

## Franceschino Back Home

Paolo Bravi and Salvatore Carboni<sup>1</sup>

### Introduction: A travelling musician<sup>2</sup>

The 2016 ESEM conference focused on the concept of ‘transhumance,’ possibly paying homage to the Sardinian culture where ‘pastoralism’ has always played a central role, both as an economic activity and as a social complex that can generate, orient and shape specific modes of culture and expressions. This article focuses on this very theme so as to observe and analyse its effects on the vocality of Francesco Demuro, one of modern-day Sardinia’s most renowned professional singers and recently the subject of an artistic ‘transhumance’ from local, traditional music to Western opera music. In fact, in the past decade, his career as a singer has brought him to star in operas performed in some of the most important venues in the world,<sup>3</sup> while for quite some time previously he was the most requested singer in the field of one genre of traditional Sardinian music, the *Cantu in Re* (Perria 2012). Sardinian music was the core music that he came into contact with during the years of his precocious and intense apprenticeship and during the first years of his professional career. Even today, whenever he has time off from his work as an opera singer, and whenever he manages to spend some time in his native town of Porto Torres in Sardinia, local dilettantes and his former colleagues in the field of Sardinian song can still persuade him to sing Sardinian songs either on stage or at private gatherings.

---

<sup>1</sup> Paolo Bravi, independent scholar (Italy), [paolobravi.gm@gmail.com](mailto:paolobravi.gm@gmail.com); Salvatore Carboni, independent scholar (Italy), [carbtores@gmail.com](mailto:carbtores@gmail.com).

<sup>2</sup> This article is the result of joint research by the two authors. For the mere sake of academic requirements, Paragraph 1 (Introduction) is to be attributed to Salvatore Carboni, Paragraph 2 (Research) to Paolo Bravi, and Paragraph 3 (Voice, styles and emotions) to both.

<sup>3</sup> Cfr. [http://operabase.com/a/Francesco\\_Demuro/5618](http://operabase.com/a/Francesco_Demuro/5618), last access 15 February 2021.



**Figure 1:** Three photographs of Francesco Demuro singing on stage in the two fields where he has achieved the highest levels of professionalism: the traditional Sardinian *Canto in Re* (top-left) and opera music (top-right). In the photo above, Francesco is singing a song from the *Canto in Re* repertory, accompanied by the guitarist Pietro Nieddu, at the end of an opera recital held at the Andrea Parodi theatre in his native town of Porto Torres on 26 March 2015. Sources: Upper images: Internet; lower image: Sardegna Live Web TV, “Francesco Demuro.” <https://www.youtube.com/watch?v=Ra3ijpXHUEo> (26 March 2015).

In this case we are talking about a ‘transhumance’ of musical style. This however has led to a dramatic shift in many other aspects of his life. For Francesco Demuro or “Franceschino,” as he is known to thousands of Sardinian music enthusiasts and personal friends (a nickname which dates back to his very

first appearances on stage as a *Canto in Re* singer)<sup>4</sup> the ‘shift’ from traditional music to opera singing has changed his way of life, his daily acquaintances and his activity as a musician. We have chosen to concentrate on an aspect that regards the effects of studying and the practice of singing styles that involve a very different approach to the voice, in an attempt to understand the effects a ‘transhumance’ of musical genre may have had on Franceschino’s singing voice.

### **Short notes on the Canto a chitarra in Sardinia**

In actual fact, the expression *Canto in Re* (Song in D) only corresponds to one of the different expressive modalities of popular Sardinian music performed by Francesco Demuro. When we talk about *Cantare in Re* (singing in D) in Sardinia, we are referring to one of the many ways of singing with guitar accompaniment that are carried out in the northern and central parts of the Island.<sup>5</sup>

*Cantare in Re* is a traditional way of singing, the first evidence of which dates back to the early twentieth century and whose exact genesis in previous periods is impossible to reconstruct. This kind of singing is performed on both informal and public occasions. Over time, the public performances have assumed a codified form, which foresees that the singers perform the different types of songs in a fairly precise order. The current canon includes about a dozen of these different types of singing, which were almost all established by the different generations of singers prior to the Second World War. When there is more than one singer, each singer alternates with the others, taking it in turns to perform two vocal renditions, during which a poetic couplet from the Sardinian Arcadian poetry of the eighteenth and nineteenth century is recited.

The themes of the texts mainly deal with a loving and idyllic Nature, often citing rural metaphors and bucolic settings. In its original form the song was only accompanied by a guitar, but in the first half of the 1960s the accordion was gradually introduced with functions of harmonic enrichment. This style of accompaniment with both instruments playing in unison has now become hegemonic.

The singers perform these songs distributing the syllables of the text along melodic lines that have achieved a certain stability and sharing over the years. These recognisable vocal articulations are called *boghes* (‘voices’) which means voices. However, the singer is able to perform variations or deconstruct the most complex musical phrases into elementary rudiments that can be variously assembled. The way of singing called *Canto in Re* offers a possibility of creative interpretation of the highest degree, and this is

---

<sup>4</sup> As members of this group, the authors have decided to use this friendly nickname both in the title and within the text of the article. We are sure that Francesco will approve of this choice, as it is purposely intended to express both our close relationship and our appreciation for what he has done and continues to do for the development of the singing art.

<sup>55</sup> There are numerous books that offer a detailed picture of the history and the phenomenology of the *Canto in Re* (or *Canto a chitarra* [Sardinian]/*chitarra* [Italian]) musical genre. The most relevant of these, listed on a purely chronological base, are Carpi (1999); Angeli (2006); Perria (2006); Carboni (2012); Carboni and Bravi (2012).

the mode that fans consider the most rewarding and appreciable. There are also types of singing that present a more rigid and less modifiable structure. These songs are called ‘classic,’ and not only does their execution call for a substantial respect of the basic structure but they also require a remarkable ability to particularly characterise melisma and pathos in their interpretation.

The melodies of the performances, the sequences and the accordion patterns of the accompaniment all create a mixture of both tonal and modal elements that make the song easily recognisable. The opening tones of the singing and the closing of the sentences are always major; the only exception is the song called *alla corsicana* introduced in the mid-1940s, which begins in minor with closure in a corresponding major by means of a classic Picardy cadence.

As we have already said, this singing is extremely popular in the private and convivial dimension, but its social consecration has arrived in the public one, giving rise to a type of show called *gara a chitarra*. Over time the characteristics of a genuine singing competition between performers have given way to a more structured show reserved for professional or semi-professional singers.

Nonetheless, based on the way these songs are understood, remarkably contrasting opinions exist amongst the public of dilettantes and the fans of this kind of singing, depending on whether the song is more oriented towards melisma and the prevalent use of melodic ornaments, or whether a more ‘muscular’ vocality prevails that favours powerful vocal emission.

The greatest interpreters of the past are often identified as icons of these different schools of vocal interpretation and, years later, often long after their career is over, they are viewed as essential models for amateur practitioners and students. As a matter of fact, an in-depth analysis of the concepts of musical aesthetics that result from the performance and careers of *cantadores* (‘singers’) would be beyond the scope of this article. It is quite intuitive that the two ‘ideal types’ of singing – ‘muscular’ on the one hand and ‘melodic’ on the other – represent the two most distant poles of a continuum. To use such terms implies simplifying a complex and variegated matter. In actual fact, if we borrow similar categories from opera singing, we find that elements of graceful vocalism and a more dramatic lyricism coexist in every performer and that sometimes this combination varies throughout their career depending on the natural decay of their voice. Some unsuspecting ‘melodic singers’ have found themselves screaming when their voice has inevitably lost its freshness and above all its ductility.

Nonetheless, it is historically verifiable that even in the first documented interpretations, e.g. in the 1930s recordings by the triad of legendary singers Cossu, Desole and Porqueddu, there are voices that incorporate more elements of *bel canto* and those that propose a more powerful rendition of the song. This dualism, albeit variously nuanced, was present in the following decades and can still be found today. Even the great generation of the *cantadores*, who in the 1950s, 1960s and 1970s took the *Canto a chitarra* to its highest and most mature levels, depended on this dichotomy, even though, on closer inspection, it

may be more myth than fact. The singing duels between *cantadores* like Francesco Cubeddu from Bulzi and Mario Scanu from Luras are some of the most striking and renowned examples of dichotomy between ‘melodic’ and ‘muscular’ singing styles. Both of these performers can now be counted in Francesco Demuro’s personal ‘reference pantheon.’ He is now the bearer of a personal and recognisable aesthetic which represents a synthesis between the two opposite poles, thanks to the ductility of his voice and his continuous search for pathos and interpretive richness. One of the reasons that Francesco Demuro has gained such wide recognition in Sardinia is precisely the fact that his singing style in the *Canto a chiterra* achieves a happy and appreciated synthesis between the two models of singing.



**Figure 2:** Area of diffusion of the traditional Sardinian genre of *Canto in Re*, where singers are accompanied by guitar and, in most cases, also by accordion.

### ***Franceschino’s biographical sketch***

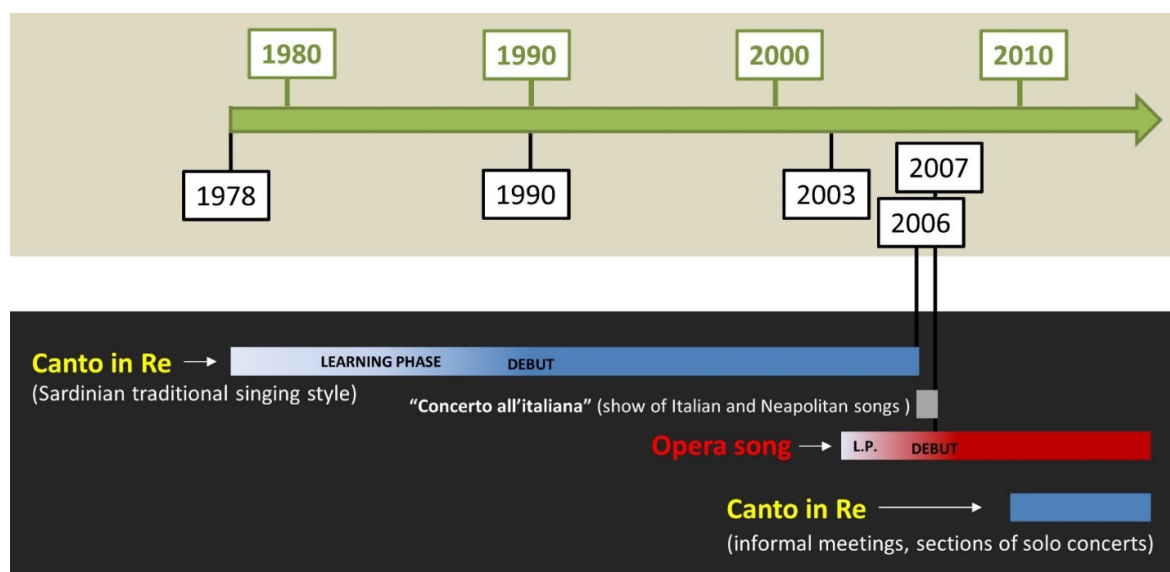
Francesco Demuro was born in Porto Torres (Sassari, Sardinia) in 1978. His family has always taken part in and held the highest esteem for the traditional Sardinian singing known as *Canto in Re*. In 1990, at the age of 12, Francesco began singing on stage and TV as a *minicantadore* (young *cantadore*), and his potential was immediately obvious. This was when amateur Sardinian singers started to call him Franceschino, an

endearment often still used today by his friends and admirers. Not long after, at the age of 18, Franceschino gained recognition amongst many singers and amateurs as one of the greatest living singers and continued performing as a professional *Canto in Re* singer in stage performances organised in Central-Northern Sardinia for patronal feasts. After some years as a top professional singer in this musical genre, he decided to try to turn his life around. He undertook a short period of study with singing teachers at the Sassari and Cagliari Conservatories, and after having abandoned his career as a professional *Canto in Re* singer in 2006 at the age of 28, in 2007 (aged 29) he began a rapid and brilliant career as an opera singer (tenore).<sup>6</sup>

Since then, Franceschino has often performed the traditional *Canto in Re* again, much to the delight of his fans. On quite a few recent occasions, he has sung Sardinian songs at (more or less) informal gatherings and at the end of his solo recital of opera songs. Fig. 3 is a synthetic sketch of the main steps in Franceschino's career, highlighting the passage from *Canto in Re* to opera music and his recent appearances as a singer of Sardinian music.

---

<sup>6</sup> It is interesting to hear what Elisabetta Scano, opera singer and singing teacher at the Conservatorio di musica di Cagliari has to say about Francesco and the short period of formal training he undertook with her: “Quando Francesco ha iniziato a studiare il canto lirico, io gli avevo proibito per un periodo di cantare il canto sardo, perché la muscolatura deve abituarsi a reggere una potenza vocale diversa. L'appoggio con l'uso parziale della maschera è diverso dall'appoggio completo, con la faringe aperta. Quindi all'inizio è necessario fare un 'digiuno' dal canto sardo o dalla musica leggera. Poi però mi sono resa conto che per Francesco non funzionava così. Lui finiva di cantare alle tre del mattino e alle dieci del mattino era a casa mia che cantava Tosca o Traviata. Nella mia esperienza personale di docente, però, generalmente ho visto che i ragazzi devono proprio abbandonare la prima impostazione per riuscire ad acquisire bene l'impostazione lirica della voce [...] Francesco racchiude in un'unica persona tutti i talenti che servono per il canto. Ha una memoria vocale, della posizione interna, molto spiccata. Con lui non ho neanche avuto mai bisogno di parlare in maniera tecnicamente approfondita della muscolatura. Bastava fargli un esempio e lui il giorno dopo se la ricordava perfettamente. [...] Avendo constatato le qualità di Francesco, lo mandai presto a fare la prima audizione. Ovviamente rimasero tutti sbalorditi. Ecco, la mia bravura secondo me è stata solo quella di capire il talento che avevo di fronte, e di avere il coraggio di dirgli che con un talento del genere, e con tutto il rispetto per il canto che aveva praticato fino ad allora, poteva puntare in alto” [tr. “When Francesco began to study opera singing, I stopped him from singing Sardinian songs for a time, because your muscles must get used to holding a different vocal power. Support with partial use of the mask is different from full support with the pharynx open. So, at the beginning it is necessary to ‘abstain’ from Sardinian singing or light music. But then I realised that it did not work like that for Francesco. He finished singing at three in the morning and at ten in the morning he was at my house singing Tosca or Traviata. In my personal experience as a teacher, however, I have generally seen that boys really do have to abandon their first training to be able to successfully acquire a voice suitable for opera singing [...] Francesco is an individual who has every talent needed for singing. He has a very strong vocal memory of internal position. I have never even needed to have an in-depth technical discussion with him about the muscle system. All I had to do was give him an example and the next day he remembered it perfectly. [...] Since I could see how good Francesco was, I soon sent him to his first audition. Obviously, they were all amazed. In this case, in my opinion, my skill lay in merely understanding the talent I had before me, and in having the courage to tell him that with such a talent, and with all due respect to the singing he had done until then, he could aim high.”] (Scano 2016).



**Figure 3:** A synthesis of the main phases and landmarks regarding the singing activities in Francesco Demuro's career.

## Research

### *Object*

The learning process, the practice, and experience as a professional singer in a musical genre implies the elaboration of a singing style. Not only do the ideas regarding what the characteristics of a beautifully shaped singing voice progressively mature on the basis of the singer's practice and experience, but also his/her vocal apparatus 'learns' and tends to adapt its muscles and shape its tissues according to the needs and the functional objectives envisaged by the singing style in question. But what happens when a singer rapidly passes from one musical genre – and singing style thereof – to another?<sup>7</sup> In this particular case, the authors have addressed the overall research question of how Franceschino's vocalicity has changed in passing from Sardinian traditional singing to opera singing. The whole issue is clearly too vast and complex to be encompassed in a single research project.<sup>7</sup> Therefore, in this case, we have chosen to

<sup>7</sup> Analysis on the singing voice has received increasing attention in the last decades. Starting from the pioneering work by Metfessel (1929), the instrumental study of singing has dramatically improved its achievements as a consequence of the availability of an ever-increasing amount of digital audio sources and the development of software specifically dedicated to the study of voice and/or musical sounds like *Praat* (Boersma and Weenink 1992–2018) and *Sonic Visualizer* (Cannam, Landone and Sandler 2010). Within the field of ethnomusicology an instrumental approach to such analysis traces back to Charles Seeger (1957), but this too has evolved greatly in recent decades. Among many other relevant contributions, we can cite here as prime examples of this type of approach in different vocal repertoires, Adamo (1992); Will (1997); Van der Meer (2014); Ambrazevičius, Budrys and Visnevskaja (2015). The use of instrumental techniques in music analysis is beneficial since not only does it provide a thorough description and understanding of the subtleties of the musical structures, but it also allows the timbric and dynamic dimensions of the singing voice to be investigated, aspects which were previously unattainable with traditional analytical means (cf. Bartók 1977). Furthermore, this approach to song analysis is able to shed light on aspects of the performance and to take an in-depth look at the nuances of the singing styles, which reveal

observe a specific and highly characteristic aspect of Franceschino’s vocality, that is his vibrato style. In particular, the article addresses three issues, namely [1] Do the characteristics of Franceschino’s vibrato change as he passes from Sardinian singing style to opera singing? [2] Did his vocal training in opera singing have effects on the vibrato he uses when he sings Sardinian traditional songs? [3] Is the vibrato controlled in the same way in the Sardinian and opera singing style?

### **Method**

The topic was investigated using the ‘bifocal’ method (Bravi 2012), which is based on both ethnographical and analytic research. Two extended interviews were carried out with the singer Francesco Demuro himself and his singing teacher, Elisabetta Scano, who is a teacher at Cagliari’s Conservatorio di Musica (Fig. 4). Analytical research on the  $f_0$  tracks of excerpts of vibrato was performed on a corpus of recordings of Demuro’s performances either as a singer of Sardinian *Canto in Re* or as an opera singer.



**Figure 4:** Two moments during and after the interviews with the singers Francesco Demuro (left) and Elisabetta Scano (right). Photographs: Paolo Bravi (left) and Salvatore Carboni (right).

### **Corpus**

The research corpus of the analysis comprises 85 excerpts of vibrato taken from 5 recordings of Demuro’s performances. These performances are relevant to five different moments in the singer’s life, from 1990 to 2015, and document his activity both in the field of Sardinian *Canto in Re* and in classical

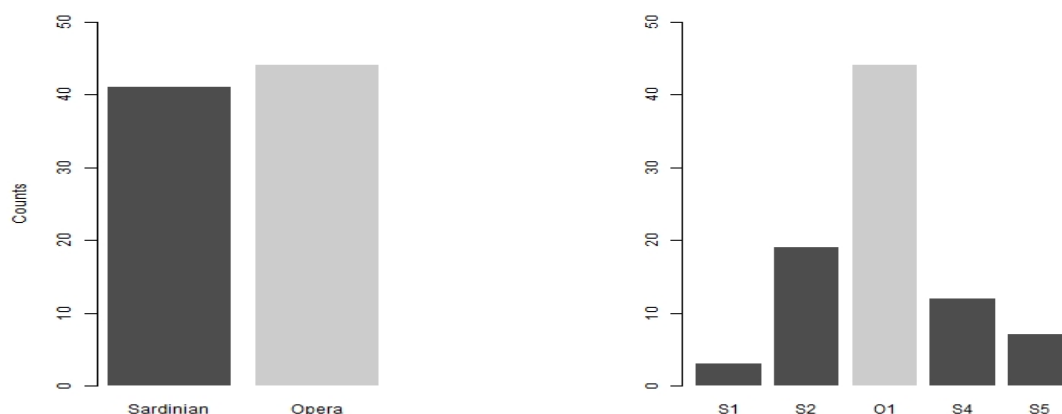
---

meaningful aspects of music making (Macchiarella 2014) and which are quite often significantly related to ideologies, stereotypes and to a wide spectrum of social values (Lawson and Nissen 2017). However, to date, a unified “science of the voice,” i.e. a discipline that can tackle and consistently evaluate the means, uses and expressive power of the voice in a global and integrated way – as wished for by Paul Zumthor in his monumental work on oral poetry (Zumthor 1983) – is still beyond our reach.



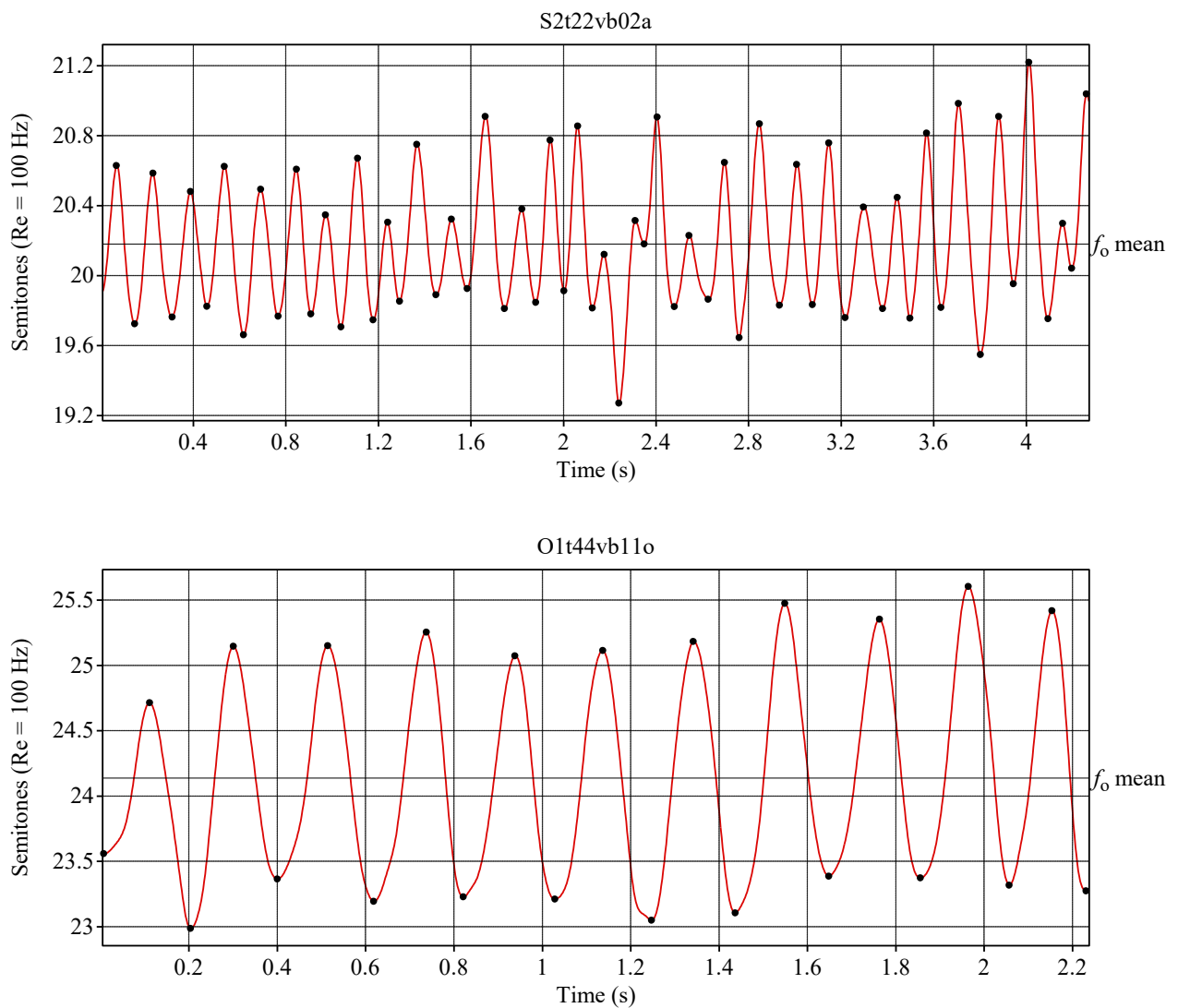
opera music.<sup>8</sup> The pitch of the vibrato segments was extracted using the Praat program (Boersma and Weenink 1992–2017). The main vibrato features (vibrato rate and extent) were computed for each excerpt through a specifically designed Praat script. Statistical analyses were performed by means of the R program (RDCT, 2011).

The distribution of the vibrato excerpts in the corpus is as follows: [1] divided per *genre* (Sardinian vs Opera): 41/44 excerpts; [2] divided per *performance* (5 performances): 3/19/44/12/7 excerpts (Fig. 5).

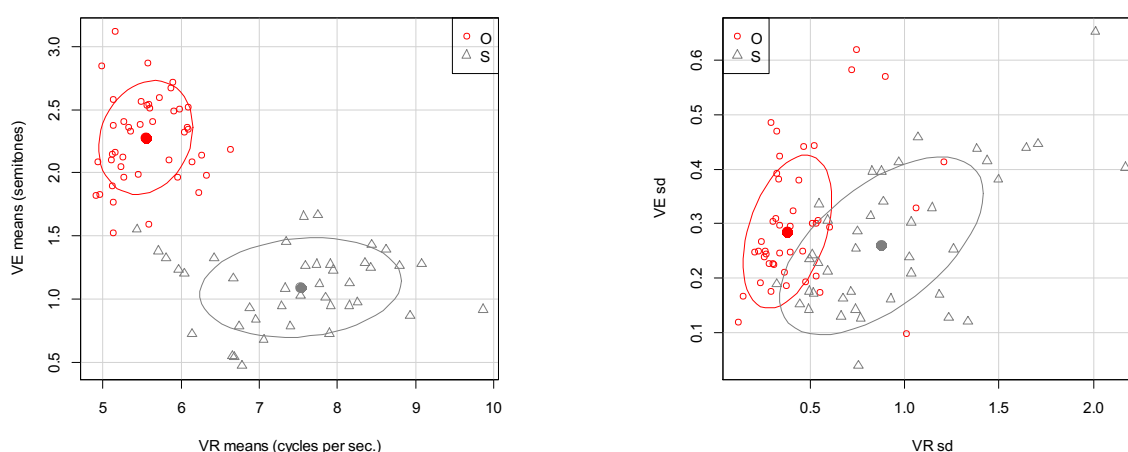


**Figure 5:** The corpus of vibrato found in the examined recordings, divided in terms of genre (left panel) and performance (right panel).

<sup>8</sup> [1] FD\_S1 – *Source*: <https://www.facebook.com/nino.manca/videos/1197912315661/> | *Place*: Cagliari, Videolina | *TV Channel* *Date*: 3 January 1990 | *Age*: 12 | *Voices*: Francesco Demuro/Massimiliano Murrighile/Salvatore Figoni | *Guitar*: Maurizio Casu | *Description*: FD sings a verse of *Cantu in Re* on TV as a *minicantadore* (“little singer”) before starting his opera-singing career; [2] FD\_S2 – *Source*: <https://www.youtube.com/watch?v=y7qyEHb2sTg> | *Place*: Borutta (SS) | *Date*: 28 June 2005 | *Age*: 28 | *Voices*: Francesco Demuro/Franco Denanni/Emanuele Bazzoni/[Unknown] Manca | *Guitar*: Tore Matzau | *Description*: an adult FD sings a verse of *Cantu in Re* on stage during a *Gara a chiterra* – before starting his opera-singing career; [3] FD\_S4 – *Source*: [https://www.youtube.com/watch?v=DPD\\_p0aWCPg](https://www.youtube.com/watch?v=DPD_p0aWCPg) | *Place*: Ploaghe (SS) | *Date*: 11 August 2013 | *Age*: 35 | *Voices*: Francesco Demuro/Emanuele Bazzoni | *Guitar*: Nino Manca | *Description*: FD sings a verse of *Cantu in Re* on stage – after starting his opera-singing career; [4] FD\_O1 – *Source*: [https://www.youtube.com/watch?v=A8eK7N\\_OuCI](https://www.youtube.com/watch?v=A8eK7N_OuCI) | *Place*: Porto Torres (SS) | *Date*: 29 June 2014 – *Age*: 36 | *Voice*: Francesco Demuro – *Piano*: [Unknown] | *Description*: FD sings the opera aria “Nessun dorma” from G. Puccini “Turandot”; [5] FD\_S5 – *Source*: <https://www.youtube.com/watch?v=Ra3ijpXHUEo> | *Place*: Porto Torres (Teatro “Andrea Parodi”) | *Date*: 27 March 2015 | *Age*: 37 | *Voice*: Francesco Demuro | *Guitar*: Pietro Nieddu | *Description*: FD sings a verse of *Cantu in Re* at the end of an operatic performance – after starting his operatic career. All sources were last accessed on 15 February 2021.



**Figure 6:** Fundamental frequency tracks in the excerpts of vibrato, taken from a performance of traditional Sardinian *Canto in Re* (top panel) and operatic singing (bottom panel) respectively.



**Figure 7:** Rate [VR] and extent [VE] in the excerpts of vibrato, divided per musical genre ([O]pera vs. [S]ardinian traditional *Canto in Re*): means (left panel) and standard deviations (right panel).

### Analysis

*Style* – The vibrato in Franceschino’s performances is realised in different ways and is clearly genre-dependent. A simple visual inspection of the fundamental frequency tracks in vibrato excerpts taken from a performance of *Canto in Re* and an opera performance clearly shows this distinction (Fig. 6). The graphs in Fig. 7, which show the mean and the standard deviation of the most relevant features of the vibrato, i.e. the vibrato rate and the vibrato extent, show that the vibrato adopted while singing traditional Sardinian songs is significantly different from the one used in opera singing.<sup>9</sup> In the latter case, the vibrato is ‘narrower’ (i.e. has a higher rate), ‘smaller’ (i.e. has a lower extent), and less regular as far as rate is concerned.<sup>10</sup>

*Evolution* – The second research question was addressed by comparing the results regarding the possibility of discovering an interference between the two vibrato styles in his recent performances, which see Franceschino still performing at private and public meetings where he sings traditional Sardinian *Canto in Re*, alongside his now predominant activity as an opera singer.

According to Franceschino, it is impossible to pass from one genre to the other (i.e. from opera singing to Sardinian singing) without losing/changing something in the way he sings. He says that the passage – both from Sardinian voice to opera and vice versa – is possible, but a period of study (or of re-

<sup>9</sup> For a detailed examination of the acoustic and perceptual aspects related to vibrato, cf. Seashore (1938, 33–52); Sundberg (1987, 163–76); Deutsch (1999, 195–203); Fussi and Magnani (2010, 264–66). As regards traditional singing styles within Sardinian music, cf. Bravi (2012); Bravi (2015, 91–104).

<sup>10</sup> The statistical significance of the differences was evaluated by means of Wilcoxon rank sum tests with continuity correction. The adopted significance threshold was p-value < 0.001. Results are as follows: W = 80, p-value < 0.001 (vibrato rate means); W = 209, p-value < 0.001 (vibrato rate sd); W = 1799, p-value < 0.001 (vibrato extent means); W = 1042, p-value = 0.2199 (vibrato extent sd).

study) is necessary in order to (re)adapt the muscles of the vocal articulators and all habits relevant to singing in accordance with the needs of the two different styles. This is what Elisabetta Scano has to say on the matter:

Per esperienza dico che passare da quella proiezione così alta, con un sapore molto nasale, a una proiezione completa è difficile. Usare la faringe in maniera ampia, senza schiacciare per avere il tipico suono del canto sardo è molto difficile perché la muscolatura fa un altro tipo di movimento. È come ballare hip hop e ballare sulle punte, è completamente diverso. Ma Francesco ha una facilità estrema. Infatti tutt'oggi lui, nonostante gli anni di canto lirico e di palcoscenico, ogni volta che torna in Sardegna una cantata [in stile sardo] se la fa, e la fa in maniera perfetta. [...] Io ho sentito un suo intervento che ha pubblicato da poco e l'unica cosa che ho riscontrato è che la voce ha preso un colorito un po' più brunito. Prima aveva una voce da ragazzo, squillante, con quel piglio nasale tipico della musica sarda, adesso – nonostante per me fosse perfetto anche in quel contesto – ha una voce un po' più matura, con uno spessore diverso, e sicuramente affronta il canto con una conoscenza diversa. Ma la cosa sbalorditiva è come lui riesca a passare con estrema facilità da un genere all'altro: il giorno prima canta *Luisa Miller* e il giorno dopo va a cantare il canto sardo e lo canta benissimo!

[tr. From experience I say that going from that high projection, with a very nasal flavour, to a complete projection is difficult. Opening the larynx wide, without pressing, to have the typical sound of Sardinian singing is very difficult because the muscles make another type of movement. It's like dancing hip hop and dancing on pointe, it's completely different. But Francesco finds it extremely easy. In fact, even today, despite years of opera and stage singing, every time he returns to Sardinia, if he does Sardinian [Sardinian style] singing he does it perfectly [...] I've listened to one of his performances that has just been released and the only thing I've found is that his voice has taken on a little more burnished colour. Before he had a boyish voice, ringing, with that nasal tone typical of Sardinian music, now – even though it was perfect for me in that context – he has a slightly more mature voice, with a different thickness, and he certainly faces singing with a different knowledge. But the amazing thing is how he manages to pass easily from one genre to another: the day before he sings *Luisa Miller* and the next day, he goes on to sing Sardinian songs and he does it really well!]<sup>11</sup>

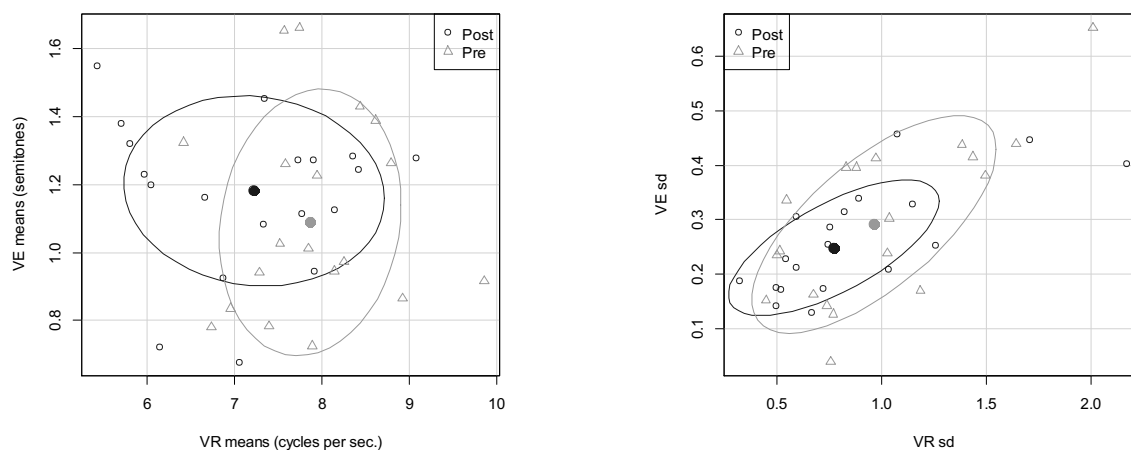
Our analysis shows that there is a small shift in the most recent recordings towards the values found in the vibrato as performed in his opera performances. However, the difference between the two groups of vibrato excerpts is not statistically significant.<sup>12</sup> In other words, despite the differences that may be

---

<sup>11</sup> Interview with Elisabetta Scano by Paolo Bravi and Salvatore Carboni, Cagliari, 26 August 2016.

<sup>12</sup> The statistical significance of the differences was as described in Note 8. Results are as follows:  $W = 112$ ,  $p$ -value = 0.04624 (vibrato rate means);  $W = 144$ ,  $p$ -value = 0.2932 (vibrato rate sd);  $W = 211.5$ ,  $p$ -value = 0.3732 (vibrato extent means);  $W = 164.5$ ,  $p$ -value = 0.6509 (vibrato extent sd).

observed in Demuro's voice as a singer of Sardinian traditional music before and after he started his training as an opera singer, the vibrato characteristics are so strongly style-dependent that their main acoustic features have not dramatically changed (Fig. 8).



**Figure 8:** Rate [VR] and extent [VE] in the Sardinian excerpts of vibrato, before [Pre] and after [Post] FD's vocal training and the start of his career as an opera singer: means (left panel) and standard deviations (right panel).

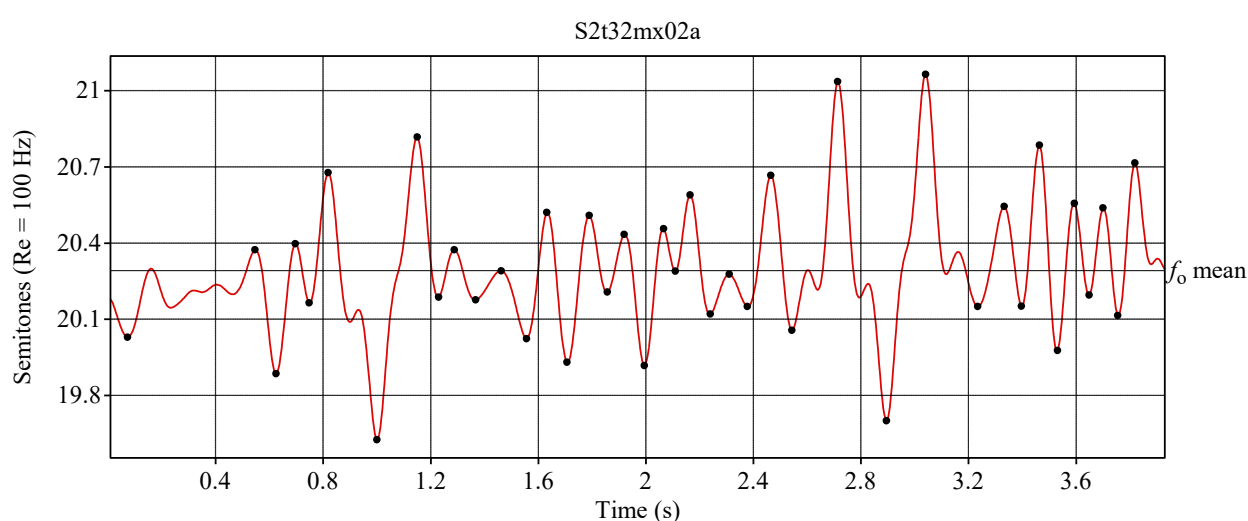
*Control* – The third research question we addressed is the control Franceschino exerts on the vibrato quality of his voice. In his own words, this is an opportunity that is only permitted within the Sardinian style:

Il vibrato io lo modifico a piacere mio. Quindi ti dico una cosa: nel canto a chitarra lo facevo questo, per quanto ti possa sembrare una voce fissa, quella del canto a chitarra, invece c'è un vibrato, e questo vibrato lo modificavo in base al momento o all'esecuzione o alla voce che dovevo fare. A volte lo acceleravo, a volte lo rallentavo, e questo veniva comunque dal diaframma, da una respirazione corretta. Quindi facevo un po' quello che mi pareva: nel momento di impeto vocale, di un acuto per esempio a volte il vibrato lo acceleravo, in un momento di dolcezza lo rallentavo [...] Nel canto popolare riuscivo a giostrarlo di più; nel canto lirico, essendo una voce piena e grande, questo è molto difficile da fare, quindi controllare questa emissione è molto complicato.

[tr. I change the vibrato as I please. Let me tell you something: I did that in the *Canto a Chitarra*. Although you might hear my voice as a steady voice, nevertheless there is a vibrato, and I changed this vibrato based either on the moment, the performance or the verse that I had to sing: sometimes I accelerated it, sometimes I slowed it down. This came from correct breathing, from the diaphragm. I did more or less whatever I wanted to do: in a moment of vocal excitement, singing on a high note, for example, I

sometimes accelerated the vibrato; in a moment of tenderness, I slowed it down. [...] Traditional singing was where I managed to elaborate it the most; instead in opera singing, since the voice is so ‘full,’ so ‘big,’ control of this kind of vocal emission is very complex.]<sup>13</sup>

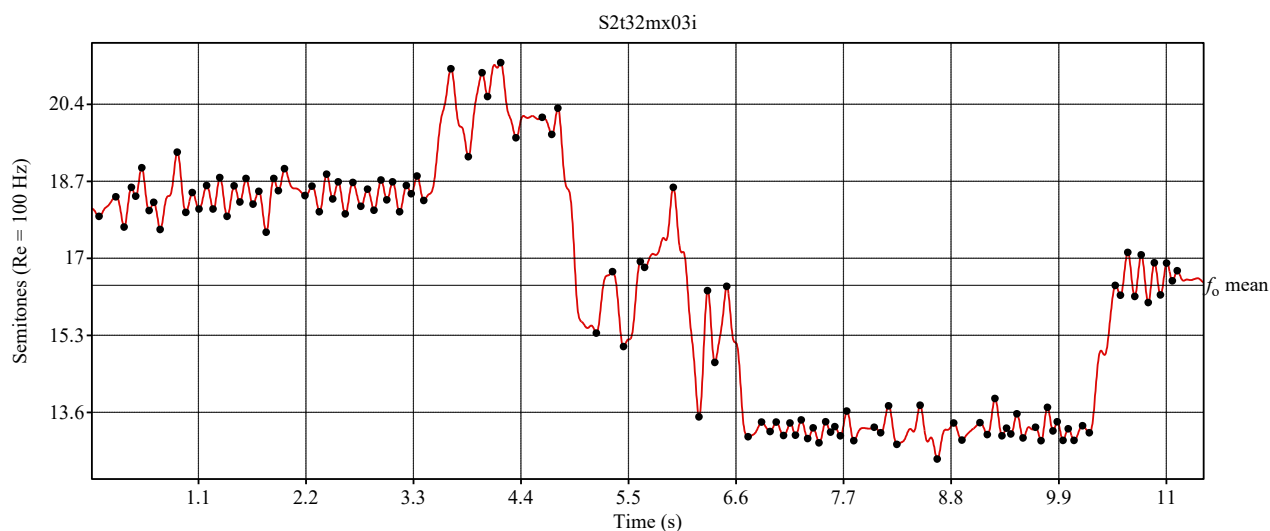
In Franceschino’s performances of traditional *Canto in Re* there are plenty of examples showing his ability that allows him to elaborate his vocals and to give all sorts of nuances to the vocal melody. Fig. 9 represents a typical example of a vocal movement performed by Franceschino while singing a Sardinian song, where the vibrato controlled by the singer is deliberately varied and encompassed within a melodic phrase where other kinds of vocal ornaments are present.



**Figure 9:** A mixed highly moving vibrato with ornaments like voltas and turns in a performance of *Canto in Re*.

Long and extremely elaborated melismas are, in fact, typical of the professional singing of *Canto in Re*. The ability to improvise in the creation and performance of strongly ornamented vocal movements are of the utmost importance for a professional Sardinian singer and an essential part in the characterisation of specific voices. Therefore, particularly in some sub-genres, we frequently find passages like the one shown in Fig. 10, where parts characterised by an unsteady, but always rapid and narrow vibrato are placed within wide vocal movements involving notes distant from each other.

<sup>13</sup> Interview with Francesco Demuro by Paolo Bravi and Salvatore Carboni, Porto Torres (SS), 26 August 2016.



**Figure 10:** An example of a free melisma taken from a recording of *Canto in Re* where Franceschino changes vibrato parameters throughout, passes to embellishments with a wider change of fundamental frequency, and moves from one note to another.

This type of liberty, this license to perform vocal movements in which the vibrato is conceived as a somewhat free vocal tool within a larger set of means, allows the singer to perform highly dynamic and ever-changing vocal melodies. This chance for the singer to have the overall palette of vocal ornaments at his/her full and free disposal and the opportunity to either quickly or progressively and almost inadvertently pass from vibrato to other types of ornamentation or to mix them up in complex vocal movements, is normally absent in opera singing where, at least nowadays, the use of a regular and wide vibrato is in most cases mandatory, as a means of expression of pre-composed melodies.

### Voice, styles and emotions

The ‘transhumance’ of Franceschino from Sardinian music to Opera – occasionally travelling back and forth between the two – is a very interesting and rare case. In this article, we have observed it through the lens of the vibrato, a crucial vocal ‘tool of the trade’ for both Sardinian *Canto in Re* and professional opera singers. We have noticed how the vibrato is conceived and performed differently in the two musical fields which refer to two aesthetics of the voice that have significant aspects in common but also radical differences making them two musical worlds that are poles apart. We have also seen that in the recent performances of Sardinian *Canto in Re* Franceschino’s vibrato has only slightly changed its acoustical features, despite the different vocal settings envisaged by the two musical genres, and the different vocal training and his daily practice as an opera singer. Such minimal changes appear to be connected to the overall setting of the vocal apparatus planned for the performance of a specific musical genre, to a different use of the articulators and eventually to a different aesthetic perspective.

But our ethnographic investigation also showed us something more, which relates the vocal issue in question to other and possibly wider themes of ethnomusicological reflection. One of these is the way in which Franceschino considers his singing ‘diglossia,’ his relation with his past and the traditional culture of Sardinia that has nourished his musical talent. Franceschino is proud of his ‘origin’ and background as a ‘popular’ singer. As he himself says it has nothing to do with nostalgia: he certainly loves the world (and the vocality) of opera singing, but this does not lessen the value of Sardinian traditional song in his eyes. When he happens to sing Sardinian music nowadays, he does not fear the risks of what we may call the ‘rhetoric of roots.’ The ‘dignity’ – i.e. the artistic value – of Sardinian music is in fact indisputable in Franceschino’s view.

He sees Sardinian song as having played an essential, though never exclusive or restricting part in the construction and expression of his own personal identity and in the elaboration of his expressive means, but also considers *Canto in Re* as the musical style to which he feels bound from an emotional point of view. He expresses this idea by employing the strongest of metaphors:

Senti, l’anima mia è rimasta sempre quella, l’unica cosa che non è cambiata è l’anima, quindi se io ti canto una voce in sardo adesso, io ti posso toccare le corde come te le toccavo prima, ti posso emozionare. Io magari sento che non faccio quello che voglio. Poi che io sento dentro di me comunque le emozioni che mi scorrono nelle vene quando canto il canto popolare, è una cosa che ho dentro, e nella lirica non è così, te lo dico [...] io morirò con il canto ... io nella mia tomba vorrò una gara a chitarra, non vorrò un disco di canti d’opera. Vorrò questo.

[tr. Listen, my soul has always remained the same, the only thing that hasn’t changed is my soul, therefore if I sing a Sardinian song now, I can touch your heart just as I did before, I can transmit emotions. I myself, however, feel that I cannot do what I would like to. But I feel emotions running through my veins when I sing the popular [viz Sardinian] song. It is something that is at my very core, and it is not like that for opera songs, I tell you [this clearly] [...] When I die, in my grave I’ll want a [recording of a] singing duel a chitarra, not a record of opera songs. That’s what I’ll want.]<sup>14</sup>

Music often has the power to surprise us when looked at from this perspective and from close-by. Acquiring a sophisticated and brilliant technique, improving one’s own skills by careful training and preparation, achieving international success and fame, developing a network of relations with high-status and influential people, having the chance to sing a wonderful musical repertoire, starring on the most prestigious stages alongside the brightest international stars of the Olympus of singing and receiving

---

<sup>14</sup> Interview with Francesco Demuro by Paolo Bravi and Salvatore Carboni, Porto Torres (SS), 26 August 2016.



important acclaim for one's performance are clearly crucial aspects in the professional path and the life of an artist. But when we are dealing with emotions, which in some sense are still a hazy side of the human brain, the musical mind makes its own and indisputable choices.

## References

- Adamo, Giorgio. 1992. "Un modello per l'analisi fonetico-acustica dei rapporti testo-musica." In *Secondo convegno europeo di analisi musicale*, edited by Rossana Dalmonte and Mario Baroni, 141–54. Trento: Università degli Studi di Trento.
- Ambrazevičius, Rytis, Robertas Budrys, and Irena Visnevskā. 2015. *Scales in Lithuanian traditional music: acoustics, cognition, and contexts*. Kaunas: KTU.
- Angeli, Paolo. 2006. *Canto in Re. La Gara a Chitarra nella Sardegna settentrionale*. Nuoro: ISRE.
- Bartók, Bela. 1977. *Scritti sulla musica popolare*. Torino: Boringhieri.
- Boersma, Paul, and David Weenink. 1992–2016. *Praat: doing phonetics by computer*. <http://www.fon.hum.uva.nl/praat/>, last access 10 January 2016.
- Bravi, Paolo. 2012. "Measurements of Vibrato Parameters in a Performance of Sardinian Traditional Sung Poetry." In *La voce nelle applicazioni. VIII Convegno AISV (Associazione Italiana Scienze della Voce), Roma 25-27 Gennaio 2012*, edited by Mauro Falcone and Andrea Paoloni, 67–78. Roma: Bulzoni.
- Bravi, Paolo. 2015. *A boghe a boghe. Ricerche sulla poesia cantata in Sardegna*. Cagliari: Condaghes.
- Cannam, Chris, Christian Landone, and Mark Sandler. 2010. "Sonic Visualiser: An Open Source Application for Viewing, Analysing, and Annotating Music Audio Files." In *Proceedings of the ACM Multimedia 2010 International Conference*, <http://sonicvisualiser.org/sv2010.pdf>, last access 15 February 2021.
- Carboni, Salvatore, ed. 2012. *Enciclopedia della musica sarda. Vol. 4: Canto a chitarra*. Cagliari: L'Unione Sarda.
- Carboni, Salvatore, and Paolo Bravi, eds. 2012. *Enciclopedia della musica sarda. Vol. 5: Canto a chitarra*. Cagliari: L'Unione Sarda.
- Carpi, Andrea. 1999. *Canti sardi a chitarra*. Roma: Il Trovatore.
- Deutsch, Diana, ed. 1999. *The Psychology of Music* (2nd edition). San Diego: Academic Press.
- Fussi, Franco, and Silvia Magnani. 2010. *Le parole della scena. Glossario della voce del cantante e dell'attore*. Torino: Omega Edizioni.
- Lawson, Francesca, and Shawn Nissen. 2017. "The Significance of the Vocal Signature in Chinese Narrative Performance: A Look at Pitch and Duration Using Praat Acoustic Analysis Software." *Analytical Approaches to World Music*, 6/1, [www.aawmjournal.com/articles/2017c/Lawson\\_Nissen\\_AAWM\\_Vol\\_6\\_1.pdf](http://www.aawmjournal.com/articles/2017c/Lawson_Nissen_AAWM_Vol_6_1.pdf), last access 15 February 2021.
- Macchiarella, Ignazio. 2014. "Exploring micro-worlds of music meanings." *El oído pensante*, 1/2, <http://ppct.caicyt.gov.ar/index.php/oidopensante/article/view/4092/45454575759470>, last access 15 February 2021.
- Metfessel, Milton. 1929. *Phonography in Folk Music: American Negro Songs in New Notation*. Chapel Hill: University of North Carolina Press.
- Perria, Giovanni. 2006. *La gara a chitarra e i suoi protagonisti*. Selargius: Domus de Janas.
- Perria, Giovanni. 2012. "Dal canto a chitarra alla lirica: Francesco Demuro." In *Enciclopedia della musica sarda*, Vol. 4, edited by Salvatore Carboni, 70. Cagliari: Unione Sarda.
- RDCT. 2016. "R: A Language and Environment for Statistical Computing." [www.R-project.org](http://www.R-project.org), last access 10 January 2016.
- Seashore, Carl E. 1938. *Psychology of Music*. New York: McGraw-Hill.
- Seeger, Charles. 1957. "Toward a Universal Sound-Writing for Musicology." *Journal of the IFMC*, 9: 63–66.
- Sundberg, Johan. 1987. *The Science of the Singing Voice*. DeKalb: Northern Illinois University Press.

- Van der Meer, Wim. 2014. "Audience response and expressive pitch inflections in a live recording of legendary singer Kesar Bai Kerkar." In *Expressiveness in music performance. Empirical approaches across styles and cultures*, edited by Dorottya Fabian, Renee Timmers, and Emery Schubert, 170–84. Oxford: Oxford University Press.
- Will, Udo. 1997. "Two types of octave relationships in central Australian vocal music?" *Musicology Australia*, XX, 6–14.
- Zumthor, Paul. 1983. *Introduction à la poésie orale*. Paris: Editions du Seuil.