Where Have The Great Big Wagner Voices Gone?

Andrew Moravcsik

Many critics, fans and opera professionals agree that the heights attained by Wagner and Verdi singers in the "Golden Age" of the mid-20th century have eroded.[1] Today most perceive a severe shortage of great *spinto* and dramatic opera voices—the vocal types for which Wagner, Verdi, Puccini and other late 19th or early 20th century composers wrote most of their music. These are "great big voices": the most powerful, expressive and weighty in opera, able to project over a massive orchestra for three to six hours at a stretch, while maintaining the sharp edge, dark resonance and precise diction that express bold and direct emotions.[2]

In the area of Wagner performance, many have sounded the alarm about this recent decline. Nina Stemme, one of today's finest Brünnhildes, speaks for many when she describes Wagnerian standards seventy-five years ago: "Flagstad and Melchior really ruined everything for later Wagner singers. No one today comes close: we can only modestly attempt to approach the score in other ways."[3] At the Metropolitan Opera, a house that consistently attracts the world's best singers, the late 1930s and early 1940s are almost unanimously viewed, in Paul Jackson's words, as a "concurrence of artists and repertory which finds no equal within memory." Wagnerian singers of this period are "benchmarks of performance history."[4] Table 1 compares cast lists during five three-year periods over the past century—illustrating how, with a few individual exceptions, quality has generally declined.[5]

This paper presents preliminary results from the first academic study to examine this perceived decline. It seeks to answer two questions. Is there really an unprecedented shortage of Wagner singers

Table 1: Top Wagnerian Singers at the Metropolitan Opera in Five Eras

	1933-1935	1967-1969	1989-1991	1999-2001	2011-2013
Dramatic Sopranos	Kirsten Flagstad, Anny Konetzni, Marjorie Lawrence, Frida Leider, Maria Müller, Göta Ljungberg	Birgit Nilsson	Hildegard Behrens, Gwyneth Jones, Waltraud Meier, Deborah Polaski	Jane Eaglen, Deborah Polaski, Violeta Urmana,	Katerina Dalayman, Deborah Voigt
Young Dramatic Sopranos	Lotte Lehmann, Maria Müller, Elisabeth Rethberg	Régine Crespin, Ludmila Dvo áková, Leonie Rysanek	Anne Evans, Mechthild Gessendorf, Karita Mattila , Jessye Norman	Solveig Kringelborn, Karita Mattila, Nina Stemme, Deborah Voigt	Eva-Maria Westbroek
Mezzo-Sopranos	Rose Bampton	Christa Ludwig, Josephine Veasey	Helga Dernesch, Christa Ludwig, Tatania Troyanos	Katarina Dalayman, Jill Grove, Hanna Schwarz, Birgitta Svendén	Patricia Bardon, Stephanie Blythe
Contraltos	Karin Branzell, Maria Olszewska Kerstin Thorborg	Lili Chookasian	——–	——–	——
Tenors	Paul Althouse, Max Lorenz, René Maison, Lauritz Melchior	James King, Sándor Kónya, Jon Vickers	Francisco Araiza Siegfried Jerusalem, Rainer Goldberg, Gary Lakes, William Johns	Stig Andersen, Johan Botha, Poul Elming, Plácido Domingo, Ben Heppner	Stephen Gould, Jonas Kaufmann, Jay Hunter Morris, Simon O'Neill, Stewart Skelton
Bass-Baritones	Friedrich Schorr	Theo Adam, Walter Berry, Otto Edelmann, Thomas Stewart	Donald McIntyre, James Morris	James Morris, René Pape, John Tomlinson	Mark Delavan, Greer Grimsley, René Pape, Bryn Terfel
Deep Basses	Ludwig Hofmann, Emanuel List	Karl Ridderbusch Martti Talvela	Kurt Moll, Jan-Hendrik Rootering, Matti Salminen	Eric Halfvarson	Hans-Peter König, Franz-Josef Selig

or have they always been scarce? And, if a decline has occurred, what caused it? The empirical research to answer these questions, which is ongoing, rests on over 130 confidential interviews in ten countries (so far), an analysis of trends in recordings over 80 years, and many other types of historical, biographical and sociological evidence.[6]

This paper summarizes preliminary research findings from this study. It reveals that the decline in numbers of great *spinto* and dramatic singers—notably those with voices appropriate to heavy Wagner operas—is real, beginning in the mid-20th century. Such a decline in quality is almost unique across the traditional performing arts, including most other types of opera. The deterioration, however, is less pronounced than the parallel decline in Verdi singing.

Explanations widely held among opera professionals do not explain the decline. Empirical evidence shows that it is almost certainly not due to bad teachers, bigger auditoriums, louder orchestras, changes in pitch, ignorant managers, clueless casting directors, or a decline in the salaries and prestige of musicians. Instead, it appears to be caused by deep sociological factors that impact the "life-cycle" of a Wagnerian singer. These include the disappearance of non-amplified singing by young people, the uniquely late age at which *spinto* and dramatic voices mature, and the greater attention paid to visual and theatrical values in opera performance, enforced by ever more powerful stage directors. These three trends have intensified over the past two generations, and they especially disadvantage *spinto* and dramatic singers. Taken together, they obstruct the traditional path upwards for a potential young Wagnerian: he or she is less likely ever to begin singing in the requisite manner, to stay in the opera profession long enough to realize his or her vocal potential and, if he or she exceptionally sticks it out, to reap the full reward for vocal excellence.

Assessing Quality: Has Wagnerian Singing Really Declined?

To assess whether the number of great *spinto* and dramatic voices—specifically, voices suitable to heavy Wagner roles—has fallen in recent

decades, we employ two methods specially designed to track long-term trends in the quality of singing. One is to consult leading figures in the opera world; the other is to trace the quality of recordings.

Interviews

We have conducted controlled interviews (so far) with more than 135 leading opera professionals: they include current and retired singers, conductors, impresarios, casting directors, consultants, coaches, accompanists, vocal teachers, academic administrators, critics, scholars and agents, resident in ten countries. Almost all work at the highest levels of the opera world.[7] Among the questions we ask each interviewee is whether he or she perceives "any change over recent decades in the quality or quantity of the very best *spinto* and dramatic singing, for example in heavy Verdi and Wagner."[8] Over 95% volunteer that they perceive a significant general decline in the quality of the top ("the very best") singing, that is, singing by the most important *spinto* and dramatic artists in any given period. In social scientific research, 95% support for a given response to an open-ended, unbiased and evaluative survey question is an extremely rare level of consensus.[9]

This near-unanimity is no coincidence; it reflects deep and well-considered professional consensus. Our interview subjects agree on at least four more details of the decline.[10]

1. *Uniformity across Repertoire*: Almost all believe that decline varies across different types of operatic repertoire. The best Wagner singing, while of notably lower quality than in generations past, remains at an acceptable though diminished level. Most interview subjects perceive a greater decline in Verdi singing.

2. *Timing*: Almost all agree that most of the decline in dramatic Wagner singing appears to have taken place in the third quarter of the 20th century, but a decade or two earlier than with Verdi. Some (though not all) observers maintain that while Wagner

singing bottomed out in the final quarter of the 20th century, it may have improved somewhat since then, even if it has not regained the level prevailing in the 1930s. Some believe the decline is limited to full dramatic ("Helden") Wagner voices, not slightly lighter ("jugendliche dramatische") ones.[11]

3. *What is Missing?* When asked (again in an open-ended form) what modern singers lack, most respondents agree on a dearth of intrinsic vocal capacity, color and technique. They miss voices large and resonant enough to project an appropriately warm and dark timbre comfortably in major houses, across a suitably wide range from high to low registers, loud to soft dynamics, and various expressive timbres.[12] Singers with voices that past generations would have viewed as too light, bright, limited and stressed for heavy Wagner (or Verdi) roles now sing them routinely.

4. *Average Quality*: While respondents consistently believe that the "very best" *spinto* and dramatic singing has declined, they do not consistently report that the "average" quality has done so. Indeed, the basic level on an average night in a mid-to top-level house may well have improved. Singers are more competent professionally: almost all can read music, sing on pitch and in the original German, approximate the appropriate style, memorize roles completely and avoid catastrophic failures. Yet among them, historically great voices seem to have all but vanished.

Recordings

The second technique we use to measure changes in *spinto* and dramatic singing is to track trends in the perceived quality of (audio and audiovisual) recordings over time. Such recordings offer the best continuous documentation of the greatest modern singers at work, dating back to the beginning of the 20th century. Our research team has conducted

a systematic study of published reviews of every extant commercial recording—audio and audiovisual—since 1927 (the advent of electrical recording) of any part (aria, excerpt or complete performance) of two operas by Wagner (*Tristan und Isolde* and *Die Walküre*), alongside two by Verdi and one each by Handel, Mozart and Rossini. We then asked multiple individuals to rate, using a standardized scale, how positive they found the reviewers' judgements of individual singers in specific roles (with the names of singers kept anonymous), adding a battery of controls designed to limit potential biases.[13] Of course, recordings differ from staged opera, and so we controlled for some differences removing singers from consideration if they never actually sang the role in question on stage. Overall, we believe that this indicator to be strongly biased (as it should be) *against* finding a decline in quality—for example, because both recording quality and editing technology has greatly improved over the years.

Our study of opera recordings confirms the perceptions of interviewed opera experts. We see the same decline in both Verdi and Wagner singing, and the same differences between the two in timing (Verdi later than Wagner) and relative severity (Verdi now more scarce than Wagner). Full presentation of this data would exceed the space available here, so one example must suffice: Figure 1 presents the scores of recordings between 1927 and 2009 of the tenor role of Tristan.[14]

Two findings are revealing. First, the number and height of the very best performances of *Tristan* (above a score of 14) have declined slowly from a peak in the 1930s, just as our interview subjects perceived. Second, the two outliers—exceptional data points representing high-quality performances in the 2000s (marked with vertical arrows in Figure 1)—are both in fact spurious. Both refer to recordings by Plácido Domingo (one of excerpts and one complete opera), who never sang a complete Tristan on stage.

A common objection to measuring the quality of vocal performance over time by using subjective perceptions, whether drawn from interviews or reviews, is that opera-lovers might be compulsively nostalgic. Many suspect that the widespread perception of decline simply reflects a

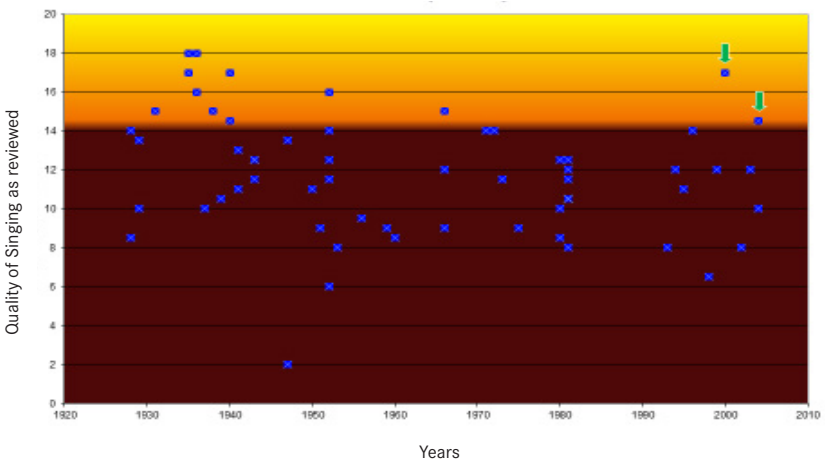

Fig. 1 *Tristan und Isolde*: Tristan (tenor); 1926-2009 (n=57).

culture among opera lovers that socializes them to exaggerate the virtue of youthful memories, old recordings and ageing divas.[15]

We take such potential "nostalgia bias" seriously and guard against it in a number of more ways—most importantly by imposing a strict set of "controls." For example, in questioning interview subjects and examining trends in recordings, we inquire not only about the quality of performances of operas by Verdi and Wagner, but also about operas by Handel, Mozart, and Rossini. We also ask about the perceived quality of opera orchestras and conductors. Similarly, in our study of recordings, we evaluate not just reviews of heavy Verdi and Wagner operas but also one opera each by Handel (*Giulio Cesare*), Mozart (*Le nozze di Figaro*) and Rossini (*Il barbiere di Siviglia*).

If nostalgia bias (or almost any other measurement bias) is at work, critics and interview subjects should perceive a decline in *all* types of opera, and in opera orchestras and conductors as well.[16] Yet they do not. Both in interviews and in reviews, observers maintain almost unanimously that vocal standards in Baroque, Mozart and *bel canto*

opera have remained steady or improved. Some insist we currently live in a "Golden Age" in these areas.[17] Almost all respondents also judge that operatic conductors and orchestras perform better than ever. The consistency of these controlled results suggests that the perceived decline in *spinto* and dramatic singing is probably real.

Before we turn to possible explanations, this last point deserves emphasis: the most puzzling aspect of the decline in *spinto* and dramatic singing is not its existence per se but its uniqueness. A nearly infinite number of potential explanations could exist for a general decline in the quality of one or more performing arts. Yet what makes this process truly puzzling is that the decline has occurred *only in one narrow artistic domain*. Not only have performance standards in other types of opera (Handel, Mozart, *bel canto*) and opera orchestras have remained steady or improved, but the same is true of solo instrumental playing, chamber music and orchestral performance, conducting, new music composition, and even jazz instrumental playing and ballet.[18] In our wealthy, globalized and multi-cultural societies, a decline in standards of any traditional performing art for which reasonable demand still exists is in fact exceedingly rare. *Spinto* and dramatic singing comprise a nearly unique exception.

Explaining the Changes in the Quality of Wagner Singing: A Brief Note on Method

So how can we explain the unique decline in the very best *spinto* and dramatic singing, specifically in Wagner operas? In the absence of any academic literature on this subject, we proceed in three steps. First, we have culled from daily and specialized opera publications, informal chats, our interviews with opera professionals, on-line forums and our own theoretical imagination all available conjectures about why the decline may have taken place. Second, we discard those explanations that, after general background research, lacked *prima facie* plausibility. For example, a distinguished singer leaned over to

me in California and confided, dead seriously, "We *know* [...] it's that stuff they put in the water"—a view echoed by a Russian colleague. After several days of research, we discarded this conjecture.[19] In the third and decisive step, having narrowed the analysis to *prima facie* plausible explanations, we assess their validity by collecting and analyzing a wide range of detailed historical, sociological and ethnographic evidence.[20] We collected such empirical evidence bearing on four questions.[21]

1. *Premises and Cause*: Do the hypothesized basic causes and premises actually exist?

2. *Causal Process*: Do the hypothesized causal "mechanisms" linking basic causes to a decline in *spinto* and dramatic singing actually exist?

3. *Time and Space*: Do the hypothesized causes and processes emerge at roughly the time of the observed decline, and not before or after, and in places where those causes are strong?

4. *Uniqueness among the Performing Arts*: Can the theory explain not just the decline of *spinto* and dramatic singing, but also the absence of a decline in other types of opera, classical instrumental performance, and traditional performing arts?

With these criteria in mind, we now turn to potential explanations.

Red Herrings: What has *Not* Caused the Decline in Wagner Singing?

Before considering more plausible causes, this section assesses and ultimately rejects five factors that many opera professionals believe have caused the shortage of *spinto* and dramatic singers. Each of

these factors arise often in our interviews, yet the balance of evidence leans strongly against them as plausible causes of the decline in great dramatic Wagner singing.[22]

I. Has the Cultural Marginalization of Classical Music Depressed Salaries and Prestige?

Traditional classical music, including opera, comprises an increasingly marginal element in Western elite and mass culture. Since the mid-20th century, "no-brow" pop culture, especially music, has spread across the globe. One might conjecture that, as a result, opera singers receive neither the generous pay for performances or recordings, nor the high social prestige, that they once did—and that this dissuades talented people from entering the profession. In 2015, for example, Adele's latest album *25* sold 3.4 million copies during its first week on the US market, whereas the top classical recording that same week (Yo-Yo Ma's 60th Birthday Album entitled *Songs from the Arc of Life*) sold 493 copies in all formats.[23]

While the cultural, social and economic marginalization of opera may be a background condition for the decline of *spinto* and dramatic voices—a point to which I return below—it almost certainly has not directly reduced the supply of singers by dampening pay and prestige.[24] The premise is false: the real income of successful opera singers rose significantly over precisely the period over which *spinto* and dramatic voices have declined. In 1956, the MET offered a top fee of $1000 per performance, but by the 1980s, according to one historian, "the maximum had reached $9000 per performance, and in the nineties fees blasted off into monetary hyperspace." Today the Met offers $17,000 a night as a top fee (with up to $30,000 reputed for special singers and occasions) and some publicly-subsidized European fees reaching even higher—reputedly up to $75,000 in extreme cases.[25] This growth over six decades is double the inflation rate, and faster (at least for men) than the rise in their median income in the US.[26] In addition, many leading singers also hold concurrent teaching positions at universities and conservatories, teach master classes, and sing at private events.[27]

To be sure, only a few opera singers make much money with recordings and solo concerts, just as only a few popular singers do. Yet the upside for opera singers has surely improved over the past 50 years. The last quarter of the 20th century was the heyday of Luciano Pavarotti and the "Three Tenors," who earned tens of millions of dollars and attracted hundreds of millions of fans—something unequaled since the early 20th century. Today Andrea Bocelli is reportedly worth $40 million.[28]

One might yet conjecture that opera singers, though well remunerated, have suffered declining social prestige. Popular artists are highly visible today, whereas classical ones far less so—even if Pavarotti and Bocelli, and in a few countries Anna Netrebko and Jonas Kaufmann, are close to household words. Yet if prestige (or material rewards) were critical, why are other performing arts, including other types of opera singing, flourishing? The piano, for example, has been in cultural decline for a century now and it is quixotic to expect to make a living as a concert performer. Yet ever more extraordinary young concert pianists come through the pipeline.[29] Among opera singers, *spinto* and dramatic singers are often among the most prominent and prestigious stars and are paid up to twice as much per performance as other types of singers. Performances of late 19th century repertoire, our interviews reveal, sell more tickets and generate more audience enthusiasm than performances of Baroque, modern, *bel canto*, or even Mozart opera—yet the latter are in good shape.[30] To judge by the size and age of its audiences, opera in general also remains relatively fashionable compared to other traditional performing arts.[31] In sum, less money or attention cannot explain the exceptional nature of the decline of *spinto* and dramatic singing.

II. Has Baroque and Early Music Performance Practice Eroded Wagner's Popularity?

Some believe that Wagner and other 19th century composers have simply gone out of fashion. The "authentic" and "performance-practice" movements are shifting operatic taste toward Baroque opera. More

subtly, a subset of opera singers increasingly adopts a cleaner, "whiter" and lighter mode of vocal production, with less vibrato, chest voice or laryngeal manipulation—a style less appropriate to the *spinto* and dramatic repertoire. This trend, one might conjecture, may discourage potential Wagner singers from entering or remaining in the profession.

The "performance-practice" movement certainly has expanded the range of acceptable classical singing styles. Yet the fact that Baroque is *in* does not necessarily imply that Wagner is *out*. Recent improvements in Baroque orchestras and solo instrumentalists have not triggered a decline in traditional symphony orchestras and soloists, so why should better early music singing imply worse traditional operatic singing? While the canon of operas has expanded, over 40% of performances worldwide still require *spinto* and dramatic voices—with Wagner firmly in fourth place among opera composers performed today, and both Verdi and Puccini ranking even higher. Certainly more performances of heavy Wagner operas occur than in years past. In any given year of the 1950s, for example, only a handful of houses performed Wagner's complete *Ring*; in each of recent years over a dozen have done so.[32] Teachers and singers report, moreover, that insofar as young vocalists enter opera with a specific operatic motivation, most aspire to sing late 19th century opera—and their voice teachers generally seek to enlarge and darken their voices, not lighten and "whiten" them.[33] As we shall see in more detail below, singers with intrinsically lighter voices are migrating to *spinto* and dramatic roles—which they would not do if they viewed them as unfashionable.

III. Has the General Quality of Vocal Training Declined?

Quite a number of our interview subjects—not least those who work in opera houses—believe the fault lies with vocal pedagogy. Since the mid-20th century, advanced training has migrated ever more to formal universities and conservatories. One often hears that academic vocal instructors today lack real-world professional experience as singers, and that such teachers tend to be incompetent. In generations past, so the claim continues, most teachers were either retired professional

opera stars with genuine knowledge or experienced old conductors and coaches who took young singers under their wing. The young Maria Callas's relationships with her mentors—first the retired soprano Elvira de Hidalgo and later the conductor Tullio Serafin—are oft-cited examples. A few observers maintain that universities teach students to sing in a style suited to small practice rooms and choruses, but not to project a big voice in a big opera house, as the older tradition did.

Yet the conjecture that the overall quality of vocal teachers has declined lacks persuasive empirical support.[34] Inept instructors have always been with us. As the Wagnerian soprano Marjorie Lawrence described of her vocal education in the 1920s: "For every honest person who teaches singing there are a hundred charlatans."[35] Many Golden Age singers, including Lotte Lehmann, Birgit Nilsson and Franco Corelli, insisted that some or all of their teachers were incompetent or harmful.[36] Nor is there any evidence that experienced singers consistently make better teachers. The truth is no one knows what makes for a good vocal teacher, but our research on the biographies of singers reveals no evidence of a correlation between prior excellence as a vocal performer and later excellence in teaching.[37]

Blaming teachers also fails to explain why the same pedagogues and educational establishments that are purportedly responsible for spoiling *spinto* and dramatic singers have recently helped recreate a brilliant Baroque and early music performance-practice tradition. Modern music education also helps maintain high standards in Mozart and *bel canto* opera, prepares singers for technically challenging repertoire of modern and contemporary music, fosters a flourishing tradition of Lieder singing, and produces generations of ever-better instrumental musicians. Basic technical skills like reading music, knowledge of basic repertoire, diction and languages, acting and professional decorum have all clearly improved among singers. (This helps explain why most of our interview subjects seem to believe that the *average* level of singing has improved in all areas, including *spinto* and dramatic singing.) If teachers in institutionalized music education systems can achieve all that, it seems implausible to accuse them of professional malpractice solely with regard to Wagner and Verdi.

A final piece of evidence against the claim that bad teachers have caused a decline in *spinto* and dramatic singers is that those countries with the extensive formal and professional educational infrastructure grounded in conservatories and universities continue to produce a disproportionate number of singers, even of a *spinto* and dramatic type. The US, UK, Australia, the Nordic countries, and even Germany and Russia export many singers and train the nationals of other countries. This suggests that strong systems of conservatories and universities help improve the quality of a nation's *spinto* and dramatic singing.

IV. Do Agents, Casting Directors and Teachers Push Singers into Heavy Roles Too Young?

Many in the opera world believe that agents and casting personnel (and perhaps teachers) push young singers to perform heavy roles before their voices are sufficiently mature, and this untimely "overparting" of young singers ruins promising young singers. Many interview subjects, especially in Germany and Austria, mention this as a likely cause—perhaps the cause—of the overall decline in the best *spinto* and dramatic singing.[38] Herbert von Karajan and Valery Gergiev are often cited as offenders. Of course, overparting is hardly unique to the last fifty years: singers in every generation have damaged their voices by attempting heavy roles when they should not, and some agents, casting directors and teachers have always been myopic, greedy or musically illiterate in encouraging them to do so.[39] This argument gains some plausibility, however, from the fact that today, most observers perceive more overparted singers taking on *spinto* and dramatic roles than in decades past. Indeed, this is part of what has led observers to speak of a "decline" in *spinto* and dramatic singing.

Yet three types of empirical evidence casts doubt that premature overparting is a primary cause of the shortage of *spinto* and dramatic voices. First, while some agents and casting directors may tempt some young vocalists to sing beyond their means, today's operatic

professionals, especially teachers and coaches, nearly unanimously advise the opposite. It has become a universal taboo in the opera world for young singers to move beyond the Baroque, Mozart and *bel canto* repertoires until they are at least thirty, if not older, lest they damage their voices.[40] Young singers do not just hear these warnings; they heed them. Our preliminary statistical analysis shows that singers begin studying and performing heavier (*spinto*/dramatic) repertoire at *an older average age* today than their counterparts did 50 or 100 years ago.

Second, while performing and learning heavy roles at a very early age is exceptional, it is unclear that it necessarily shortens a singer's career.[41] Among many counter-examples is the legendary mid-20th century German bass-baritone Hans Hotter. He sang Wotan for the first time on stage at 22 and subsequently in 400 performances of *Walküre* alone—including three of the greatest studio recordings of it ever made, respectively at the age of 29 (under Seidler-Winkler), 45 (Furtwängler) and 56 (Solti)—and retired the role at the age of 64.[42] Our study of historical singers uncovered no evidence that attempting such roles young shortens one's career.

Third, the singers who are overparted today are not disproportionately young. Most are *older* singers who move in mid-career beyond what most listeners would once have considered roles appropriate to their vocal type (*Fach*).[43] They do so, so they testify, because of the intrinsic musical interest of late 19th century repertoire; probably higher salaries and greater prestige play a role as well.[44]

So why do we hear so many overparted voices attempting Wagner and Verdi today? If any causal relationship at all exists between overparting and the number of dramatic voices, it is most likely the reverse of what most commentators presume. Overparting is not causing the shortage of *spinto* and dramatic voices. Instead, a shortage of such voices causes overparting. In an era of scarcity, agents and opera houses cast singers who can manage roles, even if their voices lack the traditional weight and color.[45]

V. Do Higher Pitch, Bigger Houses and Louder Orchestras Place Singers under Greater Acoustical Stress?

A final set of explanations is acoustic. In this view, we perceive a decline in Wagner singing because in recent decades, new acoustical trends—higher orchestral pitch, larger opera houses, and louder orchestras—are burying or stressing singers. We "hear" less powerful and resonant voices, and, because singers are constantly straining to overcome these disadvantages, they cannot execute their roles with the requisite technical competence and interpretive flexibility. At first glance this seems plausible. Yet only one of these three factors actually exists, and it does not offer a plausible account of the recent decline in *spinto* and dramatic singing.

Pitch: Some blame higher pitch—specifically, a rise in concert pitch from A=440 to A=448 and perhaps beyond, for undermining great *spinto* and dramatic singing. Champions of this explanation include the legendary soprano Renata Tebaldi and the American right-wing activist Lyndon LaRouche. Yet its basic premise is factually incorrect. Verdi himself, who campaigned to lower pitch, may have had a point in his day. Yet over the past half century, concert pitch has unambiguously dropped. The "Golden Age" stars we revere sang under far more pitch-induced acoustic stress than singers do today.[46] In the 1950s and 1960s it was reportedly A=448 or higher in some places, such as the Wiener Staatsoper under Herbert von Karajan.[47] Now it is between A=440 and A=444 everywhere, with Vienna firmly at A=443.[48]

House Size: Others ~~accuse~~ newer and bigger opera houses ~~of suppressing~~ big-voiced singers. Yet, as with pitch, the factual premise is simply false. Most of the leading venues in which top singers perform today are the same as those in which their counterparts performed 50 or 100 years ago. These include venerable theatres in London, Milan, Vienna, Munich, Berlin (Staatsoper), Bayreuth, Paris (Garnier), Barcelona, Zurich, Buenos Aires, San Francisco, Moscow, Rome, St. Petersburg (Marinskii 1),

Chicago, and Dresden.[49] Relatively few new theatres were built in the 1950s and 1960s, when the decline in Wagner vocalism first became audible: Berlin (Deutsche Oper), Frankfurt, Hamburg, Los Angeles, New York (New Metropolitan), Salzburg (Großes Festspielhaus), Seattle and the reconstructed Teatro Communale in Firenze.[50] While newer houses may be acoustically more challenging, a handful of houses cannot drive the global practice or perception of singing.

The "large houses" explanation also generates other inconsistencies. Our interview subjects do not report that singers sound historically great in some places but not others, but rather that the decline in *spinto* and dramatic singing is audible in all but the smallest houses—and even on recordings. Nor is it clear why large auditoriums have had a disastrous impact on Wagner or Verdi singers, but (apparently) the reverse effect on Baroque, Mozart or *bel canto* singers, for whom large modern auditoriums seem even less appropriate.

Loud Orchestras: A final acoustical change charged with overwhelming dramatic Wagner singers is an increase in the physical sound of the orchestra.[51] Some ascribe this to technical improvements in the sound of instruments. Others ascribe primary responsibility to contemporary star conductors, who fail to restrain orchestras as they may have decades ago. Perhaps, some speculate, fewer young conductors today take the early career path (traditional before the late 20th century) of serving as an operatic *répétiteur* and conductor—and thus are less sensitive to vocal demands.[52]

Yet this acoustical account similarly lacks convincing empirical support. First, most technical changes in instrument construction predate the period of observed decline. Almost all of the transition toward modern orchestral instruments took place in the century between 1850 and 1945, during which metal strings replaced with gut, and a redesign of wind instruments doubled or quadrupled their sound. The only exception is the very deep brass—tubas and especially trombones.[53] Yet if blaring brass were the cause of vocal decline, we should not see a deeper decline in performing Verdi than Wagner, with its far heavier deep brass accompaniment.

As for conductors, no evidence exists that contemporary encourage orchestras to play louder than, say, Wilhelm Furtwängler, Eric Leinsdorf, Hans Knappertsbusch, Karl Böhm or Georg Solti—to name just five outstanding golden-age Wagner conductors known for encouraging orchestral robustness. Any claim they do raises more questions than it answers. Why is the decline evident on recordings as well as in the theater?[54] Why does it seem evident whether conductors are opera or concert specialists? Why is it apparent only with regard to *spinto* and dramatic opera—and more pronounced in the Italian than the German repertoire, though the orchestra is more prominent in the latter?

Ironically, rather than offering a plausible explanation for the recent decline in *spinto* and dramatic singing, acoustic factors like higher pitch, bigger houses and louder orchestras may help explain the rise of such singers in previous eras. A successful co-evolution of technology and vocal style may have engendered the fondly remembered "Golden Age" of large dramatic voices in the mid-20th century: larger spaces and louder playing encouraged the emergence of bigger voices, and bigger voices permitted larger spaces and louder playing. Yet today, the houses and orchestras remain, but the voices are disappearing.[55] This is what remains to be explained.

"It Takes a Village": A Tripartite Life-cycle Theory

The factors evaluated in the preceding section—declining pay and prestige, changing operatic aesthetics, inexperienced teachers, pushy managers or unfavorable acoustics—do not explain the recent decline in *spinto* and dramatic singing.[56] We need a different type of explanation. Here we propose the "life cycle" theory: a tripartite explanation that examines factors that affect the choices of individual singers at different points in their careers. In this view, society as a whole produces *spinto* and dramatic singers—like other artists, athletes or, indeed, any specialized professional. Any singer necessarily passes through three

necessary stages of socialization to artistic excellence: they must begin to sing, they must train themselves for a long period, and, finally, they must be selected to sing at the highest levels.

Each of these three steps is a social process, and recent changes in how they function depress the number of singers who finally emerge. Fewer young people today start on the path to becoming Wagner singers, fewer of those who do remain on the path to maturity, and, of those, fewer are ~~cast and~~ recognized by opera houses. Each of these three changes is rooted in a basic economic, cultural or institutional trend in modern society that disproportionately degrades *spinto* and dramatic singing, as compared to other performing arts or physical activities.

In this section, we consider these three social trends with a negative impact on the best *spinto* and dramatic singing. First is a secular decline in the number of young people who ever sing without a microphone. Second is the increasing cost of the abnormally long time to mature that *spinto* and dramatic singers require. Third is the increasing emphasis of opera houses (and music schools) on appearance and acting, rather than vocal talent. Each contributes to the number of great *spinto* and dramatic singers that emerge and, at the end of the process, we observe an overall decline.

Stage One:
Microphones and Pop Culture as Obstacles to Identifying Young Talent

The process of cultivating great *spinto* or dramatic singers begins by identifying individuals with the one-in-a-million physiological aptitude for this particular form of musical greatness. Their number has always been few, yet amidst an unprecedentedly healthy, long-lived and physically robust global population of seven billion, more potential Flagstads, Ludwigs, Melchiors and Hotters than ever surely exist.

The problem is to identify them. A useful parallel is the search for those with the potential to become successful professional athletes or Olympic medalists. Today we have optimized societies to identify potential young soccer or basketball stars almost anywhere in the world.

But we are losing the capacity to identify individuals with the exceptional talent at projecting the unamplified human voice. Only one way to do this exists: a large proportion of the population must be trained to sing in public without amplification long enough for experts to assess their voices. In past generations, this occurred naturally. Singing was a near universal social activity in Western homes, churches, schools, clubs, towns, and cities. Indeed, singing opera crowned a pyramid of vocal activities—popular, semi-classical and classical—all performed without a microphone. Whether from church services, schools, or occasional performances, everyone in a community knew who could sing sweetly, accurately and, above all, loudly—for, absent amplification, being heard was a precondition for all else. For centuries, perhaps millennia, this is how it was in almost every Western society.[57]

In the mid-20th century, this suddenly changed. Deep technological and sociological transformations, such as the invention of the microphone, declining religiosity (and changing religious practices), shifting educational priorities, evolving popular music preferences, and the atrophy of live music-making in the face of high-quality recorded sound, mean that a far smaller percentage of the population ever sings publicly—and even fewer do so "legitimately," that is, without amplification. In nearly every society on earth, microphones are now ubiquitous in youth and school choruses, *a cappella* groups, musical theater, church and gospel choirs, popular music concerts, musicals, and folk music (not to mention school oratory, lectures, spoken theater performances, political speeches, sermons and speeches at private gatherings). The microphone has pushed unamplified public vocalism to the obscure margins of society, with classical singing now almost unique as a non-amplified vocal activity. Stylistic changes mirror technological ones. Whereas a hundred years ago, performers with the same skill set could excel at popular and classical music, this is far less often the case today.

In late 20th and early 21st century microphonic culture, most people who possess the physiological talent to excel at classical singing now never have a chance to reveal it to others—or, indeed, often even to

themselves.[58] Our collective inability to identify those with vocal talent threatens all types of opera singers, but it has a particularly devastating effect on the supply of *spinto* and dramatic singers. Experts agree that such voices have always been far rarer in the general population than lyric sopranos, mezzos and light baritones suitable for Baroque, classic and bel canto repertoire.[59] Even in the best of times, society identified only a handful of historically important singers in any given *spinto* or dramatic *Fach*. A significant reduction in the initial pool could likely reduce the number of historically world-class singers within each category close to zero.[60] Moreover, in amplified or recorded performance, large voices are not only valued less but often disadvantaged, because they are discouraged from singing out as soloists and choristers, or in studio recordings.[61]

If the shortage of raw vocal talent constrains the supply of *spinto* and dramatic singers, we should also expect to observe the largest declines in those countries where the broad religious, educational and cultural supports for non-amplified vocal art have atrophied the most. Organized Christianity has declined almost everywhere, but the most striking declines have been in Catholic countries of Europe, where the post-Vatican church has lost most of its adherents—and, at the same time, moved away from the everyday performances of sophisticated classical vocal music. Italy, for example, was once the most important producer of opera singers, but is no more—an example to which I shall return.[62]

Conversely, countries where ~~robust~~ institutional support for non-amplified singing persists should find themselves able, at least partially, to offset these general trends—and thereby to remain opera-singer-exporting countries. Cases of relative success include the United States, with its relatively robust church, university and musical theater cultures. Other examples are the Nordic countries, with universal musical education; Eastern Europe and Russia, with relatively stable educational and conservatory systems; South Korea, with its powerful, largely Methodist, infrastructure of Christian worship; as well as, to a lesser extent, Britain, Australia, Canada and Germany, with some continuity (at least until recently) in church and school musical pedagogy.[63] Still,

overall the number of young people in the Western world who ever sing without a microphone has declined since the 1930s.

Stage 2:
Late Maturity as an Obstacle to Retaining Singers in the Profession

Identifying a pool of talented candidates is only the first stage in producing great singers. The second is to keep them committed to singing classically until they mature, whereupon it becomes evident who has the talent, skill and perseverance to become a great singer. Here *spinto* or dramatic opera singers face a barrier nearly unique among musicians, athletes or anyone else who seeks to make a living by developing a physical talent: they mature extremely late, often in their mid-30s.

The prodigious talent of instrumentalists is nearly always evident by the early teen years, and they often reach maturity, at least technically, in their late teens or early twenties. The same is true for most athletes, ballet dancers, actors and popular musicians. By contrast, singers must essentially start over when their voice matures in their mid-to late teens, and they reach full maturity much later. Yet even among singers, important differences exist. Lighter-voiced opera singers generally reach vocal maturity sometime in their 20s. By contrast, most *spinto* and dramatic singers do not mature fully until the age of 30, 35 or, in exceptional cases, 40 or more.[64] (See Table 2.)

Table 2: Operatic Voice Types and Typical Age of Vocal Maturity[65]

Typical Minimum Age of Maturity	Male Voice Types	Female Voice Types
≈ 25 years	Light or lyric tenor, countertenor	Lyric soprano, soubrette, lyric coloratura soprano
≈ 30 years	*Lirico spinto* tenor, lyric baritone	*Lirico spinto* soprano, jugendlicher dramatischer Sopran, lyric mezzo

≈ 35 years	Bass-baritone, basso cantante, Italian/Verdi baritone, Helden-Bariton, tenore robusto (or *tenore di forza*)	Dramatischer Sopran, Italian dramatic soprano, Verdi and Wagner dramatic mezzos
≈ 40 years	Heavy (‚schwerer', ‚tiefer' or ‚schwarzer') Bass, *basso profondo*	Contralto

Molding a *spinto* or dramatic voice into a smooth and elegant operatic instrument tends to be a decades-long process that is not only quite costly, but often frustrating as well. During the first two decades of their careers, potentially great *spinto* and dramatic singers often sound ordinary—or worse, large, throaty and unwieldy—only to emerge later, sometimes suddenly, as Wagnerian superstars. Being an "ugly duckling" in one's early career hinders a younger singer from having successful professional outings commensurate with their ultimate potential. Others sound promising when young, but derail. Operatic singing competitions are no way out, since almost all ban contestants over 30 years old (and often also those with extensive professional experience), which makes participation (let alone success) by *spinto* and dramatic singers relatively rare.[66]

Even the most successful Wagnerian singers struggle with this hiatus.[67] Consider Kirsten Flagstad, widely considered the greatest Wagnerian dramatic soprano in recorded history. From a family of Norwegian professional musicians, her career began auspiciously: she started singing early and debuted on the stage of Oslo's National Theater at the age of 18. Yet she spent the next two decades as a singer of non-Wagnerian roles in the Scandinavian provinces. Her recorded legacy before the age of 40 comprises a few dozen Norwegian songs. At one point she seriously considered retirement. Though she had already learned the entire part by heart when she was just ten years old, Flagstad only first ventured to sing Wagner in her mid-30s. She ventured Elsa (*Lohengrin)* at age 34, followed by Isolde (*Tristan)* at age 37, Sieglinde (*Die Walküre)* at age 38, and Brünnhilde (*Ring des Nibelungen)* at age 40.[68] Paul Jackson describes the unexpected sensation of her Met

debut in 1935, originally just a two-month engagement for an unknown singer: "The Flagstad voice we know today was not fully developed until the period shortly before her debut; the impact could not have been anticipated."[69] Flagstad appeared thereafter in staged Wagner operas at the highest levels until the age of 57, and in concerts and recordings well into her 60s. Based on this experience, she concluded: "My first piece of advice to young and immature singers can be put into three words: Leave Wagner alone! He calls for powers which can only develop after many years of singing."[70]

Today the struggle to emerge as a mature Wagnerian singer is even more costly and risky today than it was for Flagstad. Other types of opera singing have become more specialized, while musical "cross-over" genres have atrophied. Unless one is lucky enough to be a splendid Baroque, Mozart or *bel canto* stylist early on, something *spinto* or dramatic singers rarely are, or to be one of the very few, such as Hans Hotter and Frida Leider, who are dramatic singers from the start, this delayed maturity can create a 10-25 year career hiatus that many do not survive.[71] Fifty years ago a "reserve army" of vocalists existed among those involved in vocal activities such as professional choral work, church and synagogue singing, operetta, Broadway shows, radio performances, nightclub "crooning," as well as performing Irish, Jewish, black and other ethnic music. Opera houses would eventually discover and retrain the best among them.[72] For example, an entire generation of great Jewish-American singers in the mid-20th century kept themselves in the business this way.[73] Today, the spread of rock, rap and other microphone-aided singing styles less stylistically compatible with opera singing, has made it much harder to remain active this way.

The career trajectories of leading contemporary Wagner singers clearly reveal the difficulty of creatively managing these intervening decades to maturity.[74] Few are as fortunate as Nina Stemme, who won major competitions and built a global career singing lighter soprano and mezzo roles, then around age 40 smoothly transitioned into genuine dramatic Wagnerian parts, starting with smaller theaters. Or even Christine Goerke, who pursued a successful career singing Mozart,

Handel and Gluck, until suddenly, in her early 30s, she found herself in vocal crisis. She considered quitting, but instead withdrew from opera to retrain her voice—and to marry and start a family. The hiatus, which lasted a decade and reduced her to living on credit card debt, ended in 2013 with her "breakthrough" performance as a dramatic soprano at the MET, at nearly 45 years of age. Now she is finally taking on the big dramatic Wagner roles: the Met has booked her to sing Brünnhilde in 2018-19.[75]

Though the rise of Ben Heppner, the most widely celebrated Wagnerian tenor of the 1990s and early 2000s, was relatively smooth and quick—perhaps because he possessed a "young" ("jugendliche") dramatic voice suitable to lighter Wagnerian parts—it still required decades. Born a farmer's son in the remote Yukon Territory of Canada, Heppner studied to be a music teacher at the University of British Columbia, only to be discovered by his professors. After college, he sang lighter roles in the Canadian Opera studio program and performed with Toronto-area Baroque groups, with little distinction except a radio talent prize. By Heppner's own account, had he not been a country boy "who didn't know any better," he would not have stuck with it. Suddenly one summer, nearly a decade into his career, he found a new teacher and discovered that his voice could now manage Wagner. At the age of 32, he won the 1988 MET National Auditions singing the Prize Song from *Die Meistersinger,* which launched an international career that turned him into the world's most sought-after light Wagnerian tenor. Even so, it was only a decade later in Seattle—although he still considered himself a "lyric" tenor, not a *Heldentenor*—that he debuted as Tristan, and a decade after that that he debuted as *Siegfried*.[76]

Nearly every leading dramatic Wagnerian tenor in the world has faced a similar challenge. Jay Hunter Morris, born in rural Texas, worked his way up slowly on the opera circuit, often unemployed, until he got his first opportunities to sing Siegfried in San Francisco and New York at the age of 48. In his words: "I don't have one of those voices ... where I can just open up and be glorious, but I am stubborn and persistent."[77] Stephen Gould sang *bel canto* opera early in his career, but

then decamped for eight years to musical theater, singing in a touring production of *Phantom of the Opera*, before returning to Wagnerian "Helden" roles at the age of 44. Tenor Daniel Brenna studied musicology at Boston University, left the profession for Wall Street, and returned at just over 40 as a Wagnerian. Christian Voigt did not sing his first big-house Siegfried until age 42. Stefan Vinke first sang Heldentenor roles in small theaters at the age of 32, one opera at a time, but only dared attempt a complete *Ring* cycle a decade later.[78]

These singers were fortunate. Faced with similar decades of uncertainty, many of their colleagues (even those with reasonable career prospects) leave the profession early, never to return: they sing on Broadway, teach music, become arts administrators, pursue another profession entirely, or raise a family. This is a greater problem today than 50 or 75 years ago, and generally in wealthier societies, because non-musical career opportunities are far more plentiful. The opportunity cost of spending decades waiting for uncertain success are higher than in generations past.

Trends in pedagogy exacerbate these difficulties. Although they may not achieve greatness on major stages until much later, it is a mistake to tell younger singers not to study and sing Wagner in smaller spaces or with piano accompaniment. Yet conservatories and young singers' (studio) programs connected with opera houses limit student performances almost exclusively to Baroque, classic and bel canto repertoire, and treat any effort to sing Wagner or heavy Verdi before age 30 as professional malpractice. Training institutions also use singers for smaller roles in larger operas, for which they favor the flexibility, smooth sound and youthful appearance of non-Wagnerian singers. The spread of a lighter, highly specialized performance-practice approach to Baroque and classic repertoire, for which singers require specialized training, further inhibits the ability of future *spinto* and dramatic singers to work their way up by singing non-Wagnerian operas.

One final implication is that we should expect the relative scarcity of different types of vocal types (*Fächer*) to be proportional to the age at which those singers typically reach maturity. This is exactly what we observe. Most threatened are the lowest voices, which often do

not mature until a singer is around 40: genuine great "black basses" ("schwarze Bässe")—the deepest male voices appropriate to Wagnerian roles such as Hagen, Hunding, Heinrich, Fafner and perhaps König Marke and Gurnemanz—are close to extinction.[79] In recent generations, the voices cast in bass-baritone ("höhe Bässe") roles—appropriate to Wotan, the Dutchman, Hans Sachs, and Amfortas—have grown lighter, increasingly baritonal, and less grand. Similarly, opera houses now routinely cast mezzo-sopranos in lieu of genuine dusky-voiced contraltos in Wagnerian roles such as Mary in *Der fliegende Holländer* and Erda, the First Norn, and Schwertleite in the *Ring*.

While sopranos and tenors remain further from extinction than lower voice types, the quality of singing is changing: "lighter" voices are replacing heavier ones. Where traditionally listeners expected a truly baritonal "Heldentenor" voice to sing Siegfried, Siegmund, Tristan, Tannhäuser or Parsifal, today houses cast lighter, more lyric tenors with voices traditionally thought of as more appropriate to Lohengrin, Walther von Stolzing or Erik, if even those roles. Whereas it used to be that many Heldentenors—from Melchior to Domingo—began their careers as baritones and learned to extend the voice upwards, today that path is less common. Most today mature into *Heldentenors* not by raising baritonal voices, but lowering and strengthening tenor ones. Similarly, more and more sopranos who would once have been categorized as *jugendlich dramatisch*—a voice appropriate for Elsa, Elisabeth, Sieglinde and Senta—are now cast as Isolde, Brünnhilde and Kundry.

Stage 3:
Theatrical Sensibility as an Obstacle to Wagnerian Vocal Greatness

After the first and second stages—identifying a pool of talented singers and keeping them singing until some emerge as great dramatic voices—great singers must pass through a third stage: opera houses must select the best among them to perform in major venues under favorable circumstances. This seems simple. Surely, one might think, great houses cast great singers. Yet this is no longer necessarily so.

Visual appearance, rather than voice, increasingly drives the selection and casting of opera singers. In many countries, perhaps most in German-speaking ones, top opera administrators and critics (though less so audiences), increasingly identify the most important element in opera as theatrical concept rather than musical expression. The literary and philosophical message underlying a production—and with it, the acting, directions, stage sets, lighting, costumes, the visual appropriateness of singers as characters, and other elements contributing to theatrical impact—have emerged as the primary focus of journalistic reviews, external publicity, and internal discussions about opera house priorities.[80] Some believe this shift is natural consequence of television, cinema, the internet and other elements of a more visually-oriented mass modern culture. Others point to post-modern elite cultural discourse in the painting, architecture, theater, philosophy, literature and criticism, which privileges pluralist intellectual "concepts" or "perspectives" over the internal or formal imperatives of genres themselves. Still others lay the blame on the increase in audio-visual rather than purely audio recordings, most of which are now recorded live, not in the studio—a trend to which we return below.[81] Perhaps also fewer and fewer listeners have personal experience as singers.

Whatever the ultimate cause, the result is that stage directors, along with set designers and dramaturgs, play an ever more influential role in opera performances—at the expense of conductors, music directors and singers.[82] Increasingly, stage directors from the theater or cinema, rather than those who have made a life in the opera or focus on the music, are now often named to head opera houses—something exceptional in past generations. In German-speaking countries, which are responsible for around 40% of the demand for opera singers in the world today, so-called *Regietheater* ("Director's Theater") is particularly entrenched.

Greater emphasis on theatricality has had at least two negative consequences for the quality of dramatic singing. First, directors increasingly place singers in environments designed to optimize visual and dramatic impact at the expense of musical resonance.

Consider stage design. Opera sets have traditionally been "closed," that is, constructed from flat panels of painted wood, canvas or plaster, often with ceilings. This creates a relatively small room of resonant material to capture and reflect vocal sound toward the audience. By contrast, modern sets are now customarily "open": they employ a wider and deeper space on stage, with the sides and top uncovered and backgrounds comprised of semi-solid curtains and scrims (to facilitate the use of projections and other lighting effects), or elements of glass, metal, cloth, gauze and other non-acoustic materials.[83] Such sets are visually attractive, but they overlook the multi-media role of traditional operatic stage technology. Whereas closed sets can serve as a form of amplification, studies show that open sets significantly reduce the amount of vocal sound that reaches the audience, dampen the resonance and color of what remains, and shift the balance between voice and orchestra against singers—thus giving the impression of less powerful, resonant and colorful voices. One might argue that this change assumes particular importance in performances of late 19th and early 20th century repertoire, where singers must make themselves heard over a large orchestra—exacerbating what might otherwise be relatively minor increases in house size and orchestral volume.[84]

Greater focus on the drama and its concept has a second implication: houses cast singers on looks rather than voice. One of the most frequent complaints of vocal coaches and singers we interviewed, not to mention the opera press, is that, at least on the margin, the opera industry is increasingly casting performers who are better-looking and slimmer at the expense of those who are vocally accomplished. Today stage directors, not conductors or music directors, often dominate casting decisions.[85] Some top houses in Germany are reputed to have made good looks all but a necessary condition for employment, and houses elsewhere in Continental Europe, and even in America, are said to be following suit.[86] Moreover, knowing they may be filmed at any time, young artists report that they must now aim to become "HD ready."[87] With broadcasts into movie theaters, even the MET—traditionally a bastion of big voices in big bodies—has moved in this direction.[88]

Heavy-weight singers are increasingly at professional risk. Young singers today seek to avoid the fate of the soprano Deborah Voigt. London's Royal Opera House fired Voigt, one of the world's great dramatic sopranos at the time, from the title role in a 2004 production of *Ariadne auf Naxos* when the stage director complained that she could not fit her figure into the "little black dress" he imagined her character wearing.[89] The alternative to temporary unemployment can be worse: Voigt responded by having surgery to lose weight, which, some observers feel, permanently shrank and damaged her voice.[90] The evidence is compelling, if not conclusive, that Maria Callas degraded her voice in the same way.[91] Heated controversy over "fat-shaming" singers arose around a 2014 performance of *Der Rosenkavalier* at Glyndebourne in which mezzo-soprano Tara Erraught sang Octavian. Andrew Clark of the *Financial Times* called her "a chubby bundle of puppy fat," Michael Church in the *Independent* as a "dumpy girl," Andrew Clements in the *Guardian* as "stocky," and Richard Morrison in the *Times* as "unbelievable, unsightly and unappealing." The internet erupted, with female singers claiming gender discrimination and some male singers claiming that fat-shaming happens to them as well. No one contested that this marked a fundamental shift in standards.[92]

Casting on appearance, often with broadcasts in mind, is likely to degrade the supply of *spinto* and dramatic singers more other types of singers, because there are fewer of them and perhaps also because they are more likely to have heftier physiques. Harold Schonberg observed: "It is a truism of the opera house that a big voice is to be found in a big body, and the bigger the voice the bigger the body."[93] Broadcast technology exacerbates the bias by easily rendering all singers similar in volume, thereby neutralizing the greatest traditional advantages of those with big voices. (In general, many believe that big voices record less well.) Some broadcast directors forego casting true *spinto* or dramatic singers who can be heard well in the house entirely in order to achieve the right look on video. Overall, the extreme scarcity of great *spinto* and dramatic singers, where in the best of times only a handful of preeminent singers exist, means that casting on appearance may audibly diminish singing more



severely than in other types of opera. There is good reason to suspect that this may be depleting the ranks of Wagnerian stars.[94]

Yet the effects of *Regietheater* and digital opera are subtle and complex, and while discrimination on the basis of appearance sometimes undermines efforts to cast the best *spinto* and dramatic singers, we should not exaggerate its importance.[95] Systematic study suggests that while lower and larger-voiced singers tend to be taller, the evidence is less clear that they are or must be heavier.[96] Moreover, *spinto* and dramatic singers are so scarce that those who lack a handsome face or slim waist still work in nearly all top houses. Finally, we easily forget that in the mid-20th century "Golden Age," critics and opera houses judged singers on their appearance and weight—perhaps even more harshly and openly than today. When Flagstad was engaged by the Met at age 39, she was told "Come to New York as soon as you know these roles. And above all, do not go and get fat! Your slender, youthful figure is not the least reason you were preferred." Her experience was commonplace.[97]

If "fat-shaming" poses a serious threat to the production of *spinto* and dramatic singers, the effect may mostly be at lower levels, where casting on appearance is probably even now pervasive. Culling the

heavy and homely can begin early. It influences which students ever receive advanced vocal training. Some top conservatories, our interviews reveal, have begun admitting 18-year-old singers not simply on vocal ability but also on "charisma"—a politically correct code word not just for stage presence in general but also for looks and weight. One long-time admissions officer at a top institution—after sharing memories of great singers on the world's stages over the past 50 years—dismissed my questions about his institution's growing focus on charisma with a shrug: "My primary responsibility to make sure that our graduates work."[98] Former judges at top vocal competitions report consistent splits between those who favor singers with the best voices and those who favor singers with an attractive overall "package"—with the latter prevailing more and more.[99] Young singers' studio programs also favor participants who add visual panache in *comprimario* roles. In past decades big houses used to cast small parts in Wagner operas—the Valkyries and Rhine-maidens, for example—with aspiring Isoldes and Brünnhildes. Today such roles are often taken by those more likely to end up singing Britten, Mozart or Rossini—but who can readily impersonate mermaids. In smaller houses, B-casts and other situations where no proven star is at hand, appearance is often more important.

Why Is the Decline of Wagner Voices Earlier and Less Severe than that of Verdi Voices?

In many respects, the decline of Wagner singing tracks the roughly contemporaneous decline of Verdi signing. Yet differences exist. As we have seen, the decline in Wagnerian singing start several decades before the decline in Verdi singing. And it has been shallower: whereas many perceive Verdi performance quality as being in free fall, with Wagner the severe has been less severe. These differences contradict many of the common theories about the decline of dramatic voices. Wagner operas are less popular, less often performed and less "culturally accessible" than Verdi operas, which may dissuade singers to specialize in them. They have

louder and more prominent orchestral parts, which could tempt conductors to seek to make an "impression" by revving up the orchestra at the expense of singers. The time to full maturity for Wagnerian singers is also as long, if not longer, than for Verdi *spinto* or dramatic singers. Wagner librettos attracted *Regietheater* directors earlier and in greater numbers than Verdi.

Yet the "life cycle" theory offers a plausible explanation.[100] Opera singers tend to perform in national operatic traditions in their native (or a related) language. A disproportionate number of singers of Verdi and *bel canto* opera come from Latin countries, whereas a disproportionate number of Wagnerian singers have come from Germanic, English or Nordic countries.[101] Out of our sample of nearly 100 outstanding Wagnerian singers at the MET over the past century (see Figure 1 above), all are native to a country where German, English, or a Nordic language is spoken. None is Italian.[102]

This is significant because Italy (and Spain) have recently all but disappeared as exporters of singers, whereas developed Northern European and North American countries (as well as Eastern Europe, Russia and Korea) continue to produce a disproportionate number of Wagnerian singers.[103] Italian singers emerged historically from a dense network of schools, churches, local music associations, and provincial opera houses—and over the past half-century, these critical institutional supports have collapsed. Amplified popular music has displaced non-amplified vocal traditions. Religiosity has declined everywhere, so the church now trains relatively few young people in classical singing: only 17% of young Italians attend mass regularly and many live in remote rural areas from which few opera singers emerge.[104]

While similar trends are common to almost all Western societies, two specific aspects have hit Italy (and Spain) with particular severity. First, the Vatican II reforms of the mid-1960s replaced the special role of specially trained choirs and soloists in Catholic services with simplified congregational hymns and indigenous and popular music appropriate for less-trained (or entirely untrained) voices.[105] Those making music in the church receive less and less musical instruction—far from the extraordinarily high level of professional training that many male singers

in past generations enjoyed. Outside of Italy, many Protestant churches—particularly the Anglican, Methodist and Lutheran denominations—have retained rigorous traditions of choral performance.[106]

A second and even more important trend that has diminished Italy's role in the opera world involves secular education. Whereas Protestant countries (as well as Catholic Eastern Europe, Orthodox Russia, significantly Protestant Korea, and China) have offset the decline of religious music with more intensive vocal training in secular schools, conservatories, universities and opera house studio programs, Italy has gone in the opposite direction. Everyday training in Italian primary and secondary schools is disappearing and, as Figure 3 shows, the country now hosts considerably less than its proportional share of top musical conservatories and universities.

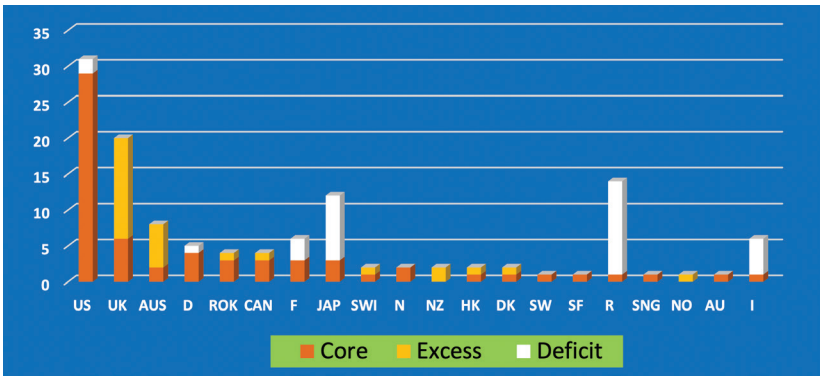

Fig. 3 Percentage of Top 100 Global Performing Arts Training Institutions (compared to share of total population in these countries)[107]

In sum, if potential successors to Caruso or Pavarotti had been born in Italy (or Spain) during the last half century—and it is likely that some were—they would have had little opportunity or motivation to discover and develop their talent, whereas their counterparts born or trained in German-speaking countries today have better prospects.[108]

Conclusion:
The Difficulty of Making a Career as a Wagner Singer

Continuing to produce great *spinto* and dramatic singers is critical to the future of opera. About 40 per cent of opera performances worldwide are of late 19th and early 20th century works that call for such voices, including such staples as *Aida*, *Il trovatore*, *Die Walküre*, *Tristan und Isolde*, *Tosca* and *Turandot.*[109] Such operas capture the popular imagination as few others do. They sell the most tickets, cross-subsidizing more adventurous programming. They dominate media representations of the opera. They make new lifetime converts to the art form. No matter how great such operas are on paper, if the ability to sing them creatively atrophies, performances will be reduced to a mélange of supporting symphonic, theatrical and vocal elements that are realized more fully in other art forms—a shadow of opera's once grand tradition.

Yet if the operas of Verdi, Wagner and Puccini, and other composers of their era, are to stay relevant and meaningful in the 21st century, great *spinto* and dramatic voices with the proper power, resonance and range to sing their works justice must be found. Opera is an extemporaneous art form. For all its multi-media trappings, it touches us most deeply when great artists sing it. Such singers have traditionally driven audiences to frenzies of wild enthusiasm lasting far into the night, creating transcendent moments by which opera lovers have traditionally marked lifetimes of listening and connoisseurship.[110] And it is the uniquely memorable interpretations of particular roles by specific artists—some still remember Kirsten Flagstad and Birgit Nilsson, Christa Ludwig and Karin Branzell, Lauritz Melchior and Jon Vickers, Friedrich Schorr and Thomas Stewart—that define the creative frontiers of what opera can express.

It is clear from the analysis above a decline in singing in *spinto* and dramatic operas is underway. Much evidence supports the three-stage "life style" explanation for this decline. Today fewer young people ever have a chance to discover whether that they are vocally gifted, fewer

are willing and able to wait out the decades to maturity, and fewer are suitable to be cast in modern visibly- and theatrically-driven opera. Each of these mechanisms has grown more pronounced over the past two generations, and each discriminates against *spinto* and dramatic singers. Together these three factors may well have shrunk the pool of great singers, not least in Wagnerian opera, until hardly any remain.

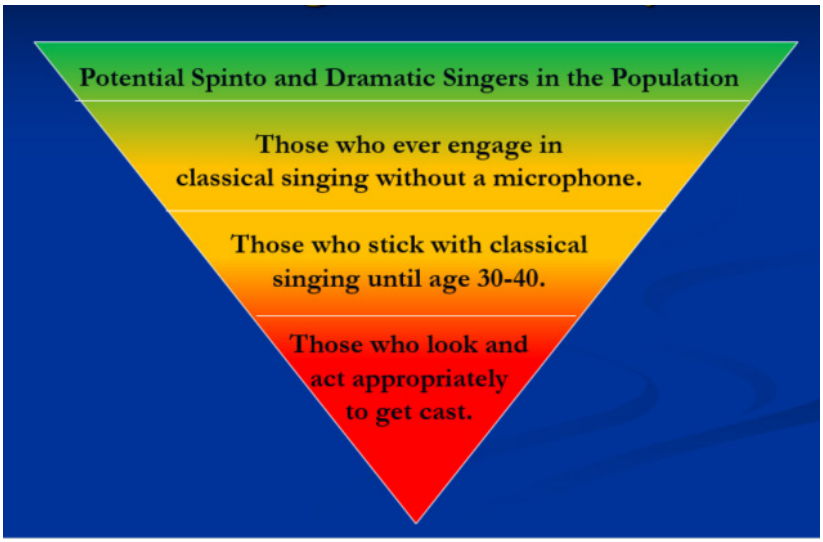

Fig. 4

Yet just knowing what causes the decline in *spinto* and dramatic voices does not necessarily suggest a viable solution. Most of these causes in the life-cycle theory are embedded deeply in broader social, economic and cultural institutions resistant to change. It would be quixotic to advocate returning to a world in which potential Wagnerians sing without microphones in schools, churches and choirs; are offered decades of meaningful musical employment as they mature; and are hired by opera impresarios for whom ~~signing~~ trumps charisma. The latter goal may

appear the most feasible, yet anyone who has witnessed the disdain that many opera administrators, critics and scholars express today toward those who defend traditional vocal virtues may well suspect that the operatic establishment will prove even more resistant to reform than schools, churches or governments.

If we want to avoid the disappearance of great *spinto* and dramatic singing, therefore, the best course may well be to take smaller steps that address the symptoms of decline rather than its root causes. One such step might be greater openness toward singers in their 20s studying and, under appropriate circumstances, studying and even performing Wagner and Verdi, as they did until a generation ago. Celebrated mezzo Dolora Zajick seeks to institutionalize such opportunities.[111] Another is to offer generous fellowship support to help promising *spinto* and dramatic singers through the gap decades—just as we now support many other endangered cultural practices. Yet another would be for more universities and young singers programs to follow the examples of the Met's Lindemann and San Francisco's Merola young artists programs in creating "affirmative action" program for young *spinto* and dramatic singers. Smaller opera houses could present performances of heavy repertoire with limitations in orchestral size. Larger houses could insist on more acoustically resonant sets. Europe and North American funders could make a greater effort to recruit singers from poorer non-European countries where Western opera is relatively new: the wealth of operatic talent to emerge from Asia and Africa in the last generation demonstrates the potential. More discussion in the opera world, led by umbrella organizations like Opera America and Opera Europa, could surely extend this list. One thing seems certain: if *spinto* and dramatic singing is not reimagined and reorganized, the core of operatic tradition we have known for so long—not least the operas of Richard Wagner—may not survive the 21st century.

Endnotes

[1] For a parallel discussion of the even more problematic state of contemporary Verdi *spinto* and dramatic singing, see Andrew Moravcsik, "Where Have the Great Big Verdi Voices Gone?", in: Isolde Schmid-Reiter (ed.), *"Poetischer Ausdruck der Seele". Die Kunst, Verdi zu singen*, Regensburg: ConBrio 2016 (Schriften der Europäischen Musiktheater-Akademie, Bd. 10). Also "Twilight of the Gods: Where have the Big Voices Gone?", in: *Opera* (November 2013). I am particularly indebted to Prof. John Deathridge for encouraging this research for some years; to Prof. Isolde Schmidt-Reiter for taking a chance on someone from a faraway academic discipline by inviting me to deliver this paper at the Wiener Staatsoper; and to Dominique Meyer and other participants in the Europäische Musiktheater-Akademie conference for their comments. Thanks also to the Princeton Center for Arts and Cultural Policy for financial support; to Hanwei Kantzer, Sarah A. Paden, Jackie Levine for research assistance; and to Carolyn Abbate, John Allison, Cori Ellison, Stanley Katz, Robert Keohane, Paul DiMaggio, Luca Zan and participants at the seminars at Princeton University, University of Bologna, New York University, and the international conference on Verdi's Third Century Conference for comments.

[2] Anne Midgette, "The End of the Great, Big American Voice", in: *The New York Times* (13 November 2005). Available at www.nytimes.com/2005/11/13/arts/music/the-end-of-the-great-big-american-voice.html.

[3] "Leider muss man feststellen, dass sie [Flagstad] und Lauritz Melchior uns nachgeborenen Wagnersängern eigentlich alles 'kaputtgemacht' haben. Da kommt keiner heran ..." – Stephan Mauß, "Nina Stemme: Eine unendliche Endstation", in: *Das Opernglas* (7-8/2005), available at archiv.opernglas.de/archiv/jahrgang-2005/ausgabe-07-08-2005/nina-stemme-1.html.

[4] Paul Jackson, *Saturday Afternoons at the Old Met. The Metropolitan Opera Broadcasts, 1931-1950*, Portland, OR: Amadeus Press 1992, p. 145. Jackson's massive three-volume study reviews over 50 years of Met broadcasts. On the Met's ability in the 1930s to attract "a profusion of majestic voices and varied interpretations of the Wagnerian heroines" (p. 34). Writing in 1979, the British critic Alan Blyth lists Frida Leider, Max Lorenz, Lauritz Melchior, Friedrich Schorr, Martti Talvela and Kerstin Thorborg among his all-time ideal Ring cast (Alan Blyth, "Der

Ring des Nibelungen", in: Id. (ed.), *Opera on Record*, London: Hutchinson 1979, p. 436). Marjorie Lawrence, who arrived in 1935, remarked: "Melchior, Rethberg, Flagstad, Schorr, Hoffman, Kipnis, Thorborg, Maison, Pinza. Nowhere in the world could you find such a star-studded assemblage" (Marjorie Lawrence, Interrupted Melody. The Story of My Life, New York: Appleton-Century-Croft 1949, p. 129). Of Frida Leider, Stephan Mösch writes: „Die Berlinerin Frida Leider, Jahrgang 1888, deren Karriere vor 100 Jahren begann, gilt bis heute als bedeutendste dramatische Sopranistin ihrer Zeit, und da ihre Zeit weithin als bedeutendste des Wagner-Gesanges angesehen wird, also wichtigste überhaupt. Zumindest aus Deutschland. Darauf könnte man sich vermutlich sogar mit Verkehren von Helen Traubel oder Kirsten Flagstad einigen. Die Bedeutung von Frida Leider war so groß, dass Walter Legge – einer der wichtigsten und künstlerisch skrupulösesten Schallplattenproduzenten des Jahrhunderts – nach dem Zweiten Weltkrieg keinen Ring des Nibelungen aufnehmen wollte: Gemessen an dem was Frida Leider, Alexander Kipnis, Friedrich Schorr, Franz Völker und andere in Wagners Partien geleistet hätten, mache eine solche Aufnahme keinen Sinn (mehr)" (Stephan Mösch, „Vorwort", in: Eva Rieger, *Frida Leider. Sängerin im Zwiespalt ihrer Zeit*, Hildesheim: Olms 2016, p. 10). Most experts agree that only a handful of singers in the most recent category—Jonas Kaufmann, René Pape and Bryn Terfel perhaps—can withstand serious comparison with their predecessors. For Jackson's parallel conclusion about the relative quality of Verdi singing several decades later, see Paul Jackson, *Start-Up at the New Met. The Metropolitan Opera Broadcasts, 1966-1976*, Pompton Plains, NJ: Amadeus Press 2006, p. 131.

5 We culled these names from archives.metoperafamily.org/archives/frame.htm. These are the "first-cast" singers appearing in Wagner operas during each three-year period. The periods were chosen to highlight moments when the Met was presenting operas from the *Ring* and appeared to be relatively successful in securing top voices. The period 1967-69 was also a brief high point of Wagner performance at the Met in the second half of the 20th century, in part due to the involvement of Herbert von Karajan, who could generally book what singers he sought. Where it is not clear whether singers were first- or second-cast singers, as occurred with tenors in the most recent period, all were included. Thus a few notable singers, including Ezio Pinza and others, are not listed, though they sang major Wagner roles a few times in second casts. The list does not include lyric baritones (e.g. in

the role of Walther in *Tannhäuser*) or character roles, which are less clearly *spinto* or dramatic—although some notable singers, such as Laurence Tibbett, did sing Wagner. Overall, this comparison probably underestimates the strength of Wagner singing in the 1930s relative to other periods, because singers traveled less in those days than in our own. This means Met audiences of this era did not hear a number of all-time great Wagner voices who were in their prime. Among indisputably great Wagnerian singers of that period, sopranos Germaine Lubin, Tiana Lemnitz and (prominent but under-recorded) Marta Fuchs; mezzo/contralto Margarete Klose, tenor Franz Völker, and bass-baritone Rudolf Bockelmann never appeared at the Met. Bass Michael Bohlen sang there for a decade, but had departed the previous season. Bass Alexander Kipnis, bass-baritone Hans Hermann Nissen, baritone Herbert Janssen, and sopranos Helen Traubel and Astrid Varnay would reach the Met just a few years later, followed by bass-baritones Paul Schöffler and Hans Hotter after the war. All except Varnay—and, in a certain sense, Traubel—were mature singers who arrived at the Met in mid-career. For a comparison with what was available in Europe at the time, see Edward Downes, "Opera Pilgrimage", in: *Opera News* 3/1 (November 1938) at www.operanews.com/Opera_News_Magazine/2016/Opera_Pilgrimage.html; and for a discerning list and assessment of the best interwar Wagnerians, see Jürgen Kesting, *Die großen Sänger*, Vol. 2, Hamburg: Hoffmann und Kampe 2008, Chapters 14 and 18. In the more recent periods, it is harder to think of many major singers of historical importance not cast by the Met. Otherwise, Jackson calls Birgit Nilsson "a beacon shining into what was, at that time, a Wagnerian wasteland" (Jackson, *Start-up at the New Met*, pp. 240, also 188-200, 237-240, 347). The three seasons 2011-13 cover the introduction of a new *Ring* cycle at the Met.

[6] A third question, namely what to do about the decline, is part of the research project as well.

[7] These interviews are taped, transcribed and citable, but remain anonymous for 15 years, after which subjects have agreed that they are to be deposited in an open scholarly archive. The interviews are mostly open-ended, but all subjects answer at least a few standardized, identically-worded questions.

[8] This question is posed verbatim this way (or in translation) to all interview subjects.

[9] A 95% response in favor of one option is extraordinary in this case, because the question is designed carefully to avoid "prompting" respondents to respond in

a way biased toward a perception of decline. It makes no mention of "decline" (or even different overall quality), and it is an entirely open-ended (not multiple choice) question that does not restrict the responses in any way. Respondents could mention any change in any direction along any dimension they please. Yet even the residual 5% who do not initially perceive a decline may simply not have understood the question or thought it through. To investigate this, we followed up by asking respondents to name and compare ideal casts now and several generations ago. Most of those who initially claim no decline exists admitted they were unable to name a top cast of *Die Walküre* or *Tristan und Isolde* today equal or superior to top casts in the 1960s or the 1930s.

[10] The fact that our respondents generally agree on these finer details, not just with regard to Wagner but also Verdi, should increase our confidence that the decline is not spurious but real. In addition to the four points above, respondents tend not to perceive the decline as resulting simply from more houses chasing fewer singers and being forced to cast further in advance—though of course that situation does pose logistical problems for casting personnel in individual houses. The overall quality of the very best singers has declined worldwide, as we find when we ask them about assembling "ideal" casts and whom they could hire if they faced no constraints. See also the footnoted discussion related to the Met comparison.

[11] Interview evidence.

[12] Many interview subjects also mention that modern singers lack distinctive and diverse interpretive insights, as compared to their predecessors. Whereas both vocal talent and technique, on the one hand, and interpretive diversity, on the other, seem in short supply, the former problem is more fundamental, because communicating deep interpretive insights requires that opera singers possess outstanding talent and technique with regard to dynamics, color and phrasing. While some observers *also* perceive contemporary *spinto* and dramatic singers as less interesting than in years past, they do not reject the notion of a decline in underlying technical competence.

[13] We compiled the dataset from reviews published in *Gramophone* magazine, assuming that this source would focus on a selection of the best recordings available anywhere. We began with recordings made in 1927, at the dawn of electrical recording. To avoid having the results influenced by non-vocal concerns, we broke each review up into segments focusing on the performance of a specific role,

without any mention of conducting, recording quality, ensemble, and visual aspects. We asked multiple individuals to assess how positive critics were in each case about the quality of the singing. We took account changes in the recording industry, making no differentiation between live and studio recordings. We also noted (and removed) singers who sang repertoire on CD that they would not and/or could not duplicate in an opera house and, if possible, we checked live "bootleg" recordings to make sure singers could replicate their roles adequately.

[14] As with interpretation of interview evidence, we proceeded carefully to measure change in perceived quality cautiously, controlling for obvious biases. We examined works from five composers (Handel, Mozart, Rossini, Verdi and Wagner) to control for nostalgia bias (see text). We employed reviews of the CD re-releases of recordings that appeared between 1983 and 2009, not the original reviews at the time of recording, thereby seeking to reduce any change in standards of the aesthetic appreciation of singing. Other obvious biases in this mode of measurement run *against* any finding that vocal standards have declined. For example, despite widespread belief to the contrary, the number of recordings of operas and fragments issued annually has increased. Today, most take the form of DVDs, video broadcasts, and other digital visual media, often live, not audio-only recordings. Also, sound quality and editing technology have greatly improved over the last 50 years.

[15] For a brilliant treatment of this syndrome among modern opera lovers in Argentina, see Claudio E. Benzecry, *The Opera Fanatic. Ethnography of an Obsession*, Chicago: University of Chicago Press 2011. In 1950, at the age of almost 95, having heard generations of singers, George Bernard Shaw, observes: "Every musical period suffers from the illusion that it has lost the art of singing, and looks back to an imaginary golden age in which all singers had the secret ..." (George Bernard Shaw, *How to Become a Music Critic*, London: Rupert Hart-Davis 1960, p. 329).

[16] Any control we employ to check for "nostalgia bias" also controls for *any other type* of generic bias (i.e. a bias not specific to *spinto* and dramatic singing) on the part of reviewers against newer recordings.

[17] One example of an extraordinarily positive evaluation the *Gramophone* review of arias from Handel "opera seria" sung by Sandrine Piau, which our coders awarded a higher score than any other recording of music from *Giulio Cesare*. David Vickers wrote: "Editor's Choice: There can be no doubt that we are living through a Golden Age for [...] Handel singing. [Piau's] facility and spirit are breathtaking [...]. A ma-

gnificent achievement [...] [s]tylish and perceptive [...] musical flair and dramatic intelligence is marvelously captured here [...]. Each is a first-class gem [...]. Piau and Rousset hit the bullseye every time, bringing out Cleopatra's despair [...].This is without doubt the finest recital of Handel arias I have ever heard" (*Gramophone*, January 2005, p. 96). One simply does not encounter reviews of this kind about contemporary recordings or performances of heavy Verdi or Wagner operas.

[18] Interview Material. Conductor, music historian and university administrator Leon Botstein writes: "The level of technical proficiency audible among young performers is astounding. There is no need to wax nostalgic about the past. Just as in tennis or golf, the minimum standard of professionalism among violinists, cellists, and pianists is higher than it has ever been. In Carl Flesch's class of violinists in the late 1920s and early 1930s, few if any of his best pupils could play all of the Paganini "Caprices" in public as part of their repertory. It may be reasonable to claim that there is no one around today to take the place of Heifetz or Milstein, but there are many more violinists on a level of proficiency of an extraordinarily high standard than ever before" (Leon Botstein, "Notes from the Editor. The Training of Musicians", in: *Musical Quarterly* 84 (3/2000), p. 329). Soloists, chamber music groups and orchestras may play for smaller and older audiences, and may be going bankrupt as a result, but they play wonderfully. The sidewalks of New York and London are crowded with prize-winning young concert pianists. Corinna da Fonseca-Wollheim expresses an uncontroversial view when she observes: "Is ours the new golden age of string quartets? It certainly feels that way..." ("Rising Quartets, Hip and Passionate", in: *The New York Times*, 8 November 2014). Some do protest that classical music performance has become interpretively more homogeneous, though it is unclear this is so. In any case, this is not the primary criticism of current *spinto* and dramatic singing.

[19] Interview Materials. The explanation lacks any plausible scientific or evidentiary basis and cannot not explain why *spinto* and dramatic singing has been singled out.

[20] It is of course insufficient simply to posit a coherent theory along with reasonable anecdotal evidence. The standard is too low, because that is what placed a cause in the category of "plausible" explanations in the first place. Nor would it be acceptable simply to poll opera professionals about the cause, since they are not in a position to analyze systematically the deep causes of a phenomenon like

long-term decline in singing. Those who work in opera, like any professional group, hold many sociological and historical views that are vague, inconsistent or just incorrect.

[21] This is in keeping with general principles of qualitative, historical and ethnographic analysis in the social sciences. On the general method of qualitative causal analysis via "process tracing," see Alexander George and Andrew Bennett, *Case Studies and Theory Development in the Social Sciences*, Cambridge, MA: MIT Press 2005. In the larger study, we use other types of evidence, including historical description and the geographical distribution of young singers.

[22] For purposes of brevity, I skip over additional explanations. Aside from the conjecture that hormones in water and food are destroying voices, noted above, some argue that singers travel too much, sing more often, don't work as hard as they used to, have less access to regular lessons, lack intimate training from experienced conductors, and much more.

[23] As reported by Norman Lebrecht in his column in *Slipped Disc*, November 2015; www.slippedisc.com/2015/11/adeles-album-sold-3-4m-last-week-the-classical-1-sold-493/.

[24] For a nuanced discussion, see Pierre-Michel Menger, "Artistic Labor Markets and Careers", in: *Annual Review of Sociology* 25 (1999), pp. 541-574.

[25] Jackson, *Sign-off for the Old Met*, p. 178. Rupert Christiansen, "How much do opera singers earn? Since state subsidy to classical music has been slashed, the whole sector has declined", in: *The Daily Telegraph* (24 July 2009). These estimates were confirmed by interviews with top agents in the US and Europe.

[26] In 1956 the fee ($1000) for a top singer was 28% of the annual US median individual income, whereas the today that fee ($17,000) is 63% of the 2012 annual US median individual income. On median income in 1956, see "Income of Men at All-Time High in 1956", in: *Current Population Reports: Consumer Income, Washington*, DC: U.S. Department of Commerce, Series P.-60 (No. 25, July 1957), p. 1. On median income in 2012, see Russell Sage Foundation, "Chartbook of Social Inequality", derived from US Census Data. See also en.wikipedia.org/wiki/Personal_income_in_the_United_States, p. 1. On inflation, see data.bls.gov/cgi-bin/cpicalc.pl?cost1=1%2C000.00&year1=1956&year2=2015.

[27] Christiansen, "How Much Do Opera Singers Earn?".

[28] www.celebritynetworth.com/richest-celebrities/singers/andrea-bocelli-networth/

[29] On the long-term decline, see Arthur Loesser, *Men, Women and Pianos. A Social History*, New York: Dover 1954, Section Seven.

[30] More literary-minded participants at academic seminars and conferences (but almost no one in the opera industry) have suggested that the themes and plots of Verdi and other 19th century and early 20th century operas are too musty to attract modern young people (including singers and teachers) to his operas. This is implausible for three reasons. First, the shortage of singers varies by role, not by opera or composer. Lighter roles in certain Wagner operas—for example, Elisabeth and Wolfram in *Tannhäuser*, Elsa in *Lohengrin*, Eva and Walther von Stolzing in *Die Meistersinger von Nürnberg*—are easier to cast because they do not require full *spinto* or dramatic voices. The same is true for lighter Verdi operas like *La traviata*. Yet the many remaining roles in these operas, and in other operas, remain almost impossible to cast, because they do require such voices. This implies that the problem is neither plot nor period, but intrinsic nature of the vocal writing. Second, we learned from our interviews and audience data that Verdi and Wagner operas (particularly the mustiest among them, such as I*l trovatore, Rigoletto, Lohengrin* and the *Ring*) remain extremely popular both with audiences and young singers, as described in the text. Third, it is unclear what exactly is musty about the plots of late 19th century composers like Wagner. Usually one answers that they do not treat women or minority groups in a politically correct manner. Yet if this were so, why should we see continued or enhanced performance standards in opera by Handel, Mozart and Rossini?

[31] This remains true even though opera remains a financial challenge to perform and despite a generally aging and declining base of core subscribers.

[32] In the 2015-16 season, 13 complete cycles of Wagner's *Ring* tetralogy were presented worldwide (Bayreuth, Staatsoper Berlin, Budapest, Frankfurt, Halle, Opera North in Leeds, Leipzig, South Bank Centre in London, Mannheim, Sofia, Mariinskii Theater St. Petersburg, Washington DC, and Wiener Staatsoper). In total, including performances of individual operas, 55 performances of 20 productions of *Das Rheingold*, 51 performances of 20 productions of *Die Walküre*, 43 performances of 18 productions of *Siegfried*, and 50 performances of 19 productions of *Götterdämmerung* took place. (Data from www.operabase.com, searched from 1 September 2015 to 1 September 2016, compiled 5 May 2017.)

[33] Interview Materials.

[34] Others view teachers as conveyers of technical information but individual talent as primary: that is, talented and committed students make the teacher, not the reverse. E.g. "Giulietta Simionato", in: Jürgen Bartels et al. (eds.), *Die Interviews. Einblicke der großen Stars in die Welt der Oper. Highlights aus 20 Jahren "Das Opernglas"*, 1980-2000, Hamburg: Opernglas 2000, p. 306.

[35] Lawrence, *Interrupted Melody*, p. 40.

[36] Vocal pedagogy lacks a single orthodox method, let alone a scientifically grounded one. Teachers and singers disagree amongst themselves about what works best. How to teach opera singing has always been even more controversial than how to teach instrumental performance, and much pedagogy has always been suspect. Birgit Nilsson recalls almost entirely negative influences from her vocal teachers, particularly those who were the most famous (Birgit Nilsson: *La Nilsson. My Life in Opera*, Boston: Northeastern University Press 2007, pp. 31-33, 39-43). Franco Corelli believed his conservatory teacher destroyed his upper register, and subsequently decided to become his own teacher. He referred to voice teachers as "dangerous people" and a "plague to singers" (Anthony Tommasini, "Franco Corelli, Italian Tenor of Power and Charisma, and Pillar of the Met, Dies at 82", in: *The New York Times*, October 30, 2003). Lotte Lehmann received highly uneven teaching: some improved her voice and some worsened it. In one case she was given the following celebrated admonition: "none of my pupils has ever been such a disappointment as you [...]. If you want to and have to achieve something in the future, you should take up a practical career" (Lotte Lehmann, *Wings of Song. An Autobiography*, London: Kegan Paul, Trench, Trubner and Co. 1938, p. 68, also 65-70, and cf. 76-79).

[37] We are still collecting data on this issue. Though some great former singers make great teachers, most do not. Some of the greatest teachers had unimpressive careers or none at all. It is not even clear if the percentage of teachers who are former singers has declined, though we are still researching this question.

[38] For a journalistic summary of the conventional wisdom, see Prospero (Pseudonym), "Young opera singers: Who will sing Aida? Young singers are ruining their voices by getting big roles too soon", in: *The Economist* (14 October 2013), www.economist.com/blogs/prospero/2013/10/young-opera-singers

[39] Dominique Meyer states: "Oft sagt man, Sänger singen spezielle Rollen zu früh und machen sich damit kaputt. Das ist leider wahr und ist auch keine Neuig-

keit. Ich bin sicher, dass sie das alle schon erlebt haben, und wir könnten jetzt den ganzen Tag damit verbringen, Beispiele aufzuzählen. Martha Mödl zum Beispiel.", in: Dominique Meyer, "Verdi besetzen", in *"Poetischer Ausdruck der Seele"*, p. 9.

40 When we ask interviewees why they believe that young singers should not begin studying *spinto* and dramatic roles until an advanced age, most treat it as an eternal verity too obvious to require detailed defense. Pressed for examples (other than Maria Callas), a few cite the generation of surprisingly short-careered (mostly American) *spinto* sopranos who came of age in the 1970s and 1980s—among them, Susan Dunn, Alessandra Marc, Aprile Millo, Katia Ricciarelli, Cheryl Studer and Sharon Sweet—who are widely believed to have destroyed their voices by singing *spinto* and dramatic roles prematurely.

41 Nor is there any evidence that teaching singers such roles at a young age is vocally risky. It is, of course, true that *spinto* and dramatic voices reach full maturity later than other types, and that young singers only rarely can consistently sing major Wagnerian roles in the biggest houses. Yet our analysis of historical singers uncovered no correlation between learning (or even attempting) *spinto* and dramatic roles at a young age and a shorter career. Indeed, there is reason to believe that the real danger today may well be the opposite: singers with *spinto* and dramatic potential are learning and attempting such roles not too early but too late to train and shape their voices properly, as they once did. For anecdotal examples, see the reminiscence in "Kurt Moll", in: Bartels et al. (eds.), *Die Interviews*, p. 225, or Marjorie Lawrence's memory of studying "O Don Fatale" at 20, in Lawrence, *Interrupted Melody*, pp. 37, 48. Lawrence made her operatic debut at age 25 as a Wagnerian heroine and sang Brünnhilde at the Met at 29. Other examples of singing German dramatic roles early from the mid-20th century Golden Age with positive outcomes include Astrid Varnay, Regina Resnik, and Montserrat Caballé.

42 See Hans Hotter, *"Der Mai war mir gewogen…". Erinnerungen*, München: Kindler 1996 for a full description. By 25, Hotter was singing leading roles in Hamburg, a top opera house, and receiving recognition as a future star (see Penelope Turing, *Hans Hotter. Man and Artist*, London: John Calder 1983, p. 79). To be sure, some criticize Hotter's last studio recording as displaying some vocal decline, but others defend it as providing unique interpretive insights—and he was at that time past

50. Even if we were to date his great performances from 1935 to 1961, it would still be a 26-year career. As late as 1965, when he appeared as Wotan at Covent Garden, Andrew Porter described his performance as "the greatest, most moving Wotan of our day," and Alan Blyth as "the greatest actor-singer of his generation" (Turing, *Hans Hotter*, p. 147). He would sing staged opera for 4-5 more years and perform Lieder in concert into his 70s (Turing, *Hans Hotter*, pp. 170-171, 201-203).

43 Among Wagnerian singers with smaller voices active today, Klaus Florian Vogt did not sing Parsifal until he was in his late 30s and Siegmund until he was in his mid-40s. Neither Thomas Hampson nor Angela Denoke did so until they were in their 40s. Evelyn Herlitzius began with lighter Wagner parts in small houses but did not sing major roles in major houses until well into her 30s. Anne Evans did likewise. Hildegard Behrens did not sing Brünnhilde until she was in her 40s.

44 For Verdi examples, see Moravcsik, "Where Have the Great Big Verdi Voices Gone?".

45 Interview Material.

46 In any case, this account offers no explanation why Mozart, *bel canto* and Baroque singers seem unaffected, even though their music originally was performed at a significantly lower pitch than Wagner or Verdi scores.

47 Carlamaria Casanova, *Renata Tebaldi. La voce d'angelo*, Parma: Azzali 1987, p. 154; "Renata Tebaldi", in Bartels et al. (eds.), *Die Interviews*, pp. 348-9. On LaRouche's Schiller Institute, see www.schillerinstitute.org/music/revolution.html. The pitch can rise further, close to A=460, by the end of the performance, as instruments warm up. Also Interview Materials.

48 Interview Materials. In most places pitch has, of course, risen since Mozart's day and fallen since Verdi's day, but the trend across this longer time period is not relevant for assessing the decline in singing since the mid-20th century. Until that time, and into the Golden Age of the mid-20th century, singers appear to have coped adequately with a slightly rising pitch.

49 For a dissenting view on the renovation of Dresden's Semperoper in the 1980s, David Griesinger, "Phase Coherence as a Measure of Acoustic Quality, part two: Perceiving Engagement", in: *Proceedings of 20th International Congress on Acoustics*, ICA 2010, 23-27 August 2010, Sydney, Australia.

50 Other large houses opened too late to explain the decline: Paris's Opéra Bastille (1989), St. Petersburg's Marinskii II (2013), Tokyo's New National Theater (1997),

Festspielhaus Baden-Baden (1998), Dallas's Winspear Opera House (2009), Valencia's Palau de les Arts Reina Sofia (2005), Beijing's National Centre for the Performing Arts (2007), and new houses in Houston (1987), Firenze (2011/2014), Copenhagen (2005), Oslo (2008) and other cities.

[51] For at least three centuries, critics have been attributing a decline in singing to louder accompaniment and the attendant strain on singers. See John Stark, *Bel Canto. A History of Vocal Pedagogy*, Toronto: University of Toronto Press 1999, Chapter 7.

[52] Two qualifications. First, the problem cannot simply be that opera conductors are also currently active as orchestral concert conductors, because this was always true. Second, not all old-school conductors with early training as a répétiteur were necessarily respectful of singers.

[53] Interview Material. Isaac Stern, *The Evolution of the Symphony Orchestra. History, Problems and Agenda*, London: Weidenfeld and Nicolson 1990, p. 10; Anne Mischakoff Heiles, *America's Concertmasters*, Sterling Heights, MI: Harmonie Park Press 2007, pp. 26, 60, 145; D. R. Reimer, *Violin Performance Training at Collegiate Schools of Music and its Relevance to the Performance Professions. A Critique and Recommendation*, PhD diss., Ohio State University 2003. Recent studies of the volume of historical vs. modern instruments tend to compare 18th century and late 20th century instruments, not shorter-term changes. Nonetheless, they place a plausible upper limit on the possible effect of changes in the past 50 years. Recent research suggests that modern string instruments with metal strings and different bows are not significantly louder than historical ones. See Johannes Krämer, "Sound Power of Modern and Historical Orchestral Instruments, Part I: String Instruments", Magisterarbeit, Institut für Sprache und Kommunikation, Musikwissenschaft, Technische Universität Berlin 2011, p. 20. The situation with regard to wind instruments is more complex. Early and modern oboes, bassoons and horns have almost identical volumes. Modern flutes only play 1 dB louder than older ones at forte, though the latter can play softer. Modern clarinets, trumpets and trombones can play both louder and softer than early ones: the difference at forte is around 1-2 dB and at fortissimo 2-4 dB, except in the case of a modern tenor trombone, which is 6.7 dB louder. Erik Detzer, Frank Schultz, Martin Pollow and Stefan Weinzierl, *Zur Schallleistung von modernen und historischen Orchesterinstrumenten II: Holz und Blechblasinstrumente*, Berlin:

DAGA 2010, p. 892; all available at: www2.ak.tu-berlin.de/~akgroup/ak_pub. So, changes in the trombone are a good standard and research suggests that "[t]rombone makers have continued to refine the design of the trombone throughout the 20th century, [but] none of their changes have been as radical as those of the 19th century" (David M. Guion, "Performing on the Trombone: A Chronological Survey", in: *Performance Practice Review* 9 (2/1996), p. 191; available at: scholarship.claremont.edu/ppr/vol9/iss2/6. There is some evidence that after 1950, American-type wider bore orchestral trombones displaced traditional small-bore instruments in most countries, and that parallel developments took place in Germany.

54 This is striking, despite the general perception that large voices record less well—a point to which I return below.

55 I am indebted to Carolyn Abbate for suggesting this formulation.

56 Yet they play an important role in our interviews. Perhaps this is because these impediments all influence the supply of singers once they have committed to serious training and are thus visible to prominent opera professionals every day.

57 Also, there is no first-cut that plays an analogical role to selecting tall people for basketball or fast ones for soccer.

58 Meyer, "Verdi besetzen", p. 12.

59 While quite a number of singers in any given era can sing lighter roles at a high level, great *spinto* or dramatic singers have always been extraordinarily scarce, with only a handful of historically great exemplars of each vocal type per generation, who clearly stand above the others.

60 Another skill far more widespread than the ability to sing dramatic roles is the ability to play instruments well.

61 Interview data.

62 One more general result is that a surprising number of opera singers today are found by chance at around age 20 in an academic setting. They have sung in musical theater, church, choral or popular music, or are instrumentalists with modest choral background, who never gave any thought to classical singing. Vocal teachers overhear them coincidentally in college or conservatory.

63 Nicholas Harkness, *The Voices of Seoul. Sound, Body and Christianity in South Korea*, PhD Thesis, Department of Anthropology, University of Chicago 2010.

64 It is unclear to what extent the delay is due to the need to aging itself and to what

extent to the need to train and develop sounder technique and greater muscle strength over many years.

[65] Pedagogue James Deere observes: "Maturation is a very individual matter, but lighter voices generally mature earlier. Soubrettes and coloratura sopranos can be ready for professional work as early as twenty years of age—if they have a solid grounding in vocal technique, foreign language and vocal literature. Roberta Peters made her debut at the Metropolitan at not quite twenty, and Patrice Munsel was only eighteen! Lyric sopranos are almost as quick to mature and are usually ready by age twenty-five. Lirico *spinto* sopranos, tenors and baritones should be ready by age thirty. Dramatic sopranos, Mezzo-sopranos and bass-baritones (*bassi cantanti*) are often ready at thirty-five, and true contraltos and Schwarzebassen may require almost to age forty [sic] for complete maturation, although some may be ready earlier. Singers need to focus on technique, literature, musicianship and language early, so these elements can be ready by the time the voice is ready. Part of building vocal technique requires time for understanding and accomplishment, so one should begin as early as practicable. Girls may study voice at fifteen or sixteen if physically mature, and the boys at sixteen or seventeen. Piano or violin study is recommended for younger singers, and may begin at eight or nine ..." (James Deere, *Singing in the Twentieth Century. A Recollection of Performance and Pedagogy*, Bloomington, IN: AuthorHouse 2005, pp. 86-87, also 36). Distinctions among Fächer are not iron-clad. For the German system, see Rudolf Kloiber, *Handbuch der Oper*, 14th ed., Stuttgart: Metzler 2016.

[66] A few contests self-consciously cut against the grain, such as Seattle Opera's International Wagner Competition.

[67] Giulietta Simionato, one of the great Verdi mezzos of the 20th century, once said that if she had it to do over again, she would not become a singer, because "I suffered too much [...] [waiting] 14 whole years for my debut in a leading role [...] they destroyed me, stripped me of all my self-confidence [...]. I was broken inside" ("Giulietta Simionato", in: Bartels et al. (eds.), *Die Interviews*, p. 308).

[68] Flagstad never even attended a performance of *Tristan* until she was 34, which she slept through, still assuming at that point that she could never sing Isolde. Sometime around that age, she also sang the more lyric role of Eva in *Meistersinger* for the first time. See Edwin McArthur, *Flagstad. A Personal Memoir*, New York: Knopf 1965, p. 5.

[69] Jackson continues: "Just short of her fortieth birthday, Flagstad was the somewhat wary veteran of a twenty-year career in Scandinavian provincial opera houses where she had sung everything from Micaela to Minnie, Agathe to Aida. Only recently had she ventured onto the Wagnerian terrain in her native Oslo. Far from being an international star, her only major appearances had been at Bayreuth in 1933 as Ortlinde (*Walküre*) and the Third Norn, these small parts earning her advancement to Sieglinde and Gutrune in the 1934 festival" (Jackson, *Saturday Afternoons at the Old Met*, pp. 84 f.).

[70] Flagstad wrote: "As if it were possible to start one's career with Wagnerian roles, instead of ending with them ... My first piece of advice to young and immature singers can be put into three words: Leave Wagner alone! Because he calls for powers which can only develop after many years of singing. I was already 34 years old and had been singing regularly for about 15 years before I attempted my first Wagnerian role, Elsa in *Lohengrin*. That is one of Wagner's lighter roles, but even so it calls for great vocal experience. For the real heavy parts, like Isolde and Brünnhilde, you need even more: a perfectly placed voice, absolute control of the breath, and immense staying power. Many a promising beginner has come to grief for lack of these qualities [...]. [In my case,] I never had any real singing difficulties; I never had to unlearn anything. My voice simply grew. And it is this word grow which is most important of all. For a singer who wants to sing Wagner must be something like a weight-lifter, building his muscles by slow degrees, adding to the weights he lifts, until he is able to attempt the very heaviest. Isolde and Brünnhilde are the heaviest roles a singer can ever be called upon to sing. And if you ever wish to sing them, you must be prepared for many years of steady growing before you make the attempt [...]. I sang Nedda, Mimi, Tosca, Aïda, Desdemona, Michäela, Marguerite and many other roles—all before I ever sang a note of Wagner. I also sang in many operettas..." (Kirsten Flagstad, "How (not) to sing Wagner – advice for young singers", audio tape, recorded 1950, available at www.youtube.com/watch?v=S6Stoi8DAqU.

[71] On Hans Hotter, see above. Frida Leider debuted as Venus and never looked back, later observing "I was a dramatic soprano right from the beginning" (James H. Sutcliffe, "Lady of Berlin", in: *Opera News* (28 January 1967), p. 29).

[72] On the Marxist concept of a "industrial reserve army", more closely connected to capital accumulation than perhaps appropriate here, see Karl Marx, *Das Kapital.*

Kritik der politischen Oekonomie, Vol. 1, Hamburg: Meissner 1872, Chapter 23, Section 3, "Progressive Produktion einer relativen Überbevölkerung oder industriellen Reservearmee", pp. 653-666.

[73] Jan Peerce sang and played jazz, Richard Tucker performed as a cantor, and Leonard Warren performed at Radio City Music Hall, as did Robert Merrill, who also did gigs at bar mitzvahs and on the Borsch Belt. Beverley Sills sang variety shows, radio broadcasts, and Gilbert and Sullivan troupes. George London toured with Mario Lanza. Risë Stevens excelled at cross-over singing. Roberta Peters, Regina Resnik and Evelyn Lear went straight into opera, never showing interest in popular singing.

[74] For this purpose, I analyze every tenor performing Tristan in a major venue in 2016 and 2017.

[75] On Goerke's career generally and her second breakthrough, see Anthony Tommasini, "In a Shadow, a Well of Human Pain and Joy: 'Die Frau ohne Schatten' Returns to the Met", in: *The New York Times* (8 November 2013).

[76] Sarah Bryan Miller, "Lyric Tenor Ben Heppner Handles Romantic German Repertoire Well", in: *St. Louis Post-Dispatch* (Everyday Magazine Section, St. Louis, 1 January 1999); interview material.

[77] www.jayhuntermorris.com/Intro.html

[78] Exceptionally, Christian Franz sang a major house Siegfried at age 32, though he did not repeat the role often and is now 49.

[79] Contraltos have always been scarce, but "in recent few true contraltos have been identified" (Deere, *Singing*, p. 24).

[80] Interview Material.

[81] It is tempting to attribute this to the fact that ever fewer members of the audience have themselves ever sung in a classical or ecclesiastical style—a result of the same social evolution that has depleted the pool of potential singers.

[82] Before the current era, even composers who placed a strong emphasis on visual and theatrical effects, such as Richard Wagner, ultimately privileged the ability to sing roles. His grandson Wieland Wagner, who was a stage director, still had extensive musical knowledge and made singing a priority.

[83] See above. Some argue that singers are required to do things—move continuously, contort their bodies, concentrate on facial expression, and, more importantly, act in ways quite at odds with the score in the interest of a Brechtian interpretation of the libretto against its apparent meaning, etc.—that are difficult to combine

with optimal vocal production. This may be true, though it does not particularly explain why *spinto* and dramatic singing should uniquely be in decline.

84 Late 19th century operas also require more demanding and spacious theatrical effects.

85 Interviews. For one of many examples, see Marilyn Horne and Jane Scovell, *Marilyn Horne. The Song Continues*, Baskerville: Ft. Worth 2004, pp. 227 ff.

86 Interview Material. The Knoxville (Tennessee) Opera recently advertised auditions restricted as follows: "Knoxville Opera will cast age appropriate, attractive artists in these roles." In the firestorm of debate that followed, defenders argued that critics unfairly singled out Knoxville Opera for making explicit something all opera companies now do. To be fair, the ad was for an educational, not main stage, performances; www.knoxnews.com/entertainment/music/knoxville-opera-notice-spurs-national-online-debate-over-casting-ep-1399489562-361264371.html.

87 Interview Material.

88 Deborah Voigt observes: "There is no way the Metropolitan Opera would have made me Brünnhilde as they did years later had I still been obese—it just wouldn't have happened" (Deborah Voigt: *Call Me Debbie. True Confessions of a Down-to-Earth Diva*, New York: Harper 2015, p. 197).

89 For her side of the story, which primarily blames herself, see Voigt, *Call Me Debbie*, Chapter 14.

90 Even Voigt admits this was true for a period of time. Voigt, Call Me Debbie, pp. 192-195.

91 For a subtly persuasive case for the role of Callas's weight, see Michael Scott, *Maria Meneghini Callas*, Boston: Northeastern University Press 1992.

92 For an overview of the controversy, with relevant links, see Norman Lebrecht, "Singers in Uproar over Critical Body Insults at Glyndebourne", *Slipped Disc* (19 May 2014), available at slippedisc.com/2014/05/singers-in-uproar-at-critical-body-insults-at-glyndebourne/. For photos, see bachtrack.com/review-proms-rosenkavalier-glyndebourne-july-2014.

93 Also, Harold Schonberg, "Of Wagnerian Sopranos", in: Id., *Facing the Music*, New York: Summit Books 1981, p. 276, and, more generally, pp. 276-283. Marilyn Horne recalls an inadvertent experiment she once conducted. She lost 30 pounds at one point to sing a more visually appropriate Carmen and felt she had reduced

the size of her voice by 50%. She gained the weight back and her customary voice returned. As she puts it: "Big voices come out of big bodies."

[94] Decisions to favor appearance over voice, particularly in the early years, can derail a singer's career. When this occurs, we may never hear the singers again, so the extent of the overall impact remains uncertain.

[95] Indeed, some of the causality may run in the opposite direction: the absence of great voices has led the opera world to place more emphasis on appearance.

[96] ~~Add Citation.~~

[97] Howard Vogt, *Flagstad. Singer of the Century*, London: Specker and Warburg 1987, p. 101. Zinka Milanov's first Met contract specified that she lose 10 kilos. Beniamino Gigli felt similar pressure from critics when he arrived there several decades earlier. Marjorie Lawrence, who was proud of her relatively athletic and youthful appearance—a critic at her debut called her "young, skim and personable"—reports that Lauritz Melchior was reportedly so bulky that he could not use his bathtub and so used a hotel pool instead (Lawrence, *Interrupted Melody*, pp. 131-135).

[98] Interview Material.

[99] Interview Material. A few competitions have been created specifically for *spinto* and dramatic repertoire, notably Seattle's International Wagner Competition.

[100] Other conjectures require more research. George Bernard Shaw, a great and voluminous music critic in his youth, maintained that it is intrinsically easier to sing Wagner than Verdi. He pointed to the sustained higher tessitura of Verdi, particularly for baritones. One might also mention the demand for greater agility. Shaw also believed that the Wagnerian orchestra was more transparent, but it seems more plausible to reverse the argument: Verdi's orchestral sound is generally more transparent, giving singers nowhere to hide. – George Bernard Shaw, *Shaw's Music. The Complete Music Criticism of George Bernard Shaw*, Vol. 2, ed. by Dan H. Laurence, 2nd revised ed., London: The Bodley Head 1981, p. 852, writing in 1893: "Verdi's worst sins as a composer have been sins against the human voice. His habit of taking the upper fifth of the compass of an exceptionally high voice, and treating that fifth as the normal range, has a great deal to do with the fact that the Italian singer is now the worst singer in the world, just as Wagner's return to Handel's way of using the voice all over its compass and obtaining physical relief for the singer and artistic relief for the audience by the contrast of the upper and lower registers has made the Wagner singer now the best singer

in the world." On the causes, see ibid., *The Perfect Wagnerite*, Vol. III, pp. 539-41, and more generally, see also Vol. I, pp. 329, 451-2; Vol. II, pp. 850-6; Vol. III, pp. 222-3, 643-644, 694, 768-9. Faced with the implicit question "You've said you're not a Verdi singer though I'm sure you have all the notes", Bryn Terfel responded: "First of all I've got to correct you. I could not sing them. If I was asked to sing *Trovatore* or *Traviata*, no! It's a very distinct, definite vocal category. If I had the choice of doing Sweeny Todd or Di Luna, Di Luna wouldn't even enter my mind. It would be a complete red light. Verdi's a composer—particularly if it's a real baritone role—that stays in the passaggio, and you need to be able to sustain that. I couldn't do that. I think I can do other things better than I would do the big Verdi roles. Why should I sing Iago when you've got that wonderful chorus scene where everyone expects you to sing that glorious top A, "Beva, Beva"! There are certain places, "Cortigiani", for instance, in Rigoletto, that have been the death of many a bass-baritone. Why enter that graveyard when you know there are other people who can do it? I'm doing my Flying Dutchman now at Covent Garden; Dmitri Hvorostovsky is doing his Trovatore at the Metropolitan Opera" (Bryn Terfel, "The Performing Voice – Bryn Terfel: Interview with Mark Glanville", in: *Opera Now* (May/June 2009), p. 37.

[101] This appears to have been true, if perhaps less so, during the first half of the 20th century, when most operas were performed in the local language rather than the language of the libretto (except in Anglophone countries). Still, there was a Verdi Renaissance in German-speaking countries, and singers from English-speaking and Russian-speaking countries also sang both German and Italian opera.

[102] By this I mean almost all are from Germany, Austria, the US, UK, Australia, Scandinavia, Finland or the Baltic states. The seven exceptions are Francisco Araiza (México), Régine Crespin (France), Plácido Domingo (México/Spain), Ludmila Dvořáková (Czechoslovakia), Sándor Kónya (Hungary), René Maison (Belgium), and Eva-Maria Westbroek (Netherlands). Note that all except the two Spaniards come from countries that geographically border a German-speaking country.

[103] For more detail on the decline in Italy, see Moravcsik, "Where Have All the Big Verdi Voices Gone?", pp. 110-112. Spain, especially Catalonia, produced a remarkable generation of great Verdi *spinto* singers between the 1950s and 1960s, including Plácido Domingo, Montserrat Caballé, José Carreras, Giacomo Aragall, Pilar ~~Lorengar, and,~~ in other styles, Alfredo Kraus, Teresa Berganza, and Victoria de los Angeles.

[104] On religious trends, using multiple sources and modern methods, see Cristiano Vezzoni and Ferruccio Biolcati-Rinaldi, "Church Attendance and Religious Change in Italy, 1968-2010: A Multilevel Analysis of Pooled Datasets", in: *Journal for the Scientific Study of Religion* 54 (1/2015), pp. 100–118, especially on youth, pp. 114-115.

[105] Among the strongest opponents to reform the Catholic liturgy were musicians, who had criticized reform proposals for over a half century. See Edward Schaefer, *Catholic Music Through the Ages. Balancing the Needs of a Worshipping Church*, Chicago: Hillenbrand Books 2008, Chapters 8-9 and Anthony Ruff, *Sacred Music and Liturgical Reform. Treasures and Transformations*, Chicago: Hillenbrand Books 2007, Chapter 12. These reforms stemmed from a recognition that "the Church has to adapt its methods of presenting its message not only to those who are not visible members of its society but also and primarily to its children." Accordingly, this required the elimination (as "anachronistic" and "inherently unsuitable") of much traditional polyphonic music dating back a millennium. An example is the tradition of melismatic Proper Chants, in which ornate melodies ranging from 6 to over 60 notes had traditionally been sung on sustained vowels, as in the Alleluia liturgical music. The church has largely replaced them with vernacular hymns appropriate for a congregational or untrained choir, or popular and indigenous music. In sum, "a great deal of new music will be needed [that will] necessarily be simple; the choir, especially the polyphonic choir, will not have nearly so large a part to play when full participation is restored to the congregation" (Anthony Milner, "Music in a Vernacular Catholic Liturgy", in: *Proceedings of the Royal Musical Association*, 91st Sess. (1964-1965), pp. 30-31. On the chain of causality, see also Lucy A. Carroll, "Vatican II did not Abolish Choirs, So Who Did?", in: *Adoremus Bulletin* 9 (2/2003), www.adoremus.org/0403Choirs.html. The critical doctrines are not just the Vatican II report (www.vatican.va/archive/hist_councils/ii_vatican_council/documents/vat-ii_instr_19670305_musicam-sacram_en.html), but also Musicam Sacram (1967). See D. C. Leege and J. Gremillion, *The US Parish Twenty Years after Vatican II. An Introduction to the Study*, unpublished report, South Bend: University of Notre Dame 1984.

[106] During the first half of the 20th century, Germany, for example, experienced a revival of Lutheran church music and the German government cooperated by setting state standards for church musicians (Ruff, *Sacred Music*, Chapter 8).

[107] Author's calculations using data on top performing arts institutions at www.topuniversities.com/university-rankings/university-subject-rankings/2017/performing-arts.

[108] This is true of opera performance as well. Today 40% of all opera performances (9552 of 23841 in the calendar year 2016) take place in German-speaking countries, whereas only 7% (1577) take place in Italy, less than in the US or Russia. Performances calculated from www.operabase.com.

[109] This percentage is calculated from www.operabase.com, which tracks live opera performances worldwide.

[110] For this view on opera from an expert, see John Steane, *The Grand Tradition. Seventy Years of Singing on Record, 1900-1970*, Portland, OR: Amadeus Press 1974. Steane remained quite optimistic about Verdi singing in 1971: "the line in the progress-chart still moves upwards" (p. 559); see also pp. 537-545, 557-559, 568-571.

[111] An organization co-founded by mezzo-soprano Dolora Zajick, the Institute for Young Dramatic Voices, seeks to provide younger singers with training and performance opportunities in heavier roles; www.instituteforyoungdramaticvoices.org.