Other Distinctive Letters.
[Source: Gutman, Alejandro, and Beatriz Avanzati. 2013 "Danish." *The Language Gulper.* http://languagesgulper.com/eng/Danish.html.]

		LABIAL	ALVEOLAR	PALATAL	VELAR	UVULAR/GLOTTAL
	ASPIRATED	pʰ	tʰ		kʰ	
Stop	UNASPIRATED	p	t		k	
	VOICELESS	f	s	ʃ		h
Fricative	VOICED	v				

Figure 3.49 Consonant Sound Signs and Other Distinctive Letters.
[Source: Gutman, Alejandro, and Beatriz Avanzati. 2013 "Danish." *The Language Gulper.* http://languagesgulper.com/eng/Danish.html.]

	LABIAL	ALVEOLAR	PALATAL	VELAR	UVULAR/GLOTTAL
Nasal	m	n		ŋ	
Liquid	ð l				
Glide	w		j		ʁ

The characteristic squeak in the articulation of the glottal stop in modern Danish occurs when the vocal folds form an incomplete closure and oscillate periodically. Thereby, the glottal stop today differs from the glottal stop from approximately 150 years ago, when in all probability there was a complete closure of the vocal lips.[280] It only affects long vowels or a sonorant (nasal, glide, liquid) after a short vowel, and can only occur in stressed syllables.

Sweden

Swedish belongs to the northern branch of the Germanic family, within which it is an eastern development of the old donsk tunga, or Danish tongue, a name anciently applied to the language spoken not only in Denmark, but in the rest of Scandinavia as well. It was much the same in the entire Northland down to about 900CE, or a little later, when it began to differentiate into an eastern type, ramifying into Danish and Swedish, and a western type, giving rise to Norwegian and Icelandic. The use of the Latin alphabet began in the thirteenth century; in the fourteenth century, when a literary language began to develop out of the Södermanland dialect, the differentiation from Danish proceeded slowly; after this came a period of extensive approximation to Danish, to be followed in time by an archaizing period, which restored original forms. Aside from divergences of vocabulary, Swedish now differs from Danish especially in its retention, after a vowel, of the old voiceless consonants, *k, t, p,* which in Danish changed to *g, d, b* as well as its retention of the vowels a and o in unstressed

syllables, where Danish has e or no vowel at all. Furthermore, Swedish has not the glottal stop of Danish, and Danish has not the delicately modulated musical accent of Swedish.

In the printing of Swedish, Roman letters have long since been in use. The written language of today represents the pronunciation of about 1700; and, as phonetic change has been at work during the interval, it is the case, just as in English, that the written form is often a bad representation of colloquial pronunciation. Swedish print is filled with silent letters; thus, *jag skall vara i stan*, (I shall be in the city), is pronounced *ja ska vara i stān*; and *vad är det* (what is it?) becomes *va ä de*. Swedish has a peculiar accent, which involves both stress and variations of musical pitch; every word has either the simple or the compound tone. Not only the correct pronunciation, but the meaning of a word often depends on the exact modulation of its musical accent.[281]

Henry Sweett gives a fantastically detailed explanation of Swedish pronunciation as it existed in the nineteenth century. Published in 1879 as part of the *Transactions of the Philological Society*, "Sounds and Forms of Spoken Swedish" runs 103 pages. Extracts are enlightening and give a firsthand account by a trained philologist of how Swedes spoke in the mid-1800s. Sweet begins: "In Swedish, as in all civilized languages, we must distinguish between the written or literary and the spoken or colloquial language. The divergence between the two is due to the retention of forms in writing after they have either been lost or else changed in speech … The divergence between the written and spoken language is of different kinds, the most important of which are 1) phonetic, 2) formal (chiefly inflectional), and 3) lexical."[282]

In describing vowels and consonants, Sweett uses his own Broad Romie Notation, since the International Phonetic Alphabet was not invented until 1888. He describes the "elementary vowel-sounds in the following order: *a; o; i, e, m*, (*ae*); *u, o, ɔ*, (*ao*); *y, ɑ, re*, (*oe*)."[283] Sweett then addresses the vowels one by one in prose form (figure 3.50):

FIGURE 3.50 Sound Descriptions as Reported by Henry Sweett.
[Source: SWT, 461–467.

a	(a: mid-back-wide): man (man) 'man,' fast (fast) 'firm,' hatt (hat) 'hat.' This is the usual English vowel in 'father' (faadhɔ), only short. The unaccented vowel, as in elska (ælska) 'love,' seems generally to have a thinner sound, like the forward Danish (a) … The Norwegian (a) is distinctly low,= (a), like the Sw. (aa).
aa	(eh: mid-mixed-narrow): bättre ('bætrə) 'better,' saker ('saaker) 'affairs.' The regular unaccented vowel in all the Teutonic languages except Icelandic and English.
ə	O, as an article, and at the end of words has the sound of u: o livro [the book], corpo [body], preto [black] (u livro, u corpo, u preto). In the middle of some words, o also sounds like u: concorrer [compete], consolidar [consult], coordenar [coordinate], introduzir [introduce], etc.
i	(i: high-front-narrow): ilia ('illa) 'ill,' fisk (fisk) 'fish' dricka ('drikka) 'drink,' mitt (mit) 'mine' neuter. This sound is unquestionably narrow in the Söderml pronunciation, which seems also to be the general Upper Swedish one. But the wide (i) certainly occurs in educated speech, and many of the dialects have both (i) and (i) in different words, according to the nature of the following consonant, as in Danish, which almost always has (i) before nasals, and in other cases as well.
ii	(ii): vi (vii) 'we,' is (iis) 'ice,' rita (riita)) 'draw.' This vowel is often formed with such strong compreuion as to amount really to a buzzed consonant, which is especially notice able between stops, as in tid (tiid) 'time.' It sometimes ends in a breath-glide, as in i (iiʜ) 'in,' the glottis being opened at the moment of relaxing the position; but this is only occasional, not constant as in Icelandic.
e	(e: mid-front-narrow): begär (bej·aer) 'desire,' eld (eld) 'fire,' hvem (vem) 'who,' akepp (skepp) 'ship.' This sound has the strict mid position, and is never raised toward (i), as in French, and still more in Danish. In the Stockholm pronunciation there is a tendency to eliminate (e) altogether, (i) or (æ) being substituted for it, so that (shep) becomes (ship) or (shæp), and (eld) becomes (ild) or (il).

FIGURE 3.50 Sound Descriptions as Reported by Henry Sweett.

ee (ee): tre (tree) 'three,' mer (meer) 'more,' sten (steen) 'stone.' In the Stockholm and Upland pronunciation (ee) approximates rather to (æ), probably by partial widening.

æ (ai: low-front-narrow): värre ('værrə) 'worse,' färsk (fæsk), fresh', (shælv) 'self,' best (bæst) 'best.' Before (r) this vowel is specially low and broad, and before the inverted consonants, as in (fæsk), it seems to be formed with a simultaneous partial anticipation of the position of the following inverted, the point of the tongue being turned upward and backward toward the (ɻr) position. This effect is still more noticeable in the long (æ).

æe (ææ): här (haer) 'here,' jern (jaen) 'iron,' värd, verld (væd) 'worth,' 'world.' (ææ) occurs only before (r) and the inverteds.

æe (ee: mid-front-wide): väl (vael) 'well,' gräs (graes) 'grass,' tje na ('caena) 'serve.' In the Stockholm and Upland pronunciation this sound is completely leveled under (ee), but the distinction is strictly preserved in Soderml. and in South Swedish generally.

u partially rounded high-back-narrow): ung (ung) 'young,' kung (kung) 'king,' full (ful) 'full,' hustru ('hustru) 'wife,' bubbla ('bubla) 'bubble.' … That the position is really the high-back seems to be proved by the fact that the Swedes have no great difficulty in acquiring the normal [u], which differs from their (u) only in being formed with narrower lips. The Norwegians, on the other hand, whose (u) is the high-mixed [uh], differing from their (uu) only in quantity, and not a back vowel, have no idea of the high-back position, and consequently have great difficulty in imitating the general European [u], substituting their own close [o^{1}] for it. To an English ear (u_{1}) sounds intermediate to the (u) of 'full' and the (ɐ) of 'but.'

uu (uuh: high-mixed-narrow-round): nu (nuu) 'now,' ful (fuul) 'ugly,' hus (huus) 'house,' ut (uut) 'out,' uthus ('uuthuus) 'outhouse.' Often buzzed, and finally=(uuʜ). The Swedish (uu) is not far removed from the ordinary (yy), as in French 'lune.' The Norwegian (uu) sounds much more more like the back [uu], and is probably really intermediate to it and (yy) in position, the Swedish sound being the advanced [uuh].

FIGURE 3.50 Sound Descriptions as Reported by Henry Sweett.

o (o^{1}: mid-back-narrow with high rounding): orm (orm) 'serpent,' blomma ('blomma) 'flower,' oxe ('oksə) 'ox,' kort (kot) 'card.' The Swedish (o) seems to be identical with the Danish and Norse one. It is possible that the tongue may be sometimes raised toward the high position, but this is not essential, the characteristic feature of the sound being its combination of the normal mid-position with high instead of mid-rounding–that is, with the rounding of the normal European [u], which latter it resembles more than it does the normal (o) of German and Italian.

oo (oo^{1}): bro (broo) 'bridge,' stol (stool) 'chair,' bok (book) 'book,' korn (koon) 'barley.' Sometimes buzzed, and sometimes finally (ooʜ).

ɔ (ɔ^{1} : low-back-wide with mid rounding): torr (tɔr) 'dry,' oss (ɔs) 'us,' sommar ('sɔmmar) 'summer,' kort (kɔt) 'short',' topp (tɔp) 'top.' This vowel seems to be opener than the North-German in 'volk,' which is certainly the normal midback-wide-round. It is, on the other hand, open in aound than the normal [ɔ] with low rounding, as in the English 'top,' when pronounced distinctly.

ao (ɔɔ^{1} : low-back-narrow with mid rounding): gå (gao) 'go,' hål (haol) 'hole,' blåst (blaost) 'blast,' gråta ('graota) 'weep,' gård (gaod) 'court.' This vowel clearly lies in sound between the normal English [ɔɔ] in 'haul,' and the normal (oo), as in German 'hohl,' which latter the Swedes imitate with their abnormal (haol). The Norse sound is identical with the Swedish, but the Danish one is … opener, and therefore nearer the English (ao).

y (y: high-front-narrow-round): styrka ('styrka) 'strength,' ly fta ('lyfta) 'lift,' grym (grym) 'cruel,' flydde ('flyddə) 'fled,' pret. What has been said about the narrowness of (i) ap plies also to (y). When the Swedish (y) is compared with the French u, it is heard to approximate to (i), which to be the result of under-rounding.

yy (yy): sky (shyy) 'sky' frysa ('fryyaa), freeze, (blygg) 'shy,' drypa ('dryppa) 'drip.' Often buzzed, (yy) final becoming (yyʜ). The approximation of (yy) to (ii) and of [uuh] to (yy) is an interesting example of that 'verschiebung,' which is so common in vowel-series. At present [uuh] and (yy) are kept apart almost as much by the different degrees of their rounding as by the difference in position.

FIGURE 3.50 Sound Descriptions as Reported by Henry Sweett.

ə (ə: mid-front-wide-round): föll (fəl) 'fell,' möss (məs) 'mice,' önska ('ənska) 'wish,' högst (həkst) 'highest.' The wideness of this sound is doubtful, and it may be really half narrow.

əə (əə: mid-front-narrow-round): sjö (shəə) 'sea,' öl (əəl) 'beer,' döv (dəəv) 'deaf,' söka ('səəka) 'seek,' nöt (nəət) 'nut.' Narrowness often doubtful.

aœ (œ: low-front-narrow-round): dörr (dœr) 'door,' törst (tœst) 'thirst,' dörren (dœn) 'the door,' störta ('stœta) 'fall.' Only before (r) and inverteds. All that has been said of (æ) under the same circumstances applies also here.

oe (oe): öra ('oera) 'ear,' björn (bjoern) 'bear,' shörd (shoed) 'harvest.'

DIPTHONGS

The diphthongs are (*æi*), (*ɔi*), and (*əi*) in native, together with (*ai*), (*au*) and (*eeu*) in foreign words. All have the stress on the first element. The glide from the first to the second element is long in those diphthongs that have the first element short. As regards the second elements, the (*i*) is very close, being often buzzed, sometimes even ending in (*ʁ*), so as to be really a consonant, and there is never any stopping at a lower position, as in English and German.

In addition to this lengthy chart, a phonetic table using modern IPA characters might help make better sense of Sweet's elemental observations; moreover, for the sake of brevity, rather than reproduce Sweet's equally long descriptions of Swedish consonants, we will instead use the consonant table that matches the IPA vowel chart (figure 3.51).

FIGURE 3.51 An Overview of the Most Common Swedish Vowels.

[Source: Riad, Tomas. *Svenskt fonologikompendium (Swedish Phonology Compendium). Sweden: Inst. för nordisk spr*åk, 1997, 8.]

	LONG	SHORT		
/**i**/	[iː]	[ɪ]	<i>	bit, spill
/**y**/	[yː]	[ʏ]	<y>	byt, bytt
/**e**/	[eː]	[ɛ]	<e>	bet, bett
/**ø**/	[øː] [œː]	[ø] [œ]	<ö>	kö, kött dör, dörr
/**ɛ**/	[ɛː] [æː]	[ɛ] [æ]	<ä>, <e>	säl, säll, fem kär, kärr

FIGURE 3.51 An Overview of the Most Common Swedish Vowels.

/**ɑ**/	[ɑː]	[a]	<a>	bar, barr
/**o**/	[oː]	[ɔ]	<å>, <o>	bår, borr
	LONG	**SHORT**		
/**u**/	[uː]	[ʊ]	<o>	rot, rott
/**ʉ**/	[ʉː], [ʉ]	[ø]	<u>	bur, känguru, burr

Because of the similarities between Swedish pronunciation during the last two hundred years, we will also include Tomas Riad's chart for Swedish consonants (figure 3.52):

FIGURE 3.52 An Overview of the Most Common Swedish Consonants.

Phoneme	Allophones	Orthography	Examples
/**p**/	[p], [pʰ]	<p>	spar, spar
/**t**/	[t], [tʰ], [ʈ]	<t>	stor, Tor, först
/**k**/	[k], [kʰ]	<k>, <c>	skur, kur, clown
/**b**/	[b]	<b>	bur
/**d**/	[d], [ɖ]	<d>	dag, torsdag
/**g**/	[g], [j]	<g>	gå, gåss
/**f**/	[f]	<f>	fröken
/**v**/	[v]	<v>	vålnad
/**s**/	[s], [ʂ]	<s>, <c>, <rs>	stol, cykel, barstol
/**ʃj**/	[ɧ]	<sj>, <sk>, <stj>, <skj>, <ch>, <g>	sjuk, skina, stjärna, skjul, chef, geni
/**ç**/	[ɕ]	<k>, <tj> <kj>	kisa, tjärn kjol
/**j**/	[j], [ʝ]	<j>, <g>, <dj>, <gj> <hj>	jippo, gissa djur, gjuta hjärna
/**h**/	[h]	<h>	hoppsan
/**m**/	[m], [ɱ]	<m>	mata, nymf
/**n**/	[n], [ɳ], [ɱ], [ɳ]	<n>	nosa, ang, anfall, körsnär
/**ŋ**/	[ŋ]	<ng>, <g>	sång, ugn

FIGURE 3.52 An Overview of the Most Common Swedish Consonants.

/***r***/	[r], [z̠]	<r>	rapa
/***l***/	[l], [ɽ]	<l>	lat, försl

Pronunciation is something most of us more or less take for granted. It just is. But, reflecting on how we speak our words raises an important question: What happens when the way we move our jaw, lips, and tongue renders what we want to say difficult for a listener to understand?

I myself had such an experience shortly after I finished school. I'd taken Italian as my language and had managed to pass the exam, so I anticipated only a little difficulty when I made my first attempt to use my new language skills abroad. The first city on my Italian itinerary was Venice, which, unknown to me, has its own version of Italian in a dialect sometimes called *Dialeto del mar (Dialect of the Sea)*, or more commonly Venetian, and has been used for centuries. Once I arrived, my first stop was a trattoría to have some of Venice's famous seafood for my lunch; the waiter greeted me and showed me to a table.

Looking at the menu, I was able to read most of the items; however, when a second waiter began to speak I was stupefied. Even though I was manifestly sitting in an Italian restaurant in an Italian city on mainland Italy, his words were incomprehensible. I didn't know, of course, that in Venice natives speak Venetian as a default; in the home, speaking proper Italian is considered uppity. The bifurcation was plain: look at a printed word, listen to a person speak what sounds like a different word, try to make sense of it all. Once I arrived in Florence, the birthplace of Dante and modern Italian, I was to able to exhale; I instantly understood what was said to me.

In the grand scheme of choral rehearsal and performance, the distinction between one of the dialects of Finnish and the "standard" language might seem overly fussy; it's up to the conductor to determine if the effort is worth the result. But, just because

a musical expressive device might be difficult to attain doesn't mean we oughtn't to know that it exists. Everything in this chapter—indeed, in the entire book—is meant to provide choices to choral professionals who believe it is important to at least investigate how choral music in the romantic age might've sounded. Not maxims or shoulds; rather, I only want to invite readers to acquaint themselves with the performance history of choral music in the romantic age.

We routinely perform Tallis, Bach, and Beethoven on period instruments and, usually, without continuous vibrato. Applying these same principles to romantic music is likely to take a while longer to work their way into the consciousness of choral conductors, educators, researchers, and composers. Nevertheless, I will consider my goal to have been met if I simply provide the information for choral professionals—who want to push past the boundaries of how we currently perform romantic choral music—so you all can just open this book and read it.

VIII. APPENDIXES A-D.

Appendix A The International Phonetic Alphabet (Revised To 2020).

CONSONANTS (PULMONIC) ©0© 2020 IPA

	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b			t d		ʈ ɖ	c ɟ	k g	q ɢ		ʔ
Nasal	m	ɱ		n		ɳ	ɲ	ŋ	ɴ		
Trill	ʙ			r					ʀ		
Tap or Flap		ⱱ		ɾ		ɽ					
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
Lateral fricative				ɬ ɮ							
Approximant		ʋ		ɹ		ɻ	j	ɰ			
Lateral approximant				l		ɭ	ʎ	ʟ			

Symbols to the right in a cell are voiced, to the left are voiceless. Shaded areas denote articulations judged impossible.

CONSONANTS (NON-PULMONIC)

Clicks	Voiced implosives	Ejectives
ʘ Bilabial	ɓ Bilabial	’ Examples:
| Dental	ɗ Dental/alveolar	pʼ Bilabial
! (Post)alveolar	ʄ Palatal	tʼ Dental/alveolar
ǂ Palatoalveolar	ɠ Velar	kʼ Velar
‖ Alveolar lateral	ʛ Uvular	sʼ Alveolar fricative

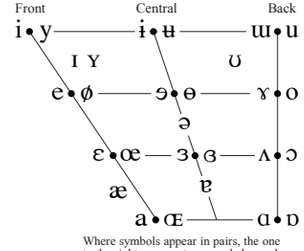
OTHER SYMBOLS

ʍ Voiceless labial-velar fricative
ɕ ʑ Alveolo-palatal fricatives
w Voiced labial-velar approximant
ɺ Voiced alveolar lateral flap
ɥ Voiced labial-palatal approximant
ʄ Simultaneous ʃ and x
ʜ Voiceless epiglottal fricative
ʡ Voiced epiglottal fricative
ʢ Epiglottal plosive

Affricates and double articulations can be represented by two symbols joined by a tie bar if necessary.

t͡s k͡p

VOWELS



Where symbols appear in pairs, the one to the right represents a rounded vowel.

SUPRASEGMENTALS

ˈ Primary stress ˌfoʊnəˈtɪʃən
ˌ Secondary stress
ː Long eː
ˑ Half-long eˑ
˘ Extra-short ĕ
| Minor (foot) group
‖ Major (intonation) group
. Syllable break ɹi.ækt
‿ Linking (absence of a break)

TONES AND WORD ACCENTS

LEVEL		CONTOUR	
e̋ or ˥	Extra high	ě or ˩˥	Rising
é ˦	High	ê ˥˩	Falling
ē ˧	Mid	e᷄ ˧˥	High rising
è ˨	Low	e᷅ ˩˧	Low rising
ȅ ˩	Extra low	e᷈ ˥˩˥	Rising-falling
↓	Downstep	↗	Global rise
↑	Upstep	↘	Global fall

DIACRITICS

◌̥	Voiceless	n̥ d̥	◌̤ Breathy voiced	b̤ a̤	◌̪ Dental	t̪ d̪
◌̬	Voiced	s̬ t̬	◌̰ Creaky voiced	b̰ a̰	◌̺ Apical	t̺ d̺
◌ʰ	Aspirated	tʰ dʰ	◌̼ Linguolabial	t̼ d̼	◌̻ Laminal	t̻ d̻
◌̹	More rounded	ɔ̹	◌ʷ Labialized	tʷ dʷ	◌̃ Nasalized	ẽ
◌̜	Less rounded	ɔ̜	◌ʲ Palatalized	tʲ dʲ	◌ⁿ Nasal release	dⁿ
◌̟	Advanced	u̟	◌ˠ Velarized	tˠ dˠ	◌ˡ Lateral release	dˡ
◌̠	Retracted	e̠	◌ˤ Pharyngealized	tˤ dˤ	◌̚ No audible release	d̚
◌̈	Centralized	ë	◌̴ Velarized or pharyngealized	ɫ		
◌̽	Mid-centralized	e̽	◌̝ Raised	e̝ (ɪ̝ = voiced alveolar fricative)		
◌̩	Syllabic	n̩	◌̞ Lowered	e̞ (β̞ = voiced bilabial approximant)		
◌̯	Non-syllabic	e̯	◌̘ Advanced Tongue Root	e̘		
◌˞	Rhoticity	ə˞ a˞	◌̙ Retracted Tongue Root	e̙		

Some diacritics may be placed above a symbol with a descender, e.g. ŋ̊

Appendix B Latin Regional Pronunciation.

[Source: “Latin regional pronunciation,” http://www.shorturl.at/ghrI 7 (accessed May 20, 2021).]

Sign	Example	Classical	Italian	Spanish	Portuguese	Slavic	Danish
a	canis	/a/	/a/	/a/	/a/	/a/	/æ(ː)/ (/a(ː)/)
ā	cāsus	/aː/	/a/	/a/	/a/	/a/	
ae (æ)	saepe, bonae	/aɪ, ae/, and /ɛː/	/ɛ/	/e/	/ɛ/	/ɛ/	/e/
c	benedīci-mus	/k/	/t͡s/	/θ/ or /s/	/s/	/t͡s/	/s/
ch	pulcher	/kʰ/	/k/	/k/	/k/	/x/	/s/
e	venī	/ɛ/	/ɛ/	/e/	/ɛ/	/ɛ/	/ɛ/
ē	vēnī	/eː/	/e/	/e/	/e/	/ɛ/	/eː/
g	agimus	/g/	/dʒ/	/x/	/ʒ/	/g/	/g/
gn	magnum	/ŋn/ or /gn/	/ɲɲ/	/ɣn/	/ɲ/ or /gn/	/gn/	/ŋn/
h	hominibus	/h, -/	/-/	/-/	/-/	/x/ or /ɦ/ or /ɣ/	/h/
i	fīdes	/ɪ/	/i/	/i/	/i/	/i/	/i/
ī	fīlius	/iː/	/i/	/i/	/i/	/i/	/i/
j	Jesus	/j/	/j/	/j/	/ʒ/	/j/	/j/
o	solum	/ɔ/	/ɔ/	/o/	/o/	/ɔ/ or /o/ or /oʷ/	/ɔ/
ō	sōlus	/oː/	/o/	/o/	/o/		/oː/
oe (œ)	poena	/ɔɪ, oe/, later /eː/	/e/	/e/	/e/	/ɛ/ or /oʲ/	/øː/
qu	quis	/kʷ/	/kw/	/kw/ or /k/	/kw/	/kv/	/kʰv/
s	rosa	/s/	/s/ or /z/	/s/	/z/	/z/	/s/
sc	ascendit	/sk/	/ʃː/	/sθ/ or /s/	/s/ or /ʃ/	/sts/	/s/
ti	nātiō	/tɪ/	/tsj/	/θj/ or /sj/	/sj/	/tsi/ or /tsɨ/ or /ti/	/ʃ/
u	ut, sumus	/ʊ/	/u/	/u/	/u/	/u/	/u(ː)/ (/o/)
ū	lūna	/uː/	/u/	/u/	/u/	/u/	/u(ː)/ (/o/)
um	curriculum	/ʊ̃/	/um/	/um/	/ũ/	/um/ or /ʊm/	/om/
v	veritās	/w/, later /v/	/v/	/b/ or /β/	/v/	/v/	/ʊ/
xc	excelsis	/ksk/	/kʃ/	/sθ/ or /s/	/ks/, /s/ or /ʃ/	/ksts/	/ks/
z	zodiacus	/dz/	/dz/	/θ/ or /s/	/z/	/z/	/s/

Appendix C Vowels in the Different Dialectical Regions of Italy in the Nineteenth Century.

Phoneme	Ligurian	Piedmontese	Lombard	Emiliano	Romagnolo	Galloitalico of Sicily	Veneto	Sassarese	Gallurese	Corso	Neapolitan Language	Sicilian
[a]–a short	à	à	à	à	à	à	à	à	à	à	à	à / â / (á)
[aː]–a long	â		aa	â	ā							
[æ]–a anterior				ä								
[ɒ]–a posterior				å							(a)	
[ɐ]–almost open central vowel							â					
[ə]–central vowels		ë		ă							e / o	(ă)
[ɛ]–short open	è	è	è		è	è	è	è	è	è	è	è / ê / (ë)
[ɛː]–long open	æ			è / ê	ë							
[ɛə]–open central												
[e]–unstressed		e (open if syllable ends with a consonant)										
[e]–closed short	é	é	é	é	(e.)	é	é	é	é	é	é	
[eː]–closed long	ê		ee	ê	ê							
[ej]–closed and i												
[eə]–central lock					ê							
[ɔ]–open short	ò	ò	o	(ò)	ò		ò	ò	ò	ò	ò	ò / ô
[ɔː]–long open	(ö)			ò / ô	ö							
[ɔə]–open central												
[œ]–open round					œ							
[o] -unstressed												

Appendix C Vowels in the Different Dialectical Regions of Italy in the Nineteenth Century.

Phoneme	Ligurian	Piedmontese	Lombard	Emiliano	Romagnolo	Galloitalico of Sicily	Veneto	Sassarese	Gallurese	Corso	Neapolitan Language	Sicilian
[ø]–rounded, closed	eu	eu	ö	ø								
[øː]–closed, round, long	êu											
[ɪ]–i open						ë						(ë)
[ʊ]–u open						ö						(ö)
[i]–i short	í	í	í	í	í	í	í	í	í	í	í	ì / î
[iː]–i long	î		ii	î	ī							
[u]–u short	ó	ó	ú	ú	ù	ú	ú	ú	ú	ú	ú	ù / û
[uː]–u long	ô		uu	û	ū							
[y]–i rounded	ú	ú	ü	ü								
[y]–i rounded, long	û		üü									

Appendix D Consonants in the Different Dialectical Regions of Italy in the Nineteenth Century.

Phoneme	Ligurian	Piedmontese	Lombard	Emiliano	Romagnolo	Galloitalico of Sicily	Veneto	Sassarese	Gallurese	Corso	Neapolitan Language	Sicilian
[s]–s silent	ç / s	s	s			s	s	s	s	s	s	s
[ʂ]–s silent, retroflex				s	s							ʂ
[ɕ]–s slient, alveolo-palatal											ç	
[ʃ]–s silent, palatoalveolare	sc (+i/e)		sc (+i/e)			sc (+i/e)	š		sc (+i/e)		(š)	x / š
[z]–s retroflex, sounded	z / s	z	ʃ			ṡ	x (ṡ) / z	ṡ	ṡ		ṡ / s(d)	ṡ
[ʐ]–s sounded				ṡ	ṡ							ṛ

Appendix D Consonants in the Different Dialectical Regions of Italy in the Nineteenth Century.

Phoneme	Ligurian	Piedmontese	Lombard	Emiliano	Romagnolo	Galloitalico of Sicily	Veneto	Sassarese	Gallurese	Corso	Neapolitan Language	Sicilian
[θ]–s silent, dental					z		ç (ż) / th					
[ts]–s silent		ts	z			zz	ç (z) / ts	(z)			ż	z
[ð]–s dental, sounded					ż		ż / dh					
[dz]–z sounded		ds				ż	ż / dz	z			ż / (n)s	ż
[th]–t aspirate								th				
[s:]–s long, silent				ʿss								
[stʃ]–diphthong [s] and [tʃ]			s'c	s'c	s-c		s-c					
[zdʒ]–diphthong [z] and [dʒ]			ʃ'g									
[ɽ]–r retroflex												ɽ
[r] [ɾ]–r												r
[ʎ]–lateral, palatal				gli	gli						gli	
[gl]–diphthong [g] and [l]					g-l							
[ɲ]–nasal, palatal	gn	gn	gn	gn	gn	gn	gn	gn	gn	gn	gn	
[n]–n front to [s]	n	nn		n		n	n'					
[ŋ]–n front to [g]	nn	n-		ṅ		ngh	n					
[bv]–diphthong [b] and [v]				ỿ								
[tʃ]–c palatal				c'								ç
[dʒ]–g palatal				g'								
[k] at end of word		ch		ch			ch					k

Appendix D Consonants in the Different Dialectical Regions of Italy in the Nineteenth Century.

Phoneme	Ligurian	Piedmontese	Lombard	Emiliano	Romagnolo	Galloitalico of Sicily	Veneto	Sassarese	Gallurese	Corso	Neapolitan Language	Sicilian
[d͡ʒ]–z retroflex, sounded												ḍ
[dˌ]–daa												d
[ɖ]–d retroflex												ḍ
[ɖɖ]–d retroflex, geminata						dd		dd	dd			dd
[ʈr]–tr retroflex												ṭr
[ʂɽ]–r retroflex												stṛ / ṣ-ṛ
[ɬ:t]–l fricative, silent + t								-lth- / -sth- / -rth-				
[ɬ:k]–fricative, silent + ch								lch- / -sch- /-rch-				
[c]–ch palatal									chj		chj	chj
[ɟ]–gh palatal									ghj		ghj	ghj
[ç][x][h]–ch fricative												h
[ɣ]–cgh fricative											gh-	
[eˌ]–e consonant							ł					
[ʊˌ]–u consonant, open							o					
[j]–i consonant	i	j	j	j	j	j	j	j	j	j	j	j
[w]–u consonant	u	v (end of word)	(u)	(u)	(u)	(u)	(u)	(u)	(u)	(u)	(u)	(u)
[ɥ]–i consonant, rounded	u	(u)	(ü)									

[Source: "Lingue dell'Italia", http://www.shorturl.at/zFGH6 (Accessed 10 January 2021).]

NOTES

162 MACL, 99.

163 Jerome, Jerome K. "Quotes About Pronunciation." Goodreads. Accessed 3 March 2021. https://www.goodreads.com/quotes/tag/pronunciation.

164 Lowe, Cheryl. "A Short History of Latin Pronunciation." Memoria Press, February 2, 2013. https://www.memoriapress.com/articles/short-history-latin-pronunciation/.

165 Collins, Andrew. "The English Pronunciation of Latin: Its Rise and Fall." *The Cambridge Classical Journal 58* (2012): 50-51. Accessed May 20, 2021. http://www.jstor.org/stable/26430979.

166 Copeman, Harold. *Singing in Latin: or Pronunciation Explor'd*. Oxford: Selbstverl, 1996, 211.

167 Silva, Sri. *Latin Pronunciation for Singers: A Comprehensive Guide to the Classical, Italian, German, English, French, and Franco-Flemish Pronunciations of Latin*. Sri S. Silva, 2020, 19.

168 Silva, 20.

169 Story, W. W. "The Pronunciation of the Latin Language." *North American Review* 128, no. 266 (January 1879): 59-73.

170 Angelini, Andrea. "Italianate Latin for Choirs." *Andrea Angelini: Choral Conductor, Composer, Music Journalist*, July 10, 2014. https://www.andrea-angelini.eu/italian-latin-for-choirs/.

171 A combination of two letters representing one sound, as in *ph* and *ey*.

172 A grapheme is a written symbol that represents a sound (phoneme). This can be a single letter, or could be a sequence of letters, such as *ai*, *sh*, *igh*, *tch*, etc.

173 Final-obstruent devoicing or terminal devoicing is a systematic phonological process occurring in languages such as Catalan, German, Dutch, Breton, Russian, Polish and Turkish. In such languages an obstruent is a fricative or plosive speech sound such as [k], [d], or [f] that is formed by obstructing airflow.

174 Keep in mind that Kyrie is Greek, not Latin; that being said, most singers and conductors pronounce Greek texts as if they were Latin.

175 De'ath, Leslie. "The Latin Problem: How Much Does a Singer Really Need to Know?" *Journal of Singing 72*, no. 5 (May-June 2016): 589-604.

176 Third from the end.

177 A word that builds on the preceding word and integrates it phonetically (example *ce* in *est-ce*)

178 In certain inflected languages, such as Latin, noting or pertaining to a case used to indicate that a noun refers to a person or thing being addressed.

179 Prosody: a foot of three syllables, one long followed by two short in quantitative meter, or one stressed followed by two unstressed in accentual meter, as in gently and humanly.

180 Lacombe, L' Abbé Ayrald de. *Traité De La Prononciation Latine*. Lyon: Périsse frères, 1851, 11-14. "La première règle générale, pour bien prononcer le latin, consiste à faire sentir toutes les lettres, tant consonnes que voyelles.

"Ainsi, 1° dans le cas de redoublement de consonne, on donne à chacune le son qu'elle aurait, si elle était prononcée séparément. 2° Si une lettre termine un mot et en commence un autre, on met un moment de repos presque imperceptible entre les deux mots, afin que la lettre puisse fournir le son qui lui est propre.

"La seconde règle générale a pour objet de donner aux syllabes le son grave ou aigu, pur ou nasal. Le son devient grâve par l'avancement et l'arrondissement des lèvres; au contraire, il devient aigu par leur contraction. Le son est pur quand il sort en grande partie par la bouche; il devient nasal, quand il sort en petite partie par la bouche, et en grande partie par le nez.

"La troisième règle générale se fonde sur l'accent (cantus), qui n'est autre chose qu'une inflexion de voix sur certaines syllabes. On fait cette inflexion de voix, en élevant ou en abaissant la voix: dans le premier cas, c'est l'accent aigu; dans le second, c'est l'accent grâve.

"On la fait aussi en élevant et en abaissant la voix successivement: c'est l'accent circonflexe. Aujourd'hui, l'accent aigu seul est marqué, et encore ne l'est-il que dans la liturgie.

"Il était parfaitement inutile de marquer l'accent grâve, attendu que l'inflexion grâve soit fait naturellement sur la syllabe que précède celle qui admet l'accent aigu. Quant à l'accent circonflexe, il est suffisamment remplacé par l'accent aigu, puisque, dans telle position donnée, on remarque aussitôt que la voix, après s'être élevée, baisse nécessairement sur la même syllabe.

"Si donc on se livre à la lecture du latin, et que l'accent n'occupe point la place qui lui est dévolue on doit suppléer avec soin à cette lacune, d'après ce que nous allons énoncer.

"1° Si les mots sont dissyllabes, l'accent doit toujours porter sur la pénultième. 2° S'ils sont polysyllabes, et que la pénultième soit longue de sa nature, elle porte l'accent; mais si la pénultième est brève ou douteuse, c'est l'antépénultième qui reçoit l'accent, quelle que soit sa quantité.

"NOTA 1° Toute pénultième longue de sa nature prend l'accent circonflexe, et par conséquent est prolongée de deux temps.

"Néanmoins l'accent aigu seul, qui a pour objet de donner à la syllabe qui le reçoit une prolongation d'un temps et demi, se fait sentir lorsque le mot qui renferme cette pénultième est suivi d'un monosyllabe qui n'en peut être séparé par un repos. Mais il se fait à peine sentir, s'il est placé sur l'antépénultième.

"NOTA. 2° Dans les mots suivis des enclitiques ne (dubitatif), que, ve, ce, met, etc., ou de ne (interrogatif), ou de cum renvoyé après le mot qu'il régit, la particule est censée faire partie du mot, et l'accent se place d'après les règles précédentes.

"NOTA. 3° Dans la liturgie, la pénultième, quoique brève, au vocatif des mots en -ius, prend l'accent: Gervàsi, Ambrôsi, Protási, Gregôri, parce qu'on disait autrefois Gervàsie, Ambrôsie, Protâsie, Gregórie, etc.

"NOTA 4° Dans la lecture des vers, on observe les mêmes règles que pour la prose. Seulement, quand un dissyllabe dont la première partie est brève, est précédé d'un monosyllabe avec lequel il forme un dactyle, l'accent porte sur le monosyllabe: númpiér, túne Deus, de dedit, ést modus, etc. On prononce les douteuses d'après la quantité qu'elles ont dans les vers.

"NOTA 5° Toutes les syllabes qui précèdent l'accent doivent durer un temps entier, sans jamais le dépasser.

"NOTA 6° Le latin prononcé familièrement n'admet pas d'accent circonflexe."

181 Articulated with the blade of the tongue held close to or touching the hard palate.

182 Molliard, L. *Méthode Pratique Et Simultanée De Lecture, D'écriture Et D'orthographe, Par MM. Molliard . . . Hinard . . . 2e Partie. Lectures Courantes*. 2. Vol. 2 vols. Paris: Dezobry, F. Tandou et Cie, 1863, 169-174.

"Toutes les consonnes finales se prononcent.

"Comme en français, la lettre e a le son ouvert è devant une consonne qui fait syllabe avec ell "Laudat, ludit, pater, monet, vicibus.
"Prononcez : Laudatte, luditte, patère, monette, vicibusse.
"La lettre e a le son de é fermé, si elle ne fait pas syllabe avec la consonne qui suit (comme dans pater).
"ei, dans quelques cas rares, se prononce comme le français eille: hei mihi! suaveis. Mais le plus souvent e se détache de i dans la prononciation (deinde comme déindé).
"La terminaison eus se prononce généralement éusse.
"Jubé, Deus, leo, rei, diei, suadeat, mea.
"prononcez: Jubé; Déusse, léo, réi, diéi, suadéatte, méa.
"EXCEPTION. Dans quelques mots seulement (Europa, heu, seu, etc.), e forme diphthongue avec u, et eu se prononce comme dans les mots français: le feu, le jeu, etc.
"oi et ai ne forment pas diphthongue, comme en français—On prononce comme s'il y avait un tréma sur i.
"au ne fait pas diphthongue dans la finale aus et se prononce aûsse.
"Esaus, Esai, proinde, Gaine, coi, aio,Laius, Baiis.
"prononcez:
"Ésaûsse, Esaï, proïndé, Caïné, coï, aïo, Laïusse, Baïis.

_____

"æ et œ se prononcent comme é.
"On les prononce è, s"ils font syllabe avec la consonne qui suit. Cæ et cœ comme ce.
"a après g et q:
"1° Muet devant o et u (guo, quo, quu comme go, co, eu).
"2° S'entend devant i, e, æ, œ (gui, gue, gæ, qui, que, quæ, comme gu i gu é eu i eu é).
"3° Se prononce ou devant, a (gua, qua, comme goua, coua).

_____

"en ou em, dans le corps des mots, se prononcent toujours in.

_____

"un ou um, dans le corps des mots, se prononcent on.
"Excepté hune, nunc, tune, dans lesquels un se prononce comme en français.
"A la fin des mots, et devant m ou n, les groupes suivants prennent le son ouvert:
"am, em, im, om, um, an, en, in, on.
"Prononcez: àme, ème, ime, ôme, ôme, àne, ène, ine, òne.
"Remarquez que la finale um se prononce ôme.
"am, em, um se prononcent comme finales (âme, ème, ôme), dans les mots composés comme:
"Plerumque, quemvis, quemdam, quarmvis, tamdiu, etc.

_____

"ch est toujours dur, et se prononce k (comme dans orchestre).

_____

"gn est toujours dur (et se prononce comme clans le mot français stagnant).

_____

"Deux I, qui se suivent, ne sont jamais mouillés.
"ti, devant une voyelle, se prononce ci (comme dans les mots français: portion, partiel).
"Mais après S ou x, t conserve sa valeur alphabétique et se prononce comme dans le mot français question.

_____

ACCENTS.

"L'accent circonflexe allonge, comme en français, le son de la voyelle sur laquelle il est placé:

"Monuêre, rosâ, amârunt, hâc, ô (Deus), nostrûm.

"L'accent grave ne modifie pas la prononciation de la voyelle qui en est surmontée:

"Ultra, quàm, cùm, benè, malè, postremô, forls."

183 Lhomond, Charles François. *Élémens De La Grammaire Française: Par Lhomond, Augmentés Du Dictionnaire Des Homonymes, D'une Table Des Mots Dans Lesquels La Lettre H Est Aspirée, D'un Traité De La Formation Des Temps Des Verbes, De La Manière D'analyser, D'un Traité De Ponctuation, D'un Tableau De Locutions Vicieuses, De La Prononciation Du Latin, De Modèles De Lettres, Etc.* ... Dijon: Impr. de Douillier, 1829, 142-143.

"Quand on sait bien lire le français, on peut lire le latin sans difficulté. Les différences de prononciation se réduisent à celles-ci:

"1°. Ai, ei, oi, ou, se prononcent toujours en deux voyelles distinguées, dont chacune garde le son qui lui est propre. Ex, Danai, fidei, introitus, prout, etc.

"2°. Au se prononce comme ô. Ex. Laus, laudate, auctor. Excepté dans quelques noms propres. Ex. Nicolaus, Danaus, prononcez Nicola-us, Dana-us.

"3°. AE, ce, et tous les e qui terminent les syllabes, se prononcent é : Poenoe, prononcez péné.

"4°. An, am, se prononcent comme notre voyelle an. Ex. Angelus, vocantis, amant, ampliùs.

"On et om, un et um, se prononcent comme notre voyelle on: Mentis, fons, compas, promptes, unda, fugiunt, umbree.

"Cependant un se prononce comme en françois dans quelques mots, Ex. Nunc, hunc, cuncti, tunc.

"Mais lorsque les syllabes an, am, en, em, on, om, terminent les mots, ou qu'elles sont suivies d'un m ou d'un n, l'a, l'e, l'i, et l'o gardent leur son naturel, et l'on fait sonner la consonne m ou n qui les suit. Ex. Titan, annus, musam, flamma, amnis, lumen, partem, dein, solemne, innixus, hymnus, immotus, Damon, connexus, omnis, committo, etc.

"Um final se prononce ome : Domum, priorum vanum, etc.

"5°. Toutes les consonnes qui ne sont point suivies d'une voyelle, se prononcent : Ex. Fons, dicunt, psalmus, promptus, emptor, etc.

"6°. Ch se prononce toujours comme le k. Ex. Charitas, chorus, Anchises, etc.

"7°. Gn se prononce durement, comme dans ces mots françois gnostique, gnomonique. Ex. Magna, igne, agni, etc.

"8°. Les syllabes qua, quoe, qui, quo, quu, se prononcent koua, kuoe, kui, ko, ku; Ex. Quarè, quercus, quilibet, quotannis, equus; Kouare, kuercus, kuilibet, kotannis, ekus.

"9°. Ti, suivi d'une voyelle, se prononce comme en français ci : Gratia, actio, actium, prudentioe, etc.

"10°. En, em, ne se prononce jamais an ou ain. Par rapport aux accents qu'on met sur les mots latins, il suffit d'observer que l'accent aigu placé sur l'antépénultième ou sur la pénultième syllabe, est destiné à la faire prononcer lentement, et que dans les mots de deux syllabes, l'accent est toujours supposé quand il n'est pas mis sur la première; mais il faut bien se garder d'appuyer trop longtemps. Ce serait une égale faute de ne pas s'y arrêter assez, ou d'y appuyer trop."

184 Copeman, Harold. *Singing in Latin: or Pronunciation Explor'd.* Selbstverl, 1996.

185 https://www.loc.gov/collections/american-english-dialect-recordings-from-the-center-for-applied-linguistics/about-this-collection/.
186 Johnson, James Weldon. 1912. *Autobiography Of An Ex-Colored Man*. New York: Sherman, French & Co., 175.
187 "African American Spirituals." *The Library of Congress*. Accessed 19 March 2021. https://www.loc.gov/item/ihas.200197495/.
188 BOO, 662.
189 BAI, 126-127.
190 Babbit, E. H. "The English of the Lower Classes in New York City and Vicinity." *Dialect Notes 9* (1896): 457-64.
191 Babbit, 458. He continues, "People of wealth and culture form a class by them selves, which is relatively smaller than in most cities. People of culture without wealth do not live in New York if they can help it; people of wealth without culture, though very disagreeably in evidence at times, are, after all, not very numerous, and get culture in a generation or two. The vast majority who have neither, look up to wealth with a curious admiration and to culture with a superstitious reverence, acknowledging frankly their want of both as compared with the recognized upper class, but very self-assertive as regards the sufficiency of what they have."
192 Babbit, 459.
193 Babbit, 458.
194 BAI, 137.
195 Grandgent, C. H. "English Sentences in American Mouths." *Dialect Notes IV* (1892): 198-203.]
196 Lenape, also called the Leni Lenape, Lenni Lenape and Delaware people, are an indigenous people of the Northeastern Woodlands, who live in the United States and Canada.
197 Smith, Troy D. "How to Speak Southern Appalachian." *Tennessee Wordsmith*. blogspot.com, 30 December 2015. http://tnwordsmith.blogspot.com/2015/12/how-to-speak-southern-appalachian.html.
198 Caruthers, William Alexander. 1834. *The Kentuckian in New York Or, the Adventures of Three Southerns*. 1. 1st ed. Vol. 1. 2 vols. New York, N. Y.: Harper, Brothers, 25,
199 Montgomery, Michael. "Exploring the Roots of Appalachian English." *English World-Wide* 10, no. 2 (1989): 227. https://doi.org/10.1075/eww.10.2.03mon.
200 Dabney, Joseph Earl. *Mountain Spirits: a Chronicle of Corn Whiskey from King James' Ulster Plantation to America's Appalachians and the Moonshine Life*. Asheville, NC: Bright Mountain Books, 1985, in Montgomery, "Exploring the Roots," 228.
201 McWhiney, Grady. *Cracker Culture: Celtic Ways of the Old South*. Tuscaloosa, AL: University of Alabama Press, 1988, in Montgomery, "Exploring the Roots," 227.
202 Montgomery, Michael. "Making Transatlantic Connections between Varieties of English." *Journal of English Linguistics*, 25, no. 2 (1997): 132-33. https://doi.org/10.1177/007542429702500206.
203 Hall, Joseph Sargent. *Mountain Speech in the Great Smokies*. Washington, DC: National Park Service, 1941, 1, 5.
204 In the interest of space, these descriptions are necessarily truncated; the only way to do Hall's work justice would be to reproduce it in its entirety.
205 The omission of sounds or letters from within a word.
206 Hall, Joseph Sargent. *The Phonetics of Great Smoky Mountain Speech*. New York: King's Crown Press, 1942,13-106.

207 Devlin, Thomas Moore. "What's the Difference Between a Language, a Dialect and an Accent?" *+Babbel Magazine*, 25 July 2018. https://www.babbel.com/en/magazine/accents-and-dialects.
208 "Aussprache der deutschen Sprache," http://www.shorturl.at/wMV18 (accessed March 11, 2021). "Im Vergleich mit der Sprechtheaterbühne bedient sich die (klassische) Vokalmusik einer leicht variierten Aussprache.

"Der besseren Verständlichkeit gesungener Sprache halber wird das Schwa oft als [e] gesungen.

"Das r wird in der klassischen Musik stets mit der Zungenspitze als [r] ausgesprochen. Dies gilt auch für die Endung -er, sofern das r am Wortende nicht einfach weggelassen wird.

"Der Glottisschlag im anlautenden Vokal wird in der Musik teilweise als unschön empfunden, er fällt häufig zugunsten eines aspirierten Tonansatzes weg, was allerdings zu gesangstechnischen Problemen und zu einer Beeinträchtigung der Textverständlichkeit führt."
209 Heinr Bauer, *Vollständige Grammatik Der Neuhochdeutschen Sprache* (Berlin: G. A. Reimer, 1827), 63.
210 Siebs, Theodor. *Deutsche Bühnenaussprache: Nach Den Beratungen Zur Ausgleichenden Regelung Der Deutschen Bühnenaussprache . . . ; Gänzlich Umgearbeitet, Den Gesang Berücksichtigend Und Mit Kurzem Aussprachewörterbuche Versehen*. Bonn: Verlag Albert Ahn, 1910, 19. "Früher war die Ansicht verbreitet, daß die Aussprache des Gesanges auch für den Sprechvortrag mustergültig sei. Diese Anschauung ist grundsätzlich abzulehnen, denn wenn überhaupt eine Abhängigkeit besteht, so kann nur das umgekehrte Verhältnis angenommen werden, da zweifellos der Rede die Priorität zukommt.

"Und tatsächlich herrscht eine enge Beziehung zwischen Sprechvortrag und Gesang. Auch bei diesem erscheint die Sprache-namentlich bei lange anhaltenden Tönen—vergröbert; besonders die Vokale werden gleichsam mikroskopisch vergrößert, und somit ergeben sich dieselben Forderungen sogar in gesteigertem Maßstabe, da die vergrößerte Länge und Stärke des gesungenen Tones die Klangfarbe der Vokale nicht beeinflussen darf. So wird der Sänger von dem Sprechvortrage manches lernen können; dazu kommt, dass alle Opernsänger auch Sprechrollen zu bewältigen haben, und ferner, daß das neuere Musikdrama eine Aussprachetechnik verlangt, die der für das gesprochene Drama geforderten durchaus gleich sein muß. Darum haben wir geglaubt, auch die Forderungen des Gesanges berücksichtigen zu müssen, zumal sich dies nach dem Urteile hervorragender Kenner durch einige wenige Zusätze erreichen ließ."
211 Siebs, 3. "Trotz der Pflege und dem Streben nach Einheit ist die Aussprache an den Bühnen des deutschen Sprachgebietes und im Munde der einzelnen Schauspieler nicht durchaus gleich, sondern zeigt gewisse Unterschiede, die sich zumeist durch Einwirkung des Schriftbildes oder der Mundart erklären und teils bewußt, teils unbewußt gesprochen werden. Weil sie die einheitlichekünstlerische Darstellung der Bühnenwerke stören und denjenigen, der die Bühnenaussprache als Muster ansehen möchte, irreführen, sind sie durch eine ausgleichende Regelung beseitigt worden."
212 Riemann, Hugo. 1887. "Aussprache." *Musik-Lexikon*. Leipzig: Max Hesse. "In neuerer Zeit wird auf eine deutliche Aussprache besonderes Gewicht gelegt, da in der modernen Richtung der Vokalkomposition vom Lied bis zur Oper des Singen des Textes mehr ein gesteigertes Sprechen, in der Regel mit nur einem Ton auf jede Silbe, ist; in der italienischen Oper, wo es manchmal scheint, als diene der untergelegte Text nur als Vorwand für

die Beschäftigung der Singstimme, ist die deutliche Aussprache von weit geringerer Bedeutung als die Schönheit der Tonbildung und tritt daher zu gunsten dieser häufig zurück. Es muß aber zugegeben werden, daß die verschiedenen natürlich Resonanz (beim Sprechen) leicht zu einer Verschiedenheit mancher Vokale nicht völlig vermeiden läßt; es ist daher im Interesse des schönen, gleichmütigen Gesangs nicht so ganz verwerflich, wenn dem I, E, Ä auf der einen und dem U, O auf der andern Seite etwas von ihrer Schärfe, resp. Dumpfheit genommen wird. Das läßt sich erreichen, ohne daß die gesamte Vokalisation in einem mittlern Ö-artigen Laut untergeht und der ganze Gesang einen instrumentalen Charakter annimmt. Besondere Schwierigkeiten verursacht dem Sänger die Aussprache der Konsonanten L und R, zumal vor A, da bei ersterm die stark gekrümmte Zunge leicht in ihrer Stellung verharrt und die Resonanz beeinträchtigt und bei letzterm Neigung vorhanden ist, dem A Resonanz dicht am Gaumen zu geben; beides ist durch gewissenhafte Übung leicht zu vermeiden, wenn man nur dar auf achtet, daß die Aussprache des Konsonanten schnell und und scharf erfolgt, danach aber jeder Rest desselben in der Mundstellung beseitigt wird. Auch kann das Gaumen-R durch das Zungen-R ersetzt werden. – Ein nicht ganz leichtes Problem, dem bei weitem nicht die genügende Beachtung geschenkt wird, ist ferner das der korrekten Silbenteilung beim Gesang."

213 Bauer, Heinrich. 1827. *Vollständige Grammatik Der Neuhochdeutschen Sprache*. 1. Vol. 1. 5 vols. Berlin: G. Reimer, 16-17. "Die Muttersprache jedes größern Volks pflegt sich wieder nach den Bedürfnissen und Verschiedenheiten der Bewohner der einzelnen Provinzen seines Landes in mehrere, oft sehr von einander abweichende Mundarten oder Dialekte einzuteilen.

"Das ist auch bei unserer deutschen Sprache der Fall, und sie teilt sich schon seit alten Zeiten vorzüglich in die oberdeutsche (alemannische) und in die niederdeutsche (sassische, plattdeutsche) Mundart ab; jene wird im südlichen, diese im nördlichen Deutschland gesprochen.

"Aus den verschiedenen Dialekten nun hat sich das hochdeutsch, oder daß eigentliche, reine und richtige Deutsch, die wahre deutsche Sprache gebildet, die man sich ja hüten muß, einen Dialekt oder die hochdeutsche Mundart zu nennen, denn in keiner Provinz Deutschlands ward je hochdeutsch gesprochen, und wird je hochdeutsch gesprochen werden; ja selbst kein einzelner Deutscher kann jemals ganz reines Hochdeutsch sprechen, indem die hochdeutsche Sprache nichts als die Bücher- oder Schriftsprache der gebildetsten Deutschen ist, befreit von allem, was die i Dialekte nur für einzelne Provinzen zulassen, oder für diese Provinzen zum Gebrauch erhoben haben."

214 Bauer, 58-59. "Am gewöhnlichsten bezeichnet das i e bloß ein gedehnt einfaches i, so daß das e zum bloßen Dehnungszeichen des i geworden ift, und seinen eignen Ton ganz verloren hat: Liebe, lieber, geliebt, lieblich, dies, vier. Deswegen brauchen aber wieder solche Sylben mit i e weder den Sylbenton noch die prosodische Länge zu haben; so ist der Artikel die immer (prosodische) kurz, und in den Wörtern Liebelei, hienieden haben die Sylben lei und nie den Wortton, obgleich auch in ihnen wie in allen ähnlichen das ie immer die volle gedehnte Aussprache des i behält. Auch in vielen fremden Wörtern wird das ie so einsylbig ausgesprochen, ob es gleich in ihrer Muttersprache, besonders bei Ableitungen aus dem Französischen oft zweisilbig tönt: Officier, Grenadier, Barbier, Courier, für auch Infanterie, Copie, Melodie, Harmonie, Poesie, Geographie. In den neuern Zeiten ist im Sprechen solcher Wörter viel Zwiespalt entstanden, indem einige nach Französischer Art diese griechisch-französischen Wörter hinten betonen, und dabei das ie einsylbig ausspreche: Komodie, Ceremonie, andere den Ton nicht auf das zweisilbig ausgesprochene i.e., legen: Kosmodi–e, Ceremonie; manche sagen selbst Tragödie (tragédie) mit einsylbigem ie. Oft endlich geht das i des ie in einen wahren Consonanten, das sogenannte Tod, über, so daß bloß das, e ein in Vocal bleibt, und zwar geschicht dies immer am Anfange einer Sylbe oder eines Worts: jemand, jeßt."

215 Thomas, M.D., LL.D., Joseph. 1887. *Universal Pronouncing Dictionary of Biography and Mythology*. 2. 1st ed. Vol. 2. 2 vols. London: J. P. Lippincott, 2013.

216 Heine, Matthias. 2018. "Much More than Expected: Duden Counts 23 Million German Words." *Die Welt*. November 23, 2018. https://tinyurl.com/rrmheycb.

217 "How Many Words Are There in English?" *Merriam-Webster*. Accessed 17 March 2021. https://tinyurl.com/4y288j75.

218 "Trends in Migration to the U.S." *Population Reference Bureau*, 14 January 2014. https://www.prb.org/us-migration-trends/.

219 Bickel, Hans. „Deutsch in der Schweiz als nationale Varietät des Deutschen." In: *Sprachreport*, no. 4, 21-27. "Wenn Deutsche erstmals in die deutschsprachige Schweiz reisen, wird es vielen wohl ähnlich ergehen wie dem anonymen Schreiber von 1795, der der Weigerung der Schweizer, sich im mündlichen Ausdruck der deutschen Standardsprache zu bedienen, ziemlich ratlos gegenüberstand."

220 Bickel, 21. "Tatsächlich hat sich die deutschschweizerische Sprachsituation in den letzten 200 Jahren nicht grundlegend verändert."

221 Fleischer, J; Schmid, S. (2006) "Zurich German." *Journal of the International Phonetic Association*, 36(2):243-255.

222 MALV, x. "De toutes les langues vivantes, la langue française est peut-être celle qui, par sa douceur, sa correction, sa pureté, son élégance, son harmonie, et surtout par la beauté des chefs-d'œuvre immortels qu'elle possède, est arrivée à son plus haut degré de perfection: elle mérite donc notre attention, non-seulement sous le rapport de la logique de sa construction et de sa syntaxe, mais encore sous celui de sa prononciation pure et correcte, dont la négligence mettrait en danger la durée de la langue elle-même, et, par suite, son universalité en Europe."

223 MALV, xi-xii. "En effet, les hommes qui connaissent l'histoire des langues (et les exemples sont nombreux), savent que c'est toujours par la prononciation que commencent les altérations d'un idiome, altérations qui, bien qu'insensibles d'abord, finissent, à la longue, par changer les formes du langage, et par le rendre en quelque sorte méconnaissable à de longs intervalles. Tant que le goût et les lumières ne sont pas fixés, cet inconvénient peut être utile, en ce qu'il conduit à des perfectionnements; mais quand un peuple est parvenu aux plus beaux siècles de sa civilisation, quand il possède des ouvrages au-delà desquels il est probable que l'esprit humain ne parviendra pas, c'est alors qu'il est utile et nécessaire d'arrêter la marche des variations que des hommes peu éclairés voudraient imposer au langage, de poser des homes à son instabilité, de fixer la doctrine de sa prononciation, et d'en répandre partout l'instruction et les principes.

"Nous terminerons par dire que, pour perfectionner ce Traité de prononciation de la langue française au XIXème siècle, nous n'avons pas assez compté sur nos seules lumières pour négliger celles puisées dans le commerce de personnes instruites et polies, d'hommes de lettres d'un profond savoir, et d'un assez grand nombre d'auteurs et de grammairiens célèbres, qui ont plus ou moins traité de la partie mécanique des langues; mais si, en profitant des lumières d'autrui, ce qu'il est impossible de ne pas faire dans

un ouvrage de la nature de celui-ci, notre mérite personnel semble recevoir quelque diminution, nous nous trouverons suffisamment dédommagé, si le public daigne l'accueillir avec faveur, et y voir un bon livre."

224 MALV, 82. "Ce que nous venons de dire des voyelles nasales an, in, on, un, et des assemblages am, im, om, um, qui, souvent, ont la valeur des sons présentés par les premiers, surtout devant les lettres p et b, suffit, sans doute, pour déterminer leur son initial, médial ou final; mais, voulant mettre sous les yeux du lecteur l'ensemble de leur prononciation la plus générale, nous l'avons réunie dans le petit tableau qui suit, auquel nous avons joint les groupes en et em, dont nous avons, en premier lieu, donne les diverses valeurs orales."

225 HATZ, 26-27. "Le français possède aujourd'hui au moins douze voyelles pures et quatre voyelles nasales. Ces voyelles présentent, suivant la nature des mots où elles se trouvent, des différences de longueur. En général, les voyelles pures sont longues quand elles sont suivies, dans une même syllabe, d'une consonne douce ; elles sont brèves quand la consonne est forte ; dans les autres cas elles sont moyennes. Les voyelles nasales sont longues quand elles sont suivies d'une consonne qui se prononce ; elles sont moyennes dans le cas contraire : elles ne sont jamais brèves.

"Les voyelles présentent également, suivant leur place dans le mot, des différences d'intensité, étant prononcées avec plus de force quand elles sont accentuées, c'est-à-dire frappées de l'accent tonique, et étant prononcées moins fortement quand elles sont inaccentuées ou atones.

"Les voyelles considérées dans le tableau suivant sont toutes accentuées."

226 Malvin-Cazal, 255. "Ainsi que nous l'avons fait pour les voyelles, nous allons également mettre sous les yeux du lecteur, le tableau général des consonnes consacrées par l'usage national à représenter les articulations fondamentales de la langue française.

227 Malvin-Cazal, 256. "Le heurtement des articulations finales des mots avec les articulations initiales des mots suivants est tellement opposé au génie de notre langue, que la règle la plus générale de prononciation à leur égard est de supprimer les consonnes finales dans la parole, afin que leur retranchement n'apporte aucun obstacle à l'émission nette et exacte des consonnes initiales des mots suivants.

"Cette règle s'étend même jusqu'à certaines consonnes médiales, quand leur émission est trop dure ou trop embarrassante pour laisser à la consonne suivante toute sa netteté, et au son qui lui sert d'appui toute sa plénitude, toute son harmonie.

"Mais comme la règle qui prescrit la suppression des consonnes finales devant d'autres consonnes a des exceptions assez nombreuses, et que les lois qui établissent ces exceptions sont fixes, nous allons faire connaitre les unes et les autres pour chacune de nos consonnes.

"Parmi les vingt caractères graphiques représentant tous les mouvements simples des organes de la parole, il y en a cinq dont l'articulation ne varie jamais, quelle que soit leur position dans les mots écrits; et quinze dont la touche varie, suivant les voyelles ou les consonnes auxquelles elles sont jointes.

"Les cinq consonnes dont l'intonation est constante et invariable, sont: B, V, R, N, J.

"Le tableau suivant va faire connaître les consonnes variables dans leur émission, et indiquer d'une manière générale dans quelle partie des mots elles le sont."

228 Walker, John. *A Critical Pronouncing Dictionary, and Expositor of the English Language . . . With Directions to Foreigners, for Acquiring a Knowledge of the Use of This Dictionary*. London: G. G. J. and J. Robinson, Paternoster Row, 1791, v-vi.

229 Luzzi, Ella, and Emma Cramer. Report. "History of the Dialect," in *Received Pronunciation*. Kutztown, PA: Kutztown University, 2020. https://research.library.kutztown.edu/english334/2/.

230 "Received Pronunciation Vowels." *English Notes*, April 3, 2017. https://english.philograph.com/received-pronunciation-vowels/.

231 Luzzi, np.

232 Ellis, Alexander J. *On Early English Pronunciation*. Vol. 4. 5 vols. London: Asher & Co., 1874, 1089-1090.

233 Bell was a teacher and researcher of physiological phonetics and was the author of numerous works on orthoepy and elocution. Additionally he was also the creator of Visible Speech, which was used to help the deaf learn to talk, and was the father of Alexander Graham Bell.

234 Walker, xii.

235 Grose, Francis. 1811. *Dictionary of the Vulgar Tongue*. London, 1811.

236 "Cockney." *Oxford English Dictionary,* June 17, 2020. https://public.oed.com/blog/cockney/.

237 *Punch, or The London Charivari* was a British weekly magazine of humour and satire established in 1841 by Henry Mayhew and wood-engraver Ebenezer Landells. Historically, it was most influential in the 1840s and 1850s, when it helped to coin the term "cartoon" in its modern sense as a humorous illustration.

238 Matthews, William. *Cockney Past and Present a Short History of the Dialect of London*. London: George Routledge & Sons., 1938.

239 Thomas, John. "The Czar's Coronation." *Punch, or the London Charivari*, October 4, 1856, 139.

240 Ben Trawick-Smith, "Irish Accents," *Dialect Blog*, 4 March 2015, http://dialectblog.com/irish-accents-dialects/.

241 Hickey Raymond. "The English Language in Ireland." *Revue belge de philologie et d'histoire*, tome 90, fasc. 3, 2012. Langues et littératures modernes. Moderne taal en letterkunde. pp. 881-87; doi: https://doi.org/10.3406/rbph.2012.8266

242 A lexical set is a group of words that all fall under a single category based on some shared phonological feature. For instance, the GOOSE set is identified by OO.

243 Kallen, Jeffrey L. "The English Language in Ireland: An Introduction." *International Journal of Language, Translation and Intercultural Communication* 1 (2012): 25-41. https://doi.org/http://dx.doi.org/10.12681/ijltic.8.

244 The trap-bath split (also TRAP-BATH split) is a vowel split that occurs mainly in southern accents of English in England (including Received Pronunciation).

245 Hickey, Raymond. *Irish English: History and Present-Day Forms*. Cambridge: Cambridge University Press, 2011, 317.

246 The transposition of sounds or syllables in a word or of words in a sentence.

247 Suppression of a vowel or initial syllable.

248 That part of certain newspapers containing the narration of daily facts of a city.

249 FOR, 21-23. "§1. Spesso di una parola medesima si hanno due forme con vocale diversa, l'una delle quali è da riguardarsi come primitiva, perché cor-

risponde all'origine della parola, l'altra come mutata. Tal vocale più spesso è atona, ma talvolta anche è la stessa vocale tonica della parola. Diciamo prima delle vocali atone.

"2. Nella prima sillaba d' una parola, l'e atona si attenua molte volte in i, come mostrano le doppie forme decèmbre, dicèmbre; nepóte, nipóte; demónio, dimónio poet.; leóne, lióne meno usato; ed, in generale, i prefissi de e re che, o si trovano cangiati in di e ri, o hanno tutte e due le forme. P. es. devóto, divóto desèrto, disèrto;

"Ció pure talvolta in fine di parola: avante, avanti; domane, domani; lúnge, lúngi. Le forme in e sono poetiche.

"Simile affinità si trova in casi analoghi fra o ed u. Onde abbiamo focile poco usato e fucile; molino poco usato e mulino; olivo ed ulivo; obbedire, ubbidire; officio, uffizio.

"§3. Altre volte, pur nella prima sillaba, e ed i si rafforzano in a. Quindi le doppie forme dendro, dentro; meraviglia, maraviglia; selvatico, salvatico; innaffiare, annaffiare; sterpáre e strappáre con metatesi; tenaglia, tanaglia .

"§4. Talora nel cambinmento di vocali atone influisce la consonante che loro segue o precede:

"r tende a cambiare in e la vocale precedente, come attestano le doppie forme: guarníre, guerníre; árbero poet. álbero; garófano, gherófano; separare, sceverare; e i suffissi -eria, -erello, -ereocio, ecc. dove l'e iniziale e spesso un' attenuamento di a primitiva. P. es. da rubare si trae, rubería e non rubaria; da beccaro, beccheria; da birrajo (birráro) birreria ecc. ecc. Si usano tuttora le doppie forme scioccarèllo, sciocchерèllo; pazzaréllo, pazzérello; boscaréccio, boscheréccio; casaréccio, caseréccio, ed altre.

"§5. Le consonanti b, p, fa contatto di i od e, tendono a cambiarle in u. Ciò si vede nelle doppie forme scripare antiq. sciupare; officina, fucina con aferesi; ribelle, rubello; ebriaco antiq. ubriaco: le cosonanti m e v a contatto di i, e, u. tendono a cambiarle in o: p. es. riverto, rivéscio poet. rovescio; diveniare, doveniare; mínimo, ménomo; dévo, dovére; pievano , porano; dimani, domani; diménda, doménda; divízia poet. dovizía; eremíta, romíto con afer.; ruina, rovina; manuale, manovale; contínuo, contínovo antiq; Cápua, Cápova antiq.

"§6. La consonante l tende a mutare in o la vocale con cui stia a contatto dopo la sillaba accentata. Ciò si vede nelle doppie forme débile poet. débole (gli antichi dissero anche nóbole, útole e sim. per nóbile ed útile); angelo, angiolo; scándalo, scándolo poco usato:

"le consonanti gutturali c, g e le nasali n, m, tendono a mutare in a la vocale che loro precede dopo la sillaba accentata. Quindi le doppie forme crónica, crónaca; tónica, tónaca; pampino, pampano; giovine, giovane; canonico, calonaco, pleb.; Gerónimo, Girólamo. Quindi pure spiegansi i modi affatto antiquati prolago, astrolago e sim. invece di prologo, astrologo ecc.

"§7. In generale il mutamento della vocale atona è favorito da quelle due tendenze opposte della lingua, che si chiamano assimilazione e dissimilazione. Per la prima si cerca di ripetere un suono medesimo; per la seconda, invece, di fuggirne la ripetizione. All'assimilazione si debbono in parte i cangiamenti in a notati al §3, come in salvatico invece del primitivo selvatico. Altri esempi sono maladetto per maledetto; e le terminazioni -ere invece di -ero, come in corriéro, corriere; cavaliéro, cavaliere; leggiéro, leggiére poco usato; e altri moltissimi. Dalla dissimilazione nascono le forme, nemíco invece del primitivo nimíco; litigáre, leticare, ed altre.

"§8. Le vocali toniche, quelle cioè su cui cade l'accento della parola, vanno pur esse soggette a cambiamenti, che tuttora si manifestano in certe forme doppie:

"mutamenti di e in i: davanti ad n, come in saracèno, saracíno: davanti a due t: rispetto, rispitto antiq.; dispetto, dispitto antiq.: le forme profitto e diritto hanno pur esse quest'origine: davanti ad altra vocale: Déi, Dío, Dii; réo, río poet; miéi, mío.

"§9. e tonica (che corrisponda ad e breve latina) non seguita da doppia consonante, passa in ie. P. es. féro poet. fiéro; altéro, altiéro; intéro, intiéro; léve poet. liéve; tepido, tiepido ed altre.

"Cosi parimente o tonica (corrispondente ad o breve latina) non seguita da doppia consonante, passa nel dittongo uó. P. es. bono, buóno; cocere, cuocere; córe, cuóre; fóco, fuóco; ómo, uómo; lóco, luógo; móro, muójo; nóvo, nuóvo; tóno, tuóno; róta, ruoóa. Le forme con semplice o sono, per la maggior parte, rimaste alla lingua poetica, benché ancora usate, in parlando, dal popolo di Firenze.

"§10. i (corrispondente ad i breve latina) passa regolarmente in e, specialmente quando si trova dinanzi a due consonanti od a z: come tuttora apparisce riscontrando le doppie forme lice, léce poetiche, plíco, piégo; cíppo, céppo; nítido, nétto (con sincope); avarízia, avarézza; franchigia (-izia) franchézza; vizio, vézzo; principe, prènce (dall' antiq. prèncipe); limbo, lembo, molte delle quall hanno diverso significato.

"§11. u (corrispondente ad u breve latina) passa regolarmente in o. Così spiegansi le doppie forme cubito, gómito; número, nóvero; cúneo, cónio; lúto poet. lóto. Quali verbi è spesso alternativa fra u primitiva ed ó. P. es. condurre, condótto; fóndere, fúso. I poeti riconducono sovente l'u latina; e usano, specialmente in rima, sepúlcro per sepólcro; spelúnca per spelónca; scúlto per scólto, ecc.

"§12. Talora una vocale, per agevolezza di pronunzia, muta di posto nella stessa parola; il che dicesi metatesi. Rare sono le metatesi delle vocali nella lingua scritta, come in schioppo, scoppio, che si usano però in significato diverso; e in bálio dall'antiquato e primitivo bailo. Ma in bocca della plebe sono frequenti. es. pianère invece di panière; rispiarmo invece di risparmio."

250 The study of pronunciation of a particular language, within a specific oral tradition.

251 §"B. La pronuncia nopolitana con fonde insieme il B semplice col B doppio, nè fa sentire all'orecchio la differenza che passa fra globo e gobbo, libro e libbra, abile e abbaco, abitare ed abbandonare.

"Per evitare questa sconcezza e trovare il suono più dolce del B semplice si miri all'analogia ch'egli ha col V in guisa che chi dice libro accosta insieme le labbra quasi al modo siesso di chi dicesse livro; il B doppio va con maggior vibrazione e forza profferito.

§"C. in ce, ci, si pronunzia in italiano dolcemente, ma più crudo si pronunzierà avanti all'a, all'o, all'u; cosicchè volendo avere presso a tutte le vocali il C egualmente aspro, converrà aggiugnere ne'due primi casi l'H e scrivere che, chi, e volendolo egualmente dolce, converrà aggiugnere un i nei secondi e scrivere cia, cio, ciu, nelle quali sillabe l'i non ha alcun suono proprio e non si sente, ma serve solo ad indicare il suono dolce del C. Questa medesima asprezza conserva il C premesso a qualunque altra consonante nella medesima sillaba, come cla, cle, cli, clo, clu, cra cre cri, cro.

"E da notare che C seguita dall'H riceve innanzi I anche un altro suono medio fra l'aspro ed il dolce teste cennati, qual è quello che senteri in occhi, orecchi, chiave ed in tante altre parole, e che non si confonde certamente con quello che si manda fuori nelle parole fianchi, stecchi, fiocchi.

Questo suono dicesi schiacciato o infranto ed andrebbe distinto con altro carattere, come appunto erasi proposto dal Trissino tra le nuove lettere del suo alfabeto.

"Il ch infranto ha luogo nelle parole in cui l'l precede una vocale ed in quelle che ne derivano come specchio, specchi, apparecchio, apparecchi, apparecchino ecc. Ma il chi iniziale, sebbene non seguito da vocale, è sem pre infranto, secondo la buona pronunzia toscana; come chi aggettivo congiuativo, chinare ecc. e cosi ne' loro composti chicehessia, dichinare, inchinare. Appo noi però si pratica diversamente.

"Altro non ci rimane a dire sul C che notare i seguenti difetti di pronunzia 1.° Esso da molti si suole scambiare col G quando vien preceduto da N, pronunciandosi allo stesso modo Franco e Frango, Stanca, Stangas, Francia e Frangia; lo che con ogni diligenza vuolsi evitare. 2.° In Roma ed altrove talora il C dolce si trasforma in S e dicesi Se ne andiamo in vece di Ce n'andiamo, Arivedersi in vece di Arivederci. 3.° I Toscani usado per lo più— articolare Ce, Gi come Sce, Sci dicendo Non sc'era, Non sci è stato, invece di non c'era, non ci é stato, e cosi Camiscia per Camicia ec.

"Pronunziano inoltre ca, che, chi, co, cu come ha, he, hi, ho, hu con una forte aspirazione senza far sentire il C, dicendo He cosa invecedi che cosa, La Harne per la Carne ec. Nel che ragionevolmente non sono imitati dagli altri Italiani. 4.° Errore comunissimo á Veneziani ed a taluni Lombardi si è quello di proferire Ce, Ci, come se fosse ZE, ZI, dicendo Zerto, Zittà, Zima in vece di Certo, Città, Cima.

§"D. Si eviti di confondere questa lettera col T e dir quanto per quando, salto per saldo, ec. Il D si ariicola appoggiando la punta della lingua ai denti superiori e spingendo la voce moderatamente. Il T appoggiando la punta della lingua un' po' più abbasso: cioè fra i denti superiori e gl' inferiori e spingendo la voce con maggior forza.

§"G. Il G diversifica di suono come il C quando precede immediatamente una vocale. Innanzi H ha un suono simile a ga, go, gu; na ove segua un l il suono è talvolta infranto, come si è osservato pel C, e ciò avviene sempre che I forma dittongo con altra vocale, o si tratti di voce che derivi da altra in cui tal condizione si avveri. La differenza de' due suoni si osserva distintamente in ghigno e ghiaccio, in ghirlanda; e ghiotto, in vegghi per vegga (2. persona) e vegghi da vegghiare.

"Ghiro e ghiribizzo si pronunziano da varj variamente, tuttocchè non essendovi dittongo, il suono del G H dovesse essere aspro.

"G seguito da L ha pure il suono aspro e l'infranto: l'uno più raro sentesi nelle parole Angli, negligenza, gloria ec. l'altro nelle parole scagliare, cogliere, biglietto, cioè innanzi al dittongo, ed in quelle che ne derivano e foglio, fogli, ec.

"Si pronunziano altresi col suono infranto il pronome egli, il pronome ed articolo gli con tuti'i composti come cogli, negli e gliele, gliene, il quale ultimo caso è il solo in cui GL sia seguito da dittongo in principio di parole. I Romagauoli ed i Lombardi mutano il GL infranto nel suono affatto diverso di LI, LLI dicendo alcuni alio, filio, orgolio ed altri allio, fillio, or gollio per aglio, figlio, orgoglio. I Veneti poi generalmente sono incapaci di tale articolazione e sogliono o bandirne interamente la H dicendo, figgi per figli, consiggi per consigli ec., o trasportarla dinanzi al G col dire filgi, e consilgi.

"G seguito da N ha un cotal suono che quasi nulla partecipa delle due lettere, ma forma una nuova articolazione, un'altra lettera, come compagna campagna, ignudo. I Romani hanno il mal vezzo di far sentire questo suo

no anche nella parola niente che profferiscono gnente.

"Uno de' difetti notabili della nostra pronunzia è di profferir doppio il G semplice innanzi E ed I, confondendo per esempio rege con regge, ragia con raggia (da raggiare) e dicendo caggione per cagione, Pariggi per Parigi. Ad evitar questo sconcio i Toscani sogliono pronunziare il G semplice come il J francese. Gioverebbe imitarli ove riuscisse non incorrere in una biasimevole affettazione.

"Altro nostro difetto, o almeno di parecchi, è far sentire il G in mezzo al dittongo E A finale, quasi potessero insieme rimare astrea e strega; e cosi si ode pronunziare assembleĝa per assemblea, contega per contea ec.

§"P. La pronuncia del P quand'egli è accompagnato dalla M o dalla N, per essere molto vicina a quella del B si suole da noi con essa confondere, come sblende per splende, sblendore per splendore; ma chi pronuncierà diritlamente farà distinguere rompa da romba e saprà sternere il B di tromba dal P di pompa. A tal opo si osservi che per pronunziare il P si fa lo stesso movimento di labbri che pel B, ma questi si premono l'uno contra l'altro prima di aprirli, e la voce si manda fuori con maggior forza.

"Il dirsi poi da taluno in Napoli abrile per aprile è cosa troppo volgare per esser qui ripresa.

§"S. Questa lettera ha doppio suono l'aspro o gagliardo ed il dolce o rimesso che di quello è men frequente. Il primo producesi con accostare e con giungere i denti insieme e subito disgiungerli, ed il secondo si forma col non disgiungerli ed ha un certo che di ronzio. Coloro che conoscono il francese possono distinguere l'uno e l'altro in profferir queste parole nous savons (S'aspro) e nous avons (S dolce).

"Ecco alcune regole principali intorno a ciò.

"1. Quando é iniziale e le segue una vocale come sole, sillaba ec. Si eccettua però il caso in cui derivi dall' X greco o latino; onde si pronunzierà dolce in Senocrate, Santippo, Senofonte, Serse.

"Le parole composte ritengono il suono che ha la S nella prima parola: perciò l'S è aspra in riserba, risuona, risegna, parasole: èdolce in Artaserse.

"2. Quando è doppia, come c'êssero, oppresso, ec.

"3. Quando è preceduta da una consonante, come colsero, pensare, arsura.

"4. In tutti gli aggettivi che hanno la desinenza oso come bellicoso, specioso ed altri moltissimi; come anche in tutti gli avverbj che ne derivano cioè bellicosamente, speciosamente, ec.

"5. In tutte le parole cadenti in ese come arnese, borghese, cornprese, forese, eccetto cortese, chiese plurale di chiesa e non già chiese da chiedere, paese e forse qualche altra parola.

"6. Innanzi a C, F, P, T, come scola, sforzo, vesta, studio, cestu. È dolce,

"1. Innanzi a B, D, G, L, M, N, R, V, come sbarrure sdegno, sguardo, slegare, smania, snello, sradicure, sventare.

"2. E quando è preceduta da U, come causa accusa, Medusa: eccetto fuso nome che ha la S aspra per distinguersi da fuso participio.

"3. E quando è preceduta da vocale e seguita da I, cui succede altra vocale come cortesia, Asia, Elisio.

"4. E finalmente nella desinenza in esimo, come battesimo, cristianesimo, millesimo.

"Intorno alla pronunzia della S aspra o dolce da noi si cade in continui errori, e quindi conviene usar molta d'digenza ad evitarli.

"Altro sbaglio gravissimo sogliamo commettere confondendo la S colla Z in tutte quelle parole in cui S è preceduta da N come assenso, compenso, denso, che malamente si profferiscono ussenzo, compenza, denzo.

"In Roma questo scambio avviene anche più frequentemente, e con istrazio dell'orecchio si sente dire il sole, il zignare, una persona invece di sole, signore, persona e cosi polzo per polso inzegna, per insegna, corzo per corso.

§"Z. La Z ha pure due suoni, l'aspro ed il dolce, che del primo è più raro. L'aspro somiglia al TS, e sentesi in zuppa, zoccolo, prezzo; il dolce è simile a DS e si trova in zanzara, zelo, orzo. Il distinguer questi due suoni assai rileva e perciò diamo le tre seguenti regole che potranno esser di qualche ajuto, senza che faccia mestieri ricorrer sempre a dizionarj di pronunzia.

"1. La Z doppia è per lo più aspra come aguzzare, corazza, stizzoso. Ed sempre aspra ne' diminativi in uzzo, e uzza come animaluzzo, bocacuzza, ec.

"2. Preceduta da L o da N è quasi sempre aspra, per esempio alzare, batzo, filza, baldanza, radenza, raggiranzare.

"3. La Z iniziale è più sovente aspra che dolce.

"Alcuni distinguono una terza Z nomata sottile che tiene il mezzo fra le due precedenti e dicono esser la scempia che precede i dittonghi la, le, lo, come in grazia, letizia, benefizio, uffizio. Ed il Salviati ne aggiugne una quarta, sul che non occorre fermarci, mentre cosi la troppa diligenza poca si suole alcune volte biasimare.

"I Lombardi, i Veneziani e principalmente i Piemontesi ed i Genovesi pronunziano S per Z, dicendo a cagion d'esempio grasia, prestesa, pasiensa, per grazia, prestezza, pazienza.

§"Prima di chiudere queste osservazioni ortologiche, giova avvertire esserci noi limitati a quelle che sono di maggior importanza, omettendo di far motto di alcune lettere che hanno alquante differenze di pronuncia quasi insensibili, le quali giustamente sarebbero tassate di troppa finezza e squisitezza per l'insegnamento elementare.

"Quanto si è detto basta a far comprendere qual cura si debba allo studio dell'ortologia, o come altri dicono ortoepia, finora por troppo negletto in ogni parte d'Italia, fuorchè in Toscana dove natura è maestra, e dove non si nota che alcun diffettuzzo di cui si è fatto cenno.

"I nostri concittadini, poi, oltre alle regole da noi date, dovrebbero porre mente a fuggire due difetti generici, quello cioè di correr troppo nel parlar o nel leggere, e quindi smozzicare i suoni, e pronunziar mute lutte le finali; e l'altra di rinforzar soverchiamenle la voce parlando, a guisa di coloro che si agitano nelle risse e nelle baccanalie.

"E gli abitanti dell'Italia superiore, specialmente i Romagnuoli, i Lombardi, i Veneti, si guardino di quel loro frequente difetto che sta nel prof ferir come semplici le consonanti doppie, massimamente quando sono verso il principio, o verso il mezzo della parola; e per contrario sul fine di essa nel profferir doppie le semplici. Molti per esempio pronunziano e taluni altresì scrivono arivo, cativo, difetoso invece di arrivo, cattivo, difettoso, e per l'opposto, stato, Vendutto, Catenna invece di stato, veduto, catena. Nelle quali storpiature incorrono talora anche uomini letterati di quelle contrade."

252 Salvador, Gregorio. "Breve historia del español." Unpublished paper. pp. 1-5. "La base del idioma Español es el latín vulgar, propagado en España desde fines del siglo III a. C., que se impuso a las lenguas ibéricas y al vasco … Antes de la llegada de los romanos, la península ibérica estaba poblada por diversas comunidades. A ambos lados de los Pirineos, se agrupaban diversos pueblos que poseían una lengua común, la vascuence. En el sur los nativos establecían relaciones comerciales con los fenicios. Hacia el siglo VII a. C. los Celtas, provenientes del sur de Alemania, invadieron la península y establecieron en Galicia y Portugal … La publicación de la primera gramática castellana de Elio Antonio de Nebrija en 1492, fecha del descubrimiento de América y de la toma de Granada por los Reyes Católicos, establece la fecha inicial de la segunda gran etapa de conformación y consolidación del idioma.

"Hasta la irrupción de la radio y la televisión en la sociedad … era relativamente fácil diagnosticar por los hábitos fonéticos y la entonación la pertenencia de un determinado hablante a su correspondiente área dialectal … Del mapa lingüístico medieval ibérico surgieron variedades lingüísticas algunas que se convirtieron en lenguas y otras, con el paso del tiempo, se transformaron en dialectos de alguna de ellas. Entre las variedades relacionadas con el español se encuentran: el leonés, que se habló desde Asturias hasta las tierras de Cáceres y que, ya a finales del siglo XV, había dejado su lugar de idioma en pugna con el castellano para ocupar el puesto de mera variedad dialectal; el aragonés, con una situación análoga al leonés, que se habló en el reino de Aragón y cuyas fronteras naturales son los Pirineos por el norte, la cordillera Ibérica por el oeste y los límites de Cataluña y Valencia por el este. A partir del siglo XIV, como consecuencia de la conquista de Andalucía por los castellanos, surgió el andaluz, que integró algunos rasgos del mozárabe, como un auténtico dialecto del castellano.

"El extremeño, que empezó siendo una variedad fronteriza del leonés y el castellano se ha consolidado como uno de los pocos dialectos hoy todavía identificables por sus aspiraciones implosivas y su peculiar léxico. El riojano, que se habló en La Rioja, y que tan decisivamente influyó en el castellano escrito de los primeros tiempos, era una variedad dialectal del aragonés. Otro dialecto de fronterizo aún vigente lo representa el murciano, en el que confluyeron el castellano, el aragonés y el valenciano, variedad catalana … En el año 1713 se fundó la Real Academia Española. Su primera tarea fue la de fijar el idioma y sancionar los cambios que de su idioma habían hecho los hablantes a lo largo de los siglos."

253 HERM, 209-210. "la voz representada por el diptongo visual francés eu es su e muda, ó mas bien pectoral larga, y esta una e más oscura y degradada que le e cerrada; pero en el fondo una e: la u francesca una mezcla de la i y la u comun, yo la a alemana una mezcla de la a castellana y de la o. Las voces nasales del francés son las comunes, emitidas en parte por la nariz &c. &c."

254 HERM, 210-211. "Y si consideramos, en fin, quien e no hay voz que no empiece por una aspiración, y contamos esta como una especie de articulación general; tendremos otra más, y en todas serán diez y ocho. Ahora bien: multiplicando este número por el de cinco, que es el de las voces, resultarán noventa voces articuladas, realmente distintas. Y como estas noventa voces articuladas pueden ser breves o largas, y tener un tono grave o agudo; se ve que cada une de ellas puede pronunciarse de cuatro modos diferentes, ó lo que es lo mismo, que el número de los sonidos completos, ó las sílabas naturales, es el de noventa multiplicado por cuatro, igual á trescientos sesenta. De lo cual se infiere que una escritura silábica debería constar de trescientos sesenta caracteres diversos, cada uno de los cuales representaría una de las sílabas naturales, es decir, uno de los sonidos completos que resultan de las varias combinaciones de la voz, la articulación, la cantidad y el tono que los diversifican."

255 For a detailed exploration of Castilian, which provides pronunciation guidelines based on Roman Latin, and which compares modern vowels and consonants with ancient ones, see Hanssen, Federico. *Gramática Histórica De La Lengua Castellana*. Halle a.S.: Max Niemeyer, 1913.

256 Celdrán, Eugenio Martínez, and Lourdes Romera Barrios. "Historiografía De Aa Fonética y Fonología Españolas." *Historiografía de la lingüística en el ámbito hispánico*, 2007, 119-60.

257 Garcia, María Blanco Antonio. *Analisis Filosofico De La Escritura y Lengua Hebrea*. Madrid: Imp. de José Felix Pala-cios, 1846, 33. "Estas mociones vocales, o sea vibraciones del aire movido por los órganos, se efectúan en tres puntos cardinales de la boca, a saber: garganta, paladar y labios, o en los espacios intermedios: si la reflexión del aire se hace en la garganta, el movimiento orgánico suena con la vocal a, si en el paladar con vocal i, y si en los labios con u: por consiguiente las vocales a i, u son cardinales de un triángulo que puede considerarse tirado desde la garganta á los labios, y desde cada uno de estos puntos al paladar: estas son las vocales fundamentales de todo idioma."

258 HERM, 218-221. "Si examinamos luego con mucho cuidado las articulaciones que resultan de los varios modos con que las partes adyacentes al tubo pueden comprimir el aria en todo su tránsito, hallaremos que bien contadas las que son absolutamente diversas, no pasan de 17, á saber, las que nosotros llamamos de b, d, f, g (suave) ch, j, k (ó c fuerte), l, ll, m, n, ñ, p, r, s, t, z (ó c suave). En efecto, representadas por estos mismos caracteres, ó por otros equivalentes, y modulas con alguna variedad en los diferentes países por efecto del clima, son las únicas que se encuentran en las lenguas que conocemos, y á ellas se reducen aun las que algunos consideran como distintas. Por ejemplo, la representada en varios alfabetos, por la llamada v de corazón, es la de f pronunciada tenue y suavísimamente."

259 CUN, 10.

260 Vianna, Aniceto dos Reis Gonçalves (1892): *Exposição da pronuncia normal portuguesa para uso de nacionais e estrangeiros*. Lisboa: Imprensa Nacional (Presented at the 10th Session of the International Congress of Orientalists), in Estudos de fonética portuguesa. Lisboa: Imprensa Nacional /Casa da Moeda, 1973, 153-257.

261 Walker, Russell. "Vowels." *Learning Portuguese,* 16 March 2006. https://www.learningportuguese.co.uk/guide/pronunciation/vowels.

262 JUNG, vol. 2, 1. "Die Portugiesen befleißigen sich, so zu schreiben, wie sie sprechen, und im Sprechen all Buchstaben hören zu raffen, die sie schreiben. Doch haben einige von ihren Buchstaben einen andern Ton, als im Deutschen, daher ich mich bemühen will, ihm Deutsch auszudrücken, damit der Leser im Stande sei, ohne sonderliche Mühe zur wahten Aussprache derselben zu gelangen."

263 JUNG, vol. 2, 40. "A wird ausgesprochen wie im Deutschen und Lateinischen: amór, de Liebe. Es ist lang oder kurz, nachdem der Accent darüber ist, wie weiter unten gezeigt werden soll.

"E wie in Deutschen: édificar, bauen. In allen mit es anfangenden, wo auf das s noch ein Consonant folgt, wird das e kaum gehört, und nur durch das Anstoßen der Zunge an den Gaumen ausgedrückt; als: escóla, die Schule, esta, ist, fast wie scola, sta.

"I wie im Deutschen: indicar, anzeigen; intimar, anzeigen, bekannt machen.

"Y ist ebendasselbe als das vorhergehende i, nur mit dem Unterscheide, daß die Sylbe etwas länger dadurch zu werden scheint, obgleich das y selbst deswegen nicht stärker gehört wird; als: Rey, der König. Vor a und o wird es stärker, ohngefähr wie j im Deutschen, gehört: joya, ein Kleinod, joyo, das Unkraut.

"O, U wie im Deutschen und Lateinischen: absoluto, durchaus.

"B wie im Deutschen.

"C klingt vor e und i wie s; vor a, o und u, wie k; wenn es aber unten ein Häkchen (Portugiesisch Plica, Französisch Cedille) hat, so nimmt es den Ton des Deutschen ss oder ss an; als çapato, ein Schuh, lies Ssapato; açoute, eine Peitsche, lies ssumo; C vor y klingt wie im Lateinischen und Deutschen, als Cyclopa, Cylindro, Cypreste, Cuthera. Von ch siehe bei H.

"D und F wie in andern Sprachen.

"G vor a, o und u, wie in Deutschen; allein vor e und i wie in Französischen. Wenn g vor e und i den Deutschen Laut haben soll, so schreibt man wie in Französischen gue, gui; als: guerre, der Krieg, lies Gerra; guisa, die Art, lies gisa. Wenn g vor ua steht, so müssen all beide Selbstlauter eigentlich gehört werden; als guarda, die Wache, lies gu-arda in drei Sylben.

"H wenn es vor einem Vocal steht, hat gar keinen Laut; als: homem, der Mensch, lies omeng; herdeyro, der Erbe, lies erdeyro; honrado, geehrt, lies onrado. Dieser Buchstabe wird hinter c, l, n, von den Portugiesen auf eine ihnen eigene Art gebraucht, nemlich:

"Cha, che, chi, cho, chu, wird ausgesprochen wie das Deutsche schau, sche, schi, scho, schu; als: chave, der Schlüssel; chegar, ankommen; chinéla, ein Pantoffel; chorar, schrein; chapar, saugen; wie schawe, schigar u. s. w.

"Lha, lhe, lhe, lho, lhu wird gelesen, wie das Französischen lle in Fille, ein Mädchen; oder fast wie im Deutschen tja, lje, lji, ljo, lju; als: abelha, eine Biene, lies abel-ja; mulher, eine Frau, lies muljer; colhido, gesammelt, lies col-jido; filho, ein Sohn, lies fil-jo; olhudo, voller Augen, lies ol-judo.

"Nur ein einziges Portugiesisches Wort mit seinen Abstammungen fäugt mit lh an, nämlich lhana, aufrichtig, redlich; davon Lhaneza, Aufrichtigkeit und Lhanamente, das Adverbium; aber auch in diesen klingt lh wie lj.

"Nh wird wie nj oder wie das Spanische ñ (zum Exempel in España) ausgesprochen n, als: unha, der Nagel am Finger, lies unnia oder unja; dinheyro, Geld, lies dinjeiro; grunhir, grunzen, lies grunjir; linho, Flachs, lies linnio; nenhum, niemand, lies nennjung.

"J oder j, das mitlantende i, wie im Französischen, j, wie in jamais.

"L sowohl einfach als doppelt, wie im Deutschen, Von lh siehe bei H.

"M in Anfange eines Worts wie im Deutschen; allein am Ende des Worts wird es wie ein n nasale gelesen, nämlich am wie das Französische en oder an, em wie das Französische in, oder wie das Deutsche en in enge, im wie in in bringen, om wie das Französische on, um wie un in Lunge; als: cawam, eine Rohle, fast wie cawang; bem, wohl fast wie beng; assim, so fast wie assing; bom, gut, fast wie bong; algum, jemand, fast wie algung. NB. Anstatt am wird auch oft ao geschrieben, z. anstatt rezam, die Ursache, schreibt man auch rezao.

"Am, im, om, um, behalten im Anfange oder in der Mitte des Worts ihren natürlichen Klang; nur em wird allenthalben, es mag im Anfange oder in der Mitte seyn, wie eng gelesen; als emgano, der Betrug, lies eng-gano; dizemlhe, sie sagen ihm, lies disenglje. Hievon sind die Wörter, die aus dem Lateinischen kommen, ausgenommen in welchen das em seine Lateinische Aussprache behält, als emperador, der Kaiser; exemplo, ein Beispiel.

"N und P wie im Deutschen.

"Qu vor a lies kw; als qual, welcher lies kwal. Que und qui wird ke und ki gelesen; quebrar, lies kebrar; queixa, die Klage lies kei-scha; queyxada, der Kinnbacken, lies kei-schada; quinta, ein Landhaus lies Kinta. Quo lautet wie kuo; als: quotidiano, täglich lies ku-otidiano.

"R, s und ss wie in andern Sprachen; jedoch das einfache s in allen Fällen etwas schärfer, als in Deutschen.

"T gleichfalls; sogar wird ti immer ordentlich, und nicht wie ci aus-

gesprochen, wenn bleich ein Vocal folget; fatiar, schneiden lies fathiar und nicht faziar; fatia de pam, ein dünner Schnitt Brot, lies fathia de pang.

"V wie w in Deutschen.

"X wie sch; queyxada, der Kinnbacken, lies keischada; queyzarfe, sich beklagen, lies keascharfe. in den Wörtern aber, die mit a und e anfangen, und aus dem Lateinischen herkommen, behält es seinen lateinischen Klang; als in axungia, exemplo.

"Z wird wie s ausgesprochen; als: produzir, hervorbringen, lies produfîr; prezar, gelten lies presar; rezao, die Ursache lies resang."

264 FREI, 168. "Accento, hé a força particular da voz, descansando alguma coisa mais sobre certa letra ou sílaba de uma palavra, para ser melhor ouvida do que as outras sílabas da mesma; por exemplo:—na palavra presúme, a força da voz deve ser sobre a letra u, que faz a segunda sílaba sume, e que recebe o accento."

265 "Vogaes. As oraes pronunciam-se ou abertas ou fechadas ou mudas. O som aberto ou fechado provém-lhes dos respectivos acentos somente, e o mudo da sua posição."

"A artigo e a final das palavras pronunciam-se muito brandos: a fama, a casa. Dois "aa" brandos sucessivos valem na pronuncia por uma m á agudo: porta aberta (portáberta), a abelha (ábelha), contra a regra (contráregra). Nalguns casos todavia conservam o som brando.

"E, conjuncção, sôa quase como i, e no fim das palavras é mudo: e este (i êst). Esta vogal também sôa como i quer do principio, quer no meio de algumas palavras: egual, crear, theoria, pateo, etc. (igual, criar, thioria, patio). Outras vezes sôa quasi ã: empenho, desenho, tenha, Mascarenhas, ferrenho, etc. (empânho, desânho, tânha, etc.); como ei em: Desejo, igreja, ensejo, seja, veja, etc. (Deseijo, egreija, enseijo, etc.)."O, artigo e o final das palavras tem o som de u: o livro, corpo, preto (u livro, corpo, preto). No meio d'algumas palavras também sôa como u: concorrer, consolidar, coordenar, introduzir, etc. (concorrer, consultar, cuurdenar, etc.) "I e u conservam o som primitivo, ainda quando alterado pelo acento agudo: vivifico, vivifico, únto, untúra."

"O, como artigo e ao fînal das palavras tem o som de u: o livro, corpo, preto (u livro, corpo, preto). No meio d'algumas palavras também sôa como u: concorrer, consolidar, coordenar, introduzir, etc. (concorrer, consultar, cuurdenar, etc.)

"I e u conservam o som primitivo, ainda quando alterado pelo acento agudo: vivifico, vivifico, únto, untúra.

"O i em muitas palavras confunde-se na pronuncia com e mudo: inimigo, opinão, particípio (inimigo, opinião, participo).

"Consonantes. L, r e s brandas chamam-se liquidas por correr facilmente a sua prolação com a d'outras consoantes: claro, cravo, ciência, casto.

"C seguido de a, o, i, vale por c ou k: capa, fraco, escuro. Antes de e, i, e cedilhado (ç) antes de a , o, u, tem o valor de ss: cedro, cifra, taça, poço, doçura. Não se pronuncia em anedota, santo, synecdoche (anedota, santo, synedoche) e noutras muitas palavras derivadas do latim.

"G e q, gutturals, antes de e, i tem u que não se pronuncia: guerra, guita, quer, quilha (exceptua-se güela). Este u, porém soa antes de a, e, i, o, em palavras de origem latina: qüadro, qüunto, eqüestre, argüir, qüinqüênio, sangüineo, qüota, etc.

"G seguido de e ou i vale de j: gente, gigante.

"H. Esta letra so por si não tem valor fonético; usa-se apenas como distintivo etimológico.

"Posposto a c, l , n, t e r, fórma as consoantes compostas ch, lh, nh, ph, th e rh. Adeante de p (ph), o h dá a esta letra o valor de f nas palavras derivadas o grego: pharol, physico.

"Ch pronuncia-se com o som de x chiante explosivo em todas as palavras propriamente portuguesas: chamar, chave; e com o som de k nas de origem grega: Achiles, monarquia, máchina. Exceptum-se chirurgia, chirurgião, schisma e catecismo, em que o cha sôa como s.

"R, rr. O r singelo no princípio das palavras sempre, e no meio depois de l, m, n, s, e, o rr dobrado entre vogaes, tem o som forte: reino, melro, Menor, honra, Israel, arrasa, ferro. O r singelo entre vogaes é brando: era, fóra; é forte depois dos prefixos ab, de, oh, pre, pro, sub: abrupto, derogar, obrepção, proromper, subrepticio (abrupto, derrogar, etc.).

"S tem tres valores:

1.º de ç no principio das palavras, e no meio precedido de consoante ou dobrado (ss): sala, ensaio, tosse;

2.º quase de x chiante no flm das palavras, no principio ou no meio depois de vogal como que faz syllaba, e seguido de consoante: homens, errada, injusto;

3.º de z entre vogais: rosa, todos os homens (rosa, todozozómens), e depois de algumas consoantes: transito, transigia, etc. (trânsito, transigir). Conserva porém o som de ç ou s singelo entre vogaes an terminação simo dos ordinaes: vigésimo, centesimo, etc.; e depois dos prefixos a, anti, pre, pro, re: asymetria, antisocial, pressupor, prosseguir, resurgir. Exceptuam-se desolador, desolação, obsequio, presumir e resumir, cujo s vulgarmente se pronuncia como z (delozar, dezolação, obséquio, presumir, resumir).

"X alem do seu primitivo som (che), tem mais, em palavras de transcripção latina, os valores seguintes: de cç—fixo, fluxo, reflexo (flcço, flucço, refeço); de ç ou ss—reflexão, syntaxe, (refleção, sentasse); de z ou s—exacto, exemplo, excepto, experiencia (ezacto, ezemplo, escepto, esperiencia). No prefixo ex faz tomar algumas vezes a esta vogal o som do diphthongs ei, como em ex-ministro (eisministro)."

266 WEI, 15. "De A, waarmede ons A B C begint, is de enkelvoudigste en ligste klinker, die, door de ongedwongenste opening van den mond, zonder moeite voortgebracht wordt. Zoo dra de tong een weinig nader aan het gehemelte komt, ontstaat de nog helderder E; en uit deze wordt, wanneer de tong digt aan het gehemelte nadert, de I gevormd, als de hoogste klank, dien de menschelijke spraakwerktuigen kunnen voortbrengen. Om de o uit to spreken, zinkt de stem weder tot A, en geeft aan dozen klinker, door de ronding der lippen, eene andere gedaante, waardoor de o ontstaat. De laagste klinker, welke, door de sterkste ronding, of sluiting der lippen, gevormd wordt, is de U. Er heeft derhalve, bij het uitspreken van de klinkletteren, van A tot U, eene genoegzaam evenredige vernauwing van den mond, of ronding der lippen, plaats; zoo dat, bij de A, de mond het meest, bij de E minder, bij de I weder minder, bij de O nog minder, en bij de u het minst geopend is; met dit onderscheid echter, dat, bij het uitspreken van A, E en I, de tong telkens meer aan het gehemelte nadert, terwijl bij het uitspreken van de o, de tong weder tot denzelfden afstand van het gehemelte terug keert, waarop zij zich, bij het uitspreken van de A, bevond; hetwelk ook ten aanzien van de U plaats heeft; schoon de stem, bij het uitspreken van iedere dezer letteren, gelijke krachten to werk stelt."

267 A realization of the r phoneme in Dutch as uvular in onsets and as an alveolar approximant, or alternatively non-rhotically, in codas.

268 "Het foneemsysteem van het Nederlands beschikt over 19 consonanten. Deze kunnen worden onderverdeeld op basis van de manier waarop ze

gearticuleerd worden, de plaats van articulatie en de stemgeving.

"Opvallend m.b.t. de consonantinventaris van het Nederlands is dat het geen stemhebbende tegenhanger kent van de [k] zoals het Duits die heeft in een woord als gut [gu:t]. Als 'typisch Nederlands' worden het foneem [x] en het stemhebbende pendant [ɣ] ervaren die ook aan het begin van een woord kunnen voorkomen: chaos [xɑ:ɔs] en geven [ɣe:və]. Recente trends m.b.t Nederlandse medeklinkers zijn een verstemlozing van de fricatieven z, v en ɣ en een nieuw r-allofoon: de Gooise r.

"Plosieven of plofklanken worden geproduceerd door de luchtstroom helemaal af te sluiten en door de lucht vervolgens in één keer te laten ontsnappen. Het Nederlands kent /p/, /b/, /t/, /d/ en /k/. Daarnaast komt in sommige leenwoorden de plosief /ɡ/ voor, zoals in het woord goal.

"Bij fricatieven of wrijfklanken wordt de lucht door een bijna volledige vernauwing geperst zodat er een 'wrijvend' geluid ontstaat. Het Nederlands heeft de fricatieven /s/, /z/, /f/, /v/, /x/, /ɣ/, /h/ en /ʃ/. In enkele Franse leenwoorden komt bovendien de klank /ʒ/ voor, de stemhebbende variant van /ʃ/, zoals in het woord rouge [ru:ʒ].

"Nasalen of neusklanken worden gevormd door de lucht (alleen) door de neus te laten ontsnappen. Vaak voorkomende nasalen zijn de /m/ en de /n/, daarnaast is er nog de /ŋ/ die echter alleen aan het einde van een woord of morfeem kan voorkomen zoals in het woord ring. De /ɲ/ komt voor in woorden als oranje of ranja.

"Liquidae of vloeiklanken worden geproduceerd door de lucht via de zijkanten van de tong te laten ontwijken. In het Nederlands zijn de /l/ en varianten van het foneem /r/ voorbeelden voor een vloeiklank. In het geval van de vloeiklank r hebben we te maken met een zogenaamde 'trill' waarbij of het puntje van de tong of de huig tot trillen wordt gebracht.

"Als laatste groep zijn er nog de glijklanken of halfklinkers zoals de /w/ en de /j/ waar bij de vorming nauwelijks een vernauwing in de mondholte plaatsvindt. Soms worden ze niet eens tot de medeklinkers gerekend maar als allofonen van de klinkers /u/ respectievelijk /i/ beschouwd. Dit komt ook in de spelling tot uitdrukking: [mo:j] wordt gespeld als mooi."

269 Pajarinen, Jaana. "Puhutaanko Suomessa Vielä Murteita? (Are There Still Dialects in Finland?)." *Kielikello (Telltale). Kotimaisten kielten keskus or Kotus (Institute for the Languages of Finland).* Accessed June 19, 2021. https:// www.kielikello.fi/-/puhutaanko-suomessa-viela-murteita-. "Usein kuulee sanottavan, etteivät nykysuomalaiset enää puhu murteita tai ettei sitä alkuperäistä pälkäneläistä tai liperiläistä murretta enää puhuta. Käsitys, ettei murteita enää puhuttaisi, johtuu pitkälti siitä, että on totuttu ajattelemaan, että oikeaa murretta ovat puhuneet vain 1800-luvun lopulla syntyneet tai sitä vanhemmat suomalaiset. Näinhän asiaa ei tarvitse nähdä, vaan yhtä oikeaa on jokaisen "murtama" suomi, oli puhuja syntynyt viime vuosisadalla tai kaksikymmentä vuotta sitten. Kielen luonteeseen kuuluu jatkuva muutos, joten suomalaistenkaan puhekieli ei ole samanlaista nyt kuin sata vuotta sitten.

"Yhtenä hetkenä kielen muutos näkyy monenlaisena vaihteluna: eri alueilla asuvat puhuvat eri tavalla, eri-ikäiset puhuvat eri tavalla, eri tilanteissa puhutaan eri tavalla. Toisaalta sama ihminen puhuu mahdollisesti eri-ikäisenä eri tavalla."

270 "Finnish Pronunciation in the 1800s," Mietta Lennes, 17 June 2021.

271 "Swedish Dialects in Finland—Institute for the Languages of Finland." *Institute for the Languages of Finland.* KOTUS. Accessed 24 June 2021. https:// www.kotus.fi/en/on_language/dialects/swedish_dialects_in_finland_7542.

The Swedish dialects of Finland belong to the East Swedish family of dialects. Their origins trace back to Old Swedish, which spread to Finland from Central Sweden with Swedish settlers from the twelfth century onward.

Swedish-speaking Ostrobothnia extends down the western coast from Karleby (Kokkola) to Sideby. Swedish dialects were formerly also spoken in parts of North Satakunta. Ostrobothnian dialects are divided into three groups: Northern, Central and Southern.

272 Lindgren, Birgitta. "Grannspråk: Om Nordiska Språk (Neighboring Languages: About Nordic Languages)." *Skolverket (The National Agency for Education),* June 9, 2020. https://www.skolverket.se/skolutveckling/inspiration-och-stod-i-arbetet/stod-i-arbetet/grannsprak-om-nordiska-sprak."De skandinaviska språken (danska, norska och svenska) är så lika varandra att man gott kunde bedöma dem som dialekter av samma språk. Men eftersom de har varsitt skriftspråk och dessutom är huvudspråk i varsitt land så beskrivs de som skilda språk. Även om det finns skillnader som ställer till med förståelseproblem är likheterna så stora att det finns en spontan ömsesidig förståelse och en tradition för att personer som kan något av dessa språk umgås med varandra utan att någon behöver byta om till ett annat språk, var och en kan tala sitt språk. Detta är inte helt unikt i världen, men inte heller helt vanligt.

"Historiskt sett har de skandinaviska språken (danska, norska och svenska) uppstått ur ett och samma språk, urnordiskan. Omkring år 800 brukar man räkna med att de skilda språken började utvecklas. Genom att även de som inte har ett skandinaviskt språk som modersmål ändå i mer eller mindre hög grad behärskar något skandinaviskt språk, omfattar den nordiska språkförståelsen i princip hela Norden.

"Den större delen av ordförrådet är så likartad i de skandinaviska språken att uppemot 75 % av orden i en dansk eller norsk text är omedelbart begripliga när man väl har insett de systematiska skillnaderna."

273 The dialect of a particular social class.

274 DEM, 119-121. "Kartet viser de fire hovudgruppene av norske dialektar: nordnorsk i gult, trøndersk i mørkeblått, vestlandsk i oransje og østlandsk i lyseblått.

"Norsk talespråk er i synkront perspektiv kjenneregnet av relativt store dialektforskjellar og sterke, livskraftige dialekter. Dialektforskjellene kan blant annet tilskrives store geografiske avstander, og at fjellandskapet har begrenset kontakten mellom folk i tidligere tider.

"I østnorske dialekter ble de trykklette endevokalene fra norrønt svekket til e eller fullt bortfall i ord med lange (og dermed mer betonte) rotstavelser, men holdt seg uendret i ord med korte rotstavelser. Et annet særtrekk ved østnorske dialekter er at de har tykk l der skriftbildet har «l» eller «rd». Den mest iørefallande forskjellen er imidlertid at østnorske dialekter har lavtone, mens vest- og nordnorske har høytone, det vil si at et ord som «Bergen» har initial lav tone i øst men høy eller fallende i vest og nord.

"Disse talemålene kan oppfattes som både standardspråk og sosiolekter. Det høyere talemålet skiller seg særlig i morfologien fra de omkringliggende dialektene, og hører hverken til østnorsk eller vestnorsk dialekt. De er ikke norske dialekter i lingvistisk forstand, men en del av talespråket som sammen utgjør moderne norsk."

275 DEM, 134. "De fleste norske dialekter har 18 monoftonger og seks diftonger. Det er en del variasjon dialektene imellom når det gjelder realisering av vokalene, men variasjonen når det gjelder diftonger er større. De seks diftongene blir skrevet ei, øy, au, ai, oi, ui. De tre første er vanlige, de går tilbake til urnordiske diftonger, og flere østlige dialekter har monoftong

i stedet for diftong her (for eksempel stenrøs for steinrøys. Østlandsk bymålsuttale av diftongene er [æ i øy æʉ ɑi ɔy ʉi], trøndersk uttale av de tre første er [ei øy øʉ]. Diftongene har en del fellestrekk, for eksempel er alle stigende, bortsett fra den siste, som er avvikende både ved å ha to høye vokaler, og ved at den er representert i ordforrådet med bare et par ord: (å) huie og (i) hui (og hast).]

276 DEM, 135-136. "Norske vokaler kan være korte eller lange. Fonologisk sett har norske konsonanter ikke lengdeforskjell. Selv om det er mulig å måle en liten forskjell i lengde mellom konsonanter, er dette alltid avhengig av vokallengde, og forskjellen er langt mindre enn den er det for lange og korte vokaler. Forskjellen mellom lette og tunge stavelser er avhengig av lengde. En tung stavelse i norsk er en stavelse med konsonant og/eller med lang vokal i rimet i stavelsen."

277 "Kort over Danske Dialektgrænser." Dansk Sproghistorie (Danish Language History). Accessed 17 June 17 2021. https://www.dansksproghistorie.dk/76.]

278 Marcussen, Jørgen. "Retskrivningsordbøger Til 1948 (Spelling Dictionaries until 1948)." *Jørgen Marcussens hjemmeside*, 25 July 25 2007. http://www.jmarcussen.dk/lit/sprog/dansk/ordbog07.html#0700. "Centraladministrationen havde udgivet retningslinjer for retskrivningen første gang i 1739, hvor det i Latinskoleforordningen af 17. april blev pålagt skolerne at påse, at eleverne »vænnes til en god og brugelig Ortographie i deres eget Sprog … Ved århundredets begyndelse kom den næste forordning: Kongelig resolution af 11. juli 1800. Ifølge denne skulle lærerne nu »følge den Orthographie, som af Fædrelandets bedste og meest classiske Prosaister bruges.

"Det var stadigt svært for lærerne at vide, hvad der var korrekt."

279 Petersen, Niels Matthias. *Det Danske, Norske Og Svenske Sprogs Historie under Deres Udvikling Af Stamsproget (The History of the Danish, Norwegian and Swedish Languages during Their Development of the Tribal Language). Kjöbenhavn*: Gyldendal, 1830. "Den vigtigste Forandring, som er foregaaet med Talesproget, er, at Dialekternes Omraade stadig er blevet indskrænket; endnu i det 19. Aarhundredes Begyndelse var Jysk almindeligt som Talesprog i de jyske Købstæder … men nu høres Dialekterne saa at sige ikke mere i de danske Købstæder eller i det hele blandt «Folk uden for Bondestanden.» Flere Bogstaver, som tidligere vare stumme, udtales nu … Ogsaa i andre Ord vare især g og d altid stumme, medens vi i det mindste ret ofte udtale dem.

"En Hyrde udtales i Nutidens Rigssprog altid med et tydeligt d, men endnu et Stykke ned i det 19. Aarhundrede var d'et stumt … I en lang Række Ord udtaltes tidligere g efter Vokal som j eller v (d. e. som sidste Led af de Diftonger, der almindelig staves ej, øj, av eller au o desl.) samt b som v … I det 18. Aarhundrede skrev man som oftest mavre, det glatte Lav, et Sindelay, og Ord som Hagl og Sagn udtaltes længe med et halvvokalisk v (gesprochen Hauwl, Sauwn). Ligeledes med Hensyn til Ord som Skab, Kaabe, Reb, Skib, Kryb, Slab er der foregaaet en Forandring: nu udtales de som oftest med b, men i Begyndelsen af vort Aar hundrede blev Udtalen med v anset for den normale …

"Ogsaa den ældre Slægts Udtale af Viol, Violet, Violin, Vridbor som Fiol, Fiolet, Fiolin, Fritbor, er nær ved at regnes for vulgær … Den mærkeligste Forandring er foregaaet med Ordet en Fiende; da man i Steden for Bierg begyndte at skrive Bjerg, medførte det ogsaa, at mange skrev Fjende for Fiende … og denne Stavemaade har saa efterhaanden fremkaldt den helt ny Udtaleform med j; men endnu 1823 erklærede J. L. Heiberg det for en grov Sprogfejl at skrive Fjende, da man « altid » udtalte Ordet med et tydeligt i."

280 und, Jørn, and Lars Brink. "7.4 Yngre Nydansk (Younger Danish)." *Dansk Sproghistorie*. Accessed June 17, 2021. https://www.dansksproghistorie.dk/alle-bind/bind-2/kapitel-7-udtale/7-4-yngre-nydansk/.

The German linguist Eduard Sievers described the glottal stop in his book *Grundzüge Der Phonetik: Zur Einführung in Das Studium Der Lautlehre Der Indogermanischen Sprachen*. Leipzig: Breitkopf & Härtel, 1881: "If the vowel is isolated toward the end, then in Danish at least the second glottal stop is expressed in a toneless breath, of greater or lesser strength, that immediately follows the vowel, e.g., the Danish pä', fœ', ti', etc. After a long vowel, a following consonant will be produced with the exhalation of the second height. But if a sounding continuant follows a short vowel, then the push does not fall on the vowel, e.g., the Danish å'nd, vi'ld."

"Ist der Vocal nach dem Ende zu isolirt , so äussert sich im Dänischen wenigstens der zweite Exspirationshub in einem dem Vocal nachstürzenden (tonlosen) Hauch von grösserer oder geringerer Stärke, vgl. z.B. dän. pä', fœ', ti' u. dgl. Nach langem Vocal wird ein folgender Consonant mit dem Exspirationsstoss des zweiten Gipfels hervorgebracht. Folgt aber auf einen kurzen Vocal ein tönender Dauerlaut, so fällt der 'Stoss' … nicht in den Vocal, vgl. etwa die dän. å'nd, vi'ld."

281 Calvin Thomas, "Swedish Language and Literature," Gilman, Daniel Coit, Harry Thurston Peck and Frank Moore Colby, ed. 1905. *The New International Encyclopædia*, Vol. 18. New York: Dodd, Mead & Co.

282 SWT, 457-458.

283 SWT, 461.

284 Hüning, Matthias. "Structuur En Geschiedenis Van Het Nederlands Een Inleiding Tot De Taalkunde Van Het Nederlands." Niederländische Philologie FU Berlin, 5 December 2013. http://neon.niederlandistik.fu-berlin.de/nl/nedling/phonology/vocals. "Het Nederlandse klanksysteem beschikt over 16 klinkerklanken: 7 lange klinkers, 6 korte klinkers (inclusief de sjwa) en 3 diftongen. Ze kunnen worden onderverdeeld op basis van lengte en klinkerhoogte en langs de dimensies voor-achter en gerond-ongerond. Daarnaast zijn er een aantal leenfonemen en semi-diftongen. De lange klinkers e en o worden in het noorden van het Nederlandse taalgebied licht gediftongeerd.... Het Nederlands kent 7 lange (i, e, y, ø, u, o, a) en 6 korte klinkers (ɪ, œ, ɔ, ɛ, ɑ, ə)."

285 The North Wind and the Sun argued over who was the stronger of the two. While they were arguing, a traveler covered in a warm coat approached. They decided that the stronger would be the one who managed to strip the traveler of his coat. The North Wind started, blowing as hard as it could, but the harder it blew, the more the traveler clung to his coat. Then the Wind gave up. It was Sun's turn, and it began to shine brightly. This made the traveler feel warm, and so he took off his coat. The North Wind had to recognize that the Sun was the stronger of the two.

286 "Fonología del Español." *Fundéu | Fundación del español urgente*, May 11, 2020. https://www.fundeu.es/fonologia.

CHORDOPHONES, ÆROPHONES & DRUMS

Tampering with the tone-colour of a composer, one of his most important means of expression, is objectionable. No one would dream of altering the colours of a fine picture, but in music this is often done without the slightest compunction.

—Author Charles Maclean,
Proceedings of the Musical Association

ART: Louis Sabattier. *Rehearsal with Musical Instruments at the Cooperative (Familistere) of Guise, France*, illustration, unattributed. *L'Illustration, N° 2804*, 21 November 1896. [Source: Veneranda Biblioteca Ambrosiana, Milan. ©akg-images / WHA / World History Archive, used with permission.]

FIGURE 4.1 **Édouard Renard & Henri Valentin:** ***Fabrique d'instruments de musique de M. [Adolphe] Sax. Vue de l'atelier du second étage (Mr. Adolphe Sax's Factory of Musical Instruments. View of the second floor workshop.),*** **1848.**
[Source: *L'illustration*, 10, no. 258, 5 February 1848, 557.]

Composers select from a palette of instrumental and vocal timbres to create simple and complex sounds; the flashing white of the cymbals or the vivid red of the brass or the shadowy gray-brown of the lower strings weave in and out of a composition like strands of thread in a tapestry. Symphonists and melodists take audible tone colors such as these and with them paint sonority onto music in the same way that visual artists apply pigments to a canvas. The total spectrum can be seen and heard, after all: a green or yellow has a frequency just as distinct as an A♭ or B.

The timbre of many orchestral instruments changed little during the nineteenth century, even though the era saw rapid and almost continual mechanical and acoustical improvements in woodwinds, brasses, and strings. The rise of nationalism that occurred throughout Europe affected instrument-making as well; indeed, there were particularly

sharp contrasts in sonority between woodwinds made in the French and German styles. Certainly no modern listener would have difficulty concluding that an oboe made between 1800 and 1900 sounds similar to a modern one; still, there are appreciable differences between the woodwind, brass, and string sounds heard in concert halls then and those heard today. In the nineteenth century

> several factors helped to bring about developments in instrument making. These included the increasing demands of composers regarding technique, expression and extension of the range upward; the rise of the solo virtuoso-composer; larger orchestras and concert halls demanding louder-toned instruments; international trade exhibitions encouraging competition and experiment; instrument makers who had backgrounds as excellent performers; … and technical advice from acoustic experts.[287]

As early as 1895 changes were observed in the tone colors of the "most modern orchestra." The belief that at the end of the nineteenth century "the orchestra of to-day is substantially the orchestra of the beginning of the century [1800]" was countered with the response that "there have been vast changes in recent times."[288] In the process of becoming louder and more standardized, the advancements that radically altered the physical and acoustical designs of wind instruments also stripped the orchestra of much subtlety of color and balance.

One has only to listen to early recordings to conclude that our modern tonal ideals differ from those of the nineteenth century—an era in which all bowed instruments were strung with gut. "In the present climate of authentic revival, the opportunity would be welcome to hear and

judge for ourselves [the] sonorities of … instruments of the nineteenth century that have been displaced by technological innovations, or which have been 'improved,' mechanized, or plasticized to the point where composers of their time would have difficulty in recognizing them."[289]

Most modern performers understand that there are dramatic differences between seventeenth- and eighteenth-century instruments and our own; period instruments are de rigueur for most performances of baroque and classical music. Yet, misunderstandings still exist regarding the dissimilarities between nineteenth- and twentieth-century wind instruments. Even a superficial examination of the instruments known by, and available to, Mendelssohn, Berlioz, Brahms and Wagner, reveals an aural sensibility that contrasts sharply with our own.

I. FLUTES

Under Liszt's direction, between 1842 and 1862 Theodor Winkler, principal flute in the Weimar Hoforchester, was the first orchestral player in Germany to use the Boehm cylinder.[290]

FIGURE 4.2 Flutes. ABOVE: Jean-Louis Tulou, French, Cocus Wood, Gold, Paris, 1852; MIDDLE: Rudall Carte & Co./Flute in C. London, P, 1879; BELOW: E-flat piccolo, Friedrich Kulow (German), Friedrich Kulow (German), c. 1879.
[Sources: TOP: Metropolitan Museum of Art Musical Instrument Collection Purchase, Robert Alonzo Lehman Bequest, 2009, 2009.24; CENTER: Image. https://www.loc.gov/item/dcmflute.0277/; BELOW: MIMEd 1547. Image courtesy of Musical Instrument Museums Edinburgh © The University of Edinburgh.]

In the mid- to late-nineteenth century there were two main types of flutes (figure 4.2). The first, called the "simple system," had a conical bore that tapered from the head toward the foot and was always constructed of wood or ivory; the six principal tone holes were covered directly by the fingers and the embouchure hole was relatively small; the flute also had a variety of keys (levers) to cover tone holes too far removed to be closed or opened directly by the fingers. This simple system instrument produced a small, focused, and beautiful tone.

The second type of flute was largely perfected by Theobald Boehm in Munich in the late 1840s and was known as the "Boehm system." It had a cylindrical bore, a much larger embouchure hole, and was constructed of either wood or metal; its circular keys covered enlarged finger holes—the diameters of which were too wide for the fingers themselves to fully cover. Thus, Boehm flutes tended to produce a more powerful sound than simple system flutes. There were also many variations on these two principal models: Meyer flutes, reform flutes, diatonic flutes, and conical ring-key flutes. Flute-playing inevitably took on national characteristics. In general, German and English flute players preferred a large, full, reedy sound, whereas French players were more concerned with suppleness and nuance.

As orchestras grew in size, instruments capable of producing greater volume were needed.

> German orchestral flautists after c 1850 continued to cite the Boehm flute's loudness as a defect, and the traditional flute's dynamic capacity and tonal flexibility (*Modulationsfähigkeit)* as ideal. … Most found the ring-key flute, just as much as the cylinder flute, too assertive, monotonous, and emotionally cold for their work. Thus until the era of recording, the sound of the conical wooden … flute remained by and large entrenched in the ears of German and Austrian conductors, composers, and flautists as the only acceptable orchestral flute tone.[291]

Wagner was concerned about changes in the flute's tonal character and became a "partisan of the old conical keyed flute…" Indeed, he remarked that flautists "have transformed their formerly delicate instruments into 'Blunderbusses;'"[292] he also "forced Moritz Fürstenau, one of the first to play the Boehm flute in Germany, to return to his old instrument."[293] Much of Wagner's experience was in Munich, "the one German city where the Boehm flute dominated." Yet, he warned in 1869 that flutes were "no longer capable of playing quietly" and were "too loud and too trumpet-like for use in an orchestra."[294] And, the "revolutionary nature of the Boehm flute caused or intensified sharp divisions among flautists, composers and conductors not merely over the fingering and mechanism of the instrument but over its tone and very character."[295]

In Berlin, the Boehm flute was established by the 1870s, but Vienna's "flute-playing retained its characteristic local instruments … until the 1880s." Dresden flautists placed "supreme value on [the city's] heritage in instrument and playing style" while Leipzig remained a "deeply conservative force in German flute-playing throughout the nineteenth century." As late as 1881, for instance, the Gewandhaus orchestra "invited only players who did not play the Boehm flute" to audition.[296]

Thus, the romantic era cannot "be regarded as the musical domain of the Boehm flutes," which were "slow to be adopted in Germany and were banned from certain German orchestras until 1914."[297] Even though Boehm's "earlier instruments were of metal," he constructed his "later ones of wood."[298]

II. OBOE AND ENGLISH HORN

The French oboe has a thinner and more delicate tone; the German is harsher and more powerful.[299]

The same spirit of optimistic inventiveness that fueled the Industrial Revolution in Europe led to remarkable mechanical advancements in wind instruments—particularly flutes and reed instruments.

"At the beginning of the century, the player's fingers were in contact with the instrument itself, using keys only to obtain chromatic notes or to extend the reach of the fingers. By the latter part of the century, on many of the instruments, the player never touched the body of the instrument at all, playing every note by manipulating key work of ever-increasing complexity."[300]

Oboists sought instruments that were technically proficient in a broad range of keys; instrument makers responded with increasingly complex key work. By mid-century fingering systems varied tremendously (even from oboe to oboe) as makers looked for the best solutions to problems such as intonation. When composers wrote more chromatically, oboists then needed instruments that played evenly in all twelve keys. Mechanical advances allowed composers to venture further from traditional harmony, which, in turn, created a cause-and-effect cycle among composers, players, and instrument-makers that lasted for decades.

In spite of the mechanical innovations to the oboe, the "German oboe (figure 4.3, B, C & D) retained many characteristics of the eighteenth-century instrument, with a fairly wide bore and reed, and a warm tone blending well with other wind instruments."[301] German oboists preferred a fuller, darker tone with more fundamental and fewer overtones, as opposed to the brighter and more flexible sound cultivated in France. Unlike the uniformity of oboe models found in orchestras around the world today, however, in the nineteenth century there was considerably more variety of tonal ideals; this French-German distinction was only the most pronounced.

FIGURE 4.3 **Oboes. A. Triebert (French), Rosewood and Brass, Paris 1870–75; B. B. Schott fils (German), Boxwood, Ivory, Silver, Mainz, c. 1830; C.: Theodaore Berteling, Westphalia, 1870s; D. Franz Lauter (Munster, active ca. 1845–1885 New York), c. 1855–1860.**
[Sources: Metropolitan Museum of Art Musical Instrument Collection: A. Purchase, Robert Alonzo Lehman Bequest, 2008.456; B. Purchase, Robert Alonzo Lehman Bequest, 2005, 2005.81a–g; C. Funds from various donors, 1976. 1976.7.10a, b; D. Gift of Dr. Nora Post, 1991, 1991.100.]

Indeed, it was not until the last decades of the nineteenth century that the French oboe (figure 4.3, A) even made its way into a German orchestra: "Fritz Flemming is known as

FIGURE 4.4 **English Horns. LEFT: Andrea Fornari (Italian), Wood, ivory, leather, horn, Venice, c. 1832; RIGHT: Johann Tobias Uhlmann (German), Nickel-silver, boxwood, Vienna, 1860–70.**
[Sources: Metropolitan Museum of Art Musical Instrument Collection. LEFT: The Crosby Brown Collection of Musical Instruments, 1889, 89.4.889; RIGHT: Purchase, Clara Mertens Bequest, in memory of André Mertens, 1998, 1998.419.]

the first oboist to play a French instrument in a German orchestra."[302] Even though the designs of the French and German oboes were similar, their sounds were not:

> The profile of the French oboe was more streamlined and it was played with lighter, narrower reeds. The sweet, bright tone of the French oboe added brilliance in the orchestra, while the heavy, dark tone preferred in the German lands was better able to blend with other instruments. German oboes had a slightly wider bore and the keys were supported on wooden mounts, which tended to damp resonance; and these characteristics, together with the use of relatively hard reeds, produced a dark sound.[303]

Choice of wood surely affected the instrument's tone. French makers initially used boxwood, which was the hardest timber available in Europe at the time, but quickly switched to more stable exotic woods such as rosewood, tulipwood, grenadilla, and ebony. These harder woods "made for a brighter tone … but particularly with the narrow reeds used by French players, the volume could not be pushed beyond a fairly modest ambitus."[304]

Joseph Sellner perfected an oboe with thireteen keys that stabilized the design of Austro-German instruments while preserving their "classical 'warmth' and blending qualities."[305] Interestingly, one of "the most important German mid-nineteenth-century manufacturer[s.] of oboes and bassoons was Heckel of Biebrich." Known today for bassoons, Heckel developed oboes from about 1850, which were made of "boxwood, retain traditional turning and have simple key systems."[306]

Another kind of oboe, a tenor in F, inexplicably called the English horn (*cor anglais*) (figure 4.4), slowly carved an orchestral niche for itself. Although in its modern, more familiar form it has a curved bocal and bulbous bell, it was also made with a curved body until about 1850; such instruments continued to be played in Italy almost to the end of the century. The English horn was

> little known in Germany and Austria in the early- to mid-nineteenth century. German orchestration texts of the first half of the century scarcely mention the instrument, composers did not use it, and Mendelssohn was unable to find a pair for his Berlin revival of the *St Matthew Passion* in 1829. Wagner, who had heard the

English horn in Paris, was the first German composer of the era to make extensive use of it … Other composers who wrote for the instrument included Schumann (*Manfred*, 1848-1849) and Liszt, especially "Der nächtliche Zug" from the two episodes from Lenau's *Faust* (1856-61) and *Christus* (1866-72).[307]

During his journeys, Berlioz was deeply affected by hearing shepherds play a similar instrument in the Abruzzi mountains; these "shepherd-pipers" came down from the mountains into Rome to perform.[308] Wagner wrote extensively for the instrument, using it to create a melancholy mood in such works as *Tristan, Tannhäuser*, and *Siegfried*.

III. CLARINETS

The clarinet is not only the finest wind instrument in the orchestra, but also the one with the widest range. The sound of the clarinet is closest to the human voice. What a wealth of resources composers have here to achieve the finest affects.[309]

Robert Vollstedt, *Klarinettenschule zum Selbstunterricht*, c. 1870

In the early nineteenth century, clarinets were made with more and more keys (as many as thirteen), without which difficult works such as the concertos by Weber and Spohr would have been inconceivable. The clarinet's rounded tone, expressive compass and facile technique were ideal for early romantic composers who were interested in innovative scoring and novel effects. The distinctly different styles of instrument-making and playing, which developed in France and Germany around this time, were reflected in composers' works from both sides of the Rhine.[310]

The French clarinet (figure 4.5, A) might be said to sound more brilliant than the darker timbre preferred by

FIGURE 4.5 Clarinets. A. in A, Buffet, Crampon & Cie., boxwood, brass with thin gold wash, Paris 1860–65; B. in B♭/A, Martin Schemmel, Vienna. Two upper sections (B♭, A), two middle sections (B♭, A) for the right fingers, c. 1830; C. Bass clarinet in C, Buffet jeune, Paris, 1837; D. in E♭, Martin Frères, La Couture-Boussey, c. 1850.
[Sources: A. Metropolitan Museum of Art Musical Instrument Collection, 2002.343; B. Photo by Raymond Parks, MIMEd 5264, Image courtesy of Musical Instrument Museums Edinburgh © The University of Edinburgh; C. Photo by Raymond Parks, MIMEd 4948, Sir Nicholas Shackleton Collection, Image courtesy of Musical Instrument Museums Edinburgh © The University of Edinburgh; D. Musée des instruments à vent, La Couture-Boussey, 2019.1.15.]

the Germans, but the instrument was popular throughout Europe.[311] By mid-century, ring-keys were applied to all woodwind instruments. The so-called Boehm clarinet was developed in France and included six ring-keys; by 1850

German instruments (figure 4.5, B) usually incorporated at least four ring-keys.

Precisely because of the clarinet's considerable range of expression, it was not infrequently compared to the human voice; it was said to have a smooth, singing quality in the uppermost register. Musicians described it as "expressive and flexible"—able to perform all the notes "lightly and smoothly in the quiet passages," which enabled it to imitate "a superlatively fine and full soprano voice."[312] Unlike the flute and oboe, however, the clarinet was made in five sizes: A, B♭, C, D, and the soprano E♭; three low instruments were also manufactured: the basset horn, along with alto and bass clarinets.

> While the exact role of each type of clarinet in [the early nineteenth century.] may be difficult to ascertain, an overwhelming case can be made for identifying and following composers' preferences as a first step toward the re-creation of original sonorities. The difference in tone-quality among the instruments in A, B♭ and C was perceived by virtually all eighteenth- and nineteenth-century writers; several, including … Berlioz … emphasized that the choice should be the composer's responsibility rather than the player's.[313]

Advanced clarinet models allowed composers to write chromatically and in more keys, both of which were impossible on the boxwood clarinets with ten or fewer keys common in the early 1800s. As clarinet design developed, many players found they were able to play almost all of the repertoire on a B♭ clarinet, a technique advocated by Iwan Müller in his *Méthode* of 1825.[314] Composers were less enthusiastic about these innovations, however, opting instead to preserve the changes in timbre associated with the different sizes of clarinets.

Berlioz railed against clarinettists who always played B♭ instruments, saying that "It is also the imperative duty of the conductor to see that clarinetists do not use the same instrument (the B♭ clarinet), all the time, regardless of what the composer asks for, as if the various clarinets, especially those in D and A, did not have a special individuality fully appreciated by well-informed composers … "[315]

This tradition was especially strong in mid-century with composers such as Liszt and Schumann and continued with Brahms and Richard Strauss through to the twentieth century. In his revision of the Berlioz *Grand traité d'instrumentation*, Strauss wrote about all sizes of the clarinet, describing each in detail and how best to use in them in certain types of music. Prior to the premiere of *Der Rosenkavalier* he wrote to the conductor Ernst von Schuchprior and urged him to only use C clarinets where indicated.[316]

Certainly a composer's choice of keys was important, but to what extent they deliberately selected one clarinet instead of another is still controversial. The A and B♭ clarinets were more easily interchangeable because their similar lengths, but the C instruments, which are a good bit shorter than either the A or B♭ (although the size of the bore remains constant), unquestionably produces a more brilliant, noticeably different timbre.

IV. BASSOONS

> *The bassoon is serious, yet at the same time highly agreeable in nature. It is the man as he appears among his family, directing and arranging everything with absolute strictness, yet caring and tending as well with unswerving devotion.*[317]
>
> —Gustav Schilling. 1838

The bassoon began to change into our modern instrument during the first two or three decades of the nineteenth century, separating as it did so into two distinct national styles. The French bassoon (figure 4.6, B) was perhaps nearer

FIGURE 4.6 Bassoons. LEFT: in C, Friedrich Kulow (German), c. 1879; CENTER: in C, Jean-Jacques Baumann (French), Keys by C. H. Felix, Maple, brass, Paris, 1813–1825; RIGHT: Contrebassoon, Christian Gottfried Schuster, Markneukirchen, early 1800s.

[Sources: LEFT: Courtesy of Musical Instrument Museums Edinburgh ©The University of Edinburgh, MIMEd 4058; CENTER: Metropolitan Museum of Art Musical Instrument Collection, The Crosby Brown Collection of Musical Instruments, 1889, 89.4.885; RIGHT: Cité de la musique, Photo: Jean-Claude Billing, E.2326.]

in sound to that of the eighteenth century, with a "beautiful singing quality," but the German instrument (figure 4.6, A) was "much more even in tone quality over its range" and had fewer notes that were "risky in performance." Unless the player was skilled, the sound of the German bassoon might

be "dull and less interesting than the French, but because it is more dependable, it is used almost universally today."[318]

The bassoon that eventually gained orchestral hegemony was perfected by the craftsmen of the Heckel family. "The first member to specialize in woodwind instruments was Johann Adam Heckel. Having learnt his craft in his native town, in 1829 he traveled to Mainz to train under his uncle August Jehring, working for the Schott factory, where Carl Almenräder's model of reform-bassoon was being developed."[319] Heckel was the main instrument-maker in the shop, but many of the refinements attributed to him were due to Almenräder's experimental work in acoustics. Almenräder, known as "the Boehm of the bassoon," successfully reformed the Dresden model instrument, opening and resiting certain tone-holes, adding keys, introducing the principle of "double-holes," and debouching into both butt bores. The modern Heckelfagott is directly derived from Almenräder's model.[320]

The Germans were not content to produce instruments with purer intonation; they also wanted an instrument with a softer and more agreeable voice, one that would blend better with the tone of other wind instruments. For example, Arrey von Dommer wrote in his 1865 *Musikalisches Lexikon* that

> By reason of its full and ample tone, particularly in the middle principle of 'double-holes,' and debouching into both butt bores. It is an excellent harmony instrument; its low register, rich, strong and somewhat coarse in tone provides the double-bass with most effective reinforcement at the octave. Its high notes are squeezed and plaintive, somewhat woeful in character. Indeed, the instrument has a strong hint of the grotesque which can easily turn into slapstick; but this side of its character builds it all the more useful, for it is equally well at home in the comical genre and burlesque as in the

serious genres, and can play the orchestral fool just as well as it can arouse deep emotions in tragic scenes.[321]

Composers and theorists recognized the expressive potential of the bassoon. Wenzel Neukirchner wrote in 1840 that "The more varied the shading of tone an instrument is capable of, the greater richness of feeling it can express, the higher the degree of perfection attained by it. Occupying the pinnacle are the sublime and the pathetic emotions and it is in this point that the bassoon stands unrivaled of its kind … " Neukirchner recognized that the instrument was only then being perfected, noting that "once a disagreeable, unpolished youth, [it is.] now matured into beautiful, sensitive manhood." He admired its "noble sound," with low notes "full of majesty," described the upper register as "deeply touching and graceful," and noted that the middle notes were "serious in mood." He concluded his paean to the bassoon by declaring that "its magical sound—coming not as out of an orchestra but as down from above—enters the electrified ear of the listener like the voice of a cherub in the angelic choir."[322]

The instruments that so inspired Neukirchner were made by Heckel, who along with his descendants for two generations

continued the manufacture and gradual refinement of what has since become known as the Heckelfagott, the model gradually adopted by the other German makers. Wagner, who in 1862 was living nearby and took an interest in these developments, persuaded Heckel to build a longer bell to reach A', and later endorsed Wilhelm Heckel's improved double bassoon of 1879, which he subsequently employed in *Parsifal*. By 1887 … this model of the instrument was starting to predominate throughout Germany and also in Austria.[323]

Much of the success of the later Heckel instruments was due to the work done on the bore of the instrument, "restoring as much of the original beauty of tone as was possible without losing any of the advantages of … their own technical improvements."[324] During the mid-nineteenth century the "majority of bassoon makers preferred medium hard, porous 'geflammt' which was European Maple." Some, however, chose North American black maple; Heckel used maple "almost exclusively for bassoons."[325]

By the end of the nineteenth century, Heckel had more or less achieved its technical and acoustical goals; thereafter, Heckel instruments were fine-tuned, rather than reworked. Apart from minor improvements, the "German bassoon of to-day … is still in essentials the practically-planned, even-sounding, tonally-true instrument of the Almenräder-Heckel type."[326]

V. HORNS

An even more corrupt and pernicious habit has arisen in many orchestras from the use of valve horns: that of playing as open notes (using the new mechanism fitted to the instrument) those notes which were intended by the composer to be played as stopped notes, with the right hand placed in the bell. Horn players nowadays, furthermore, use only the horn in F, no matter what was marked by the composer, as a result of the ease with which pistons and cylinders put their instrument into different keys. This custom leads to a host of abuses from which the conductor must take every care to protect the works of composers who know how to compose.[327]

—Hector Berlioz, 1844

The invention of valves generated deep divisions among composers, conductors, and performers in the nineteenth

century. Berlioz was not the only influential figure who expressed his unequivocal views, though he was among the most vehement. Liszt composed through the period of transition from natural to valved brass instruments and spent many years in France, where there was strong resistance to the use of valved horns (figure 4.7).

FIGURE 4.7 Orchestral Horn, Pierre Piatet (French) Brass, Lyon, 1845–50. [Source: Metropolitan Museum of Art Musical Instrument Collection, Purchase, The Howard Bayne Fund Gift, 1977, 1977.315a–n.]

Outside France, however, the valved horn was almost universally adopted during the 1830s. In 1840, the elder Johann Strauss shifted his horn writing considerably, as did Schumann a few years later. [Camille] Saint-Saëns, however, was more restricted; he wrote for two pairs of horns in the *Symphony No. 3*: natural and *chromatique*. Moreover,

natural horn was taught in the Paris Conservatoire into the twentieth century.

> The valve-horn achieved no early general popularity among orchestral players, who, having had to master the delicate and difficult art of the hand-horn player, saw no advantages in an instrument that, defective in itself, threatened to supersede their laboriously-acquired skill, and lent itself, if improperly handled, to an inferiority of tone and style that they properly shunned.[328]

Still, not long after valved horns were introduced, composers used them in tandem with the traditional instruments because of their technical advantages. In the first opera to use valved horns, Fromental Halévy's *La Juive*, and in early operas of Wagner, valve instruments were used in pairs along with additional pairs of natural horns; by the late nineteenth century, however, valved horns were standard. The Grove *Dictionary of Music and Musicians*, which was an excellent barometer of musical tastes and practices throughout Europe, tells us that

> Much difference of opinion exists as to the superiority of the simple Handhorn, or the more modern instrument furnished with valves. It appears that the lightness and vibratile power of the former, added to the absence of abrupt bends and sinuosities in the bore, adds materially to the brilliancy of the tone. But, on the other hand, in rapid melodic passages, such as it is now the fashion to write, the alternation of open and stopped notes tends to produce uncertainty and unevenness.[329]

Many German solo players adopted the valved, chromatic horn relatively soon after its appearance. Orchestral play-

ers, however, "were slow to accept the new horn unconditionally, since hand technique and its associated variety of timbre was universally much in demand and much appreciated."[330] In *Lohengrin*, "Wagner used the earlier method of specifying many 'crook' (i,e. valve) changes in succession, and expecting hand-horn technique between one instruction and the next."[331]

Some players supported the hand horn exclusively; even after the successful integration of valved instruments into the mainstream, they believed that the valve horn was deliberately built "so that the valves are manipulated by the left hand." They accounted for this fact by pointing out that the "original purpose of valves was solely to provide a quick crook change," so that the right hand could do its "work in the bell in the ordinary way."[332]

By 1860 horn technique was in a confusing state; in 1864 the valve horn was even banned from the Paris Conservatoire.[333] In 1865, Brahms conceived the horn part in his *Trio Op. 40* for a natural instrument; indeed, Brahms, like Liszt and Wagner, continued to write in "natural horn keys" until the end of his career. The adoption of the valve horn involved not only the elimination of differences in timbre,

> but also a drastic reduction of the keys in which the instrument was pitched, leaving almost only the horn in F with its characteristically dark, resonant tone colour. This meant that all the existing repertory when performed on this standardized model became tonally uniform. The transformation seems to have been encouraged by a general search for tonal uniformity which was then taking root, particularly in German-speaking areas and in Italy. There was great criticism of the increasing indifference to the old distinctions of tone colour.[334]

The opposite view held that the modern horn was so superior that any compromise in the resultant timbre was outweighed by its unequaled flexibility. "The modern horn can sing any melody, take part in any polyphony, and proceed chromatically to any note; while it can revert at pleasure to the functions which formerly characterized it."[335] The German horn player Joseph Rudolph Lewy indicated in his horn method that

> These Studies are to be played on the chromatic F horn, but the valves are to be employed only when the natural horn is inadequate for the bright and distinct emission of the sounds … When the part is marked 'In Es,' the first valve is to be used; when 'In E,' the second; and when 'In D,' the third. In this way alone will the beauty of tone of the natural horn be retained, and the instrument acquire increased capabilities.[336]

Nevertheless, even though some performers, conductors and theorists did not agree with Lewy about the wisdom of employing the valves, by 1895 the general consensus was that "Whether quite correctly written for and used or not, the fact remains that the valve-horn has for modern music supplanted the mere natural horn; and as this new instrument still retains its character of natural horn if the pistons are not put down … the result is a clear gain … of an inestimable nature."[337]

The modern valved horn may be played to simulate the natural horn by selecting a valve combination that corresponds to the key of the indicated natural horn crook. Thus crook changes are facilitated and the chromatic notes that are not part of the natural harmonic series are played using the hand in the bell in the same manner as on the natural horn, reaping the advantages of both instruments.

It is true that writing horn parts only in F (or for trumpets in B♭) builds for additional key signatures in the score. In some ways, the nineteenth-century method of simply specifying transpositions without indicating key signatures might have seemed easier (or simply less cluttered) to Liszt and Brahms, as well as the older composers and conductors who were accustomed to seeing horn parts without key signatures; in 1860, however, the mysteries of transpositional mathematics were still part of the hornist's life.

VI. TRUMPETS

> *The Orchestral Trumpet, as now used, is really an 8-foot pipe overblown, like a Harmonic stop on the Organ; to this it owes its keenness, pungency, power of traveling, and its marvelous superiority in timbre over the 4-foot Cornet.*[338]
>
> —A. J. Higgins, in Grove D*ictionary of Music and Musicians*

In 1826, Berlioz was the first composer to use the valve trumpet (figure 4.8) in his overture to *Les francs-juges*, the same year a German valve trumpet was brought to Paris and copied; German trumpets then gained widespread acceptance. Early in the nineteenth century, a time of transition for the instrument, trumpets with keys and valves were developed that could produce a wider range of notes and sustain more accurate intonation. Although trumpets were built in many keys (instruments in E♭, F, G, and B♭ were not uncommon by the end of the nineteenth century), the standard early nineteenth-century European valveless orchestral trumpet—a twice-folded instrument with a larger bore than earlier trumpets—was pitched in G and crooked successively stepwise down to B♭ or low A.[339]

The valve trumpet and its predecessor the natural trumpet continued to be used side by side. "Even well into the nineteenth century after valve trumpets had become rela-

FIGURE 4.8 ABOVE: Valve trumpet in C, B♭ , A, or G, Elbridge Wright (American), Brass, nickel-silver, Boston, 1845; BELOW: Valve trumpet in F, Courtois & Mille, Brass, silver-plated, Paris, 1881–1885.
[Sources: Metropolitan Museum of Art Musical Instrument Collection; ABOVE: Purchase, Robert Alonzo Lehman Bequest, 2002 2002.388a–j; BELOW: . Purchase, Bequest of Robert Alonzo Lehman, by exchange, 2001, 2001.187a–i.]

tively securely established, trumpeters played on either the valve or the stop trumpet, depending on the music to be performed."[340] Players preferred the ease of valves, but composers often desired the particular tone color associated with a certain crook; as with the horn, playing on a single

instrument caused discord between players and composers since there was no longer any contrast in timbre. "There are marked differences of colour between trumpet crookings (whether on natural or on valve instruments)," which implies that "a now forgotten effect may thus have been intended."[341]

Wagner understood these differences, for

> Among the last parts written for the natural trumpet … are those which Wagner wrote in the third act of *Lohengrin* for the entries of the king and the counts. As each appears, he is heralded by a fanfare from his pair of trumpets. Because each pair is in a different key, and because each key requires a trumpet of a different length but the same bore diameter, and thus with a slightly different bore/length ratio, each pair produces a slightly different tone colour … This effect, a masterly stroke of genius in orchestration, is totally lost in modern performances of the opera, because today all the parts are played on B-flat valve trumpets and therefore they all have the same tone quality.[342]

Until his retirement in 1860, François Georges Auguste Dauverné was professor of trumpet at the Paris Conservatoire. He and horn professor Louis François Dauprat both strongly advocated using natural trumpets and horns, even though by 1835 valved instruments were becoming generally available. The influence of Dauverné and Dauprat on the musical scene in Paris must have been quite dominant, since natural horn was taught at the Conservatoire until about 1920. Dauverné insisted that all of his students begin with the study of the natural trumpet in order to foster their technique and to gain an appreciation of the trumpet's true sound—one rich in harmonic overtones. In his *Méthode pour la trompette* of 1857, Dauverné wrote:

> In imposing upon myself the task of writing this method, I have had as a goal to preserve and to propagate, by developing them, the principles of an instrument which it would be unfortunate to let fall into oblivion, and whose traditions could not be lost without harm to the interests of musical art. No! The original principle of the Trumpet must never be blotted out by the modern inventions of pistons and cylinders, which have given birth to new instruments which can serve, it is true, to enrich instrumentation, but will never replace, with respect to the purity and clarity of sound, the natural Trumpet, so much appreciated in its simplicity by composers of intelligence and taste, and of which I will generally compare the use in scores, to a brilliant and vivid color placed on the palette of a painter, who uses it only from time to time for obtaining sparkling lights.
>
> In short, I will say that it is impossible to become a skillful trumpeter, in any style, if one does not begin with a complete study of the natural Trumpet. Would it not be, in fact, in opposition to all further progress to devote oneself at first to the study of an instrument which offers the mechanical help of cylinders and pistons, instead of practicing to conquer all the difficulties of articulation solely by the play of our organs, whereas it will require hardly a few moments to master the mechanism of all possible systems of Trumpets, for those who have already obtained the precision of the attack of the sound, that is to say, the most difficult thing, the longest to acquire on the Trumpet?[343]

Nevertheless, by 1843 natural trumpets had been almost completely superseded by valve trumpets[344] in Germany; one

British author wrote in 1895 that "Scarcely any composers now will be tied down to the plain trumpet giving the natural harmonics only." The writer went on to note that "German composers now-a-days nearly always write for the valve trumpet in F; it is a very brilliant instrument … You will find that neither horn nor trumpet players use any crooks but the F and E [and] if the E♭, D, and C crooks are written for they will never be used by players of horns or trumpets."[345]

VII. LOW BRASS

I regard the trombone as the true leader of the race of wind instruments that I have described as "epic." It possesses nobility and grandeur to a high degree and has all the solemnity of high musical poetry, ranging from a calm, imposing, devotional aura to the wild clamors of an orgy. It is up to the composer to make it chant like a chorus of priests, or utter threats, then muffled groans, then a subdued funeral knell, then a resounding hymn of glory, then a piercing shriek, then a mighty fanfare for the waking of the dead or the death of the living.[346]

—Hector Berlioz, 1844

Trombones (figure 4.9) were accepted only reluctantly into the nineteenth-century symphonic orchestra; although regularly heard in opera orchestras and in churches, they were seldom employed in concert ensembles. The earliest slide trombone, called the Sackbut, was first available in the sixteenth century; it often doubled the satb choral parts in church and was used to a lesser extent in ensembles. Bell-forward B♭ tenors with Berliner valves, primarily used in military bands, were available after 1850.

Like many instrumental families, they came in multiple sizes—from soprano to contrabass. Alto trombones appeared

FIGURE 4.9 ABOVE: Bass trombone, Brass; plated stockings, wired bell rim, c. 1850; BELOW: Tenor Valve Trombone in C/B♭, Prestreau, Paris, mid-1800s.
[Source: Images courtesy of Musical Instrument Museums Edinburgh © The University of Edinburgh: ABOVE: Photo by Antonia Reeve, MIMEd 901; BELOW: Photo by Raymond Parks, MIMEd.5918.]

intermittently in the early nineteenth century, but only the tenors and basses found permanent places in the modern orchestra. German trombones were made in three different bores, the narrowest being used for the alto, the medium for tenor parts and the widest for the bass. (Just as length affects its fundamental, the gauge of the bore alters the strength of the various overtones, which in turn determines the instrument's timbre.)

Modern trombones have much larger bores than the instrument that Berlioz knew. "In Germany the bore increased from an average (for the tenor) of 11 mm around 1800 to 13 or even 14 mm by about 1840. The flare of the bell was increased in acuity and was continued to a termination of wide diameter."[347] The bores of French trombones, on the other hand,

remained narrow for some time. Whereas today, when the construction and sound of trombones is virtually identical, French and German instruments maintained distinct timbres into the late-nineteenth and early-twentieth centuries.

Wagner championed large-bore German instruments in Dresden, which led to their widespread acceptance. romantic composers believed the trombone could express a broad range of emotions; Berlioz said the instrument possessed "both nobleness and grandeur" and had "all the deep and powerful accents of high musical poetry, from the religious accent, calm and imposing … to wild clamours of the orgy."[348] Large-bore tenors and basses were used in the orchestra for the later works of Wagner, Brahms, Bruckner, and Richard Strauss.

Although it was already a fully chromatic instrument, the trombone was eventually manufactured with valves. In addition to the slide, the tenorbass trombone at first was fitted with one valve for the left hand; much later, however, slides became obsolete altogether when three or more valves were added to the instrument, which was known as the "valve trombone." Modern contrabass trombones often have two valves for the left hand along with the slide.

Valves not only increased the range, they also improved the intonation. "Made in alto, tenor and bass pitches, valve trombones reached a peak of popularity soon after the mid-nineteenth century. In 1890, according to Constant Pierre, German and Italian orchestras almost always used a valved bass trombone."[349]

In addition to facilitating packing and traveling, valves "made some parts rather easier to play, for notes which appear to be close on paper may be a long way apart by slide, and the use of valves avoided some very difficult shift."[350] As composers sought more novel orchestral effects, trombones were sometimes asked to play long, sustained

pedal tones near the bottom of their range. Since only the most skilled players could accomplish this difficult trick, makers continued to modify the trombone and other low brass instruments in order to ease the execution of the new, more technically demanding music.

Unlike the trumpet and horn, the tuba (figure 4.10) has no immediate ancestors among the valveless brasses. Its most direct predecessors include the serpent, ophicleide, bass horn, and the Russian bassoon (figure 4.11). In 1835 the Prussian bandmaster Wilhelm Wieprecht and German instrument-builder Johann Gottfried Moritz patented an early tuba with a small bore between the valves and the bell. Moritz's later instruments, however, more closely

FIGURE 4.10 Tuba, attrib. C. W. Moritz, (German), brass, Berlin, c. 1855.
[Source: Metropolitan Museum of Art Musical Instrument Collection, Purchase, Robert Alonzo Lehman Bequest, 2014, 2014.18.]

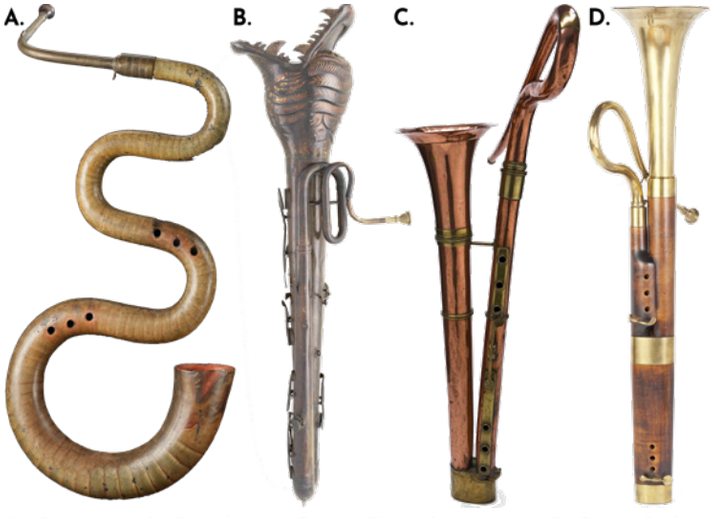


FIGURE 4.11 A. Serpent, C. Baudouin, Paris, French, c. 1820; B. Bass Ophicleide in B♭, Unknown, c. 1825; C. Bass Horn in C, Jasper Fridge, London, c. 1810; D. Russian Bassoon in C, Pierre Joseph Cuvillier, St. Omer, France, c. 1820–1830.

[Sources: A. Metropolitan Museum of Art Musical Instrument Collection, Purchase, Robert Alonzo Lehman Bequest, 2012, 2012.568a–c; B. The Crosby Brown Collection of Musical Instruments, 1889, 89.4.2564; Images courtesy of Musical Instrument Museums Edinburgh © The University of Edinburgh: C. MIMEd 3305. D. MIMEd 6099.]

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resemble the modern tuba. After 1850 the tuba was often found in bands but was less common in orchestras, but by the last quarter of the nineteenth century, tubas were fully integrated into symphonic orchestras.

Berlioz championed the use of the tuba in symphonic works to balance the ensemble; indeed, he preferred it to the ophicleide, which he noted in the 1840s, was used less frequently in German orchestras; in some places bass tubas replaced it altogether. Berlioz himself authorized substituting bass tubas for ophicleides in an edition of the *Symphonie Fantastique* prepared for German publication. Wagner wrote extensively for the tuba and was one of the first composers to use low brass as solo instruments.[351]

VIII. PERCUSSION

To play a bass drum requires chiefly confidence and courage. No instrument betrays a man's character so quickly as the bass drum.[352]

—Alexander Brent-Smith, *The Musical Times*, 1830

The nineteenth century saw a rise in the importance of the timpani (figure 4.12) in the orchestra. After discovering that timpani were capable of producing more than one timbre, composers liberated the drums from the characteristic dominant-tonic writing found in most earlier music. Higher performance standards were eventually demanded from percussionists, just as they had from every other orchestral player. Berlioz observed that composers had "long complained" of the shortcomings of the timpani, due in part to the limited number of timpani that were available as well as the reluctance of players to use the new *baguettes d'éponge*.[353]

FIGURE 4.12 A. Snare Drum, Grande-Bretagne, 1880s; B. Bass Drum, Anonymous, France, c. 1860.

[Source: Cité de la musique. Musée de la musique; Photos: Jean-Marc Anglès. A: D.MRF.2; B: E.994.18.1]

In 1812, Gerhard Cramer invented the first rapid tuning device in Munich. Johann Kaspar Einbigler, from Frankfurt, invented an important prototype for rapid tuning in 1836, suspending the bowl from its upper portion at the same time. August Knocke, a Munich gunsmith, invented an elaborate system of gears that allowed the timpanist to alter the pitch of the drums. It was not until 1881, however, that "Carl Pittrich, a player in the Dresden orchestra, replaced the tram-handle with a pedal, enabling the player to tune while playing with both hands."[354]

While side (snare) drums were part of the military "field music" and used regularly in the army, the much larger bass drum had a very different traditional usage. (figure 4.13) The bass drum was typically paired with cymbals and came to European music from the influence of Turkish janissary bands. In those ensembles, the bass drum and cymbal played along with trumpets and loud double reed instruments. The bass drum and cymbals became signifiers for "Turkish" style music, as can be found in compositions by Mozart, Beethoven, and other classical composers. The instruments were also used in European military bands and eventually in similar bands found in the United States.

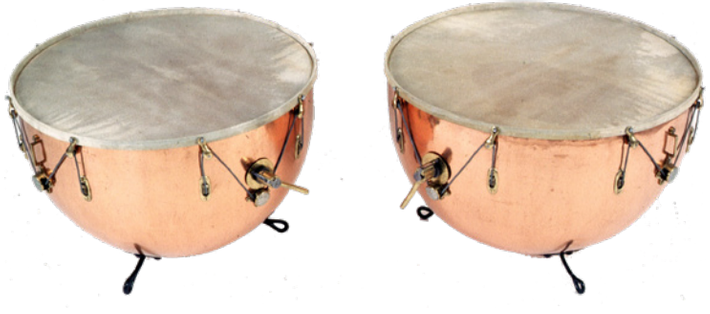

FIGURE 4.13 Kettledrums, Cavalry drum with copper shell, George Potter, London, c. 1850.
[Source: MIMEd 2378. Image courtesy of Musical Instrument Museums Edinburgh © The University of Edinburgh.]

In the early nineteenth century, players generally used plain wooden sticks, although they were sometimes covered with a "layer of leather tied over the wood." The roll produced was similar to that made on a side-drum, "using two strokes with each hand." As drumheads changed so did the materials available for sticks. "The new sticks brought out the tone of the thinner skins, whereas the older sticks produced a harsh and ugly sound on them."[355] Berlioz indicated *baguettes en bois* whenever he wanted such a harsh sound. The introduction of sponge-covered sticks around 1825 dramatically affected the tone color of the drums. These sticks produced a roll with a superior blend; favored by timpanists, they were soon ubiquitous.

> In early nineteenth-century performance practice, cymbals were struck together with the somber and menacing-sounding bass drum in simple beat sequences. Berlioz scored the first bass drum roll in his *Symphonie fantastique*, but the first bass drum roll for a single percussionist appears in Liszt's *Ce qu'on entend sur la montagne*. In orchestras of the late Romantic period the bass drum was beaten from the side in a large downward arc. In addition, musicians began to position the drum differently: it was placed on a wood stand so that the head could be beaten horizontally.

Many attempts were made in the nineteenth century to make the sound of church bells available to opera and symphony orchestras by means of more manageable instruments. Success was achieved with various metal objects; experiments were carried out with hanging plates, bars, discs and vessels as well as long piano strings thickly wrapped and amplified with resonators. These efforts aimed to combine two performance aspects: the most accurate imi-

tation possible of the bell sound, with its high proportion of overtones, along with a clearly definable pitch.

IX. STRING INSTRUMENTS

The combination of plain gut E and A, high-twist gut D and a G with copper, silver-plated copper or silver round wire close-wound strings on a gut core was the norm throughout the nineteenth century.[356]

Upheavals that followed the French Revolution also had far-reaching repercussions in the world of music. The responsibility for organizing and financing musical events shifted from the aristocracy to the bourgeoisie, and concerts became a regular feature of society life. Since these were held in ever-larger halls, louder instruments with thicker bows were required. Violin makers were therefore forced to make those alterations to the instrument, which resulted in the development of the modern violin; old instruments were "modernized" to meet the new requirements: the bridge was raised to increase string tension, thereby increasing volume. This also altered the angle of the strings to the fingerboard, so that the musician would have had to apply more pressure to play the high notes. This difficulty was counteracted by placing the neck at a backward angle, thus maintaining equal distance between strings and fingerboard along its length; at the same time both the neck and the fingerboard were lengthened. To cope with the increased pressure of the strings on the table, the bass bar and sound post were also reinforced.

An important innovation was the "standardization" of the bow by Tourte around 1800. Before the Tourte bow there was still much experimentation with the length, camber (bend), frog, and tip of the bow. Unlike its nineteenth-century counterpart, the modern bow (besides its standard length and

camber) has a band of metal to hold the hair flat and together at end of the frog; this device permits strong attacks as well as increased volume. These modifications also enabled the string instruments to hold their own against the more powerful woodwinds, brass, and percussion.

One of the most significant alterations occurred around 1820, when Spohr invented the chin rest. His aim was to overcome the problem of players having to squeeze the instrument between the chin and shoulder.[357] Spohr's chin rest allowed players to shift positions freely and quickly; it also made playing in higher ranges easier—especially the upper range of the G string, which then became a sonority favored by composers and players.

The strings were made stronger, too, so that they could withstand the increased tension. It had long been customary to cover the G strings, which had a gut core, with metal; nowadays, the G string is often silver-wound. It is not completely clear whether the D and A strings were also covered in the nineteenth century; today aluminum-wound gut strings are generally used. The E string was also made of gut in the nineteenth century.

The names of all stringed instruments (figure 4.14) are derived from the term *viola*; in the sixteenth and seventeenth centuries *viola* described two families of stringed instruments: the viola da braccio and the viola da gamba. The appellations *da braccio* and *da gamba* have two meanings; on one hand they describe the playing position. *Da braccio* is Italian for "played on the arm" and refers to the horizontal playing position. *Da gamba* means "played at the leg" and refers to the vertical playing position.

They also describe the two instruments' characteristic construction: The viola da braccio (the forerunner of the instruments of the violin family), had low ribs, a rounded back, F-shaped sound holes, a fretless fingerboard, a neck

FIGURE 4.14 String instruments. A: Violon, Jean Baptiste Vuillaume, Paris, 1823; B. Viola, Gand et Bernardel frères, Paris, 1867; C. Violoncello, Jean-Baptiste Vuillaume, Mirecourt, 1850s; D. Contrebass, Joseph Xavier Jacquet, Mirecourt, 1850s.

[Sources: A, B, D: Cité de la musique. Musée de la musique. A: E.1376, Photo: Nabil Boutros; B: E.617, Photo: Jean-Marc Anglès; D: E.980.2.683, Photo: Jean-Marc Anglès; C: Metropolitan Museum of Art Musical Instrument Collection, Gift of Dr. Peter Blos, 1984, 1984.114.1.]

raised from the body with a scroll and four strings across a curved bridge, which meant that they could be bowed individually. The viola da gamba had high ribs, a vaulted belly, a flat back and C or F-shaped sound holes. The body extended upward toward the neck, the fingerboard had seven frets and the five to seven strings lay across a rather flat bridge

which meant that the bow could play more than two adjacent strings at once.

The modern term violoncello appeared for the first time in the *Sonate A 2, & a Tre. Con la parte del Violoncello a beneplacido*, op. 4 (1665) by the Italian composer Giulio Cesare Arresti. The violoncello was originally also known as the *violoncino*. What both terms share is a linguistic paradox: a diminutive form (*cello, cino*) is added to an augmentative (*violone*=large *viola*). Violoncello literally means nothing more than "small large viola." In spite of this paradox, the Italian name was adopted throughout Europe from 1700 onward.

The double bass differs in several ways from the instruments of the violin family. In its modern form it is a hybrid, combining elements of both the *viola da gamba* and the violin families. From the *gamba,* it retains the sloping shoulders, the generally relatively flat back and the string tunings to fourths (older instruments also retain the frets and the five to six strings). The F-shaped sound holes, the scroll, the often rounded back, and the ribs with corners come from the violin. Inside the body a wide crossbar reinforces the sound post. Historically, and in terms of its original construction, the double bass belongs to the *gamba* family, but the developments it underwent made it increasingly similar to the instruments of the violin family.[358]

During the first decades of the nineteenth century, most orchestras contained a mixture of older, unaltered instruments and modernize d ones. Both types, however, were strung with gut. The lowest strings on all instruments were covered gut strings—that is, they were closely enveloped in fine copper or silver wire. These strings would include the G string on the violin and the C and G strings on the viola and cello. The remainder were strung with plain gut (often mistakenly referred to as "catgut") that was manufactured out of the entrails of sheep.[359]

Indeed, the introduction of steel strings, necessitated by the increased size of concert venues and larger complements of more powerful wind instruments, did not occur until the 1920s. The interruption in the manufacture and distribution of fine gut strings occasioned by the World War I induced artists to use the steel E string, which had previously been used only by theater and street fiddlers. In modern times, some string players have turned again to simple and wound gut, but metal-wound strings (now usually with silver and aluminum and not necessarily steel) are still widely used.

Modern musicians are probably astonished to learn that string sections in romantic orchestras used gut strings exclusively. Years may elapse before a major orchestra performs a large-scale romantic work on gut-strung instruments; but, given that the orchestras known to Beethoven, Mendelssohn, Schubert, Schumann, Liszt, Wagner, and Brahms were unacquainted with steel strings, the potential for a rediscovery of the particular sonorities that romantic composers expected to hear from nineteenth century strings would be worthy of just such an attempt.

X. HARP

The harp is an entire orchestra as long as you can get all its sounds out of it.[360]

Harps have been known since antiquity in Asia, Africa, and Europe—dating back at least as early as 3500 BCE Normally triangular in outline, all harps have three basic structural components: resonator, neck, and strings. The earliest known use of the word "harpa" was by Venantius Fortunatus, Bishop of Poitiers, in about 609; he wrote: "Romanesque lyra, plaudat tibi barbarus harpa." (Let the Roman applaud you with the lyre, the Barbarian with the harp).[361] Early medieval Latin terminology is also ambiguous. "Cithara" was used for both lyres and harps, while in the tenth and eleventh centuries the terms *lira* and *lyra* were used for a type of bowed instrument. Confusions as to terminology still existed as late as 1511, when Virdung wrote: "What one man names a harp, another calls a lyre."[362]

As European harps evolved to play more complex music, a key consideration became how to facilitate the quick changing of a string's pitch, in order to be able to play more chromatic notes. Single-rowed harps may appear diatonic, and perhaps most were, but all single-rowed harps do not necessarily need to be tuned diatonically. By the Baroque period in Italy and Spain, more strings were added to allow for chromatic notes in more complex harps. In the second half of the seventeenth century, German diatonic single-row harps were fitted with manually turned hooks which fretted individual strings to raise their pitch by a half step. In the eighteenth century, a link mechanism was developed connecting these hooks with pedals, leading to the invention of the single-action pedal harp (figure 4.15).

Although he probably first visited London as early as 1779, it was not until 1790 or 1791 that Sébastien Érard finally settled there in 1792. He concentrated on the manufacture of harps, which previously had almost all been imported from France; it was there, too, that he acknowledged the first ever British patent for a harp in November 1794.[363] This instrument, the fruit of much experiment, represented a radical change in the construction of the single-action harp. Érard also made mechanical improvements to the pedals, but the really revolutionary feature of his harp was its brilliantly simple "fork" system, which consists of two brass prongs mounted on a small round brass disc.[364] The fork system is important, but it is only one of four or five such systems; it is certainly still in use today.

FIGURE 4.15 Harps. LEFT: Sebastian Érard, London, c. 1837. Forty-three strings (six octaves); double action; RIGHT: Jacques-Georges Cousineau, Paris, 1820. Mark on the console: "Cousineau luthier de S.A.R. Monsieur . . . rue Dauphine N° 20 in Paris." Inscription: " . . . by Patent of Invention n° 515."

[Source: left: MIMEd 176. Image courtesy of Musical Instrument Museums Edinburgh ©The University of Edinburgh; right: Cité de la musique. Musée de la musique; Photos: Claude Germain, v.]

"The increasing use of chromatic harmony by composers such as Wagner, Fauré and Richard Strauss at the end of the nineteenth century posed problems in executing harp parts on the pedal harp. There were also structural imperfections in the pedal harp, such as its dependence on an often imprecise mechanism in order to obtain the half-steps. In August 1894, two famous French harpists, Alphonse Hasselmans and Félix Godefroid, presented the problem to Gustave Lyon, director of the firm of Pleyel, Wolff et Cie. Lyon immediately began building an "harpe chromatique sans pédales" (chromatic harp without pedals)[365] based on a patent of 1845 by Jean-Henri Pape."[366]

In 1810, Érard patented his double-action harp. Operating on the same fork principle as his earlier single-action harp, Érard's double-action instrument uses C♭ as its open key and has forty-three strings (E' to e''') and seven pedals, each of which can be depressed twice, housed in a box at the base of the harp. Each string passes between two fork-bearing discs, placed one above the other.

> The three composers who made the greatest contribution to the literature of the single-action harp were all married to professional harpists. Many of the works of these three men—Krumpholtz, Dussek and Spohr—form an important part of the standard modern repertoire for the pedal harp. The harp entered the modern orchestra by way of the opera house, where it was at first little used except as an instrument evocative of mythology and romantic legend. The harp continued to be played in opera orchestras, but it was Berlioz who pioneered its use in the symphony orchestra (*Symphonie fantastique*; *Harold en Italie*).[367]

Not until the 1840s, however, did the double-action harp become so widespread that it was available to all Western composers. Liszt's tone poems show the harp to great advantage, and both Schumann (*Drei Gesänge for tenor and harp, Op. 95*) and Brahms (*Four Songs, Op. 17*) wrote harp parts that are idiomatic and difficult; harp parts in Wagner's operas are extremely difficult as well as unidiomatic. The harp parts in Verdi's later operas, on the other hand, are well written and graceful to play. Occasionally, in nineteenth-century operas, multiple harps are required. *Das Rheingold* calls for six harps onstage and a seventh off. For

the remaining three parts of the *Ring*, Wagner wrote only two harp parts, but called for six harps, three on each part. Berlioz scored for six separate harp parts in *Les Troyens*.

The construction of the harp has undergone numerous changes throughout its long history, changing both in size and shape. It has grown into the modern seven-octave concert grand harp that stands tall in the orchestras. In the early twentieth century, Pleyel's chromatic harp and Érard's double-action harp had equal opportunity to become today's standard harp. Each instrument had its own musical advantages and disadvantages: Pleyel's chromatic harp was able to play the chromatic music of the key, broke fewer strings, had stable tuning and required less maintenance, but several major disadvantages caused the instrument's demise. The heaviness of the instrument, which was played mostly by women, made it cumbersome to move. In orchestral pieces, several chromatic harps had to play in unison to bolster the sound. The Pleyel chromatic harp was once a museum piece, but today is played and attempts to revive it are proving remarkably successful.[368]

XI. HARMONIUM

> *For what a magnificent organ I have to thank your kindness! It is worthy of all praise and admiration! Even average players could attain much success on it.*[369]
>
> —Liszt to Boston firm of Mason & Hamlin, Weimar, 1883

In 1842, the French organ builder Alexandre-François Debain patented a small reed organ that he called the Harmonium (figure 4.16). Unlike the larger instruments in churches and concert halls, Debain's organ was comprised entirely of reed stops, which gave it a distinctive timbre. Foot pedals inside the case operated small bellows, providing the air necessary to incite the reeds to speak.

Reed pipes in most organs are similar to the clarinet, which uses a soft reed to "provide the means of setting the air in vibration … [T]he pitch of the tone depends mainly on the length of the tube attached to the reed. These are known as "heterophonic" reeds, which have only an indirect influence on the production of the tone."[370]

The other type is the "idiopophonic" or "free" reed, which uses no tube whatsoever, thus greatly diminishing

FIGURE 4.16 Harmonium, Georges Guéroult; Maison Debain, Paris, 1878. two keyboards tuned in two different temperaments. Invented by Georges Guéroult and manufactured by the Debain Firm, it appeared at the Universal Exhibition in Paris in 1878 and won G. Guéroult a bronze medal.
[Source: Musée de la musique, E.1651. Photo: Jean-Marc Anglès.]

the amount of space required to house a rank of pipes. "The advantages of the free reed are that it is more stable than the beating reed, which goes out of tune with every change of temperature, that it does not require a pipe as a resonator, that it can be played loudly or softly, which is why … it is called 'expressive,' and that it is cheap and easy to make."[371]

Debain's instruments were initially small and portable, "mounted on a tripod, with a single foot pedal for the wind. The single pedal afforded a direct control of the wind pressure on the reeds … [thus.] all dynamic shades of expression could be obtained … "[372] Liszt recognized the potential of the harmonium as an ancillary member of the orchestra; indeed, he was the first composer to incorporate one.

In choral works, Liszt used the harmonium to accompany both the entire chorus and the soloists. His more chromatic choral passages in particular often needed fixed-pitch reinforcements, as he (as well as other listeners) noted in several performances of *Christus*. Nikolay Rimsky-Korsakov experienced this phenomenon himself. After a performance of *Christus* that he conducted on 8 March 1877 in St. Petersburg, in which there were intonation troubles, he gave an amusing account of his resourceful organist:

> At the third concert I gave excerpts from Liszt's oratorio *Christus* …
>
> The concert went off safely; even the "Stabat Mater Speciosa", most difficult of performance (from Liszt's oratorio). The enharmonic modulations in this latter chorus dragged the singers irresistibly to a gradual lowering of the pitch, while, in the interim between the singing of the choir, there are interludes for the organ. The organ (harmonium) was played by my conservatory pupil Bernhard … whenever the choir sang half a tone flat, he transposed his interludes also half a tone, and thus we ended safely a third below where we had started. Subsequently, when Borodin related this to Liszt, the latter said that in Germany the same thing had always happened in performance of that chorus![373]

Harmoniums generally "had four registers from 1842 onwards, and other devices were added for graduating the dynamics … "[374] One of these was the "'expression' stop—a slide enabling the player to cut out the wind reservoir, so that the air traveled direct from the feeder to the soundboard. The player could then control the wind-pressure, and thus the strength of the tone, with his feet."[375]

Grove wrote that the expression stop gave the harmonium "the power of increase and decrease of tone under the control of the player, who … can graduate the condensation of the wind almost as a violin-player manages the tone by the bow."[376] Furthermore, "The harmonium later acquired other stops in an attempt to imitate the organ's variety of tone colour; sets of reed chambers of different sizes and shapes were provided, small-sized chambers, for instance, giving a trumpet or tuba tone."[377]

Harmoniums came in a great many sizes, suitable for the home, stage, or church. They ranged "from compact single-manual instruments with one set of reeds, powered by one or two foot treadles, to large two-manual (rarely three) and pedal instruments having several sets of reeds of differing colours and pitches … The commonest types had two to five sets of reeds, one manual and such accessories as octave couplers and *tremulant*."[378]

European instruments were constructed on the same principle as the large pipe organ; that is, wind was forced into the bottom of the pipe and out the top. In the United States, though, builders devised another method. "In American

organs the wind is drawn inward through the reeds by means of suction bellows, and the reeds themselves differ from those of the harmonium as they are smaller and more highly curved, thus yielding a softer tone.[379]

Berlioz was hardly the only composer/conductor who would bloviate against players who defied his choice of instruments as notated in the score and parts; he might've been the loudest and best-known, however. Anyone who had been on the receiving end of one of his tirades would've surely thought twice about switching instruments again; yet, the practice continued until it became standard.

It's hard to understand why clarinetists would ignore a composer's indication to play an A-clarinet, or an E♭ clarinet, or a D-clarinet, or even a C-clarinet; what vexed Berlioz was that clarinetists would play everything on a B♭ clarinet. Each of those clarinets has its own distinct timbre; Berlioz (and other composers), to whom careful orchestration was paramount, selected the clarinet that would produce the sound he wanted.

Brahms, like Berlioz, also wanted particular timbres; he loved the natural horn for its particular tone colors, especially "stopped notes," which involve the hornist thrusting his right hand into the bell of the horn, thus stopping (or plugging) it. In the first half of the nineteenth century (excepting trombonists), all brass players were obliged to use crooks. When a composer wanted a particular key or sound, he would write, "Horn in C," and so forth; there is little doubt that hornists were put upon greatly: they had to tote around not only their horn, but any number of crooks. When the key changed to C, for instance, the hornist would've inserted the C crook into the instrument, where it would remain until the composer indicated another key.

Natural horns (meaning not just the French horn, but also trumpets) had limitations as to which notes they could produce. Before valves were invented, the brass players had to use their lips (and hornists their hands) to manipulate the harmonic series and sound the

notated pitch. It is the reason that orchestras had four horn players in pairs: one pair was tuned to the tonic key while the second pair was generally tuned to the dominant. The vestige of this practice exists today: Horn I is the highest of the four; Horn III is second highest; Horn II is second lowest; Horn IV is the lowest of the four.

While valves were a tremendous improvement, composers continued to indicate the key so that players who didn't have—or didn't use—valves could still play their music. When the hornist or trumpeter saw "Horn or Trumpet in G," composers such as Brahms and Berlioz expected the player to depress the combination of valves that would transpose the horn into the designated key—without crooks, then continue to depress those valves until the next notated key change. The horn was meant to be played as if it had crooks, so that Brahms and other composers might write a stopped notes.

Yet, trumpeters, hornists and tuba players quickly discovered that they could skip from note to note by rapidly switching from valve to valve. By using their lips, valves, and breath control (and—for hornists—their hands) they obviated crooks entirely; composers eventually discontinued indicating a key altogether, since virtually all brass players stopped using crooks. Players preferred the more even scale that valves produced; even though doing so meant trumpets and horns could neither produce stopped notes nor any other notes that could only be played using crooks.

Some contemporary orchestras that specialize in HIP have trumpeters and hornists who use crooks. They choose to forfeit the ease that valves provides in favor of creating the tone colors that composers requested. It's a rarefied world to be sure; nevertheless, when discerning listeners hear the unique tones that only natural horns and trumpets produce, it's as if they espied an almost imperceptible brushstroke of aquamarine that Leonardo placed on a canvas—daring the viewer to see.

These subtleties may seem unimportant or even irrelevant, but one of the characteristics that distinguish great performers from the rest of us is that they ignore nothing in the score and take pains

that everyone hears what the composer wrote. The oboist John Mack recounted a conversation he had with the legendary conductor George Szell. Discussing the Mozart *Oboe Quartet in F major, K.370/368b*, Maestro Szell advised Mack "to play every single note." It's but a short leap to turn that into "sing every word"—and bring the nuances and subtleties that cause audiences to sit, motionless and silent, when the conductor's hands finally come down.

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QUIRES, BANDS & WHERE THEY SIT

[Hans Richter's] practice was usually to divide his double basses in order to achieve a balance; he would have been horrified if anyone had asked him to let his violins sit together on the left.[380]

—Sir Adrian Boult[381]

ART: *The New Orchestra, Exeter Hall.* [Source: *Illustrated London News*, 4 November 1848, 277.]

FIGURE 5.1 **The Hallé Orchestra in the Manchester Free Trade Hall with conductor Hans Richter, unattrib., 1910–1911.**
[Source: Manchester Digital Music Archive, CF/2/7.]

I. ORCHESTRAL AND CHORAL PLACEMENT

Some of the misconceptions about nineteenth-century performance practice are surely due to the lack of unambiguous historical documentation. There are recordings from the early part of the twentieth century by notables such as Joachim, Fritz Kreisler, Artur Nikisch, Felix Weingartner, Adelina Patti, and Liszt's pupil Emil Sauer; nevertheless, this aural record of how instrumentalists and singers actually sounded is unlikely to fully resolve the controversy that exists concerning the execution of vibrato, articulation, and phrasing.

On the other hand, the matter of how orchestras and choruses were seated during concerts is fairly straightforward: that the chorus was placed in front of the orchestra is indisputable. Composer/conductors such as Berlioz and Wagner wrote at length about it; there is a wealth of visual data—illustrations, diagrams and even photographs—that corrob-

orate treatises and textbooks. Diagrams of festival oratorio performances reveal that even in vast spaces—with hundreds of seated and standing performers—placing the chorus near the front of the stage was the rule rather than the exception. Adam Carse, in *The Orchestra from Beethoven to Berlioz*, agrees: "In most places the choir and soloists were placed in front, facing the audience, with the conductor in the centre; the orchestra was generally behind the choir, rising by steps above it."[382]

One of the earliest diagrams that demonstrate orchestra size is from 1821, by Franz Stöber. In the *Wiener Zeitschrift für Kunst, Literatur, Theater und Mode*, (figure 5.2) he diagrammed the placement of the players, including six first and six second violins, four each violas, cellos and basses, nine brass, with drums, piccolo, double bassoon and harp; that is, twenty-four strings against twenty-one wind and percussion.

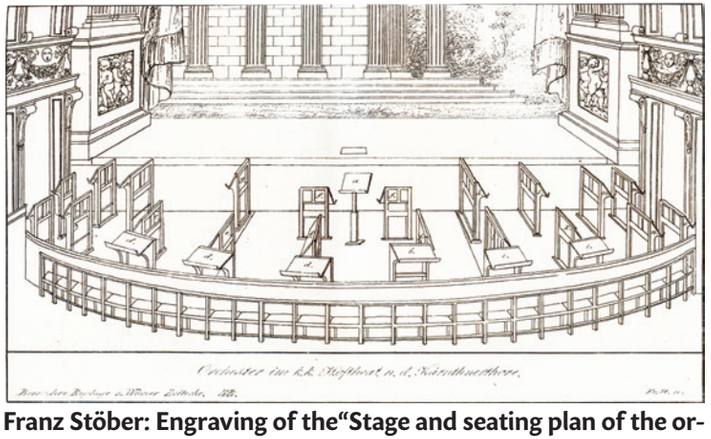


FIGURE 5.2 Franz Stöber: Engraving of the"Stage and seating plan of the orchestra at the Kärnthnerthor." Note that players stand while performing. [Source: Supplement to the *Wiener Zeitschrift Für Kunst, Literatur, Theater Und Mode*, 11 September 1821, 923.]

Charles Burney, the indefatigable British sojourner and author, left descriptions of performances in Westminster Abbey among his considerable writings. The 1784 Handel Commemoration festival did not escape his notice and he left a remarkably detailed diagram of exactly how the hundreds of performers were situated in a space that is ill-suited for such a mass of participants. (figure 5.3) It is interesting to note that many of the singers were positioned so that they either could not see the conductor at all, or would have had to twist and turn in order to do so.

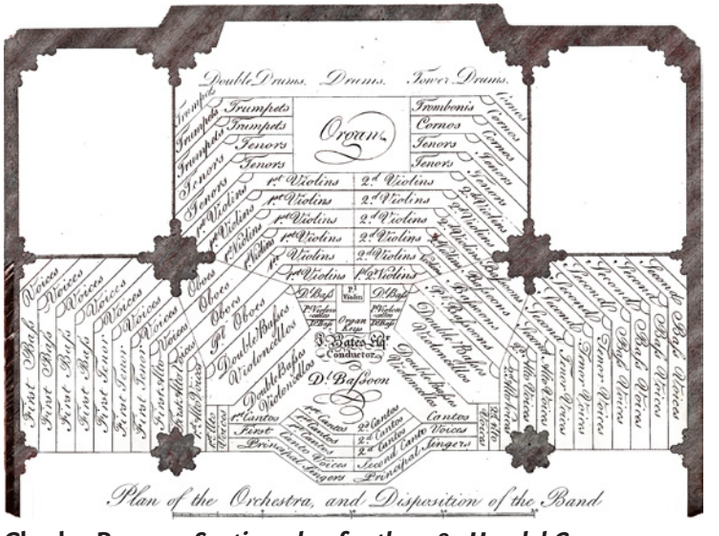


FIGURE 5.3 Charles Burney: *Seating plan for the 1784 Handel Commemoration in Westminster Abbey*, 1789.
[Source: BURN, 24.]

In 1834, there was another Handel festival in the Abbey (figure 5.4). A reviewer from London's *The Times* wrote that:

> Some effects peculiar to the present performance in the Abbey, and differing perhaps from the expectation previously formed of it, are well worthy of remark. The volume of sound, even when the power of the orchestra was exerted to the utmost, was far less than anticipated. … Another peculiarity, also quite unexpected, was that the voices of the solo singers appeared louder and more distinct than

usual, and were so far from being overpowered by the accompaniment. In general, but particularly on the floor of the cathedral, the chorus does not come out so distinctly as it ought to do, and it would be a great improvement if it could be brought more forward, and if some of the instruments were carried up into their places.[383]

FIGURE 5.4 **View of the Orchestra and Performers in Westminster Abbey, during the Commemoration of Handel, 14 January 1785.**
[Source: BURN, 109.]

In a letter to the editor of *The Times*, Londoner Francis Bryans writes

> Sir,—Can you help in putting down another nuisance—namely, the stentorian and blatant powers of our modern orchestra, more especially in the performance of oratorio? … how often does [the orchestra] drown everything else, making solo singing and chorus a mere dumb show. The other day at Exeter-hall the chorus was apparently doing its duty, but the voices frequently were quite inaudible, owing to the din of the so-called accompaniment … I should like to know what chorus and solo singers have to say on the subject … This would be as sensible as the present arrangement, for in these days the greater part of an oratorio performance is, in fact, a grand exhibition of unnecessary power by the band alone. Yours Truly, Francis Bryans, B. A.[384]

England was not the only locale where hundreds of singers came together to perform the great choral masterworks. Haydn's *Die Schöpfung (The Creation)* was given at the *Gesellschaft der Musikfreunde* in Vienna; the chorus and orchestra appear to be more sizable than the ones at Westminster Abbey. Georg Schünemann included an elaborate schematic of the seating plan in his *Geschichte des Dirigierens*. (figure 5.5)

This configuration requires a first and second director; moreover, a third keyboard director is situated behind the first director. In addition to the chorus and soloists, several stands of woodwinds and brass were arranged along the outside walls, facing perpendicularly toward the center, which produced only obstructed views; furthermore, Schünemann's schematic indicates separate directors for both the first and second violins. All told there are five directors—four of whom were presumably subordinate and dependent upon the primary conductor.

Unlike the Handel and Haydn configurations, most nineteenth-century orchestras placed the violins nearer to the front of the stage; they were also divided—firsts on one side (typically the left, although seating first violins on the right was not unknown) with the seconds opposite. Berlioz

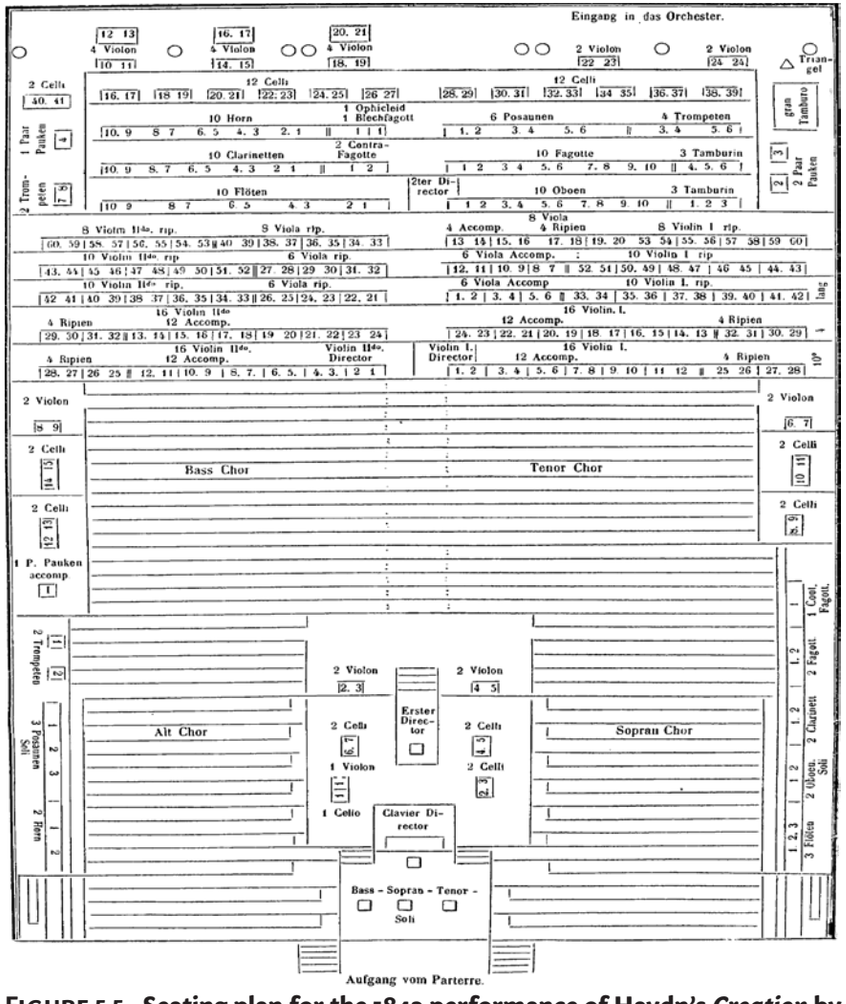


FIGURE 5.5 **Seating plan for the 1843 performance of Haydn's *Creation* by the Gesellschaft der Musikfreunde, in the Kaiserliche Winterreitschule (Imperial Winter Riding School), Vienna. *Notice the four directors located throughout the tremendous orchestral layout.* See Figure 5.6.** [Source: SCHN, Beilage no. 310.]

explained the need for divided violins in his *Grand traité d'instrumentation et d'orchestration moderne*: there are "different points of origin of sound. Different sections of the orchestra are sometimes meant by the composer to give questions and

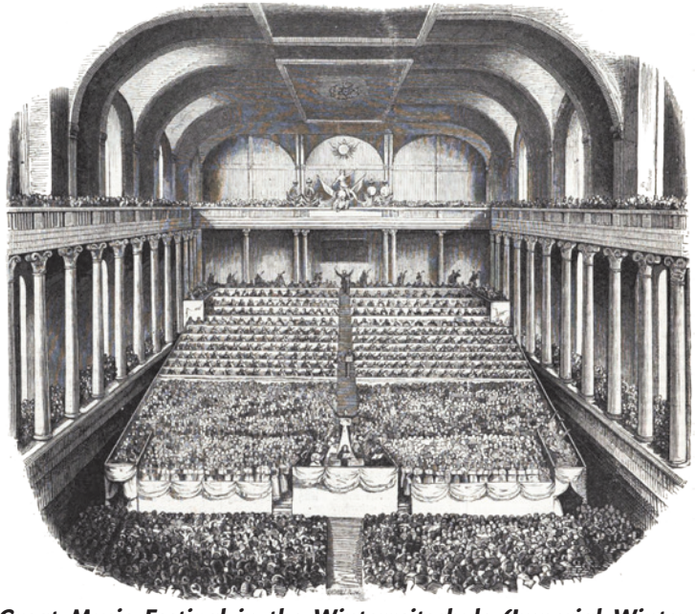


FIGURE 5.6 ***Great Music Festival in the Winterreitschule (Imperial Winter Riding School),* Vienna, with more than 1,000 participants performing Haydn's *The Seasons*, 8 November 1838. See Figure 5.5.**
[Sources: *Illustrirte Zeitung, Vol. 2, No. 30*, Leipzig, 20 January 1844, 60.]

answers, and this idea can only be clear and effective if the dialoguing sections are far enough apart."[385]

Published diagrams "almost always show the violins at the front of the orchestra, facing one another on opposite sides. The winds were often placed on risers, sometimes quite steep, in the rear, with the brass at the very back. Violas, cellos and basses might be found almost anywhere." The chorus, however, was still "placed in front of the orchestra or at the sides. The conductor of a concert orchestra usually stood in the centre of the orchestra, among the instrumentalists." What may be most startling to the twentieth-century mind, though, is that the conductor often faced the audience.[386]

Grove Music Online notes that "In Germany, the conductor does not now stand, as with us [the British], exactly in the

centre of the orchestra with his back to the audience, but a trifle to the right, with his left side toward the room."[387] There were exceptions, of course. Local traditions, logistical necessities, acoustical concerns, and often the whim of the conductor produced novel solutions to the dilemma of how to place large numbers of performers into a finite space.

Two variants of the orchestral/choral concert template existed in 1840s Dresden. One had the brass and percussion at the back; the chorus was in the front with the divided violins behind facing each other; woodwinds and lower strings were mixed in everywhere else. The plan for the *Stabiles Orchester*, which performed in Gottfried Semper's *Semperoper* (figure 5.7) shows the soloists behind the conductor's back; the violins are flanked along the stage right wall with woodwinds opposite along the stage left wall; contrabasses and cellos sit between.

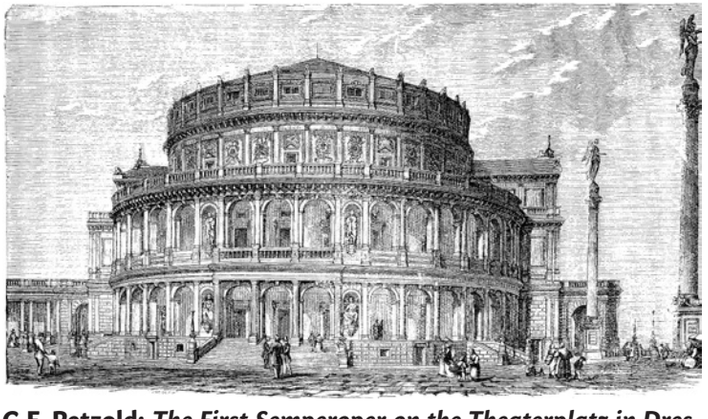


FIGURE 5.7 C.F. Petzold: *The First Semperoper on the Theaterplatz in Dresden*, built by Gottfried Semper in 1841, engraving.
[Source: Collett-Sandars, William Collett. *A Handbook of Architectural Styles.* New York: Charles Scribner's Sons, 1895.]

The other plan varies slightly: the violins are still flanked along the stage right wall and the woodwinds are opposite; brass and percussion are situated along the back wall; contrabasses and cellos sit between. As in the *Semperoper*, the chorus

is placed in front, with sopranos and tenors separated from the contraltos and basses; the soloists have their backs to the director, whose back is to them. The innovation here was to use elevated risers—in one-quarter- and one-half-yard increments, which would have greatly improved the sight line between many of the players and the conductor (figure 5.8).

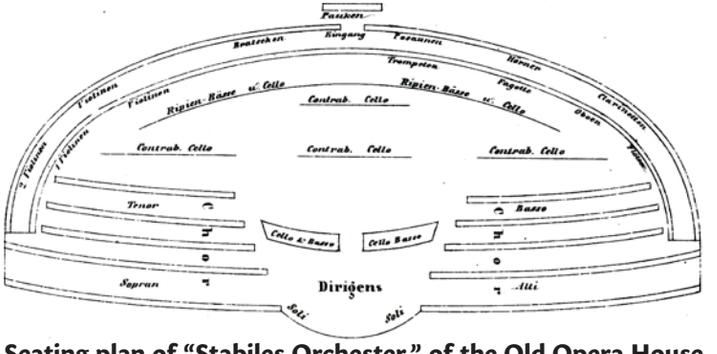


FIGURE 5.8 Seating plan of "Stabiles Orchester," of the Old Opera House in Dresden from the 1840s.
[Source: GAS, Beilage No. 5.]

Figure 5.8 is the founding concert in the *Winterreitschule*, presenting Handel's oratorio *Alexander's Feast or The Power of Music*, with six hundred performers and an audiencev of five thousand. The seating plans and audience placement are virtually identical to figure 5.5, so one can obtain a good sense of what the 1837/1838/1843 performance of either Haydn's *Creation* or *Seasons* must have looked like. figure 5.9 is a copper engraving of the same concert in the *Winterreitschule,* seen from a side view.

There is some confusion about this concert. Georg Schünemann dates the performances of Haydn's *Creation* as 5 & 9 November 1843. The official history of the *Gesellschaft der Musikfreunde*, however, lists the year as 1837, performing Haydn's *Creation*. Apparently, there are no extant images of this performance; but, the official concert poster lists the date as 8 November 1838, and the work as Haydn's *The Seasons*.

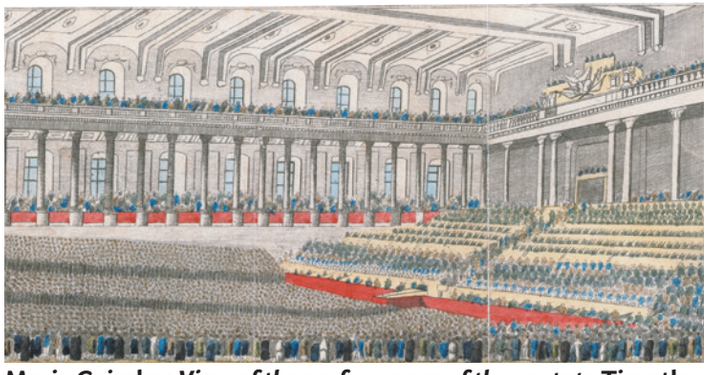


FIGURE 5.9 **Maria Geissler: *View of the performance of the cantata* Timothy, *performed for the benefit of wounded warriors by 704 amateurs at the Imperial Riding School in Vienna*, Copper engraving, possibly based on Geissler's own drawing, 1812.**

[Sources Beethoven-Haus Bonn, Sammlung H. C. Bodmer, B 2414.]

In order to overcome the acoustical superiority that bowed, blown, and struck instruments maintain over the human voice, arrangements were tweaked; conductors experimented in order to correct the imbalance between the singers and the instrumentalists.

> Where the orchestra is placed in relation to the orchestra, the conductor, and the audience is important because of the enormous effect the physical arrangement has on the balance between the vocal and instrumental groups, and thus on how the music is heard. Perhaps the most fundamental problem is the inherent advantage instruments have when compared to the human voice. Unlike the vocal mechanism, on which time and technological innovation have had little bearing, nearly all instruments used to accompany the voice have undergone significant changes in their design, materials, and mechanisms for the past two centuries. Most of these alterations have served to allow not only for increased virtuosity but also for increased range and, most significantly, increased volume.[388]

Ancient Greeks knew that amphitheaters are acoustically agreeable to the human voice; consequently, similarly shaped halls have been constructed for centuries. An anonymous 1839 article titled "On Concerts" in *The Musical Magazine; or Repository of Musical Science, Literature, and Intelligence* directs that

> The orchester [sic.] ought therefore to be amphitheatrical; having the Director in front, turned toward the Orchestra; and the Leader at the head of the first violins, immediately at his left; the second violins at his right; behind the first violins, the flutes and oboes; and behind the second violins, the clarinets and bassoons. In the middle, between these two files, the double basses and violoncellos must be extended down the whole length; and behind, on the last platform, the brass instruments and kettle-drums should be arranged. The Choir must by every means be placed before the orchestra, or at least as much so as can be; and the Solo singers must on no account stand behind the orchestra."[389]

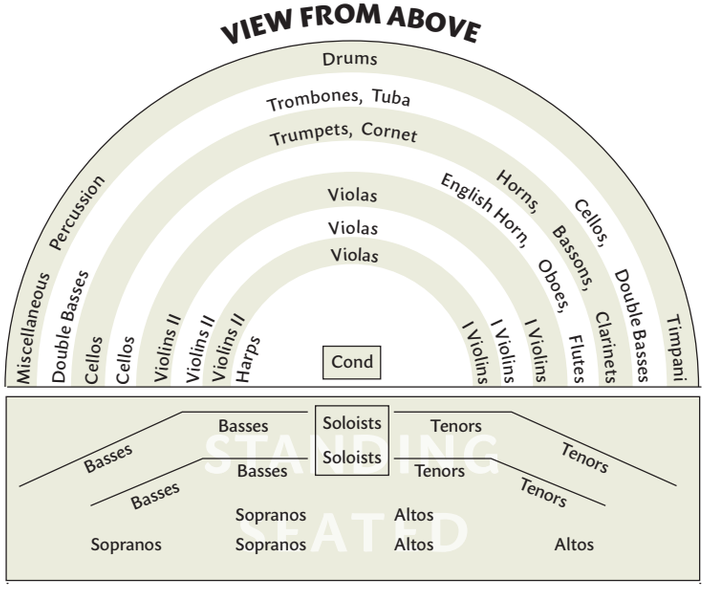
Berlioz was of a like mind. He wrote in his *Grand traité d'instrumentation* that

> For concerts, in general, an amphitheater on eight or at least five levels is essential. A semicircular plan is the best for this amphitheater. If it is wide enough to contain the whole orchestra the full body of the players can be set out on different levels with the first violins at the front on the right; the seconds at the front on the left; the violas in the middle between the two sets of violins; the flutes, oboes, clarinets, horns and bassoons behind the first violins; a double row of cellos and basses behind the second violins; the trumpets, cornets, trombones and tubas behind the violas; the rest of the cellos and basses behind the woodwind; the harps at the front close to the

conductor; the timpani and other percussion behind the brass; and the conductor near the front desks of first and second violins with his back to the audience at the bottom of the amphitheater.

Extending forward from the lowest level of the amphitheater there should be a horizontal platform or fairly large stage. Here will be the chorus, laid out in the shape of a fan, three-quarters facing the audience but still able to see the conductor without difficulty. The grouping of the chorus in voices will depend on whether the composer wrote in three, four or six parts. In any event, the women, both sopranos and contraltos, will be at the front, sitting down; the tenors will be standing behind the contraltos, the basses standing behind the sopranos.

Soloists will occupy the centre of the forestage, at the back, and will be placed so that they an always see the conductor's beat by turning the head a little[390] (figure 5.10).



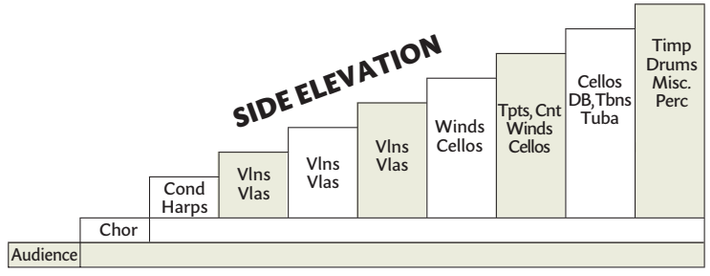


FIGURE 5.10 Diagram of Berlioz' Amphitheatrical Seating Arrangement, Based on Written Description in the *Le Traité d'Orchestration*.
[Source: BERZ, 2 95; illustration by author.]

The semicircular arrangement favored by the Odeon in Munich and illustrated in this drawing (figure 5.11), is remarkably similar to Berlioz's exacting description. He conducted in many European countries, including Germany; hence, he knew from direct experience that modifications to the basic guide were often required. Even a mediocre photograph from the nineteenth century, however, can aid in visualizing a architectural space with more clarity, as shown in figure 5.12.

No doubt because of his firsthand knowledge Berlioz added this proviso to the grandiloquent advice he gave in the *Grand traité d'instrumentation*:

> It is of the greatest consequence that the chorus-singers placed on the front of the stage shall occupy a plane somewhat lower than that of the violins; otherwise they would considerably deaden the sound of these instruments. For the same reason, if there are no other rows for the choir in front of the orchestra, it is absolutely needful that the women should be seated, and the men remain standing up; in order that the voices of the tenors and basses, proceeding from a more elevated point than those of the sopranos and contraltos, may come forth freely, and be neither stifled nor intercepted.[391]

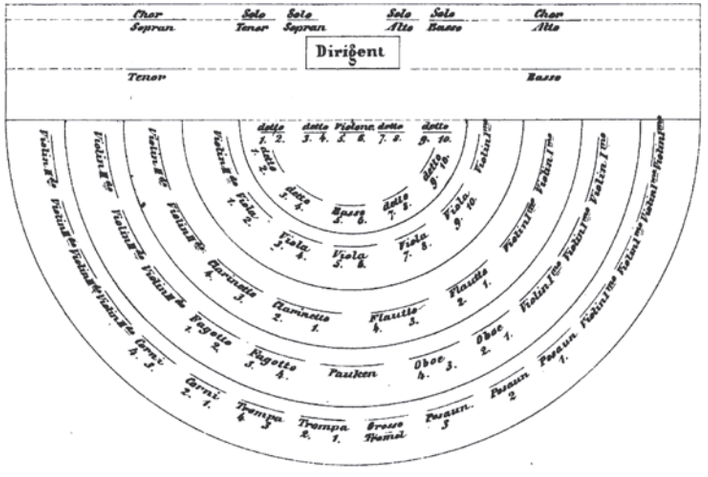


FIGURE 5.11 Concert seating with chorus, Munich, Odeon, 1840s.
[Source: SCHN, 311.]

FIGURE 5.12 Photograph of interior view of the concert hall in the Munich Odeon, Leo von Klenze, architect, built 1826–1828.
[Source: Unattributed, c. 1900.]

In his *Mémoires*, Berlioz recounts the preparation for the 1 August 1844 performance of Meyerbeer's *Les Huguenots* in the Palais de l'Industrie: "When the rehearsal was over, a new nightmare was revealed. The many people who had been listening came up and unanimously declared that the platform would have to be rebuilt; it was impossible to hear a sound from the orchestra, with the chorus placed in front of them." Like most modern conductors and performers who have worked with large instrumental forces, Berlioz was confounded: "The idea of an orchestra of five hundred that could not be heard was a novel one." Nevertheless, "sixty workmen set to work; the platform, which did not slope sufficiently, was cut in two and the front half lowered ten feet. This exposed the orchestra, the back rows of which were then raised still higher. With this new arrangement it would be possible to hear the orchestra, even in a hall of such unresonant acoustics."[392]

Imaginative seating plans were devised for concert halls and theaters alike. Wagner excitedly describes the preparation for his upcoming performance of Beethoven's *Symphony No. 9* in an April 1872 letter. Even if Wagner's methods are a little unorthodox, the message is clear that the singers must be placed ahead of the orchestra.

> In regard to our Festival performance of the big Beethoven Symphony, I have hit upon a very simple expedient for the placing of my big body of singers, namely, all the singers, for whom room cannot be found on the stage, will be placed in the front rows of the parquet. In fact, this idea corresponds exactly and in the most perfect manner to my most ideal demands, according to which the public (just as the congregation in the church) shall join in the singing … On the whole, I should like to have the entire parquet and stage reserved for us crazy musicians and singers, and relegate the listeners to the boxes and the balconies.[393]

Even by nineteenth-century standards, the number of singers in this 1880s Gewandhaus seating chart (figure 5.13)—more than

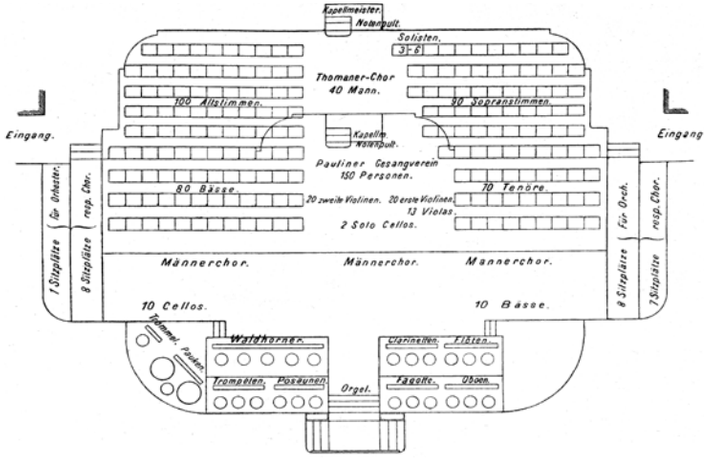


FIGURE 5.13 Leipzig Gewandhaus Seating Plan, 1880s.
[Source: KLI, 276; Austrian National Library, Music Collection, 666140-C.M.1]

five-hundred-fifty—is impressive. Ensembles of this size were probably remarkable; still, the Leipzig diagram demonstrates that placing the soloists and chorus in front of the orchestra—and as close to the audience as possible—was still preferred.

FIGURE 5.14 Engraving of the interior of the old Große Saal in the Gewandhaus, c. 1840. The members of the famous orchestra did not take seats until about 1905.
[Source: Smith Archive.]

Figure 5.14 is an engraving from c. 1840 of the original *Gewandhaus Große Saal*, as it was built in 1781. In the late 1870s and early 1880s, the Gewandhaus underwent extensive renovation (figure 5.15).

FIGURE 5.15 Hermann Walter: *Interior of the Große Saal in the second Gewandhaus*, photograph, 1886.
[Source: Sachbearbeiterin Gewandhausarchiv.]

The concert hall was closed for many months while the latest acoustical engineering was incorporated into the new design. Following the 1884 renovation, the Gewandhaus concert hall enjoyed great admiration throughout Europe; unfortunately, the entire building, where many renowned conductors and ensembles performed, was destroyed during World War II; the rebuild, guided by Communist architectural tastes, lacked the elegance of the renovation.

Massed choral concerts remained popular into the twentieth century; in larger concert halls and theaters then being built new approaches were needed to accommodate the increasing number of participants. Even in smaller halls, such as the *Gewandhaus* in Leipzig, there were peculiarities. Daniel Koury points out in *Orchestral Performance Practices in the Nineteenth Century: Size, Proportions, and Seating* that "the violins and violas … did not sit to play until about ten years after the advent of Artur Nikisch as conductor, which would be about 1905."[394] Earlier in the nineteenth century, the players

in the Gewandhaus orchestra always stood. In 1893, one of the oldest surviving members of the orchestra wrote that "In the Gewandhaus we are wholly different people than in the theatre; in black dress coat and standing erect at the desk, surrounded by the finely bedecked society in the hall, a different, higher spirit dominates us."[395]

While in Munich, Bülow more or less hewed to the typical arrangement in the concert house. First violins were seated on the left, second violins and violas on the right, and cellos in the middle. Winds and horns sat behind the first violins, brass and percussion behind the second violins, and double basses behind the cellos. When the pit was expanded in the opera theater, however, he placed the winds to his left and strings to the right.[396]

It was Wagner who first changed the prior seating and placement in a performance of Beethoven's *Symphony No. 9* in Dresden. "To achieve his musical objectives, he undertook a complete reconstruction of the stage area, so that the orchestra could be seated in the centre. For the chorus, he obtained permission to construct a semicircular, terraced seating area that partially surrounded the orchestra."

Orchestral seating plans in the United States mirrored their European counterparts. The Musical Fund Society Orchestra of Philadelphia (figure 5.16) is the earliest known (1845) sketch of an established American symphony orchestra in action. During the nineteenth century, its orchestra was the precursor of the Philadelphia Orchestra and played music by Beethoven during his lifetime, and "new" music by Haydn, Mozart, Weber and others. The Society built its Musical Fund Society Hall in 1824.

Figure 5.17 is a seating arrangement for the Boston Symphony Orchestra used by Sir George Henschel, for the Boston Symphony Orchestra's debut season in 1881. Brahms, Henschel's friend, who commented: "Your experiments in regard to the placing of an orchestra look very good and interesting. I should almost give preference to the first of the two drawings (In which the orchestra was arranged this way) on account of the horns; the violas, however, seem to give trouble up to now?"

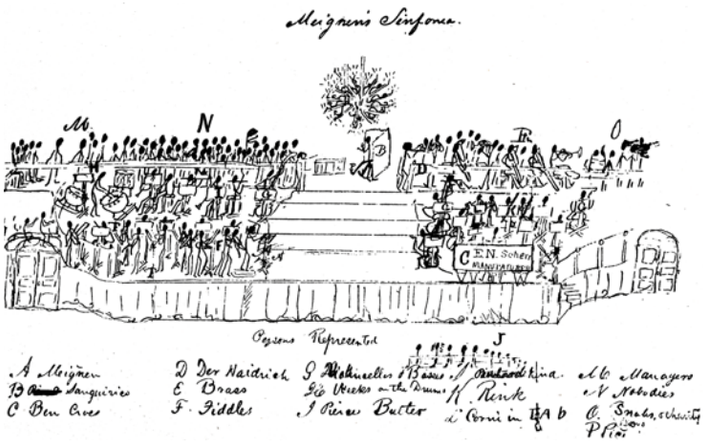


FIGURE 5.16 Seating Plan for the Musical Fund Society Orchestra of Philadelphia, 1845.
[Source: Louis Madeira, *Annals of Music in Philadelphia and History of the Musical Fund Society*, ed. Philip Henry Goepp (Philadephia: J.B. Lippincott Co, 1896), 145.]

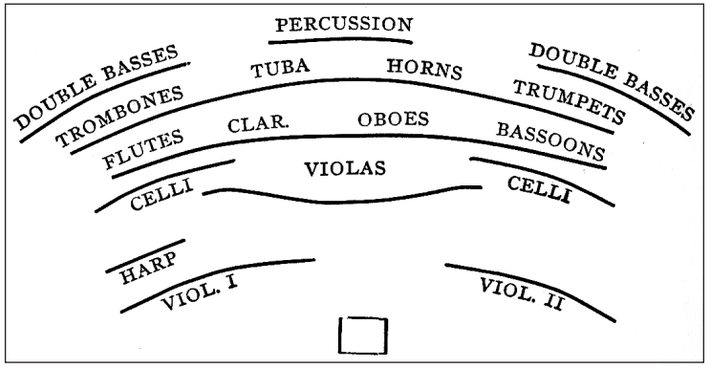


FIGURE 5.17 Illustration of Henschel's arrangement of orchestra (1882) on-stage. [Source: HEN, 84.]

This undated plan devised for the Chicago Symphony Orchestra depicts the typical nineteenth-century plan (figure 5.18).

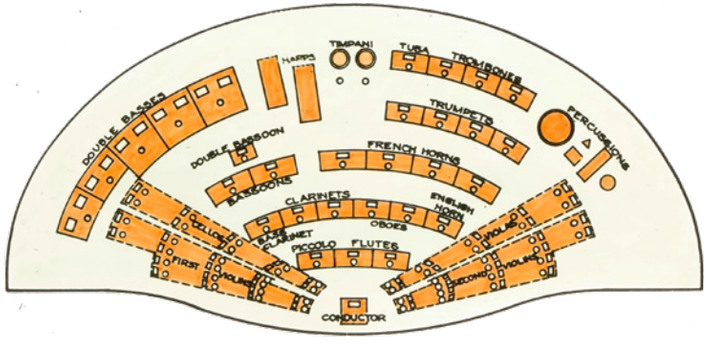


FIGURE 5.18 ***Chicago Symphony Orchestra Seating Plan*, undated. Note the nineteenth-century plan.** [Source: Ernest Schelling Slide Collection, New York Philharmonic Shelby White and Leon Levy Digital Archives.]

Although this photo of the Chicago Orchestra, with conductor Theodore Thomas (figure 5.18) differs from the diagram in figure 5.19, it still reflects nineteenth-century practice.

FIGURE 5.19 Lawrence Dinius: *Theodore Thomas with the Chicago Orchestra (as it was then named)*, 1897. [Source: "Principal Musicians of the Chicago Symphony Orchestra." *stokowski.org.* Accessed May 4, 2022. https://www.stokowski.org/Principal_Musicians_Chicago_Symphony.htm., by permission.]

These two undated New York Philharmonic seating diagrams both depict a typical nineteenth-century plan (figure 5.20).

From deep within the archive of the Vienna Musikverein come these two rare and early seating diagrams, Figure 5.21, ABOVE, shows the plan for the Grosser Redoutensaal, Vienna, 1826; Figure 5.21, BELOW: shows a plan for first building of the Musikverein "Unter den Tuchlauben," Vienna, 1830.

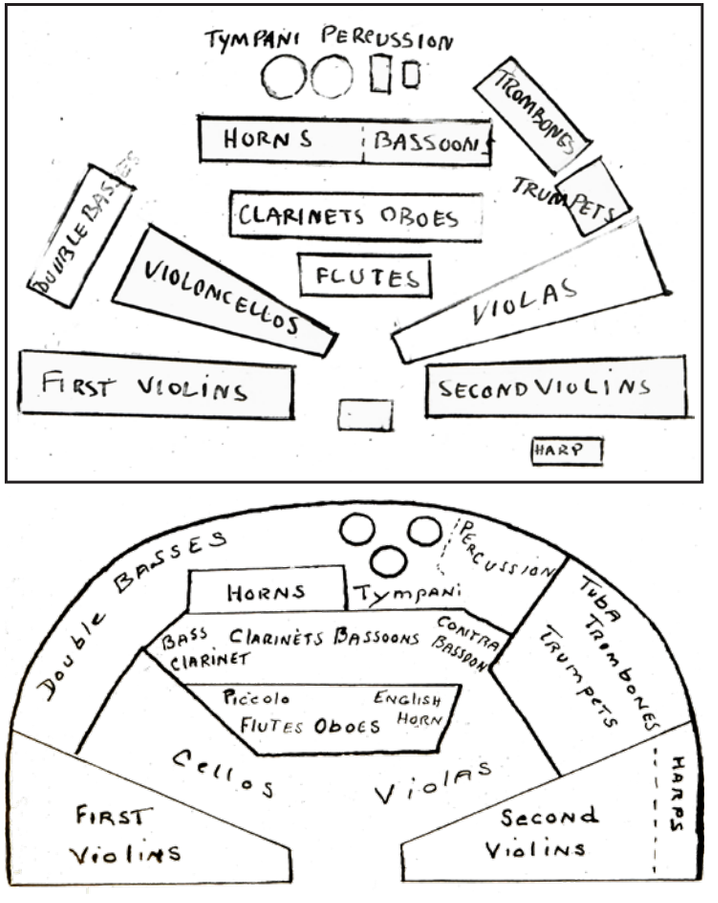


FIGURE 5.20 ***New York Philharmonic Seating Plans*, undated.** [Source: Ernest Schelling Slide Collection, New York Philharmonic Shelby White & Leon Levy Digital Archives.]

Author Raymond Holden goes on to state that "Today his seating plan might seem obvious, but at the time it was revolutionary. Previously, when concerts involving choirs were given in the Dresden theatre, the chorus and vocal soloists were placed in front of the orchestra. By seating the orchestra in front of the singers, Wagner ensured that he was in closer contact with the orchestral players throughout the performance … "[397]

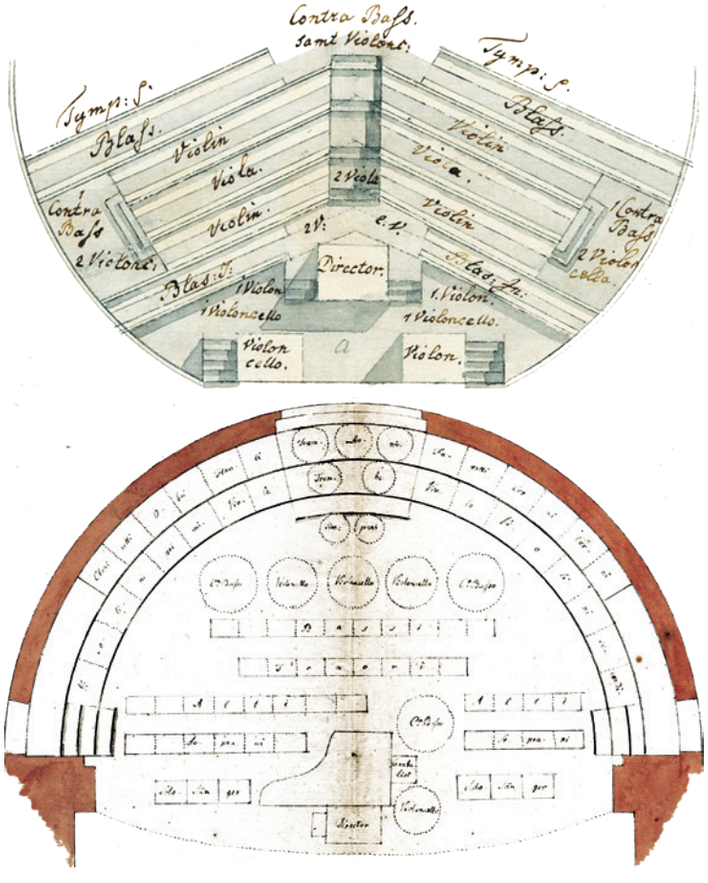


FIGURE 5.21 **Wien Musikverein seating plans: ABOVE: *Grosser Redoutensaal*, Vienna, 1826; BELOW: The first building of the *Musikverein "Unter den Tuchlauben,"* Vienna, 1830.**
[Source: ©Gesellschaft der Musikfruende Wien Archiv, 8401–125.]

Maybe so, but the balance between the singers and the vastly more powerful instruments that was envisioned by the composers was thrown completely off; the modern seating plan causes the singers to work twice as hard, creating a strained, unlovely sound.

As late as 1949 Sir Adrian Boult wrote that,

> There are one or two points concerning the placing of the orchestra which may perhaps be of general interest. Until 1910 it was the custom all over the world to have the "layout" of the orchestra as far as possible on a principle of balance, by which the high instruments (e.g., violins) were not all placed to the left of the platform, but were distributed, first on the left and seconds on the right. When Sir Henry Wood changed this, and placed all his violins together, I remember an old friend of mine, who had always sat in the middle of the Queen's Hall circle, saying that he couldn't sit there any longer: all the bass came into this right ear and all the treble to his left, and he had to sit round at the side to get a blend.
>
> This modern practice has now been adopted by almost all conductors on both sides of the Atlantic—it is no doubt easier for players and conductor, and it might seem better that the second violins should play with their instruments turned *toward* the audience. ... But, on the other hand, in almost every orchestral work there are passages where first and seconds answer each other, an the obvious expectation of the composer was that the sounds should come from opposite sides of the platform.[398]

This advice comes from a man who knew of what he spoke; for, in 1949, Boult recalled that "a memory as long as mine cannot forget the enormous advance in orchestral virtuosity through the last fifty years. It is a commonplace that no orchestral player could deal really adequately with Wagner's string parts at the time they were written. Now they are played with ease; and a work like Strauss's *Ein Heldenlehen*—formidable in 1902—is now taken as a matter of course."[399]

Orchestral size has always been subject to variation, although the development toward ever larger orchestras clearly continues up to the time around World War I. This

gradual increase was initially connected to the transfer of the orchestra from royal courts to the public domain. In 1782, the permanent staff of the Mannheim Orchestra included twenty-three violins (12/11), three violas, four cellos, three double basses, four flutes, three oboes, four clarinets, four bassoons, six horns, and tympani. Around 1800, the string group had grown to seven violas, five cellos, and seven double basses, and from here on the size of the string section was repeatedly extended. In his opera *Salome* (1905), Richard Strauss calls for sixteen first and sixteen second violins, twelve violas, ten cellos, and eight double basses.[400]

Part of the problems associated with imbalance between singers and instrumentalists involves the science of acoustics. In her study of the acoustics of concert halls throughout Europe, *Music and Space*, Dorothea Baumann makes these salient points.

> With the establishment of academic disciplines in the nineteenth century room acoustics became part of several scientific and humanistic fields, such as physical acoustics, medicine, psychology, sociology, history of architecture, musicology and others. … A selection of orchestras of typical size reflects also the change of music style, such as the minimal ensemble of 5 strings with several instruments for basso continuo for the Italian baroque opera around 1658 in Venice, Lully's opera orchestra with 25 strings its group of woodwinds around 1670 in Paris, the opera orchestra in Vienna between 1781-1808 with 22 strings, double woodwind and two trumpets, or Wagner's orchestra for the Ring with 64 strings, fourfold woodwind and brass as indicated in the score, compared to the setting used in 1876 in the new Festspielhaus in Bayreuth with 87 strings, sevenfold woodwind and 26 brass instruments. In this table Baumann clarifies orchestral sizes (figure 5.21):[401]

FIGURE 5.21 Typical Size of Orchestras, Seventeenth-Nineteenth Centuries. [Source: Dorothea Baumann, *Music and Space a Systematic and Historical Investigation into the Impact of Architectural Acoustics* (Bern: Peter Lang, 2011), 175.]

Year, place, source	Vn	Va	Vc	Db	Fl	Ob	Cl	Bn	Hn	Tbn	Tpt	Bc	Total
1658, Venice, T. Giovanni e Paolo	3	1	1	0	0	0	0	0	0	0	0	5	10
1670, Paris, Opéra, Lully	10	8	6	0	2	2	0	1	0	0	2	1	31
1781–1808, Vienna, Burgtheater, orchestra	12	4	3	3	2	2	2	2	0	0	2	0	35
1876, Bayreuth, Ring score	32	12	12	8	4	4	4	3	8	5	4	0	104
1876, Bayreuth, Ring orchestra	44	16	16	11	7	7	7	7	12	7	7	0	147

> Data clearly show that the size of the symphony orchestra during the nineteenth century started to increase independently of the hall's size. In small halls the podium had to be enlarged, as, for instance, in the old Gewandhaussaal in Leipzig until the great hall in the new Gewandhaus was opened in 1884, finally covering over a third of the parterre. The growing need for space is reflected in the orchestra's numbers per part: a total of 29 in 1807, 39 in 1831, 70 in 1865 and 72 in 1881. The construction of the great public halls in the nineteenth century was prompted mainly by the increasing number of concerts with large choirs and the need for halls for more than 1,500 listeners.[402]

The evaluation of data with known orchestra size shows a strong relation between the performance space, ensemble size and program type … collected data on performances permit the following conclusions:

1. Even at the time of the first performance there is not only one typical performance of a specific genre, such as opera in the opera house or the symphony in the great concert hall or the sonata in the chamber music hall.

The relation between space and genre is more complex and was subjected to changes.

2. Genre, selection of the performance space and even the ensemble size depended in most cases also on nonmusical factors. For performers this could cause serious problems in the sounding presentation of a work.
3. Composers and musicians obviously had a clear evaluation scale for good and bad room acoustic conditions.[403]

The size of Beethoven's orchestras varied greatly. In 1792, the *Tonkünstler Societät* in Vienna had strings of 6-6-4-3-3, while Beethoven's *Symphony No. 4* (performed in 1807) had 13-12-7-6-4 with single woodwinds 2-2-2-2. *Symphony No. 7* (performed in 1813) drew upon strings of 18-18-14-12-7 with doubled woodwinds 4-4-4-4. Beethoven's suggestion in 1813 for strings (4?-4-2-2) had to do only with a play-through ensemble.

Berlioz favored quite large ensembles, as in the premiere of the *Symphonie fantastique* in Paris (1830), which had strings of 15-15-10-11-9 (plus two harps). The woodwinds comprised 2-2-2-4 (with second players on piccolo, English horn, and clarinets in C and E-flat); the brass, four horns, two trumpets, two cornets, three trombones, and two ophicleides; and the percussion, timpani (with four players) and tubular bells. For the *Requiem* (1837) he enlisted strings of 25-25-20-29-18, woodwinds of 4-4-4-8, brass of twelve horns and four choirs, each made up of twelve trumpets, four cornets, sixteen trombones, and six tubas, as well as the percussion of 16 timpani played by ten timpanists.

For the performance of the *Messe des morts*, Berlioz calculated quite well: the main orchestra with 210 singers and 190 instruments and four separate orchestras with thirty-eight brass instruments and timpani were able to provide adequate power and quality of sound, and, "at the most overwhelming moment in the "Tuba mirum," the horror produced by the five orchestras and eight pairs of timpani was indescribable."[404]

Seven years later he realized that acoustic quality and maximum space size have certain limits. After a spectacular concert at the *Salle des machines* (figure 5.22) during the 1844 *Grand Festival de l'Industrie,* he was honest enough to admit that not even 1,022 musicians, two assistant conductors, and five choir conductors could fill the hall sufficiently.

FIGURE 5.22 Salles de l'Exposition de l'industrie.—Grand Festival de l'industrie, dirigé par. M. Berlioz. (Hall of the Industry Exposition. Grand festival of industry conducted by Berlioz.), 1844.
[Source: *L'Illustration*, III, no. 76, 10 August 1844, 372.]

Never one for half-measures, he writes in the *Le Chef Dorchestre théorie De Son Art* (figure 5.23): "But the finest concert orchestra, for a hall barely larger than that of the Conservatoire, the most complete, the richest in nuances, in varieties of timbre, the most majestic, the strongest, and the most mellow at the same time, would be an orchestra composed as follows:"[405]

FIGURE 5.23 The Ideal Orchestra, as described by Berlioz. [Source: BERZ, 294.]

21 First violins,	4 Harps,	1 Basset Horn or one Bass Clarinet,	1 Bass Trombone,
20 Seconds,	2 Piccolos,	4 Bassoons,	1 Ophicleid in B♭ (or one Tuba),

FIGURE 5.23 The Ideal Orchestra, as described by Berlioz. [Source: BERZ, 294.]

18 Violas.	2 Flutes,	4 Valve Horns,	2 Pairs of Timpani with four players,
8 First Cellos,	2 Oboes,	2 Valve Trumpets,	1 Bass Drum,
7 Seconds,	1 English horn,	2 Cornets with Pistons or with Valves,	1 Pair of Cymbals
11 Double-basses,	2 Clarinets,	3 Trombones (1 Alto, 2 Tenor, or 3 Tenor),	

And, naturally, Berlioz helpfully adds the size of the chorus–if one is required (figure 5.24):

FIGURE 5.24 The Ideal Chorus Size, as detailed by Berlioz. [Source: BERZ, 294.]

46 Sopranos (First & Seconds)	40 Tenors (First & Second)	40 Basses (First & Second)

Berlioz goes on to describe what might happen if this already quite large ensemble were increased by two or three:

> By doubling or tripling in the same proportions and order this body of performers the result would probably be a superb festival orchestra. But it is a mistake to suppose that all orchestras must be constructed according to this scheme, which is based on the predominance of string instruments. Excellent results can be achieved with the opposite system. In the latter case the string instruments would be too weak to dominate the mass of clarinets and brass instruments, and would serve to provide a harmonious bridge with the strident sounds of the orchestra of wind instruments. In some cases they would soften their brilliance, in others they would give warmth to the impetus of the music, by means of the tremolo which can lend a musical quality even to drum rolls by blending with them.
>
> Common sense suggests that unless the composer is obliged to make do with whatever size of orchestra is available, he must put together his body of performers according to the style and character of the work he is writing and the type of principal effects the subject may require. For example to reproduce in a musical way the great images of the Mass for the Dead in a *Requiem*, I have used four small orchestras of brass instruments (trumpets, trombones, cornets, and ophicleides) placed some distance from each other at the four corners of the large orchestra. The latter consists of an imposing mass of string instruments, all the other wind instruments doubled or tripled, and ten musicians playing eight pairs of timpani tuned to different notes. It is quite certain that the special effects obtained by this new type of orchestra could not possibly be achieved with any other forces.
>
> This is the place to draw attention to the importance of the different points of origin of the sounds. Some parts of an orchestra are meant by the composer to question and answer each other, and this intention only becomes clear and beautiful if the groups which engage in dialogue are placed at a sufficient distance from each other. In his score the composer must therefore indicate the layout that he thinks is appropriate.
>
> In the case of drums, bass drums, cymbals, and timpani, for example, if they are used all at once to play certain rhythms in the commonplace manner, they can remain grouped together. But if they are playing a rhythmic dialogue, one part of which is performed by the bass drums and cymbals, and the other by timpani and drums, it is probably the case that the effect will become immeasurably better, more interesting and more beautiful if the two groups of percussion instruments are placed at the two ends of the orchestra, and therefore at a fairly great distance from each other. This means that the constant uniformity in the placing of masses of instruments is one of the greatest obstacles to the production of monumental works that are really novel. It is imposed on composers more by habit, routine, laziness, and lack of thought than

for reasons of economy, though these are unfortunately all too compelling, particularly in France. Here music is far from our national habits, the government does everything for theatres, but nothing for real music. Wealthy magnates who are prepared to give 50,000 francs or more for a painting from a great master, because this represents a safe investment, would not spend even fifty francs to make it possible to hold once a year some musical celebration worthy of country such as ours, which would display to good effect the considerable musical resources it does actually possess but which in practice cannot be put to good use.

And yet it would be interesting to try once to make simultaneous use of all the musical resources that can be assembled in Paris, in a work specially written for the occasion. Assuming a composer had such resources at his disposal, in a vast hall organised for this purpose by an architect versed in acoustics and music, he would need to determine precisely before starting work the disposition and layout of this huge orchestra, and then keep them always in mind while composing. It can be assumed that it is highly important in using such a vast mass of players to take into account the distance or the proximity of the different groups that make it up. This is an essential precondition for achieving the best possible results and calculating with sureness the intended effects. In musical festivals up till now all that has been heard are standard orchestras and choruses but with their parts quadrupled or quintupled, depending on the smaller or larger number of performers. But this would involve something very different, and the composer who wanted to show off the prodigious and innumerable resources of such an instrument would certainly have to perform a novel task.

Given time, care and the necessary expenditure, this is how it could be done in Paris. The layout of the groups

> is optional and subject to the composer's intentions; percussion instruments, which have a compelling effect on the rhythm, and which always drag when at a distance from the conductor, should, as I have mentioned, always be placed sufficiently near to him to be able to respond instantaneously and exactly to the slightest variations in the tempo and the beat.[406]

His ideas about what constitutes a "Festival Orchestra" are absolutely eye-popping (figure 5.25).

FIGURE 5.25 Festival Orchestra Size, per Berlioz. [Source: BERZ, 294–295.]

120 Violins divided in two, three, or four parts;	2 Bass Trombones
40 Violas divided optionally into first and seconds, at least ten of which would at times play the *viola d'amore*;	1 Very deep Organ, with at least sixteen foot stops;
45 Cellos, divided into first and seconds;	1 Ophicleide in C;
18 Double-Basses with 3 strings tuned in fifths (G, D, A);	2 Ophicleide in B♭;
4 Octo-Basses;	2 Tubas
15 Double-Basses with 4 strings tuned in fourths (E, A, D, G);	30 Harps
6 Flutes;	30 Pianos;
4 Flutes in E♭, incorrectly known as Flutes in F;	8 Pairs of Timpani (10 players);
2 Piccolos;	6 Drums;
2 Piccolos in D♭, incorrectly known as piccolos in E♭;	12 Pairs of Antique Cymbals (tuned to different pitches);
6 Oboes;	3 Bass Drums;
6 English horns;	6 Triangles
5 Saxophones;	6 Sets of Bells;
4 Tenoroons;[407]	2 Large and very deep Bells;
12 Bassoons;	2 Gongs;
4 Clarinets in E♭;	4 "Jingling Johnnies;"[408]
8 Clarinets (in C, B♭, or A);	**TOTAL: 467 Instrumentalists**
16 Horns (6 of them with valves);	40 Sopranos (children, first and second);
8 Trumpets;	100 Sopranos (women, first and second);
4 Cornets;	100 Tenors (first and second);
4 Alto Trombones;	120 Basses (first and second);
6 Tenor Trombones;	**TOTAL: 360 Choristers**
GRAND TOTAL OF INSTRUMENTALISTS AND SINGERS:	**827**

To modern eyes, the number of performers is shocking. One struggles to understand how such extravagant numbers could be afforded; notwithstanding that economic concern, Berlioz was hardly the only composer who demanded vast numbers of instrumentalists and singers. Consider Wagner: In this engraving of Wagner conducting the orchestra in Bayreuth (figure 5.26), the huge chorus can be seen sitting behind the orchestra, which is large. Earlier in the century, orchestral and choral placements were different, with singers before the orchestra.

FIGURE 5.26 Richard Wagner conducting the orchestra at the theatre in Bayreuth, unattributed engraving, 1872

[Source: Bayreuth, Richard-Wagner-Museum.]

In the *Ring* (1876) his earlier orchestra was extended to strings of 16-16-12-12-8 (and eight harps), to woodwinds of 4-4-4-4 (i.e., three of each plus separate piccolo, English horn, bass clarinet, and contrabassoon players), to brass of eight horns (four of them doubling on Wagner tubas), three trumpets plus bass trumpet, three trombones and bass trombone, and five tubas,

and to a percussion section of timpani (with three timpanists), two pairs of triangles, cymbals, and glockenspiel. Wagner's scoring allowed for separate harmonic choirs of winds, each of them having a distinctive tone color. Wagner recommended a particular positioning of orchestral performers in the pit at Bayreuth to achieve his preferred sonority.

This unusual drawing by clarinetist H. Henzl of a rehearsal of *Parsifal* conducted by Wagner disciple Hermann Levi shows the rehearsal space at Bayreuth as well as the seating of the orchestra; the numbers are impressive, somewhat in line with the numbers given below (figure 5.27). An important component of orchestral/choral balance concerns the acoustics of the room where the performance takes place. Many factors affect how sound travels in a space, including construction materials, shape, location of performers, and the number of spectators.

FIGURE 5.27 Drawing of a rehearsal of *Parsifal* with Bayreuth Orchestra, Herman Levi, conducting, by Munich first clarinetist, H. Henzl, 1882. Note Wagner looking through cowl at the top. Franz Strauss playing the horn, second left on third row from below.

[Source: ©agefotostock.]

As *Grove Music Online* notes,

Because orchestras functioned in so many different venues and contexts during the nineteenth century, it is hard to make useful generalizations about their size. Where the same orchestra can be traced over several decades, the impression is often one of growth. The orchestra at La Scala, the court orchestra in Dresden and the London Philharmonic all grew from about 60 players in the 1820s to over 90 in the 1890s; on the other hand, the Paris Opéra and the court orchestra at Munich remained about the same size over the same period.

Nineteenth-century orchestras divide into two principal types: theatre orchestras and concert orchestras. Experimentation and advances in instrument technology during the nineteenth century led to significant changes in the composition of the orchestra, particularly among the brass. During the first half of the nineteenth century, valved and natural instruments played side by side in the same orchestras. Wagner, for example, in *Rienzi* (1842, Dresden) calls for two natural trumpets along with two valved cornets, two natural horns along with two valved horns, and both serpent and ophicleide. Woodwind too were redesigned, mainly by adding new key work, which enabled them to play in any key rapidly and more reliably in tune.[409]

II. ACOUSTICAL PROPERTIES OF FIVE OUTSTANDING NINETEENTH-CENTURY CONCERT HALLS

Acoustical engineers have identified four concert halls—all built before 1901—that have exceptional acoustics (figures 5.28-5.46, p. 357-p. 370), along with Carnegie Hall. All are rectangular (shoebox) in shape and have lightly upholstered seats. To listeners, the sound in them is beautiful, almost luxurious; because of the rich reverberation, the quantity of early

lateral reflections that give breadth to the music, the balance of tone among the orchestral sections, the loudness of the sound, and the dynamics that brings listeners to their feet following a fortissimo conclusion. Also, the quality of the sound is nearly uniform in about 90 percent of the seating areas and the players clearly hear each other onstage.[410] There are even suggestions that concert halls with strong and lateral sound increase the emotional impact of orchestra music.[411]

In "Architectural Features That Make Music Bloom in Concert Halls," published in *Acoustics*, Tapio Lokki and Jukka Pätynen identify eight characteristics in these halls:

1. **Side Walls without Small, Widespread Diffusing Elements**
   Flat and rigidly-build side walls give strong lateral reflections at wide frequency bands, resulting in a powerful and engaging sound;
2. **Deep Side Balconies and Vertical Wall Elements**
   Side balconies or lateral wall elements give second-order "cat-eye" reflections roughly up to double wavelength of the balcony depth;
3. **High Ceiling**
   The ceiling has to be high enough so that lateral reflections from the side walls reach the listeners before the ceiling reflection. . . . High ceilings and large upper volumes in the halls enable also the late reverberation to develop and bloom. . . . The shape of the ceiling is also important. In many highly appreciated halls the ceiling is coffered;
4. **Flat Floor with Seats That Allow Sound to Pass Below**
   Sound waves from the stage propagate to our ears at a grazing angle over the seats. The low frequencies diffract from the seat backrests downwards, thus at low frequencies we receive both the direct sound and the delayed (diffracted and reflected) copy of it;

5. **Elevated Stage**
   Some people do not like relatively high stage combined with flat audience chairing as it does not permit unobscured sight lines over the entire orchestra . . . .a flat audience floor with open seats and hopefully an elevated stage are instrumental in achieving a strong bass below 100 Hz [40].
6. **Back Wall of the Stage**
   The compact stage area calls for densely seated musicians, which in turn allows them to hear each other well. On the contrary, modern orchestras want to have more space on stage, partly to reduce the sound pressure levels on stage and partly to have comfortable playing conditions. Therefore, stages in modern halls are quite large. The use of risers, in particular in a semi-circular setting, have mostly solved the contradiction with good auditory and visual communication and enough space between the musicians;
7. **Reflecting Surfaces around the Stage**
   In some halls, the stage area is surrounded by extended side balconies, which provide supporting reflections to the musicians. At the same time such constructions reflect the sound to the audience from the elevated directions, many times from the side of the orchestra or from the back corners of the stage;
8. **Background Noise**
   Naturally, a concert hall has to be silent. Therefore, sound insulation and the noise control of the ventilation and lighting equipment need special care.[412]

The common architectural element in these four halls is their elongated, rectangular shape. It is no accident that medieval Gothic architecture, as demonstrated in European cathedrals, had phenomenal acoustics; even though the master builders would have had zero experience, or interest for that matter, in how and why the interiors were so reverberant, the

end result is an acoustical environment that is conducive to musical performance of some periods.

Another nineteenth-century hall acclaimed for its superior acoustics is Carnegie Hall—dubbed "The Stradivarius of Concert Halls"—in New York. William Burnet Tuthill designed the structure, which opened in 1891. At Andrew Carnegie's request, Tuthill toured and studied European concert halls famous for their acoustics. The hall's smooth interior, elliptical shape, slightly extended stage, and domed ceiling help project soft and loud tones alike to any location in the Hall with equal clarity and richness.

Carnegie Hall is one of the last large structures in New York City built entirely of masonry. This turned out to be a good choice, considering the acoustical properties of the chosen materials. The heavy masonry effectively acoustically isolated the halls while providing good reflective and diffractive surfaces to enhance musical performances.

Even the best acoustical concert halls will still have the challenges that come with large choral/orchestral works. Our modern eyes and ears have become accustomed to seeing orchestras configured with violins on the left, cellos and double basses on the right and violas somewhere in-between. Woodwinds and brass sit behind the strings, with percussion off to the side. Where the chorus sits is determined by the particular space, the number of instrumentalists and how the stage is able to be physically configured. When it comes to nineteenth-century music, there are solutions to these challenges; some are be discussed later in this book. That being said, if conductors disregard the remedies offered herein—taken from contemporaneous sources—then there will always be listeners in the audience who leave the concert hall asking themselves why the singers were unintelligible.

While it may not be possible to exactly reproduce nineteenth-century authenticity, performance practices such as

ensemble placement are relatively easy to incorporate. The seating principles outlined in the drawings, writings and diagrams of nineteenth-century observers are unambiguous and were not in dispute at the time. Conductors who contemplate performing the great romantic masses and oratorios could serve the music well by implementing the concert seating arrangements set forth in the historical record for their own performances.

During the nineteenth century, the orchestra became much louder, not only because of its expanding size but also because of the changing nature of the instruments. The strings were rebuilt, allowing for a greater tension and sonority in the strings, and the adoption of the Tourte bow resulted in an enhanced strength of tone. The woodwinds were redesigned so as to produce a more powerful sound; the bores of brass instruments were enlarged for the same reason. The directing of players until ca. 1810 was carried out from the first violin chair or from a keyboard (when voices were present).

The concert halls that were discussed in "Architectural Features That Make Music Bloom in Concert Halls"—including Vienna *Musikverein*, Amsterdam *Concertgebouw*, Berlin *Konzerthaus*, Boston Symphony Hall, and Carnegie Hall—have relatively high stages and practically flat audience areas. Illustrations and photographs of these halls follow; it is important to remember that not every hall was configured to have the chorus in front of the orchestra; nevertheless, these images will highlight the architectural features that make for superlative acoustics, along with the nineteenth-century seating plans.

We begin our discussion of these concerts halls with the Wiener Musikverein, built by Theophil Hansen in 1870, beginning with figure 5.28. Following will be the *Concertgebouw Amsterdam*, then the *Berlin Königliches Schauspielhaus Großer Saal*, followed by Boston Symphony Hall. And, although Carnegie Hall is not in the original list of nineteenth-century outstanding concert halls, its renowned acoustics deserve examination.

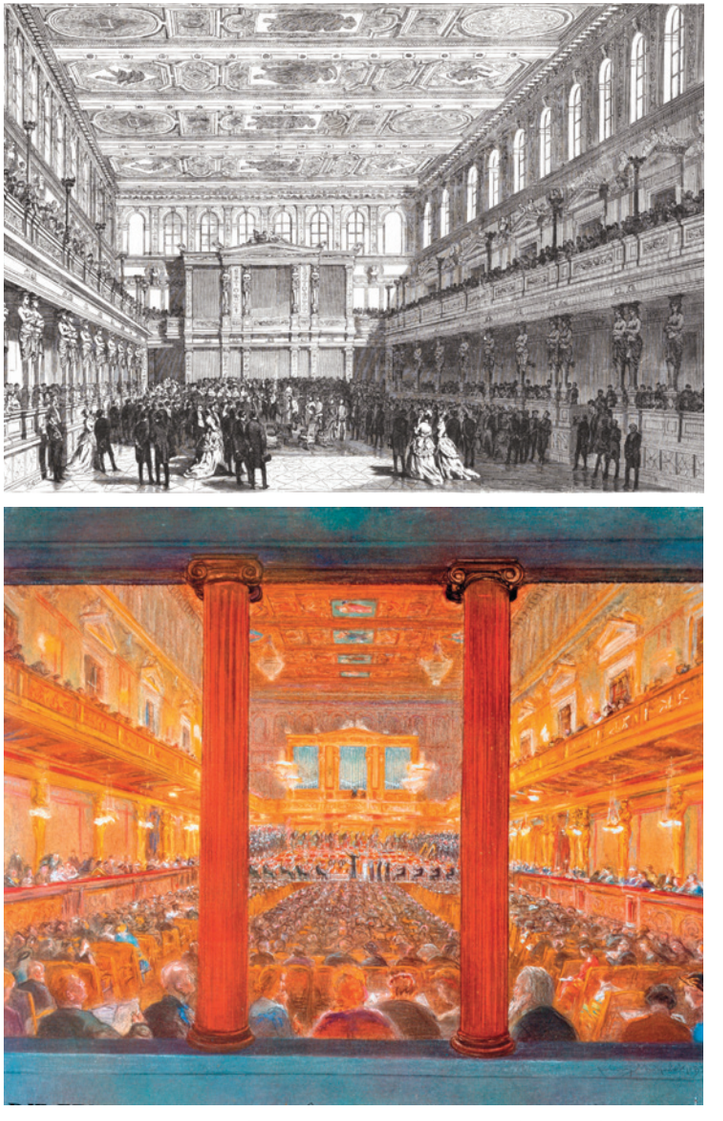


FIGURE 5.28 **ABOVE: Vinzenz Katzler: *Ceremonial laying down of the keystone in the Goldener Saal of the new Musikvereinsgebäude,* Vienna, 1 March 1870, etching, 1870; BELOW: Ludwig Michalek: *View of the Großer Saal of the Wiener Musikverein*, pastel, 1913.**

[Sources: ABOVE: *Illustrirte Zeitung*, 54, no. 1392, 5 March 1870, 172; BELOW: ©akg-images / WHA / World History Archive, used with permission.]

FIGURE 5.29 **ABOVE: August Mandlick: *Celebration of the jubilee of the Vienna Philharmonic in the Großer Saal of the Wiener Musikverein*, 1910. The violins are divided, the chorus flanks and stands behind the orchestra, and the four soloists stand behind the conductor, closest to the audience; BELOW: Wilhelm Gause: *Painting of a Joh. Strauß-Konzert in the Goldener Saal (Golden Hall) of the Vienna Musikverein,* 1896. It was not uncommon for the audience to sit at café tables and play cards, order drinks and converse during concerts and operas.**

[Sources: ABOVE: agefotostock/Fine Art Photographs; BELOW: bpk/Dietmar Katz.]

FIGURE 5.30 **Vienna Philharmonic at its 81st New Year's Concert in the Musikverein, conducted by Ricardo Muti, 2021. *Nineteenth-century seating has been used since the founding of the orchestra.***

[Source: ©Photo: Dieter Nagl for the Musikverein.]

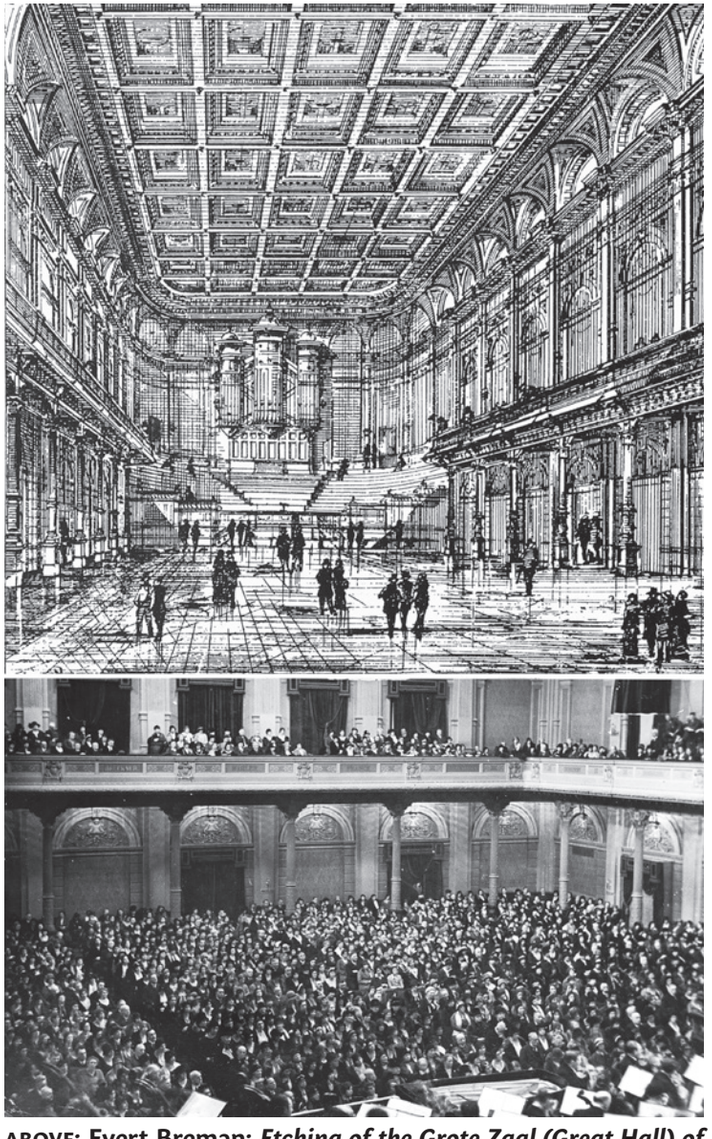


Figure 5.31 **ABOVE: Evert Breman: *Etching of the Grote Zaal (Great Hall) of the Concertgebouw Amsterdam,* built by Adolf Leonard van Gendt, 1883; BELOW: Overview of the audience in the Grote Zaal during a concert, unattributed, c. 1935.**
[Sources: Collectie Stadsarchief Amsterdam. ABOVE: 010056914755; BELOW: OSM100138000001.]

Figure 5.32 **ABOVE: Concertgebouw stage in the Grote Zaal with Concertgebouw Orchestra. ABOVE: c. 1891; BELOW: Ben Ikelaar: *Sketch of stage from the balcony during the performance of Benjamin Britten's* War Requiem, Concertgebouw Orchestra with choir, black chalk, 1964.**
[Source: Collectie Stadsarchief Amsterdam: ABOVE: OSIM00001003470; BELOW: Ben Ikelaar/Amsterdam City Archives.]

FIGURE 5.33 Concertgebouw stage in the Grote Zaal, 2019. The Concertgebouw was not damaged during World War II, so van Gendt's original design still stands.
[Sources: Concertgebouw, Amsterdam.]

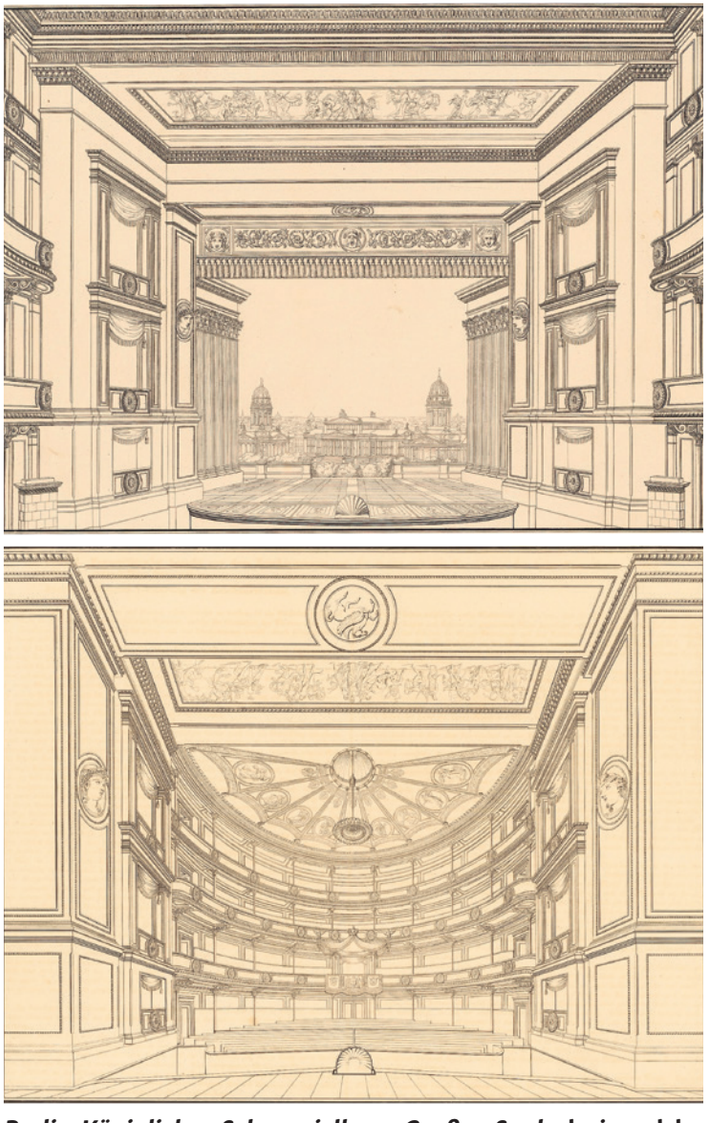


FIGURE 5.34 *Berlin Königliches Schauspielhaus Großer Saal*, designed by Karl Friedrich Schinkel, 1821. ABOVE: Perspective view from the audience onto the stage in the Royal Schauspielhaus in Berlin; BELOW: Perspective view of the auditorium in the Royal Schauspielhaus, as seen from the stage.
[Source: ©TU Berlin Architekturmuseum.]

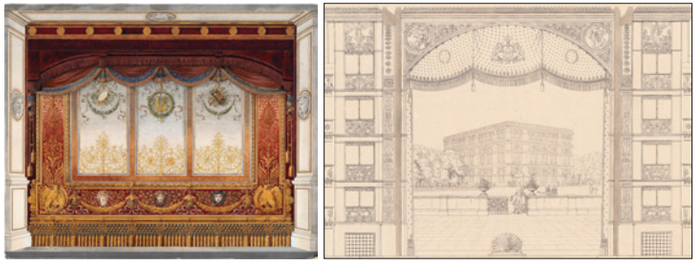


FIGURE 5.35 **LEFT: Stage curtain for the Schauspielhaus Berlin by Johann Eduard Jacobsthal, 1889. RIGHT: View of the proscenium, the adjoining lounges and the perspective view of the theater looking through the stage, 1825.**
[Sources: ©TU Berlin Architekturmuseum. left: doi.org/10.25645/e93k-9rbq; right: doi.org/10.25645/erxk-rmvr]

FIGURE 5.36 **Ernst H. Börner: *Berlin Konzerthaus Großer Saal*, photograph, 1941. The original was destroyed in World War II; the entire Konzerthaus was rebuilt in 1979. The view from the stage matches Figure 5.34, Schinkel's 1821 architectural drawings for the Großer Saal.**
[Source: ©TU Berlin Architekturmuseum. doi.org/10.25645/bpmj-v9cz]

FIGURE 5.37 **Konzerthaus Berlin Großer Saal, 2019.**
[Source: Photo by ©Sebastian Runge / Konzerthaus Berlin.]

FIGURE 5.38 **Photo collage of the Boston Symphony Orchestra, 1882. Note the seating plan, with divided violins, prominent harp, and double basses and cellos across the back, flanking the winds.**
[Source: Photograph by Jas. Notman, courtesy BSO Archives.]

FIGURE 5.39 **Boston Symphony Hall, c. 1900.**
[Source: Courtesy Boston Symphony Orchestra Archives.]

FIGURE 5.40 **Formal orchestra photograph, Serge Koussevitzky, conductor, c. 1940. As late as 1940, there were divided violins and double basses against left wall.**
[Source: Courtesy Boston Symphony Orchestra Archives.]

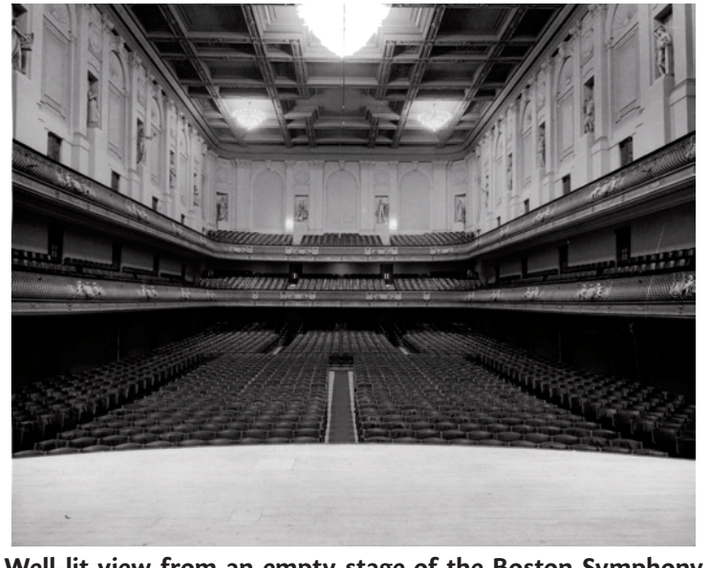


FIGURE 5.41 **Well-lit view from an empty stage of the Boston Symphony Hall auditorium, balcony, statues, and ceiling, with no audience present.**
[Source: Photo by Paul Davis. Courtesy Boston Symphony Orchestra.]

FIGURE 5.42 **Boston Symphony Hall, 2015.**
[Source: Courtesy Boston Symphony Orchestra.]

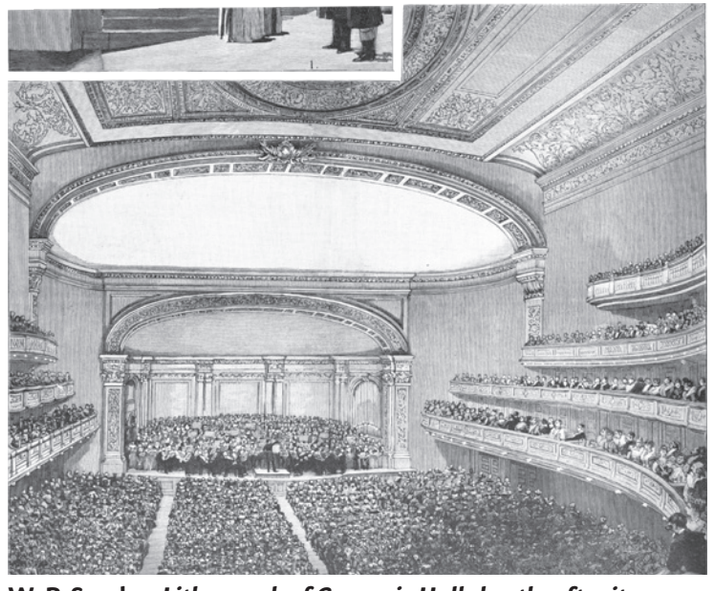


FIGURE 5.43 **W. P. Snyder: *Lithograph of Carnegie Hall shortly after its opening*, 1891.**
[Source: "The Carnegie Music Hall," *Harper's Weekly*, 35 , no. 1794, 9 May 1891, 340.]

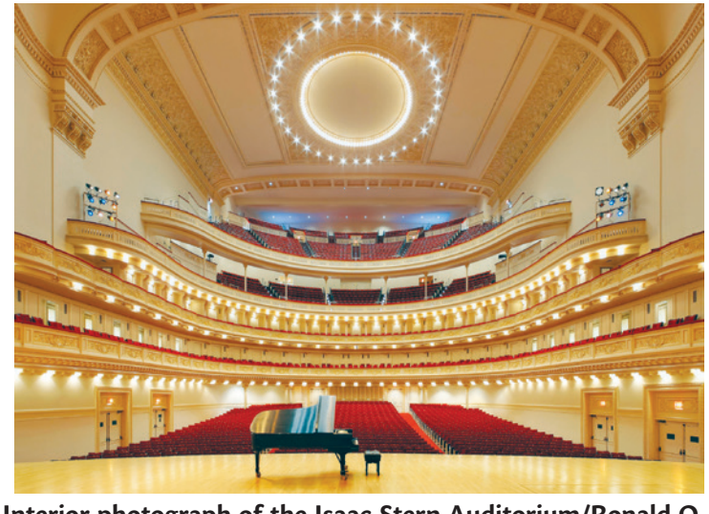


FIGURE 5.44 **Interior photograph of the Isaac Stern Auditorium/Ronald O. Perelman Stage, 2019.**
[Source: Photo ©Jeff Goldberg/ESTO.]

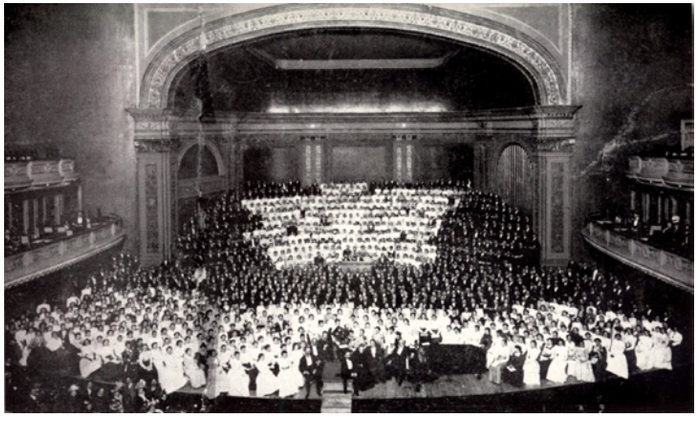


FIGURE 5.45 ***People's Singing Classes and People's Choral Union in Carnegie Hall*, 13 May 1900.**
[Source: Courtesy of Carnegie Hall Rose Archives.]

FIGURE 5.46 **The New York Philharmonic with Josef Stransky onstage at Carnegie Hall, 1917. Note the divided violins and double basses against wall, according to nineteenth-century plans.**
[Source: Courtesy of Carnegie Hall Rose Archives.]

Appendix E (p. 379) contains many images of other noteworthy halls in Europe and the United States. What is important are the similarities and differences between them and the four concert halls discussed above.

III. CONCERT PITCH

> *Men think God is destroying them because he is tuning them. The violinist screws up the key till the tense cord sounds the concert pitch; but it is not to break it, but to use it tunefully, that he stretches the string upon the musical rack.*[413]
>
> –Henry Ward Beecher, 1869

The notion of an absolute, universal concert pitch is generally discussed only among the rarefied world of performers and singers who specialize in music predating the seventeenth century; there are several temperaments that range from Pythagorean, which is based upon the succession of perfect fifths, to the experiments that make possible microtonal temperaments in pianos, harpsichords, wind instruments and even organs.

Meantone Temperament and Just Intonation, to name only two, were primarily used before the time of Bach; his truly revolutionary collection of keyboard pieces in twenty-four major and minor keys–the *Well-Tempered Clavier*, BWV 846-893–proved beyond dispute the superiority of Well Tempered tuning. Every key was literally equal, meaning that some keys, for instance, F♯ minor, could be easily performed; furthermore, modulations, unworkable in earlier temperaments, now entered the composer's toolbox and opened an entirely new world of tonalities. No more "wolf notes," or keys that were described as if they were palettes of colors.

Nevertheless, once the temperament issue was resolved there was still the matter of a universal concert tuning pitch; there were almost as many concert pitches in Europe as there were cities and towns. It seems unlikely that pure obstructionist ideology was the culprit; rather, mechanics were more likely the cause of disparate concert pitches.

String instruments are unaffected by concert pitch, along with the trombone; the remaining woodwind instruments had scales whose intervals determined whether a flute, for example, could tune with an oboe or bassoon—or somewhat later, the clarinet. The inability to match pitches between instruments of one town with instruments of another town meant that a universal concert pitch, such as A440, could not be achieved even with the best of circumstances. A chart showing the variety of concert pitches in European cities, towns and countries (figure 5.47) demonstrates the variety of concert pitches used in the nineteenth century.

Figure 5.47 History of Concert Pitch Assignment.
[Source: *Standard pitch or concert pitch for pianos.* Accessed 28 February 2001, https://www.piano-tuners.org/history/pitch.html.]

Year	Country	A=	Comments
1800	England	505.7	Broadwood's C tuning fork, one-half step lower than now
1811	France	427.0	Paris *Grand Opéra*
1812	France	440.0	Paris *Conservatoire*, equal to modern pitch
1813	England	423.3	George Smart adopted pitch for the Philharmonic Society
1820	England	422.5	Westminster Abbey organ and Paris Comic Opera
1823	Vienna	437.0	Standard pitch that rose to 440 in 1834
1828	England	440.0	London Philharmonic Society
1834	Vienna	436.5	Vienna state opera
1835	Germany	443.0	Wolfels Piano makers
1836	France	446.0	Pleyel Piano makers
1846	England	452.5	Standard pitch that lasted until 1854
1846	England	433.5	Mr Hipkins piano tuner (Meantone) A433.5 (Equal) A436.0
1849	England	445.9	Broadwood's medium pitch, which lasted until 1854
1858	England	522.0	New London Philharmonic concert pitch
1859	France	435.0	French government set up a commission for standard pitch; the tuning fork was 15° centigrade

Figure 5.47 History of Concert Pitch Assignment.

Year	Country	A=	Comments
1860	England	448.4	Cramer's Piano makers of London
1862	Germany	440.0	Dresden Opera House
1871	England	440.0	Covent Garden Opera House
1877	England	449.9	Collard's Piano maker standard pitch
1877	England	446.6	St. Paul Cathedral Organ (London)
1877	England	448.9	Chappell Pianos (London)
1878	England	436.1	Her Majesty's Queen Victoria Organ
1878	Vienna	447.0	Vienna Opera
1879	England	450.0	Covent Garden Opera House
1879	France	450.0	Sébastian Érard Piano Makers
1879	England	454.0	Steinway of England
1879	England	451.9	British Army regulation pitch for woodwinds
1885	Vienna	435.4	A pitch of A435.4 was adopted at a temperature of 59° F for A
1885	England	452.0	At an international exhibition of inventions and music in London, A452 was adopted
1925	America	440.0	On the June 11, the American music industry adopted A440.
1936	America	440.0	American Standards Association adopted A440, yet New York Philharmonic and the Boston Symphony Orchestra, used A442
1939	America	440.0	At an international conference A440 was adopted

Figure 5.48 visualizes the frequent and irregular changes to concert pitch in Western Europe in the nineteenth century detailed in the above table. One reason that the New London Philharmonic raised its concert pitch to A522 Hz is an acoustical phenomenon: higher pitches travel farther and faster than lower ones; this advantage gives concert halls with less than stellar acoustics the means to improve the sound of orchestral, vocal, and keyboard instruments.

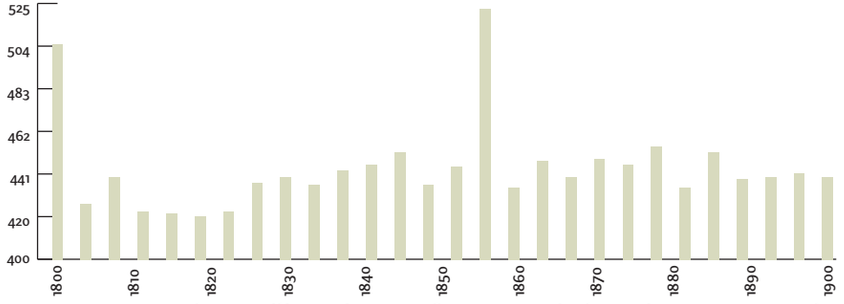


FIGURE 5.48 Graph Detailing History of Concert Pitch Assignment, Based on Figure 5.47.
[Source: Standard pitch or concert pitch for pianos. Accessed 28 February 2021, https://www.piano-tuners.org/history/pitch.html.]

Orchestras, competing with one another over better sound, started to tune their instruments higher and higher. This eventually led to problems for singers, who complained about having to perform pieces in higher registers than they were originally meant to be performed in. At the urging of singers, the French government made the tuning A=435 Hz officially standard in France in 1859, and many orchestras and Opera houses in Europe adopted this standard. In Britain, however, the French standard was interpreted in an erroneous way (it was understood as being relative to a certain temperature), due to which British orchestras commonly tuned to A=439 Hz.

There was another difficulty in prescribing a standard concert pitch in Western countries: temperature. The 59° Fahrenheit temperature attached to the standard fork in Paris was intended for the definition and verification of that fork alone. The alteration of the fork due to heat is scarcely perceptible, but wind instruments—particularly the pipe organ—rise almost proportionately to the increase in temperature of the surrounding air, because sound travels faster as the temperature rises.

To discuss the standardization of concert pitch following World War I as part of the Treaty of Versailles seems

incongruent; nevertheless, a little known provision that established A440 Hz as the standard pitch for all signatory nations was ratified on 28 June 1919. Article 282, (22) of the Treaty reads "Convention of November 16 and 19, 1885, regarding the establishment of a concert pitch."[414] This provision was based on the 1885 conference in Vienna among Italy, Austria, Hungary, Russia, Prussia, Saxony, Sweden and Württemberg wherein the Diapason Normal resulted in middle C being tuned to approximately 258.65 Hz., or A430.54 Hz.

In 1939, there was an international conference held in London that resulted in a recommendation to use A=440 Hz, as a compromise between the various tuning systems used at the time, some of which reached beyond 450 Hz. This recommendation was further supported by the fact that the BBC required their orchestras to tune to 440 Hz instead of 439 Hz because 439 is a prime number, and the corresponding frequency was hard to generate electronically with standard electronic clocks. Eventually, in 1955, the standard A=440 Hz was adopted by the International Organization for Standardization (ISO).

Virtually all commercially produced contemporary music is tuned to A=440 Hz. Nevertheless, most symphony orchestras ignore the standard and tune to 441, 442 or 443 Hz instead, while orchestras specializing in older music may sometimes use a tuning close to the one for which the piece was originally written, which may range from 415 Hz to 470 Hz.[415]

Beginning in the eighteenth century, the standard pitch in use was the so-called "classical pitch" of A422 Hz, to which Bach, Mozart, and Beethoven wrote; by the middle of the nineteenth century, however, the number of vibrations increased to A435 Hz; indeed, in 1859 the French government, acting on

the advice of several influential composers such as Fromental Halévy, Giacomo Meyerbeer and Gioachino Rossini, leglislated the so-called "Diapason Normal." In 1859, a tuning fork that was to be the Standard Pitch or "Diapason," was deposited at the Paris Conservatoire; it vibrated at A435 Hz. Furthermore, on 12 January 1885, Queen Victoria announced in London that she had adopted this "Diapason Normal" for her private band and that it would in future be used at state concerts.

Part of the HIP movement was the discovery that concert pitch had changed drastically from the eighteenth century. There were multiple concert pitch assignments that differed from city to city, town to town and nation to nation. The observance of concert pitch in baroque and classical music opened our ears to the differences 5–10 Hz can make in a performance. (Just ask the sopranos in the final movement of Beethoven's Symphony No. 9.) As concert pitch ascended throughout the nineteenth century, changes had to be made to string instruments, for example. Because of the tensile strength needed for the higher pitch, violins required steel strings to reach the higher notes, which meant that an interior sound post was needed to prevent the instrument from snapping into two pieces—detaching the body from the neck.

The switch to steel strings was necessitated by World War I, when the government appropriated catgut, of which sutures were manufactured, for the care of soldiers—an awful but very real truth. Concert halls grew in size: larger audiences meant increased revenue; thus, even after the war, when catgut was once again available, orchestral string players retained steel strings, which filled concert halls with the brilliant tones that steel strings produced. That being said, players found that steel strings didn't create the warm, pure sound of gut strings; accordingly, as discussed above, continuous vibrato was introduced into twentieth century ensembles after about 1915.

There are many obvious advantages to having universal, worldwide concert pitch. Unlike the traveling soloists of the 1800s, one need not worry about mismatched pitch standards. We can be certain that an A

in Berlin will be identical to an A in Rio de Janeiro. The march toward performing romantic music with as much authenticity as possible will require much time, patience and reliance on practicalities. It would be foolhardy to attempt to use concert pitch with a particular composer/composition; there are simply too many variables.

Determining or approximating what the concert pitch was for a particular composer during the 1800s is more or less a proverbial can of worms. In a utopic world, orchestral performers would have instruments in more than one key, say a clarinet in D as well as another in B♭; furthermore, even string players would need to tune their instruments to the desired concert pitch. The reality of twenty-first century classical music, however, means that the vast majority of performers (excepting clarinetists) and ensembles simply have neither the resources nor the inclination to obtain and maintain multiple instruments. Plus, if the piece needed a pianoforte or pipe organ, the challenges would prove practically unworkable.

Singing unaccompanied choral music with a historically accurate concert pitch, though, might be possible. If the difference was as great as A=423 HZ and A=522, a conductor might consider transposing the concert pitch higher or lower, since such a large difference would create an obvious difference in timbre. Ultimately, of course, every conductor must determine what is practical as opposed to what is possible. Every modern concert of romantic choral music will be dissimilar to an 1800s performance: period concert halls, period orchestral instruments, period pianofortes and organs, and period audiences. Unattainable? Possibly. Still, just because we can't do it all shouldn't mean we shouldn't do something; introducing changes incrementally won't overwhelm singers, players, and audiences. Try something simple; if it works, great! Add another. If the change make life simply too difficult, then congratulate your singers and performers. And, of course, yourself. Then, try another way.

During the nineteenth century, concert halls weren't as large as what we have today. The difference in sizes could be attributed to

the numbers of attendees; after all, in the 1800s there were far fewer ways to entertain oneself. We have also seen that orchestras weren't so large as most modern ensembles. Modern concert halls are generally unable to reproduce the seating plans included herein; although the orchestral/chorus arrangements that were used before 1900 had different configurations, one aspect is common to them all: the chorus was either in front of the instruments; divided on either side (but still closer to the front of the stage); or divided with the orchestra, as in, singers on the left and instruments on the right. There was some knowledge of the science of acoustics, but mainly decisions about the size and shape of the hall was based on the failures or successes of prior buildings; hence, just as we in modern times perform in halls of different sizes and shapes, with varying acoustical results, so did performers of the 1800s.

The economics of classical music in the twenty-first century means that in order to break even, more tickets have to be sold, which means larger concert halls. Nearly every state has at least one hall that seats more than 2,000; many states boast spaces that are enormous: the Fox Theater in St. Louis seats 4,426; Dell Music Center in Philadelphia can seat 5,800; and the Microsoft Theater in Los Angeles, accommodates 7,100. One of the major differences between concert halls in the 2020s and those in the 1800s, is the configuration of backstage and the wings. Many concert hall stages could introduce risers where instrumentalists could sit; the elevation allowed the chorus to stand in front of the players without blocking the wind, brass and percussion.

Making these kinds of changes today are almost impossible. There is the added cost of setting up (and maybe even construct) risers; stage management becomes not just a challenge, but perhaps even a hazard. There are still auditoriums where singers can sing from a balcony behind the orchestra; Chicago's Symphony Hall has such a balcony; in Europe two halls that come to mind are the Berliner Philharmoniker as well as the Leipzig Gewandhaus have such arrangements. Singing from an elevated position that is still behind the orchestra is definitely

an improvement; still, the instrumentalists have the jump on the chorus, which can strain to match the volume of 200 performers.

I don't mean to suggest that creating a seating plan that places the singers ahead of the instrumentalists is impossible in the modern era; I do, however, believe that because of the way modern halls are constructed, upending the typical formation will resisted; even if successful, the cost will be high, if not prohibitive. Still, looking at the score of Liszt's oratorio Christus, the idea of the chorus attempting to sing ***p*** makes much more sense with the nineteenth-century choral/orchestral seating plan. The effect is sublime, to be sure; nevertheless, financial matters have to be respected: no one can blow an entire season's budget in order to give the chorus the help it needs, and which it received during the romantic era.

Imagination, along with receptive stage personnel, might be able to create a workable plan. Like most every chorus, though, the difference between what might be done and what can be done is still a matter of economics. As I have said previously, all we can do as conductors is the best that is possible; we can ask no more of ourselves.

IV. APPENDIX E.

The images that follow show concert halls with varying configurations, stage sizes and seating plans—ranging from 1844 to 1884. While many incorporate nineteenth-century seating plans; others do not.

By examining these halls, with their variety of shapes, sizes, and physical configuration/limitations, a reader might gather ideas from them about how his or her concerts might incorporate parts or all of one or another. Some original solutions to a few spaces with quirks or odd sight lines. No one seating plan will be right for modern halls, generally speaking; that being said, collect and adapt various elements into something that could work for your particular performance space. Information is useful. Information is power.

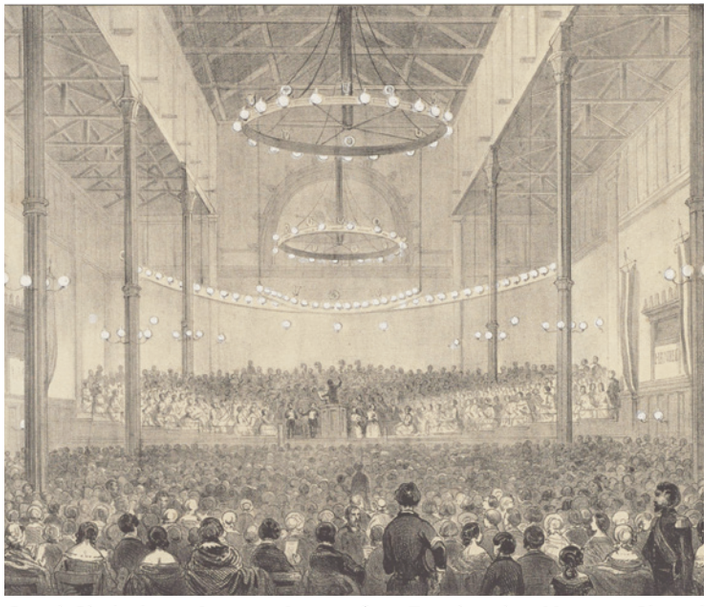


FIGURE 5.49 **Carel Christiaan Antony Last, after Everhardus Koster: *Choral concert in the Feestgebouw during the music festival,* 1854, music building interior, 1855. Note: the chorus is divided, and in front of the orchestra; soloists stand behind the conductor.**

[Source: Rijksmuseum, RP-P-OB-89.127-15.]

FIGURE 5.50 **The Concert of the Minnesingers' Club in the Portland Hall, London, 1882.**

[Source: *The Graphic*, 25, no. 646, 15 April 1882, 377.]

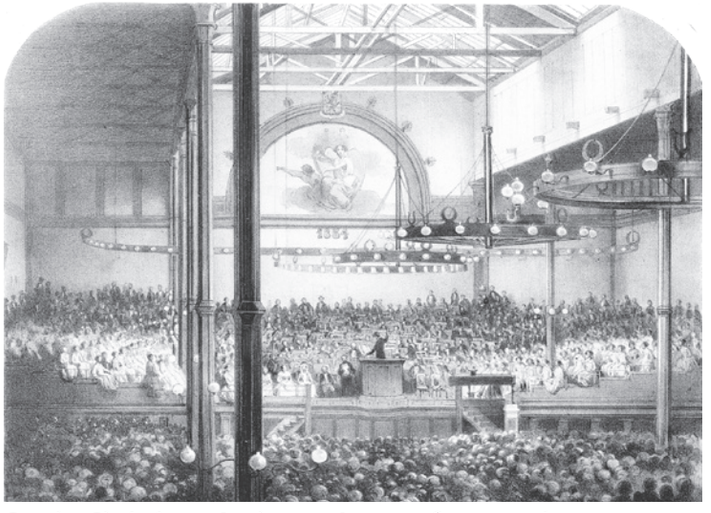


FIGURE 5.51 **Carel Christian Anthony Last, after a daguerreotype by Peter Wotke: *Interior view of the concert hall during a Gala Performance in Rotterdam,* Thursday evening, 15 July 1854, lithograph. In the nineteenth-century plan, the chorus is seated against the two side walls, flanking the orchestra.**

[Source: ©akg-images / WHA / World History Archive, used with permission.]

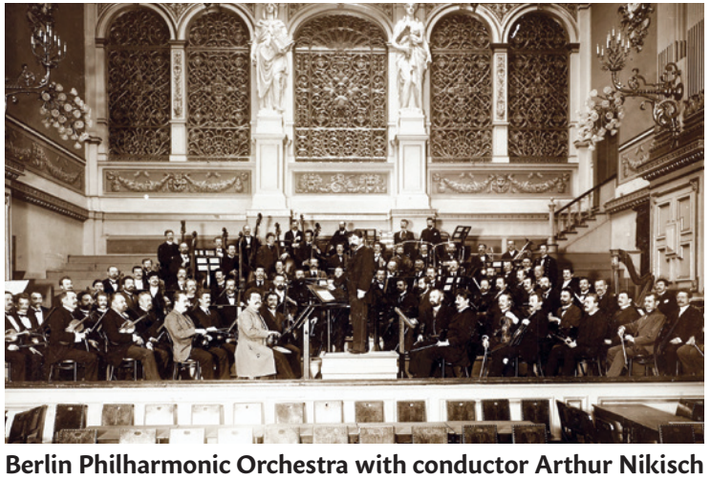


FIGURE 5.52 **Berlin Philharmonic Orchestra with conductor Arthur Nikisch in the old Großer Saal (Great Hall) of the Berliner Philharmonie, c. 1896. Note divided violins, with double basses against back wall, behind wind instruments.**

[Source: Archiv Berliner Philharmoniker.]

FIGURE 5.53 **Leipzig Gewandhausorchester, with Arthur Nikisch, before World War I, 1914. In addition to violins across from each other, the players are standing; they must have performed standing as well, since there are no chairs visible onstage.**
[Source: Stadtgeschichtliches Museum Leipzig, 5688a.]

FIGURE 5.54 **Viscountess Folkestone's Ladies' Orchestra at the Prince's Hall, Piccadilly. Note: violins sit divided, with double basses far left, with pianoforte to right of conductor.**
[Source: *The Graphic*, no. 765, 26 July 1884, 80.]

FIGURE 5.55 **Opening of Chickering Hall, corner of Fifth Avenue and Eighteenth Street, Monday evening, 4 December 1875.**
[Source: Wallach Division Picture Collection, The New York Public Library.]

FIGURE 5.56 **Thomas Theodore: New York Philharmonic in Steinway Hall, 17 April 1890. Note the divided violins.**
[Source: New York Philharmonic Leon Levy Digital Archives, by permission.]

FIGURE 5.57 ***Germania Musical Society Orchestra, conductor Carl Bergmann seated in the center,*** **etching, 1850.**
[New York Philharmonic Leon Levy Digital Archives, by permission.]

FIGURE 5.58 **Georg Osterwald:** ***Concert in the Beethoven Hall as part of the Beethoven Festival*****, 1845.**
[Source: *Illustrirte Zeitung*, Vol. 2, No. 30, Leipzig, 20 September 1845 , 1.]

NOTES

380 GARC, Part II, 49. "La grande loi des arts est l'expression; toute œuvre d'art qui n'exprime pas une idée, ne signifie rien."
381 BOU, 24.
382 BAR, 474.
383 "Royal Musical Festival in Westminster Abbey," *The Times*, 21 June 1834.
384 Bryans, Francis, letter to the editor, *The Times*, 22 June 1878.
385 BER, 328.
386 Spitzer, John, and Neal Zaslaw. "Orchestra." *Grove Music Online*. 2001; Accessed 4 Oct. 2019. https://doi.org/10.1093/gmo/9781561592630.article.20402
387 Vaughan Williams, "Conducting."
388 DIG, 191
389 CON, 165-6. The misspellings, inconsistent punctuation and capitalized nouns in the English suggest that German was the original text.
390 BER, 358-89.
391 BER, 358-89.
392 BERC, 360.
393 Wagner to Feustel and Muncker, Lucerne, 7 April 1872, in WAG2, 70-71.
394 KOU, 175.
395 CRE, 122.
396 HOLD, 24.
397 HOLD, 4.
398 CAR, 11-12.
399 CAR, 11-13.
400 Rasmussen, Karl Aage, and Lasse Larsen. "14. Orchestra Size and Setting." *The Idiomatic Orchestra*. Accessed September 23, 2019. http://theidiomaticorchestra.net/14-orchestra-size-and-setting/.
401 BAU, 173-77.
402 BAU, 173-77.
403 BAU, 175.
404 " … au moment du Jugement Dernier l'épouvante produite par les cinq orchestres et les huit paires de timbales accompagnant le Tuba Mirum ne peut se peindre." H. Berlioz, letter to Humbert Ferrand, Paris 17 December 1837, Correspondance générale (ed. 1975), vol. 2, 391.
405 BERZ, 294. "Mais le plus bel orchestre de concert, pour une salle à peine plus grande que celle du Conservatoire, h' plus complet, le plus riche en nuances, en variétés de timbre, le plus majestueux, le plus fort, et le plus moelleux en même temps voudrais un orchestre ainsi composé:
406 BERZ, 294-295. «En doublant ou triplant dans les mêmes proportions et dans le mème ordre cette masse d'exécutants, on obtiendrait sans doute un magnifique orchestre de Festival. Mais c'est une erreur de croire que tous les orchestres doivent être composés d'après ce système, basé sur la prédominance des instruments à cordes, on peut obtenir de très beaux résultats du système contraire. Les instruments à cordes, trop faibles pour dominer des masses de Clarinettes et d'instruments de cuivre, servent alors de lien harmonieux aux sons stridents de l'orchestre d'instruments à vent, en adoucissent l'éclat dans certain cas, et en échauffent le mouvement dans certains autres, au moyen du trémolo qui musicalise même les roulements de tambours en se confondant avec eux.

«Le bon sens indique que le compositeur, à moins qu'il ne soit forcé de subir telle ou telle forme d'orchestre, doit combiner sa masse d'exécutants d'après le style, le caractère de l'œuvre qu'il traite, et d'après la

nature des effets principaux que le sujet peut amener. Ainsi dans un Requiem, et pour reproduire musicalement, les grandes images de la prose des morts, j'ai employé quatre petits orchestres d'instruments de cuivre (Trompettes, Trombones, Cornets et Ophicléïides) placés à distance les uns des autres, aux quatre angles du grand orchestre, formé d'une masse imposante d'instruments à cordes, de tous les autres instruments à vent doublés et triplés, et de dix Timbaliers jouant sur huit paires de Timbales accordées en différents tons. Il est bien certain que les effets spéciaux obtenus par cette nouvelle forme d'orchestre étaient absolument impossibles avec toute autre.

«C'est ici le lieu de faire remarquer l'importance des divers points de départ des sons. Certaines parties d'un orchestre sont destinées par le compositeur à s'interroger et à se répondre ; or cette intention ne devient manifeste et belle que si les groupes entre lesquels le dialogue est établi sont suffisamment éloignés les uns des autres. Le compositeur doit donc, dans sa partition, indiquer pour eux la disposition qu'il juge convenable.

«Pour les Tambours, grosses Caisses, Cymbales, Timbales, par exemple, s'ils sont employés à frapper certains rhythmes tous à la fois d'après le procédé vulgaire, ils peuvent rester réunis ; mais s'ils exécutent un rhythme dialogué, dont un fragment est frappé par les grosses Caisses et Cymbales, et l'autre par les Timbales et Tambours, sans aucun doute l'effet deviendra incomparablement meilleur, plus intéressant, plus beau, en plaçant les deux masses d'instruments à percussion aux deux extrémités de l'orchestre, et conséquemment, à une assez grande distance l'une de l'autre. D'où il suit que la constante uniformité des masses d'exécution est un des plus grands obstacles à la production des œuvres monumentales et vraiment nouvelles ; elle est imposée aux compositeurs plus encore par l'usage, la routine, la paresse et le défaut de réflexion que par les raisons d'économie ; raisons malheureusement trop bonnes. Cependant, en France surtout, où la musique est si loin d'être dans les mœurs de la nation, où le gouvernement fait tout pour les théâtres, mais rien pour la musique proprement dite, où les grands capitalistes, prêts à donner cinquante mille francs et plus pour un tableau de grand maître, parce que cela représente une valeur, ne dépenseraient pas cinquante francs pour rendre possible, une fois l'an, quelque solennité digne d'une nation comme la nôtre, et propre à mettre en évidence les ressources musicales très nombreuses qu'elle possède réellement sans qu'on puisse les utiliser.

«Il serait pourtant curieux d'essayer une fois, dans une composition écrite ad hoc, l'emploi simultané de toutes les forces musicales qu'on peut réunir à Paris. En supposant qu'un maître les eut à ses ordres, dans un vaste local disposé pour cet objet par un architecte acousticien et musicien, il devrait, avant d'écrire, déterminer avec précision le plan et l'arrangement de cet immense orchestre, et les avoir ensuite toujours présents à l'esprit en écrivant. On pense bien qu'il doit être d'une haute importance, dans l'emploi d'une aussi énorme masse musicale, de tenir compte de l'éloignement ou du voisinage des différents groupes qui la composent ; cette condition est on ne peut plus essentielle pour arriver à en tirer tout le parti possible, et pour calculer avec certitude la portée des effets. Jusqu'à présent dans les Festivals, on n'a entendu que l'orchestre et le chœur ordinaires dont les parties étaient quadruplées ou quintuplées, selon le nombre plus ou moins grand des exécutants ; mais

ici il s'agirait de tout autre chose, et le compositeur qui voudrait mettre en relief les ressources prodigieuses et innombrables d'un pareil instrument, aurait à coup sur à remplir une tâche nouvelle.

«Voici comment avec le temps, les soins et les dépenses nécessaires on pourrait le créer à Paris. La disposition des groupes facultative et subordonnée aux intentions du compositeur; les instruments à percussion, dont l'action sur le rhythme est irrésistible, et qui retardent toujours quand ils sont loin du chef d'orchestre, devraient en tout cas, je l'ai déjà dit, être placés assez près de lui pour pouvoir obéir instantanément et rigoureusement aux moindres variations du mouvement et de la mesure.»

407 Tenoroon is a member of the bassoon family of double reed woodwind instruments. Similar to the alto bassoon, also called octave bassoon, it is relatively rare.

408 Jingling Johnny also called Turkish Crescent, French *Chapeau Chinois*, or *Pavillon Chinois*, musical instrument consisting of a pole ornamented with a canopy (pavillon), a crescent, and other shapes hung with bells and metal jingling objects, and often surmounted by horsetails.

409 Spitzer, John, and Neal Zaslow. "Orchestra." *Grove Music Online*. Oxford University Press, 2001. https://doi.org/10.1093/gmo/9781561592630.article.20402.

410 Beranek, Leo L. "Concert Hall Acoustics: Recent Findings." *Acoustical Society of America*, January 1, 1970. https://asa.scitation.org/doi/full/10.1121/1.4944787?showFTTab=true&containerItemId=content/asa/journal/jasa&.

411 Pätynen, Jukka, and Tapio Lokki. "Concert Halls with Strong and Lateral Sound Increase the Emotional Impact of Orchestra Music." *Acoustical Society of America*, January 1, 1970. https://asa.scitation.org/doi/10.1121/1.4944038.

412 Lokki, Tapio, and Jukka Pätynen. "Architectural Features That Make Music Bloom in Concert Halls." *Acoustics* 1, no. 2 (2019): 439-49. https://doi.org/10.3390/acoustics1020025.

413 Henry Ward Beecher, *Life Thoughts* (London: Strahan, 1869), 40.

414 Myers, D. P., & Schmitt, B. E. (Eds.). (1947). *The Treaty of Versailles and after: Annotations of the text of the treaty*. Washington, D.C.: U. S. Government Printing Office,

415 Marian, Jakub. "The '432 Hz vs. 440 Hz' Conspiracy Theory." *Jakub Marian's language learning, science & art*, 19 October 2016. https://jakubmarian.com/the-432-hz-vs-440-hz-conspiracy-theory/.

{SEMI-} FINAL THOUGHTS

Music is the only communal art. It requires for its existence extensive cooperation and organization. . . . Sing together the greatest choral music of all time is the surest way of developing a sense of quality and reverence for beauty, which is the basis of musical culture.

—Edgard Varese[416]

ART: Louis M. Glackens. *A Bad Outlook for Harmony*. President William Howard Taft struggling to conduct an orchestra composed of two groups of musicians, on the left, playing the "Eastern Conservatism" on stringed instruments are "Root, Crane, Smoot, Depew, Aldrich, [and] Gallinger", and on the right, playing the "Western Conservatism" on horns and percussion instruments are "Knute Nelson, Dolliver, Cummins, Clapp, Bristow, and La Follette," 1909. *Puck, v. 66, Nº 1712*, 22 December 1909, centerfold. [Source: Library of Congress Prints and Photographs Division, 2011647533, https://lccn.loc.gov/2011647533.]

FIGURE 6.1 **Anton Crussens: *Seated Old Man Facing Right, Singing and Holding Music*, c. 1650, pen and brown ink over black chalk, inscribed in a roundel in pen and brown ink.**
[Source: Metropolitan Museum of Art, 1975.131.174, bequest of Harry G. Sperling, 1971.]

There is a monstrous amount of information in this book. One hundred years is a long time, and continental Europe and North America are vast territories. Now, let us attempt to stitch all the divergent threads into one comprehensible tapestry.

Much has been written about vibrato, tempo, ornamentation, portamento, articulation, and phrasing in pre-1820

music. Outstanding monographs exist for Renaissance, baroque and classical choral music; for the nineteenth century, however, not so much. As you read those chapters, you might have wondered why many of the musical examples were taken from instrumental music. The only other book that exists for the romantic era ceases at 1850; and, while there is much useful data therein, choral music receives short shrift. Happily, many of the treatises in this book include written explanations, along with musical examples that illuminate those elements.

Of course, understanding nineteenth-century performance practices is one thing; incorporating them into choral performances is quite another. Historically informed performance (HIP) for baroque and classical have so permeated the classical music culture that it seems almost everyone who mounts a performance of a Bach cantata or a Beethoven symphony does so with appropriately sized orchestras, and, to a certain degree, period instruments or, more likely, masterful copies.

Vibrato is first in the chapter on expression for a reason: while choral and voice faculty are unlikely to argue about whether a trill in nineteenth-century music ought to commence on the upper note, they will debate the use of vibrato in choral singing until the sun goes down. Lest there be any hesitation, there are *many* nineteenth-century sources that decry the use of continuous vibrato. Most students as well as professionals are surprised (and a bit skeptical) to learn that vibrato was used as an ornament.

There are extant recordings of the Leipzig Gewandhausorchester conducted by Arthur Nikisch from 1915 that don't incorporate continuous vibrato—which only became part of the performance practice of the Vienna Philharmonic in 1946—when Gustav Mahler's brother-in-law, and Philharmonic concertmaster, Arnold Rose, died. Our ears have become

accustomed to a sound that simply didn't exist in the 1800s. One reason orchestras began to perform pre-1900 music with continuous vibrato was because gut—used for instrumental strings—was appropriated by the federal government to manufacture sutures for the grievously wounded soldiers of World War I.

Still another reason was the introduction of larger and larger concert halls. Gut strings don't carry well into these spaces that might seat more than two thousand patrons; furthermore, mechanical improvements to wind instruments meant that pre-1900 string instruments could no longer hold their own against louder brasswinds. Using steel strings meant that instruments had to be modified in order to withstand the increased tension that came with them; steel strings did produce a louder sound and could fill the larger concert halls that were needed for ensembles to remain financially viable.

It is commonplace for voice teachers to claim that singing with straight-tone damages the voice. I respectfully disagree. My voice teacher at the University of Miami obtained her PhD in vocal pedagogy from Columbia University in New York. As it happens, I was living and working in New York during the same years she was earning her degree; even though I hired singers for gigs, our paths never crossed professionally. Nevertheless, she sang many gigs in New York professional choruses, where straight tone is de rigueur. Even now, she performs with orchestras and choruses in this country, frequently as the soprano soloist in such works as the Verdi *Requiem*.

The sources don't imply that vibrato is evil; they make clear that it is an ornament, and can be quite moving. They also say that continuous vibrato was ruinous to tone. It was even called "vulgar," only for the Gypsy violinists who roamed cafés. Many voice professionals believe

that straight-tone damages the vocal mechanism; multiple European sources in the 1800s make plain, however, that continuous vibrato was not part of the romantic style. And the experience of my own teacher shows that, used healthfully, singing without vibrato does not damage the human voice.

Not all choral professionals have the opportunity to perform choral/orchestral works; sadly, when such a work is undertaken on college or university campuses, the choral director is expected to prepare the chorus so that another faculty member can conduct the performance. Outside a major metropolitan area, a period clarinet would be difficult to locate, though string instruments have become more widespread. Trumpets, horns, and tubas underwent major changes when valves were introduced—even if the players didn't use them as composers such as Berlioz and Brahms intended. Woodwinds underwent continuous improvements starting around 1820; these lasted until the turn of the century. In modern American orchestras almost all oboes and clarinets are made by French firms, and bassoons are almost universally German; unlike in the nineteenth century, when they were made of wood, today flutes are made entirely of metal—usually silver, or for the affluent, gold or even platinum.

What is a modern conductor to do? As Norrington has shown, it is possible to achieve a satisfactory result playing only on modern instruments. Such a romantic-era orchestra, comprised of players who understand performance practices—vibrato, portamento, ornamentation, etc.—produces performances that composers would recognize; such performances are also vastly preferable to most of what is heard today.

During the 1800s, choruses were almost always seated in front of, or to the sides of, the orchestra. Vocal soloists

sometimes stood behind the conductor, facing the audience, while the conductor faced the orchestra. The construction of modern concert halls make these seating arrangements pretty much impossible. Notwithstanding that truth, we have also observed that balance problems are greatly reduced when singers are placed before the instrumentalists. Doing so creates a *pianissimo* that can actually be heard; unfortunately, however, because of trends in concert hall design, it is probably unrealistic to hope that romantic-era seating practices will return during the twenty-first century.

In the 1960s and 1970s, when historically informed performance and so-called original instruments were introduced, there was tremendous pushback. That same reaction once again happened when the HIP movement advanced forward from baroque into classical and into early romantic music. It turns out that many musicians—as well as audiences—do not want musical interpretation to change; they know when the concerto slows down, they like the tempo of the saraband, and they have learned to love the sound from "their" orchestra, and God help anyone who messes with it. Because of that backlash, smaller orchestras playing period instruments gained traction; leading to the HIP movement as we currently understand it.

Even in the twenty-first century there is still pushback. The nineteenth century seems closer to modern performers and listeners, which causes some to believe that prevailing musical interpretations and orchestral configurations are *just fine*. While studying at the University of Miami, one of my classmates, who's gone on to a tremendous career and great fame, made this comment about continuous vibrato: "Perhaps it's good for some things to fall away." Alas, I'm afraid he is not the only modern conductor/performer who feels that way.

Composers such as Berlioz, Brahms, and Wagner gave specific instructions as to what instruments they wanted to be used in performance. Berlioz asked for clarinets in D or C (which were not part of the average clarinetist's collection), because he wanted the particular timbre that those instruments produce; and when they didn't follow his direction, he became mad as an Italian vespa; and as we know, Berlioz wasn't afraid to show his displeasure.

Brahms preferred natural horn because he was especially fond of the timbre of stopped notes–when the player manipulates the tone by shoving his fist into the bell, stopping it. Brahms didn't dislike valved instruments; rather, he disliked players who skipped from one valve to the next, so as to avoid having to play an entire passage with a single valve depressed, which is far more difficult, and necessitates using lips and hand to properly perform the part. Valves were invented not to obviate natural horn and trumpet; rather, valves were meant to make the lives of brass players easier. After the invention of valves, players no longer had to tote a collection of four or five crooks from one gig to another. It is human nature to choose the easy instead of the difficult; thus, nineteenth-century trumpeters and hornists eschewed natural instruments in favor of valved ones, a practice that continues in modern orchestras to this day. Today, orchestras that are comprised of players who perform on period instruments (including woodwinds in unusual keys), and who play without continuous vibrato are what composers from 1800 until about the 1920s wanted: what HIP creates is musical timbre, and timbre is nothing more than tone color. If we are to maintain any semblance of artistic integrity as musicians, we ought to give thoughtful, ongoing consideration to incorporating nineteenth-century performance practices into our choral and choral/orchestral concerts. Otherwise, we are nothing more than clanging gongs and crashing cymbals.

At its matrix, music is sound—and sound is made up of numbers. From the duration of notes to time signatures to the divisions of the octave to the pitches to which instruments are tuned, all sound is mathematics. Let us not forget that the mathematician Pythagoras discovered the musical scale and used a monochord to describe it. No one can perfectly re-create a performance of music from the nineteenth century that will exactly reproduce what the composer heard; still, just because we can't achieve perfection doesn't excuse us from making an attempt—a performance that the composer hoped to hear. May this book inspire choral professionals to pursue performance results that approach a more exalted, representative truth.

NOTES

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AVP Auer, Leopold. 1921. *Violin Playing as I Teach It*. New York: Frederick A. Stokes Company.

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BAR Barrère, Georges. 1944. "Expression Unconfined." *Musical Quarterly* XXX (2): 192-97. https://doi.org/10.1093/mq/xxx.2.192.

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BEK Beck, Crafton. 1989. "Use of the Dot for Articulation and Accent in Orchestral Repertoire (1880-1920)." *Journal of the Conductor's Guild*, 12-23.

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GIH Geiringer, Karl. 1978. *Instruments in the History of Western Music*. New York: Oxford University Press.

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KRE Kretzschmar, Hermann. 1898. *Führer Durch Den Concertsaal*. Leipzig: Breitkopf & Härtel.

KRU Krugger, Karl. 1958. *The Way of the Conductor: His Origins, Purpose and Procedures*. New York: Charles Scribner's Sons.

LAJ Lajosi, Krisztina, and Andreas Stynen. 2018. *Choral Societies and Nationalism in Europe*. Leiden: Brill.

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MON Montagu, Jeremy. 1981. *The World of Romantic & Modern Musical Instruments*. London: David & Charles.

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PEY Peyser, Joan. 2006. *The Orchestra: a Collection of 23 Essays on Its Origins and Transformations*. Milwaukee, WI: Hal Leonard.

PFE Pfeiffer, Michael Traugott, and Hans Georg Nägeli. 1821. *Chorgesangschule: Zweite Hauptabtheilung Der Vollständigen Und Ausführlichen Gesangschule, Mit Mehrern Beylagen, Etc*. Zürich, ben H. G. Nägeli, und in Commission den Friedrich Fleischer in Leipzig.

PHI Philip, Robert. 1992. *Early Recordings and Musical Style: Changing Tastes in Instrumental Performance, 1900-1950*. Cambridge: Cambridge University Press.

PHIM Phillips-Matz, Mary Jane. 1996. *Verdi: a Biography*. Oxford: Oxford University Press.

PLE Pleasants, Henry. 1966. *The Great Singers: from the Dawn of Opera to Caruso, Callas and Pavarotti*. New York: Simon & Schuster.

POL Polko, Elise. 1868. *Erinnerungen an Felix Mendelssohn-Bartholdy: Ein Künstler Und Menschenleben*. Leipzig: F. A. Brockhaus.

POLL Pollens, Stewart. 2019. *Bartolomeo Cristofori and the Invention of the Piano*. Cambridge: Cambridge Univ Press.

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POTT Potter, John, and Neil Sorrell. 2014. *A History of Singing*. Cambridge: Cambridge University Press

QUAD Quadros André de. 2012. *The Cambridge Companion to Choral Music*. Cambridge: Cambridge University Press.

RAB Raabe, Peter. 1943. *Wege Zu Liszt*. Regensburg: Gustav Bosse.

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RMI Remnant, Mary. 1989. *Musical Instruments: an Illustrated History: from Antiquity to the Present*. Portland, OR: Amadeus Press.

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SAI Saint-Saëns Camille. 1969. *Musical Memories*. Translated by Edwin Gile Rich. New York: Da Capo Press.

SAM Samson, Jim, ed. 2014. *The Cambridge History of Nineteenth Century Music*. Cambridge: Cambridge Univ. Press.

SC Schilling, Gustav. 1838. *Versuch Einer Philosophie Des Schönen in Der Musik: Oder, Aesthetik Der Tonkunst*. Mainz: B. Schotts Sohne.

SCB Schoenberg, Arnold. 1911. "Franz Liszts Werk Und Wesen." *Allgemeine Musik-Zeitung* 38 (42): 1008-10.

SCH Schonberg, Harold C. 1967. *The Great Conductors*. New York: Simon and Schuster.

SCHB Schubert, Franz. 1890. *Impromptus, Op. 90*. Edited by Hugo Riemann. Leipzig: Henry Litolff Verlag. Bodleian Library, Oxford. Mus. 118 c.95 (9).

SCHC Schroeder, Carl. 1889. *Handbook of Conducting (Katechismus Der DiriGie Rens Und Taktierens)*. Edited and translated by J. Matthews. London: Augener Ltd.

SCHL Schletterer, Hans M. 1858. *Praktische Chorgesangschule: Op. 29*. Zweibrücken: J. C. Herbart

SCHM Schmalhausen, Lina, and Alan Walker. 2002. *The Death of Franz Liszt: Based on the Unpublished Diary of His Pupil Lina Schmalhausen*. Ithaca: Cornell Univ. Press.

SCHN Schünemann, Georg. 1913. *Geschichte Des Dirigierens*. Leipzig: Breitkopf & Härtel.

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SEI Seidl, Anton. 2014. *On Conducting*. Canberra: Parrot Press.

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SEI1 ———. 1900. *The Voice in Singing*. Translated by William Furness. Philadelphia: J. B. Lippincott & Co.

SHV Silvela, Zdenko. 2001. *A New History of Violin Playing the* Vibrato *and Lambert Massarts Revolutionary Discovery*. Universal Publisher.

SMI Smither, Howard E. 2012. *A History of the Oratorio, Vol. 4: the Oratorio in the Nineteenth and Twentieth Centuries*. Durham: The University of North Carolina Press.

SPE Specht, Richard. 1930. *Johannes Brahms*. First ed. Boston: E. P. Dutton & Co.

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SPV Spohr, Louis. 1832. *Violinschule*. Vienna: Tobias Haslinger.

SPA ———. 1860. *Selbtsbiographie: Erster Band*. Cassel & Göttingen: Georg Wigand.

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STO Stockhausen, Julius. 1884. *Gesangsmethode*. Leipzig: C. F. Peters.

STR Stowell, Robin. 1989. "The Nineteenth Century: Strings," in "The Nineteenth Century: Introduction," In *Performance Practice: Music after 1600*, edited by Howard Mayer Brown and Stanley Sadie. New York: W. W. Norton & Company.

SUT Suttoni, Charles. 1989. *An Artists Journey Lettres Dun Bachelier Ès Musique 1835-1841*. Chicago: University of Chicago.

SWT Sweet, Esq., Henry. 1879. *Transactions of the Philological Society*. London: Trübner & Co., Ludgate Hill,

SZA Szabolcsi, Bence. 1959. *Franz Liszt an Seinem Lebensabend*. Ungarischen Akademie der Wissenschaften: Budapest.

TAY Taylor, David Clark. 1908. *The Psychology of Singing: a Rational Method of Voice Culture Based on a Scientific Analysis of All Systems, Ancient and Modern*. London: Macmillan.

THAL Thal, Herbert van, ed. 1972. *Solo Recital: Reminiscences of Michael Kelly*. London: Folio Society.

THYS Thys, Auguste. 1861. *Les sociétés chorales en Belgique*. 2nd ed. Gand: Imprimerie et Lithographie de De Busscher Frères.

UNG Unger, Melvin P. 2010. *Historical Dictionary of Choral Music*. Lanham, MD: Scarecrow Press.

VOE Voelcker, Bruno. 1955. *Franz Liszt Der Grosse Mensch: Ein Characterbild Aus Zeugnissen Seiner Zeit*. Weimar: Gustav Kiepenheuer Verlag.

CWAG Wagner, Cosima. 1997. *Cosima Wagners Diaries: an Abridgement*. Edited by Geoffrey Skelton. New Haven, CT: Yale University Press.

WAG Wagner, Richard. 1912. *Bayreuther Briefe: (1871-1883)*. Leipzig: Breitkopf & Härtel.

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WALB ———. 2010. *Hans Von Bülow: a Life and Times*. New York: Oxford University Press.

WEI Weiland, Petrus. *Nederduitsche Spraakkunst*. Antwerp: P. Van Dieren en Comp., 1844.

WPH Walls, Peter. 2003. *History, Imagination and the Performance of Music*. Woodbridge (Suffolk): The Boydell Press.

WER Werner, Eric. 1964. *Mendelssohn A New Image of the Composer and His Age*. New York: The Free Press of Glencoe.

WES Westernhagen, Curt von. 1981. *Wagner: a Biography*. Cambridge: Cambridge University Press.

WIE Wieck, Friedrich. 1853. *Klavier Und Gesang: Didaktisches Und Polemisches*. Leipzig: F. Whistling.

WIL Wilhelmy-Dollinger, Petra. 1989. *Der Berliner Salon Im 19. Jahrhundert (1780-1914)*. Berlin: Walter de Gruyter.

WAT Waterhouse, William. 1993. *The New Langwill Index: Dictionary of Musical Wind-Instrument Makers and Inventors*. London: Tony Bingham.

WEL Welch, Graham F., David M. Howard, and John Nix, eds. 2019. *The Oxford Handbook of Singing*. Oxford: Oxford University Press.

WIN Winter, Robert. 1977. "Performing Nineteenth-Century Music on Nineteenth-Century Instruments." *nineteenth-Century Music* 1 (2): 163-75. https://doi.org/10.2307/746476.

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ZAD Zadro, Michael G. 1975. "Woods Used for Woodwind Instruments since the 16th Century." *Early Music* 3 (2): 134-36. https://doi.org/10.1093/earlyj/3.2.134.

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ABOUT THE AUTHOR

DAVID FRIDDLE is a man of many talents: author, conductor, composer, organist, designer and accomplished chef. He has DMAs: Juilliard, 1988, and the Univ. of Miami, 2006 (choral conducting), and has worked as a church musician in multiple denominations; a professional graphic designer for a NYC glossy magazine and a manufacturing company in Miami; adjunct faculty at the University of South Carolina Upstate; and as a line cook at restaurant Cibréo in Florence, Italy.

In addition to his varied professional activities, David founded two gay men's choruses—one in Greenville, SC and the second in Asheville, NC. In 1997 he managed the SC Gay Pride March, held in Greenville; the following year he oversaw public events for the NC Gay Pride March in Asheville. His dissertation *Christus* is published by Bärenreiter-Verlag of Germany, and he has had articles published in the *Choral Journal, American Choral Review, Newsletter of the American Liszt Society* and *The American Organist*. Dr. Friddle has conducted in seventeen states and Europe and has given organ recitals in the major cathedrals of England and around the United States. In June 2022 Lexington Books, a division of Rowman & LIttlefield, will publish David's two large studies of choral music in the nineteenth century: *Choral Treatises and Singing Societies in the Romantic Age* along with *Sing Romantic Music Romantically.*