Sonderveröffentlichung



Melissa Panlasigui

Women in High-Visibility Roles in German *Berufsorchester*

Impressum

Autorin: Melissa Panlasigui

Zitierweise: Melissa Panlasigui: *Women in High-Visibility Roles in German Berufsorchester*, Munich 2021 (musica femina münchen und Archiv Frau und Musik-Sonderveröffentlichung)

musica femina münchen e.V. (mfm) 2021 www.musica-femina-muenchen.de info@musica-femina-muenchen.de

Archiv Frau und Musik 2021 www.archiv-frau-musik.de info@archiv-frau-musik.de

Alle Rechte vorbehalten

Unterstützt von / Supported by



Alexander von Humboldt Stiftung/Foundation

Munich, February 2021

CONTENTS

ABSTRACT	5
BERUFSORCHESTER BACKGROUND	6
DATA COLLECTION	7
Leadership Positions	7
General Music Directors and Artistic Directors	7
Orchestra Boards	8
Performance	8
Subscription Series	8
Soloists	9
Conductors	1
Composers Overall	1
Living Composers 1	13
Contemporary Series	13
Living Composers 1	13
DISCUSSION 1	15
Female Composer Representation, Subscription vs. Contemporary Series	15
Female Conductor Representation Relative to Student Population	15
Females in Leadership Positions Relative to National German Labor Market	16
CONCLUSIONS AND QUESTIONS FOR FURTHER RESEARCH 1	18
SUPPLEMENTAL MATERIAL	19
REFERENCES	22

ABSTRACT

Since the beginning of the 20th century, women have gained acceptance in the workplace and their participation in the labor force has increased. However, a leadership gap exists, meaning the representation of women suffers in the higher professional echelons (Yellen, 2020) despite research demonstrating the (mainly financial) advantages of having diverse leadership (Coury et al., 2020). The integration of women in classical music, particularly in symphony orchestras, has followed a similar, if delayed, trajectory. For example, the renowned Berlin Philharmonic only granted membership to a female musician for the first time in 1982 (Madeleine Carruzzo, n.d.). Though studies have documented an increase in the representation of female instrumentalists across orchestra stages in Germany in recent decades (Ahrens, 2018; Frauen in Berufsorchestern, 2020; Paternoga, 2005), progress on this front in Germany and Europe overall has been slower compared to that in North America and Britain (Allmendinger & Hackman, 1995; Sergeant & Himonides, 2019). Some light has been shone on the situation of female conductors as general music directors in Germany (Blankenburg, 2005; Bode, 2002; Drynda, 2002; Steinbeck, 2012), but little attention has yet been paid to other leadership and high-visibility roles, such as soloists, guest conductors, and composers. This study provides a quantitative overview of female participation rates in these roles to investigate if a leadership gender gap in German Berufsorchester exists, and if so, where. Female participation rates are then compared to those of the German national labor force and student body populations.

BERUFSORCHESTER BACKGROUND

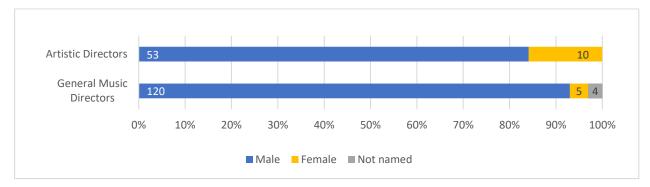
There are currently 129 *Berufsorchester* in Germany, which are divided into four categories: 81 theater orchestras, 29 concert orchestras, 8 chamber orchestras, and 11 radio ensembles (excluding dance orchestras and big bands). Most theater and concert orchestras are governed by the Collective Agreement for Musicians in Concert and Theater Orchestras (TVK, *Tarifvertrag für die Musikerinnen der Konzert- und Theaterorchester*), which classifies these orchestras by size into remuneration tiers A through D. Several theater and concert orchestras opt rather to have their own fee schedule or no collective agreement. The radio ensembles each have their own fee schedule, and it is largely the case for the chamber orchestras to have no collective agreement. (Mertens, 2019, 2020; "Orchesteraufstellung," 2018) [Supplemental Material: Table 8].

According to the Deutsche Musikinformationszentrum (MIZ), the Berufsorchester are defined as "professional orchestras, mainly financed by public funds, [which] have a permanent, year-round staff, and do not play pure entertainment or marching music" ("... professionelle Orchester... die überwiegend aus öffentlichen Mitteln finanziert werden, mit einem festen Personalbestand ganzjährig und keine reine Unterhaltungs oder Maschmusik spielen") (Symphonieorchester, n.d.). Historically, these were not the only characteristics used to distinguish this subset of professional orchestras. The term Kulturorchester also has been and is used to refer to this body of orchestras, and has been elevated to the status of a legal term. First coined in 1926 by conservative German cultural preservationists, it was used to demarcate these orchestras as separate and above purportedly Jewish-influenced, "degenerate" jazz. The resulting Tariff Regulations for German Cultural Orchestras (TO.K, Tarifordnung für deutschen Kulturorchester) of 1938 states that the Kulturorchester have a responsibility to "keep the high cultural assets of German music alive among the people" ("...das hohe Kulturgut deutscher Musik im Volke lebendig zu erhalten") and perform "music judged to be serious" ("...ernst zu wertender Musik..."). The music of the Romantic and late Romantic eras was bestowed with the title of "serious" and continues to be the main output of these orchestras today (Felbick, 2015). Much of the terminology from the TO.K was carried into the modern TVK of 1972. Only in the 2019 was the TVK updated to replace "Kulturorchester" with "Konzert- und Theaterorchester" and remove the "serious" music qualifier (Mertens, 2020). Titles and qualifiers notwithstanding, these orchestras continue to occupy an esteemed place in German society, as demonstrated by the successful lobby to have the German theater and orchestra landscape included among the UNESCO lists of Intangible Cultural Heritage in 2016. Due to the place of privilege held by the Berufsorchester, their principal output of subscription concert series comprises the main portion of the performance analysis.

DATA COLLECTION

Data was collected for the 2019/2020 performance season in two areas: management and performance. The management section focused on the gender composition of leadership roles, namely the general music directors, artistic directors, and orchestra boards. The performance section investigated the gender makeup of high-visibility roles on main subscription concert series and, when available, contemporary music concerts series. Information was compiled from orchestra websites and season programs accessed between November and December 2019. Orchestras that did not have complete season overviews available at the time of website access were excluded from the performance data. Information was also drawn from artist websites, program notes, and the MIZ online database. Though it would have been most accurate to collect gender information by asking for the gender identity of all individuals involved, as well as to allow for people to identify outside the male-female binary, it is with regret that this was not a realistic possibility in this study due to limited resources. Gender was therefore assumed based on the gender distinction in German nouns (e.g. – Dirigent*in, Intendant*in, Soloist*in), pronoun usage in associated written documents, and/or the historical gendered assignment of names. Works, soloists, or conductors who were not yet named were omitted from the data (e.g. - slots to be filled by a competition winner or audience vote).

Leadership Positions



General Music Directors and Artistic Directors

The general music director (GMD) and the artistic director (AD) are executive level positions within an arts organization. For orchestras, the GMD and AD are often consolidated into one role, but many ensembles, particularly opera and theater houses, choose to separate them. In this case, the GMD is typically responsible for all performance aspects such as rehearsals and concerts, while AD is generally responsible for the overarching artistic vision of an ensemble and will often have the final say in terms of programming and hiring.

The gender breakdown of the two positions is shown in **Figure 1**. 63 instances of an AD being named separate from the GMD were found, 10 of which were filled by females: Judith Kubiz (Sorbisches Kammerorchestra), Dagmar Schlingmann (Staatsorchester Braunschweig), Frauke Roth (Dresdner Philharmonie), Cathérine Miville (Philharmonisches Orchester Gießen), Michaela Barchevitch (Thüringen Philharmonie Gotha-Eisenach), Laura Berman (Niedersäcshsiche Staatsoper), Ingrid Schrader (Hofer Symphoniker), Insa Pijanka (Südwestdeutsche Philharmonie), Karen Stone (Magdeburgische Philharmonie) and Karola Wille (MDR Sinfonieorchester).

Only five women were named to general music directorships¹: Ewa Strusińska (Neue Lausitzer Philharmonie), Ariane Matiakh (Staatskapelle Halle), Anna Skryleva (Magdeburgische Philharmonie), Joana Mallwitz

Figure 1. Executive-level positions by gender.

¹ The contract between Ariane Matiakh and the Staatskapelle Halle was mutually terminated mid-way through 2019/2020, her inaugural season ("Generalmusikdirektorin Matiakh verlässt Staatskapelle Halle," 2020).

(Staatsphilharmonie Nürnberg) and Julia Jones (Sinfonieorchester Wuppertal). Four GMD positions were vacant in the 2019/2020 season.

An overview of the number of female conductors who held GMD positions in the past two decades is given in **Table 1**. The data show that the absolute number of female GMDs has not undergone significant change in that period.

Year	2000	2005	2010	2015	2019
# female GMD	2	4	2	3	5

Table 1. Number of female conductors in GMD positions in *Berufsorchester* from 2000-2019. Sources: Babbe, 2015, Blankenburg,2005; Bode, 2002; Steinbeck, 2010; MIZ database.

Orchestra Boards

Orchestra boards are made up of musicians who represent the interests and opinions of the ensemble to the management. These roles are unpaid and are performed in addition to regular orchestral duties. Responsibilities vary between orchestras, but example tasks include overseeing auditions and supplying suggestions for programming and guest artists (although the ultimate authority on these decisions lies with the artistic or general music director). The orchestra boards also have a great deal of influence regarding issues such as recording rights, rehearsal times, and the selection of general music directors (Kaboth, n.d.; "Orchestervorstand der Rheinischen Philharmonie," 2016).

Data was found for 62 orchestras regarding the membership of their orchestra boards [Fig. 2]. The gender composition of the boards was heavily male, and women comprised less than one third of board members (p < 0.000). Males held a majority for 87% of boards while less than 10% had a female majority.

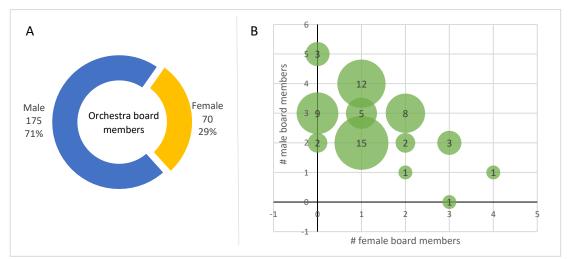


Figure 2. Representation of gender composition for orchestra boards (n=62). The overall gender breakdown of orchestra board members is presented in (A). The gender ratio within each board is illustrated in (B). The intersection on which a bubble is centered indicates the gender ratio. The area of each bubble is proportional to the number of orchestras with that ratio, also given by the number in the center of each bubble.

Performance

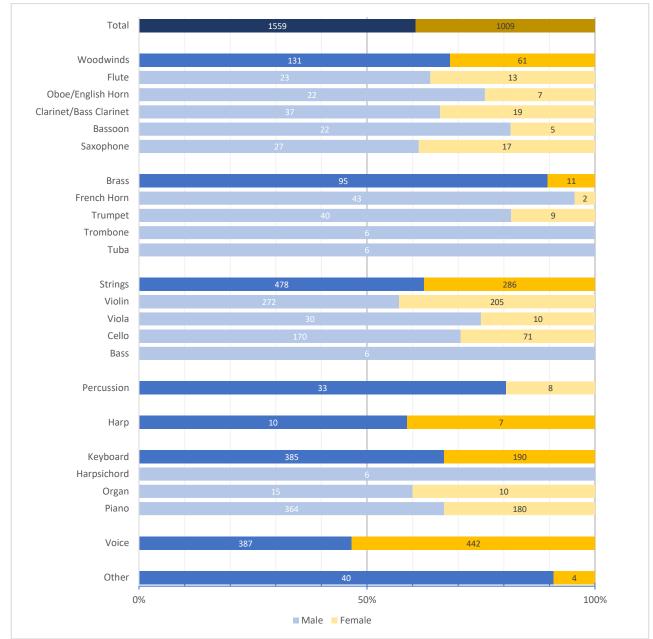
Subscription Series

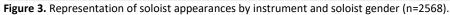
Subscription concert data was assembled for 120 orchestras (7 chamber orchestras, 9 radio orchestras, and 104 concert and stage orchestras), comprising 2,347 concerts and 6,814 performances of works. Repeat concerts, such as in a concert set, were counted individually. Special, gala, children/family, chamber, and guest concerts were excluded. Matinee concerts were only included if cross listed in a subscription series. Tour performances were also excluded, except when an orchestra regularly played in multiple cities as part of its main concert series (e.g., Philharmonisches Kammerorchester Wernigerode has subscription concert series in Seesen as well as Wernigerode), in which case these concerts were included.

Soloists

In the context of this report, "soloist" refers to musicians featured with orchestra accompaniment, as in the case of concertos. Males had a significant majority of soloist appearances, accounting for 60.7% of all concert appearances (p < 0.000) [Fig. 3]. The frequency of soloist appearance by gender and orchestra type is illustrated in Figure 4. Tier B orchestras featured female soloists at a significantly lower rate than other orchestra groups (33%, p = 0.0019).

Gender representation among soloists was dependent on instrument, and largely follows the trends shown in data from the *Mitteldeutscher Rundfunk* report on gender representation in *Berufsorchester* instrumentalists in the 2018/2019 season [Fig. 5]. This is reflective of a phenomenon that begins in childhood, in which instruments are gendered according to traditional stereotypes and has generated a substantial body of research (Byo, 1991; Conway, 2000; Fortnez et al., 1993). Women had higher rates of representation among instruments considered traditionally "feminine" such as the flute, clarinet, violin, and harp, although the data show that soloist performance appearances were statistically significantly biased towards men for the clarinet and violin. The brass instrument family remained the domain of male musicians, despite a nonsignificant probability value for trombone and tuba due to sample size. In no instrument category did women have a statistically significant majority of soloist appearances [Supplemental Material: Table 8]. There was no significant difference between the proportion of women per instrument group as soloists or ensemble members. This indicates that gender representation is mainly dependent on instrument type rather than the status of soloist or ensemble member.





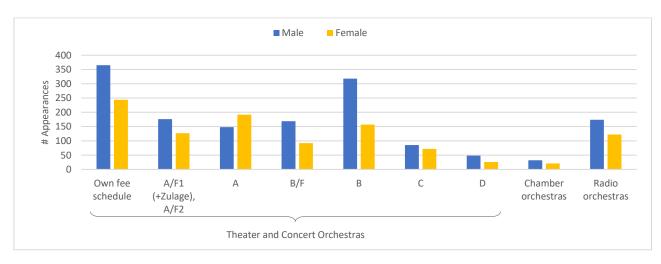


Figure 4. Frequency of soloist appearances by gender and orchestra type.

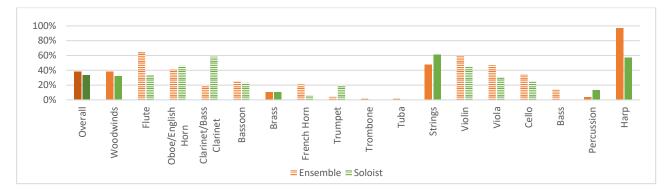


Figure 5. Comparison of the female percentage of persons playing selected instruments as ensemble members (n=9629) and soloists (n=398). Ensemble data was extracted from data compiled by the MDR for 128 orchestras in the 2018 season (2020). The percentage of women overall is given by the leftmost pair. Bars representing instrument families, designated by solid fill, are followed by their constituent instrument types in with striped fill.

Conductors

In the 2019/2020 season, there were 461 conductors active on the subscription concerts including both guest conductors and GMDs. Female conductors comprised 7.2% of active conductors (p < 0.000) and accounted for 6.6% of all conductor appearances (p < 0.000) [Fig. 6]. Instances where a conductor was not named were excluded.

The breakdown of conductor appearances by gender and conductor type, as well as orchestra type, is illustrated in **Figure 6B**. Only 34 out of the 120 orchestras catalogued had any female conductor appearance on subscription concerts. Although Tiers A and C appear to have higher rates of female conductor appearance, this is mainly due to the female GMDs. When guest conductors are isolated, there is no significant difference between the orchestra types in female conductor appearances.

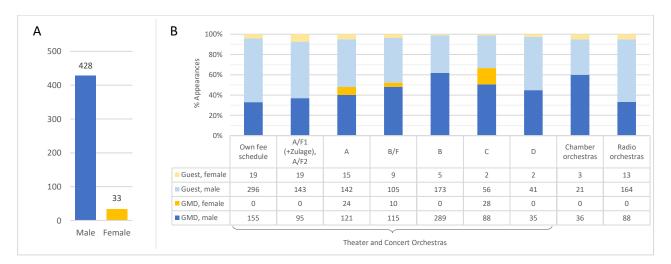


Figure 6. Representation of conductor participation by gender. The number of conductors active on subscription concerts by gender is given in (A). Conductor appearances on subscription concerts by conductor gender, conductor type and orchestra type are shown in (B).

Composers Overall

Works by a total of 36 female composers constituted just 1.9% of all work performances **[Fig. 7].** The 13 most-performed male composers each had more works programmed than all these female composers combined. Composers who celebrate a special anniversary year often enjoy a higher rate of programming in the corresponding season (*Classical Music in 2017: The Year in Statistics*, 2017). This implies that at nearly 10% of performances, works by Beethoven likely enjoyed a higher programming rate than other years on the occasion of his 250th birthday in 2020.

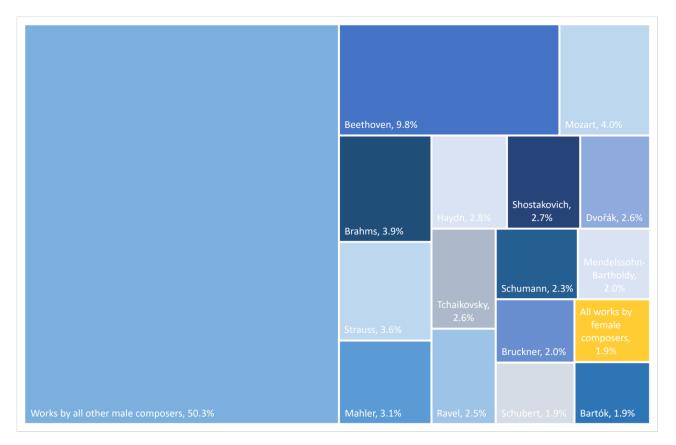


Figure 7. Percentage of performances of works by composer gender (n = 6,814). The 15 most-performed male composers are identified.

The distribution of the proportion of works by female composers on an orchestra's subscription concert series by orchestra type is shown in **Figure 8**. The bottom half of every box and whisker unit is not visible because approximately 60% of orchestras programmed no works by female composers, bringing the median to zero in nearly every case. Although the mean value is higher in Tier B/F, this is value inflated by a single outlier – the Magdeburgische Philharmonie, who had a special focus on female composers this season. For this, the orchestra has been awarded the "Innovative Orchestra" award by the DOV (Adrians, 2020).

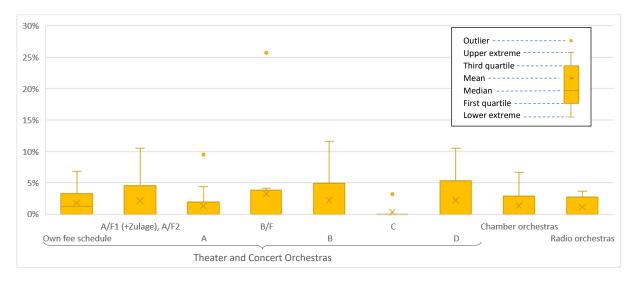


Figure 8. Box and whisker distribution of percentage subscription concert series consisting of works by female composers by orchestra type.

Living Composers

Of the 120 publicly funded orchestras included in these statistics, 107 included at least one work by a living composer in their subscription concert programming. 170 living composers were included, and their works comprised 9.4% of subscription concert programming **[Fig. 9]**. Deceased composers only outnumber living composers by a factor of two, and yet have over ten times the number of performances of their works. When works by living composers are isolated, 11.6% were written by female composers. A total of 30 female composers are included in this percentage, only one of whom is included amongst the 10 most-performed living composers **[Tables 2 & 3]**.

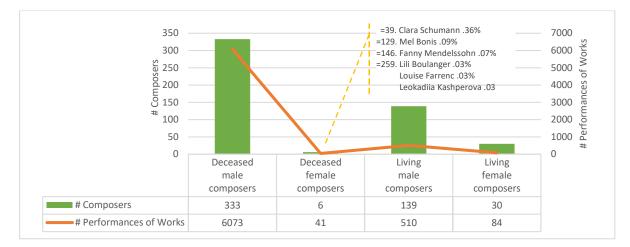


Figure 9. Performances of works on subscription concerts by composer status. All deceased women composers are listed in the call out on the right with their rank amongst all programmed composers. An equal sign designates that more than one composer is tied for this position.

Compo	ser name	# perfs	% all works
44.	Jörg Widmann	25	0.37
=49.	John Adams	22	0.33
=62.	Arvo Pärt	17	0.25
=67.	Philip Glass	16	0.24
=75.	Thomas Adès	14	0.21
	Sofia Gubaidulina	14	
=81.	Avner Dorman	13	0.19
	Fazil Say	13	
=89.	Detlev Glanert	12	0.18
	György Kurtág	12	

Table 2. Most performed living composers in main subscription concerts. Every instance of the performance of a work is included in the number of performances. The number preceding the names indicates their ranking overall. Equal signs indicate there are other composers with the same number of performances.

Compos	ser name	# perfs	% all works
= 75.	Sofia Gubaidulina	14	0.21
=146.	Unsuk Chin	5	0.07
	Martina Eisenreich	5	
	Isabel Mundry	5	
	Kaija Saariaho	5	
=177.	Lera Auerbach	4	0.06
=203.	Ella Milch-Sheriff	3	0.04
	Thea Musgrave	3	
	Konstantia Gourzi	3	
	Anne Clyne	3	
	Graciane Finzi	3	
	Keiko Abe	3	

Table 3. Most performed living female composers in main subscription concerts.

Contemporary Series

Living Composers

Contemporary series often include chamber performances that feature guest ensembles and the presence of a conductor is variable. Due to the higher variety in format, only composers are investigated for these series. Programs for the six following contemporary music series were compiled: Forum N (hr-Sinfonieorchester), Musik 21 (NDR Radiophilharmonie), musica viva (Symphonieorchester des Bayerischen Rundfunks), Musik der Zeit (WDR Sinfonieorchester), Horizont 21 (Gewandhausorchester Leipzig), Bad Emser Neue Klänge (Staatsorchester Rheinische Philharmonie).

Approximately half of performed works were written by deceased male composers, despite comprising only 37% of all composers and being largely non-contemporary **[Fig. 10 & Table 4].** Works by female composers were performed at a rate of 13%, but only one female appeared in the top ten most performed composers overall. Living male composers outnumber female composers by nearly a factor of three, and only two female composers are among the most-performed living composers **[Table 5]**.

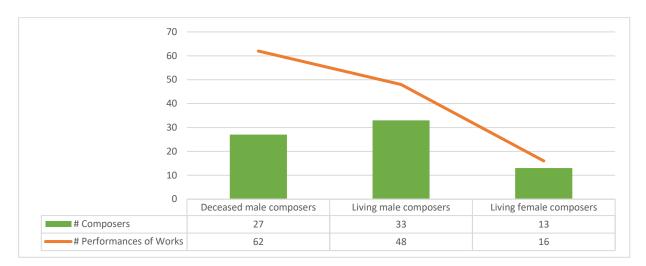


Figure 10. Works and composers featured on contemporary music series by composer status and gender

Cor	nposer name	# perfs	% all works
1.	H. K. Gruber	7	5.3
2.	Bruno Maderna	6	4.6
3.	Richard Wagner	5	3.8
	Anton Bruckner		
	Matthias Kaul		
6.	Arnold Schoenberg	4	3.0
	Richard Strauss		
	Béla Bartók		
9.	Ludwig van Beethoven	3	2.3
	Ella Milch-Sheriff		
	Felix Mendelssohn-Bartholdy		
	John Adams		
	György Ligeti		
Table	• 4. Most performed composers	overall in o	ontemporary

Table 4. Most performed composers overall in contemporary music series.

Comp	oser name	# perfs	% all works
1.	H. K. Gruber	7	5.3
=3.	Matthias Kaul	5	3.8
=9.	Ella Milch-Sheriff	3	2.3
	John Adams	3	2.3
=14.	Hans Zender*	2	1.5
	Sofia Gubaidulina		
	Jan Ersa Kuhl		
	Arturs Maskats		

Table 5. Most performed living composers in contemporary music series. The numbers preceding the names indicates their ranking in programming overall. All other composers featured in these series had only one performance.

Comp	oser name	# perfs	% all works
=9.	Ella Milch-Sheriff	3	2.3
=14.	Sofia Gubaidulina	2	1.5
=29.	Dijana Bošković	1	.8
	Milica Djordjević		
	Miyuki Ito		
	Malika Kishino		
	Elina Lukijanova		
	Sarah Nemtsov		
	Olga Neuwirth		
	Eve Risser		
	Kaija Saariaho		
	Nina Senk		
	Barbara York		

 Table 6. All female composers featured on contemporary music series.

DISCUSSION

Female Composer Representation, Subscription vs. Contemporary Series

The data show a substantially higher rate of representation for female composers on contemporary music series (13%) compared to main subscription series (1.9%) [Fig. 11]. Several possible factors contribute to this difference. First is the allocation of time between standard repertoire and new music. The standard concert program generally contains two halves. While the second half is usually dedicated to the performance of a single symphony, the equally long first half is typically shared by three pieces: an overture, a new(er) composition, and a concerto. This means that standard repertoire works typically fill three out of four slots per concert. The classical canon has an engrained male bias due to the historical exclusion of women from the practice of composition, which is then in turn perpetuated in main subscription concerts due to this repetition of canonical works (Citron, 1990). Female composers are more likely to be featured with a newer work due to their late societal acceptance as composers (i.e. - female students and professors only first began to be accepted in conservatories in the late 19th and early 20th centuries (Casula, 2019)). The fact that the standard concert program affords little temporal space to living composers, and living female composers a fraction thereof, compounds their underrepresentation on subscription series. Another potential factor is that, as Leonard Bernstein decreed, "The symphonic form is dead, finished" ("Music," 1968). This statement is somewhat extreme and not entirely valid, as a number of contemporary composers have still found much creative success within the form. However, there is an element of truth in that many compositions of recent decades explore instrumentations, styles, and frameworks outside the traditional "symphony" (Bermel, 2013), and are thereby less likely to be featured in subscription series.

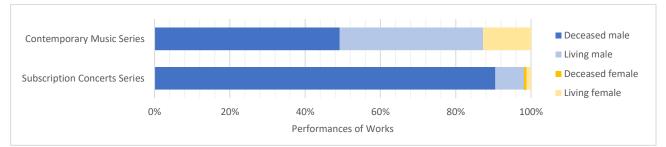


Figure 11. Comparison of works performances between contemporary music and subscription concert series by composer status and gender.

Female Conductor Representation Relative to Student Population

There are several steps along the career path of a conductor: 1) interest in orchestra leadership during lower education, 2) acceptance to educational institutions to acquire necessary skills, 3) matriculation from these institutions, 4) participation in masterclasses and competitions, 5) engagement as repetiteurs and assistants, and 6) transition into guest conductor and music director roles. Investigations into the transitions between each are necessary to discover sources of female attrition. Due to resource restrictions, this study considers the discrepancy manifested between education (Steps 2 and 3) and entry into the professional world as guest conductors and music directors (Step 6).

Two related data sets are presented in **Figure 12**: the percentage of females as conductors engaged by *Berufsorchester* on main subscription concerts in the 2019/2020 season by birth decade, and as students studying conducting in German higher education institutions by winter semester. Although sufficient historical data could not be found to compare student populations for most of the professional conductors presented here, there is some temporal overlap between the professional and student data sets. Assuming direct transition from lower to higher education, those born in the 1980s would be represented in the student population in the early 2000s. This indicates the female percentage of conductors born in the 1980s and engaged by the *Berufsorchester* in the 2019/2020 season was only 16% despite comprising ~30% of the student population in the early 2000s.

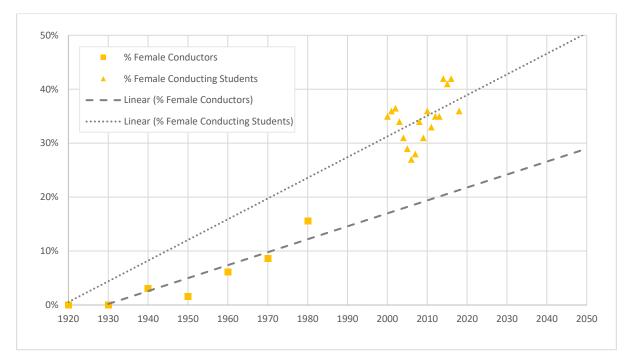


Figure 12. Comparison of female proportions of professional conductors engaged by Berufsorchester on main subscription concerts in the 2019/2020 season by birth decade (n = 481) and student population in German higher education institutions. For the professional conductors, each point represents conductors born in the corresponding decade (e.g. – point (1950, 1.6%): female conductors comprised 1.6% of all conductors born from 1950-1959). Student data retrieved from the MIZ (*Studierende in Studiengängen Für Musikberufe – Nach Frauen, Männern Und Ausländer*innen*, 2020).

Upward trends are apparent in both data sets. If female students transitioned from study into professional *Berufsorchester* work at the same rate as their male counter parts, this would result in two offset parallel trend lines. However, the divergence between the trend lines indicates the female proportion of conductors engaged by the *Berufsorchester* is increasing at a lower rate than that of the student population. This suggests that despite increased female interest, substantial barriers to female professionalization as conductors continue to exist in Germany. Potential reasons for this, as enumerated and discussed in an article by Steinberg (2012), include a low rate of female applicants, the family-incompatible nature of orchestra work, and implicit bias against female leaders.

Females in Leadership Positions Relative to National German Labor Market

According to the German Federal Labor Agency (*Bundesagentur für Arbeit*), females accounted for 46% of employed persons in 2018. However, a stark leadership gap exists, and women filled only 27% of leadership positions (*Die Arbeitsmarktsituation von Frauen Und Männern 2018*, 2019). This trend is borne out in the female proportion of orchestra ensemble members relative to executive leadership [**Fig. 13**]. The data compiled by the MDR show that females comprised 38% of all *Berufsorchester* musicians in 2018 (*Frauen in Berufsorchestern*, 2020) in comparison to just 8% of the executive level positions as general music directors and artistic directors [**Fig. 1**]. These figures come from two separate populations, and therefore are not directly analogous with the figures presented for the general labor market. However, these examples do suggest that the *Berufsorchester* engage females at an overall rate lower than the national female employment rate, and that the leadership gap is wider in *Berufsorchester* than in Germany as a whole.

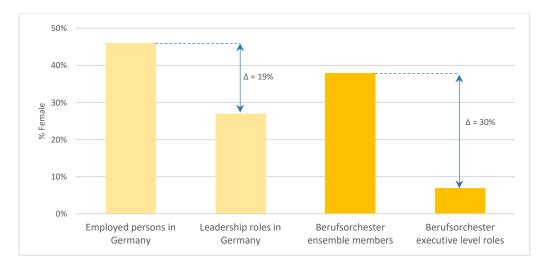


Figure 13. Comparison of percentages of women in the national labor force (*Die Arbeitsmarktsituation von Frauen Und Männern 2018*, 2019) and that in *Berufsorchester* as ensemble members (*Frauen in Berufsorchestern*, 2020) and executive roles.

CONCLUSIONS AND QUESTIONS FOR FURTHER RESEARCH

The above research demonstrates a clear disparity between male and female representation in the German *Berufsorchester*. As soloists, male musicians held all statistically significant majorities for the instruments analyzed. The confines of the standard concert format together with the engrained male bias of the classical canon and its perpetuation resulted in little representation for female composers in programming. The disparity in female representation between executive level positions and ensemble members indicates a large leadership gap, and the rate of females in leadership positions is extremely low in relation to the German national labor force.

The lack of women in higher positions raises concerns of a gender pay gap across the *Berufsorchester*. There are two contributing factors to a gender pay gap, the first of which is disparity in pay for the equal work. For musicians governed by the TVK, equal pay within ranks is assured; anything less than equal pay for equal work would, in any case, be obviously illegal. However, a gender pay gap is calculated by finding the difference in the average income between men and women across all roles, which highlights the second contributing factor: unequal distribution of higher paid positions. The leadership gap in *Berufsorchester* is therefore a direct indicator of a gender pay gap. It would further be exacerbated by the fact that there are fewer women in higher paid orchestras altogether, and that women are underrepresented in higher paid instrumentalist positions, such as concertmaster and section leader (*Dossier: Frauen in Berufsorchestern*, 2019). In order to determine the true gender pay gap, further gender-disaggregated statistics regarding the hierarchies within an orchestra are necessary, as well as wage information for orchestra associates not subject to the TVK.

A wealth of talent goes underutilized when half the population is discouraged from participation in these ensembles either actively or passively, and therefore barriers to entry must be further scrutinized and addressed. Equality of opportunity is meaningless without equity. The hiring practice of simply selecting the person who seems best for the job does not consider underlying systemic problems, including the effects of implicit bias, which bars certain groups from entering consideration in the first place. Women, as well as minority groups, cannot be blamed for the perpetuation of a system in which they are, for whatever reasons, not fully able to participate and thereby effect change. This large amount of responsibility lies with institutions themselves, and orchestras everywhere could do more to actively encourage and cultivate young female musicians. In doing so, they would be doing their part to rectify an historical inequity, to develop a neglected talent pool, and would ultimately reap the benefits of diversification. Excellent examples exist worldwide of performance organizations actively fostering female talent such as the Welsh National Opera Female Conductor in Residence Program, the Dallas Opera Hart Institute for Women Conductors and the Women in Musical Leadership fellowship, a joint program headed by Tapestry Opera, Pacific Opera and the Toronto Symphony Orchestra.

This report centered on gender, but it is only one of many aspects of identity. Intersectional research pertaining to the multitude other facets of identity is necessary to evaluate the diversity participation in the professional orchestra realm. Investigations of this nature into ensembles outside the *Berufsorchester*, such as the opera houses, "free" ensembles, and other chamber orchestras, are likewise needed to obtain a more complete measure of the musical landscape that has grown out of the classical tradition. With appropriate assessment and benchmarking, systemic solutions can be put in place to pursue equity, diversity, and inclusion and foster a more vibrant cultural landscape.

SUPPLEMENTAL MATERIAL

 Table 7. Orchestra descriptions and classification. Source: Das Orchester, 2018

Location	Orchestra	Classification re: remuneration	Designated positions	Study classification
	Publicly financed state and municipal orchestras			
Aachen	Sinfonieorchester Aachen	TVK B	66	В
Altenburg/Gera	Philharmonisches Orchester Altenburg-Gera (GmbH)	TVK B/F (HTV)	72	B/F
Annaberg/Aue	Erzgebirgische Philharmonie Aue (GmbH)	TVK D (HTV)	50	D
Augsburg	Augsburger Phillharmoniker/Städtische Bühnen	TVK B	70	В
Bad Lausick	Sächsische Bläserphilharmonie/Deutsche Bläserakademie (GmbH)	HTV (ca. D)	34	D
Bad Reichenhall	Bad Reichenhaller Philharmonie (e.V.)	HTV (C)	39	С
Baden-Baden	Baden-Badener Philharmonie	TVK (Zulage nach B)	38	В
Bamberg	Bamberger Symphoniker, Bayerische Staatsphilharmonie (Stiftung)	TV Bamberger Symphoniker	110	Own fee schedule
Bautzen	Sorbisches Kammerorchester/Sorbisches National-Ensemble (GmbH)	HTV (C)	22	С
Berlin	Staatskapelle Berlin/Staatsoper Unter den Linden (Stiftung)	TV Staatskapelle Berlin	136	Own fee schedule
Berlin	Konzerthausorchester Berlin	TV Konzerthausorchester	108	Own fee schedule
Berlin	Orchester der Komischen Oper (Stiftung)	TVK A/F1	112	A/F1 (+Zulage), A/F2
Berlin	Berliner Philharmoniker (Stiftung)	TV Berliner Philharmoniker	128	Own fee schedule
Berlin	Deutsches Symphonie-Orchester Berlin (GmbH)	TV DSO Berlin	114	Own fee schedule
Berlin	Orchester der Deutschen Oper Berlin (Stiftung)	TVK A/F1 + Zulage	125	A/F1 (+Zulage), A/F2
Bielefeld	Bielefelder Philharmoniker/Theater Bielefeld	TVK B	67.5	в
Bochum	Bochumer Symphoniker	TVK A	85	A
Böhlen	Leipziger Symphonieorchester (GmbH)	HTV (D)	40	D
Bonn	Leipziger Symphonieorchester (GmbH) Beethoven Orchester Bonn/Theater der Bundesstadt Bonn	TVK A/F1	40	
				A/F1 (+Zulage), A/F2
Brandenburg	Brandenburger Symphoniker/Brandenburger Theater (GmbH)	TVK C (HTV)	51	с
Braunschweig	Staatsorchester Braunschweig/Staatstheater	TVK A	85	A
Bremen	Bremer Philharmoniker (GmbH)	ohne TV (ca. A)	82	А
Bremerhaven	Philharmonisches Orchester Bremerhaven/Stadttheater	TVK C	52.5	С
Chemnitz	Robert-Schumann-Philharmonie/Städtisches Theater (GmbH)	TVK A (HTV)	99	А
Coburg	Philharmonisches Orchester Landestheater Coburg	TVK B	66	В
Cottbus	Philharmonisches Orchester des Staatstheaters Cottbus (Stiftung)	TVK B/F (HTV)	72.5	B/F
Darmstadt	Staatsorchester Darmstadt/Staatstheater	TVK A (HTV)	78	А
Dessau	Anhaltische Philharmonie Dessau/Anhaltisches Theater Dessau	TVK B/F (HTV)	78.5	B/F
Detmold	Symphonisches Orchester des Landestheaters Detmold (GmbH)	TVK B (HTV)	52	В
Dortmund	Dortmunder Philharmoniker/Theater Dortmund	TVK A	100	А
Dresden	Sächsische Staatskapelle Dresden/Staatsoper	TV Sächsische Staatskapelle	159	Own fee schedule
Dresden	Dresdner Philharmonie	TV Dresdner Philharmonie	116	Own fee schedule
Dresden	Orchester der Staatsoperette Dresden	TVK B (HTV)	59	В
Duisburg	Duisburger Philharmoniker	TVK A/F2	93	A/F1 (+Zulage), A/F2
Düsseldorf	Düsseldorfer Symphoniker	TVK A/F1	130	A/F1 (+Zulage), A/F2
Erfurt	Philharmonisches Orchester Erfurt/Theater Erfurt	TVK B/F	62	B/F
Essen	Essener Philharmoniker/Theater und Philharmonie Essen (GmbH)	TVK A/F2	99.5	A/F1 (+Zulage), A/F2
Flensburg	Schleswig-Holsteinisches Sinfonieorchester/Landestheater (GmbH)	TVK B	59	В
Frankfurt/Main	Frankfurter Opern- und Museumsorchester/Oper Frankfurt (GmbH)	TVK A/F1 + Zulage (HTV)	115	A/F1 (+Zulage), A/F2
Frankfurt (Oder)	Brandenburgisches Staatsorchester Frankfurt (Oder)	TVK A (HTV)	86	A
Freiberg	Mittelsächsische Philharmonie/Mittelsächsisches Theater (GmbH)	TVK C (HTV)	45	С
Freiburg	Philharmonisches Orchester Freiburg/Theater Freiburg	тук в	70.5	В
Gießen	Philharmonisches Orchester Gießen/Stadttheater Gießen (GmbH)	TVK D	40	D
Görlitz	Neue Lausitzer Philharmonie/Theater Görlitz (GmbH)	TVK C (HTV)	56	С
Göttingen	Göttinger Symphonie-Orchester (e.V.)	HTV (B)	51	В
Gotha/Eisenach	Thüringen Philharmonie Gotha-Eisenach (e.V.)	HTV (unter B)	59	B
Greifswald/Stralsund	Philharmonisches Orchester Vorpommern/Theater Vorpommern (GmbH)	TVK B/F (HTV)	56	B/F
Greiz/Reichenbach	Vogtland Philharmonie Greiz Reichenbach (e.V.)	HTV (ca. C)	65	С
Hagen	Philharmonisches Orchester Hagen/Theater Hagen	TVK B	60	В
Halberstadt	Orchester des Nordharzer Städtebundtheaters (Zweckverband)	TVK D (HTV)	35	D
Halle	Staatskapelle Halle/Theater Oper und Orchester (GmbH)	TVK A (HTV)	132	A
Hamburg	Philharmonisches Staatsorchester Hamburg	TVK A/F1 mit Zulage	134	A/F1 (+Zulage), A/F2
Hamburg	Symphoniker Hamburger, Laeiszhalle Orchester (e.V.)	HTV (ca. A)	68	А
Hannover	Niedersächsische Staatsoper/Niedersächsisches Staatsorchester Hannover	TVK A/F2	104.5	A/F1 (+Zulage), A/F2
Heidelberg	(GmbH) Philharmonisches Orchester Heidelberg/Theater Heidelberg	TVK B	62	В
Herford	Nordwestdeutsche Philharmonie (e.V.)	TVK B/F	75	B/F
Hilchenbach	Philharmonie Südwestfalen (e.V.)	TVK B (HTV)	61.5	В

Table 7 (con't)

Location	Orchestra	Classification re: remuneration	Designated positions	Study classification
Hildesheim	Theater für Niedersachsen - TfN-Philharmonie Hildesheim (GmbH)	TVK D	30	D
Hof/Saale	Hofer Symphoniker (GmbH)	HTV (ca. B)	63	В
ena	Jenaer Philharmonie	HTV (B/F)	85	B/F
Kaiserslautern	Orchester des Pfalztheaters Kaiserslautern	TVK B	66	В
Karlsruhe	Badische Staatskapelle/Staatstheater	TVK A/F2	99	A/F1 (+Zulage), A/F2
Kassel	Orchester des Staatstheaters Kassel/Staatstheater	TVK A	78	А
Kiel	Philharmonisches Orchester Kiel/Bühnen der Landeshauptstadt (AoR)	TVK B	79	В
Koblenz	Staatsorchester Rheinische Philharmonie/Theater Koblenz	TVK B/F (HTV)	70	B/F
Köln	Gürzenich-Orchester Köln	TVK A/F1 mit Zulage	130	A/F1 (+Zulage), A/F2
Konstanz	Südwestdeutsche Philharmonie	TVK B	63.75	В
Krefeld/Mönchengladbach	Niederrheinische Sinfoniker/Theater Krefeld und Mönchengladbach	TVK B/F	87	B/F
Leipzig	(GmbH) Gewandhausorchester Leipzig	TV Gewandhausorchester	185	Own fee schedule
Leipzig	Orchester der Musikalischen Komödie Leipzig	TVK B	47	B
Lübeck	Philharmonisches Orchester der Hansestadt Lübeck (GmbH)	ТУК В	66	В
Ludwigshafen			86	A/F1 (+Zulage), A/F2
-	Deutsche Staatsphilharmonie Rheinland-Pfalz	TVK A/F2	30	D
üneburg	Lüneburger Symphoniker/Theater Lüneburg (GmbH)	TVK D (HTV)		
Magdeburg Mainz	Magdeburgische Philharmonie/Theater Magdeburg	TVK B/F TVK B/F (HTV)	82 69.5	B/F
Mainz Aannhaim	Philharmonisches Staatsorchester Mainz/Theater Mainz	,		B/F
Mannheim	Nationaltheaterorchester Mannheim	TVK A	103	A
Meiningen	Meininger Hofkapelle/Südthüringesches Staatstheater (Stiftung)	TVK B	61	В
München	Münchner Philharmoniker	TV Münchner Philharmoniker	120	Own fee schedule
München	Bayerisches Staatsorchester/Staatsoper	TV Bayerisches Staatsorchester	144	Own fee schedule
München	Orchester des Staatstheaters am Gärtnerplatz	TVK A/F2 (HTV)	78	A/F1 (+Zulage), A/F2
München	Münchner Symphoniker (e.V.)	ohne TV (unter B)	60	В
Münster	Sinfonieorchester Münster/Städtische Bühnen	TVK B	66	В
Neubrandenburg/Neustrelitz	Neubrandenburger Philharmonie (GmbH)	TVK B (HTV)	68	В
Nordhausen/Sondershausen	Loh-Orchester Sondershausen/Theater Nordhausen (GmbH)	TVK B (HTV)	52	В
Nürnberg	Staatsphilharmonie Nürnberg/Staatstheater (Stiftung)	TVK A	92	A
Nürnberg	Nürnberg Symphoniker (e.V.)	TVK B (HTV)	56	В
Oldenburg	Oldenburgisches Staatsorchester/Staatstheater	TVK B	69	В
Osnabrück	Osnabrücker Symphonieorchester/Städtische Bühnen Osnabrück (GmbH)	TVK B	59	В
Passau	Niederbayerische Philharmonie/Landestheater Niederbayern	TVK D (HTV)	41.75	D
Pforzheim	(Zweckverband) Badische Philharmonie	TVK D	42	D
Plauen/Zwickau	Philharmonisches Orchester des Theaters Plauen-Zwickau (GmbH)	TVK B (HTV)	66	В
Potsdam	Deutsches Filmorchester Babelsberg (e.V.)	ohne TV (unter D)	51	D
Recklingshausen/Gelsenkirchen	Neue Philharmonie Westfalen (e.V.)	TVK B/F (HTV)	124	B/F
Regensburg	Philharmonisches Orchester Regensburg/Städtische Bühnen	TVK B	66	B
Remscheid/Solingen	Bergische Symphoniker (GmbH)	TVK B (HTV)	66	В
Reutlingen	Württembergische Philharmonie Reutlingen (Stiftung)	TVK B (HTV)	68	В
Riesa/Radebeul	Elbland Philharmonie Sachsen	TVK C (HTV)	72	C
Rostock Saalfeld/Rudolstadt	Norddeutsche Philharmonie/Volkstheater Rostock (GmbH)	HTV A	70	A C
•	Thüringer Symphoniker/Thüringer Landestheater (GmbH)	TVK C (HTV)	42	
Saarbrücken	Saarländisches Staatsorchester/Staatstheater	TVK A	81	A
Schönebeck	Mitteldeutsche Kammerphilharmonie (GmbH)	HTV (unter D)	22	D
Schwerin	Mecklenburgische Staatskapelle Schwerin/Staatstheater (GmbH)	TVK A (HTV)	59	A
Stuttgart	Staatsorchester Stuttgart/Staatsoper	TVK A/F1	131	A/F1 (+Zulage), A/F2
Stuttgart	Stuttgarter Philharmoniker	TVK A (HTV)	86	A
Frier	Philharmonisches Orchester der Stadt Trier/Theater Trier	TVK C	56	С
Jlm/Donau	Philharmonisches Orchester der Stadt Ulm/Ulmer Theater	ТVК С	56	С
Weimar	Staatskapelle Weimar/Deutsches Nationaltheater (GmbH)	TVK AF/2	100	A/F1 (+Zulage), A/F2
Viesbaden	Orchester des Hessischen Staatstheaters Wiesbaden	TVK A (HTV)	78	А
Würzburg	Philharmonisches Orchester Würzburg/Theater Würzburg	TVK B	66	В
Nuppertal	Sinfonieorchester Wuppertal/Wuppertaler Bühnen (GmbH)	TVK A	88	А
	Chamber orchestras			
Heilbronn	Württembergisches Kammerorchester Heilbronn	ohne TV (A)	20	Chamber orchestras
ngolstadt	Georgisches Kammerorchester Ingolstadt	ohne TV (D)	16	Chamber orchestras
Mannheim	Kurpfälzisches Kammerorchester	HTV (ca. D)	14	Chamber orchestras
München	Münchener Kammerorchester	ohne TV (A)	21	Chamber orchestras

Table 7 (con't)

Location	Orchestra	Classification re: remuneration	Designated positions	Study classification
Prenzlau	Preußisches Kammerorchester	ohne TV (unter D)	12	Chamber orchestras
Stuttgart	Stuttgarter Kammerorchester	ohne TV (A)	17	Chamber orchestras
Wernigerode	Philharmonisches Kammerorchester Wernigerode	HTV (unter D)	20	Chamber orchestras
	Radio orchestras			
Berlin	Rundfunk-Sinfonieorchester Berlin	bes. TV (TVK A/F1 + Zulage)	114	Radio orchestras
Frankfurt/Main	hr-Sinfonieorchester	bes. TV	114	Radio orchestras
Hamburg	NDR Elbphilharmonie Orchester	bes. TV	113	Radio orchestras
Hannover	NDR Radiophilharmonie	bes. TV	86	Radio orchestras
Köln	WDR Sinfonieorchester	bes. TV	111	Radio orchestras
Köln	WDR Funkhausorchester	bes. TV	52	Radio orchestras
Leipzig	MDR Sinfonieorchester	bes. TV	116	Radio orchestras
München	Symphonieorchester des Bayerischen Rundfunks	bes. TV	116	Radio orchestras
München	Muenchner Rundfunkorchester	bes. TV	55	Radio orchestras
Saarbrücken/Kaiserlautern	Deutsche Radio Philharmonie Saarbruecken-Kaiserlautern	bes. TV	96	Radio orchestras
Stuttgart	SWR Symphonieorchester	bes. TV	167	Radio orchestras

 Table 8. Soloist appearances by instrument and soloist gender.

Instrument	n	Male (%)	Female (%)	Bias	Diff (%)	р
Flute	36	63.89	36.11	М	27.78	not sig.
Oboe/English Horn	29	75.86	24.14	М	51.72	0.005
Clarinet/Bass Clarinet	56	66.07	33.93	М	32.14	0.016
Bassoon	27	81.48	18.52	М	62.96	0.001
Saxophone	44	61.36	38.64	М	22.73	not sig.
French Horn	45	95.56	4.44	м	91.11	< 0.000
Trumpet	49	81.63	18.37	М	63.27	< 0.000
Trombone	6	100.00	0.00	м	100.00	not sig.
Tuba	6	100.00	0.00	М	100.00	not sig.
Violin	477	57.02	42.98	м	14.05	0.002
Viola	40	75.00	25.00	М	50.00	0.002
Cello	241	70.54	29.46	м	41.08	< 0.000
Bass	6	100.00	0.00	М	100.00	not sig.
Percussion	41	80.49	19.51	М	60.98	< 0.000
Harp	17	58.82	41.18	М	17.65	not sig.
Harpsichord	6	100.00	0.00	м	100.00	not sig.
Organ	25	60.00	40.00	М	20.00	not sig.
Piano	544	66.91	33.09	М	33.82	< 0.000
Voice	829	46.68	53.32	F	6.63	not sig.
Other	44	90.91	9.09	М	81.82	< 0.000
Total	2570	60.74	39.26	м	21.48	< 0.000

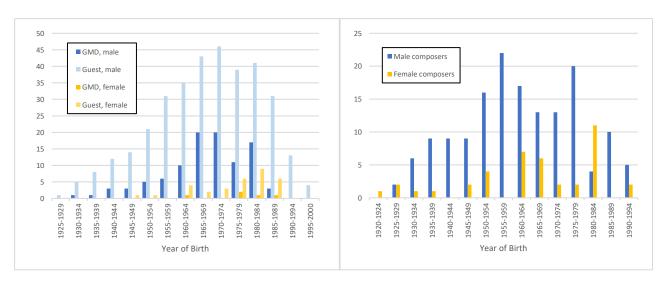


Figure 14. Distribution of conductors (left) and living composers (right) by year of gender and year of birth.

REFERENCES

Adrians, F. (2020). Mit der Mittagshexe auf Land. Innovative Orchester des Jahres. Das Orchester, 2/20.

Ahrens, C. (2018). Der lange Weg von Musikerinnen in die Berufsorchester. *Online-Schriftenreihe des Sophie Drinker Instituts I*, 84.

Allmendinger, J., & Hackman, J. R. (1995). The More, the Better? A Four-Nation Study of the Inclusion of Women in Symphony Orchestras. *Social Forces*, *74*(2), 423–460. JSTOR.

Bermel, D. (2013, September 4). Why Aren't Composers Writing More Symphonies Today? In *Deceptive Cadence*. NPR. https://www.npr.org/sections/deceptivecadence/2013/09/03/218634928/why-arent-composers-writing-more-symphonies-today

Blankenburg, E. M. (2005). Dirigentinnen gestern und heute. Das Orchester, 5/05.

Bode, M. (2002). *Die Situation junger Dirigentinnen in Deutschland—Vestandsaufnahme und Entwicklungsmöglichkeiten* (EX 160) [Hochschule für Musik und Theater Hamburg]. Archiv Frau und Musik.

Byo, J. (1991). An Assessment of Musical Instrument Preferences of Third-Grade Children. *Bulletin of the Council for Research in Music Education*, *110*, 21–32.

Casula, C. (2019). Gender and the Classical Music World: The unaccomplished professionalization of women in Italy. *Per Musi*, *39*, 1–24.

Citron, M. J. (1990). Gender, Professionalism and the Musical Canon. *The Journal of Musicology*, 8(1), 102–117. https://doi.org/10.2307/763525

Classical Music in 2017: The year in statistics. (2017). bachtrack.

Conway, C. (2000). Gender and Musical Instrument Choice: A Phenomenological Investigation. *Bulletin of the Council for Research in Music Education*, *146*, 1–17.

Coury, S., Huang, J., Kumar, A., Prince, S., Krivkovich, A., & Yee, L. (2020). *Women in the Workplace*. McKinsey & Company.

Die Arbeitsmarktsituation von Frauen und Männern 2018 (Berichte: Blickpunkt Arbeitsmarkt). (2019). Bundesagentur für Arbeit.

Dossier: Frauen in Berufsorchestern. (2019). Deutsche Orchestervereinigung. https://www.dov.org/position/dossier-frauen-berufsorchestern

Drynda, Y. (2002). es geht um musik und nicht um macht: Zur situation von frauen am dirigentenpult. *Neue Zeitschrift Für Musik*, *163*(1), 30–33. JSTOR.

Felbick, L. (2015). Das ,Hohe Kulturgut Deutscher Musik' und das ,Entartete' über die Problematik des Kulturorchester-Begriffs. *Zeitschrift für Kulturmanagement*, 1(2), 85–116. https://doi.org/10.14361/zkmm-2015-0206

Fortnez, P. M., Boyle, J. D., & DeCarbo, N. J. (1993). A Study of Middle School Band Students' Instrument Choices on JSTOR. *Journal of Research in Music Education*, *41*(1), 28–39. JSTOR.

Frauen in Berufsorchestern. (2020). Mitteldeutscher Rundfunk. https://www.mdr.de/mdr-klassik-radio/frauen-in-berufsorchestern-132.html

Generalmusikdirektorin Matiakh verlässt Staatskapelle Halle. (2020, February 4). *Süddeutsche Zeitung*. https://www.sueddeutsche.de/kultur/kultur-halle-saale-generalmusikdirektorin-matiakh-verlaesst-staatskapelle-halle-dpa.urn-newsml-dpa-com-20090101-200204-99-774139

Kaboth, D. (n.d.). Nichts geht ohne den Orchestervorstand. *Klassik.Com*. Retrieved January 28, 2021, from https://professionals.klassik.com/recht/artikel.cfm?AID=1202&Beitrag=Nichts%20geht%20ohne%20den%2 0Orchestervorstand

Madeleine Carruzzo. (n.d.). Berliner Philharmoniker. Retrieved January 31, 2021, from https://www.berliner-philharmoniker.de/en/orchestra/musician/madeleine-carruzzo/

Mertens, G. (2019). Orchester, Rundfunkensembles und Opernchöre. In *Musikleben in Deutschland* (pp. 190–217). Deutscher Musikrat, Deutsches Musikinformationszentrum.

Mertens, G. (2020). Orchesterarbeitsrecht. In *Handbuch Kulturmanagement* (71st ed., pp. 107–137). DUZ Medienhaus.

Music: THE SYMPHONIC FORM IS DEAD. (1968, August 30). *Time*. http://content.time.com/time/subscriber/article/0,33009,844603,00.html

Orchesteraufstellung. (2018). Das Orchester, 2.18.

Orchestervorstand der Rheinischen Philharmonie. (2016, 9/2016). rhein gehört, 13, 15.

Paternoga, S. (2005). Orchestermusikerinnen: Frauenanteile an den Musikhochschulen und in den Kulturorchestern. *Das Orchester*, *5/05*, 8–14. Melvyl.

Sergeant, D. C., & Himonides, E. (2019). Orchestrated Sex: The Representation of Male and Female Musicians in World-Class Symphony Orchestras. *Frontiers in Psychology*, *10*, 1760. https://doi.org/10.3389/fpsyg.2019.01760

Steinbeck, A. (2012). Warum es Dirigentinnen in Deutschland noch immer schwer haben. *Archiv für Musikwissenschaft*, 79–86. JSTOR.

*Studierende in Studiengängen für Musikberufe – nach Frauen, Männern und Ausländer*innen.* (2020). Deutsches Musikinformationszentrum.

Symphonieorchester. (n.d.). Deutsches Musikinfromationszentrum. Retrieved October 15, 2019, from http://www.miz.org/institutionen/symphonieorchester-s33

Yellen, J. Y. (2020, May 7). The history of women's work and wages and how it has created success for us all. *Brookings*. https://www.brookings.edu/essay/the-history-of-womens-work-and-wages-and-how-it-has-created-success-for-us-all/