

# **WIRING THE SINGER**

## **Classical Voice and the Microphone**

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## **Research Summary**

### **The Research Problem**

Given the ubiquity of the application of sound technology to the classical voice, this thesis investigates the ways the amplification of the classical voice is a catalyst for new expressive techniques and aesthetics. Such mediation of the classical voice is becoming widespread and pervasive. It is creating new expressive techniques and aesthetics, facilitating the construction of musical ensembles impossible without amplification, transforming non-traditional physical spaces into performing spaces and enhancing the performativity of the classical singing voice. These practices are challenging traditional understandings of the classical voice as a purely acoustic phenomenon and introducing new expressive techniques and aesthetics, some of which were previously considered dysfunctional or bad singing. This creates a problem for classical singers who clearly position themselves within the classical singing tradition and wish to develop new repertoire requiring the use of the microphone

### **The Research Question**

The thesis asks what defines the classical voice in the 21st century given that most audiences now experience the amplified classical voice in live performance?

### **The Investigative Field**

Sound technology is changing singing aesthetics, including the classical aesthetic. In discussing the amplification of the classical voice, a number of technical terms are used to describe this process: microphone, microphone and playback system, amplification and sound technology. It is recognised that these terms are not interchangeable. The wide field of study and the varied applications of sound technology to the classical voice make pinning down the technology to one thing a futile exercise. Miriama Young recognises the vastness of this field of study in her work on the intersection of the human voice and sound technology.<sup>1</sup> Her definition of technology as it applies to the voice is well suited to defining the meaning of the terms microphone and playback system, amplification and mediation in this thesis:

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<sup>1</sup> Young, Miriama. *Singing the Body Electric*. (Farnham: Ashgate, 2015.) 7.

*‘Technology’ (mediation) represents the means by which the human voice-by virtue of the fact it is ‘captured’ in electronic form-is subject to displacement and transposition, permutation or transformation.<sup>2</sup>*

Once having defined what the mediated voice encompasses, the next step is to define what is meant by the classical voice. Does this term refer to a particular type of training, the repertoire sung, the context in which the performance takes place or a combination of these elements? The difficulty in defining the unique characteristics of the classical vocal style are discussed in Chapter 1. Is the ability to sing unamplified a unique characteristic of classical singers? This is demonstrably not so. Are power and expression unique characteristics of the classical voice? Again, not so. Nor is the capacity to sing complex music or develop strong levels of musicianship. Chapter One explores these dilemmas and comes up with a broad consensus on what constitutes a classical vocal technique, although it is recognised that such a thing has never been static or fixed. This chapter concludes that the mediation of the classical voice creates room for many voices, for performers/composers to take greater control over their work, for many shades of intersections between vocal genres to emerge and an exploration of performative elements of the voice that was previously impossible prior to amplification.

The literature review and the case studies demonstrate the diverse practices emerging from this practice: from adding proximity and detail to the classical voice to creating an avatar of the human voice and everything in between. The investigation focuses on live performance, although recordings are referred to.

Theorists such as John Potter (the social and political history of classical singing)<sup>3</sup>, Jacob Smith<sup>4</sup> and Jonathon Sterne<sup>5</sup> (sound studies) and Nina Eidsheim,<sup>6</sup> Brandon LaBelle<sup>7</sup> and Steven Connor (voice studies)<sup>8</sup> help to develop a framework for understanding the mediated classical voice and its varying impacts. In classical voice the powerful and the virtuosic have

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<sup>2</sup> Young, Miriama. Op.cit. 6.

<sup>3</sup> Potter, John. *A History of Singing*. (Cambridge: Cambridge University Press, 2012.)

<sup>4</sup> Smith, Jacob. *Vocal Tracks. Performance and Sound Media*. (Berkeley and Los Angeles: University of California Press, 2008.)

<sup>5</sup> Sterne, Jonathan (Editor). *The Sound Studies Reader*. (New York: Routledge, 2012.)

<sup>6</sup> Eidsheim, Nina. *Sensing Sound. Listening as Vibrational Practice*. (Durham, NC: Duke University Press, 2015.)

<sup>7</sup> LaBelle, Brandon. *Lexicon of the Mouth: Poetics and Politics of Voice and the Oral Imaginary*. (U.K.: Bloomsbury, 2014.)

<sup>8</sup> Connor, Steven. *Beyond Words*. (London: Reaktion, 2014.)

been preferenced over the sounds the microphone allows us to hear with more detail and nuance: that which lies under the surface can be brought forward into the listener's ear. Miriama Young<sup>9</sup> and Nori Neumark<sup>10</sup> develop a conception of the mediation of the voice as deeply humanizing: one that is not fixed but rather relational, adaptive and responsive to the various beings and entities present in any given moment in performance.

The contextual review examines classical performers/composers (and some performers/composers who sit in the growing but ambiguous place that is somewhere between art music and popular music). The nature of this practice is that it challenges delineations between vocal and musical genres and those between composer, arranger, producer and performer. Many of the performers discussed (but not all) have emerged at least in part from a classical tradition. They are engaging with the mediation of the voice and in the process writing and producing their own works.

A number of terms are used widely in this thesis. They are identified and defined next.

## **Definition of Terms**

*Mediation* (of the classical singing voice) refers to the ways that the human voice is transformed into electrical signal and through this is subject to “*displacement and transposition, permutation or transformation.*”<sup>11</sup>

*Microphone and playback system* refers to the conversions of the acoustic energy of the voice into electrical signal in all the stages of the microphone and playback system. The playback system comprises the mixing (including any vocal processing) and its transmittal via speakers or headphones to the listener. “*Every stage a signal passes through affects the tonal quality, timbre, or colour of the sound for better or worse.*”<sup>12</sup>

*Classical vocal technique* is defined as fundamentally an acoustic phenomenon allowing the singer to be heard unamplified in particular performing spaces under specific conditions. This technique is understood to be derived from the European traditions of Bel Canto singing. Some

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<sup>9</sup> Young, Miriama. *Singing the Body Electric*. (Farnham: Ashgate, 2015.)

<sup>10</sup> Neumark, Nori. *Enchanted Voices*. In Thomaidis, Konstantinos and Macpherson, Ben. *Voice Studies, Critical Approaches to Process, Performance and Experience*. (New York: Routledge, 2015.)

<sup>11</sup> Young, Miriama. *Op.cit.* 6.

<sup>12</sup> Evans, Bill. *Live Sound Fundamentals Course Technology*. (Boston, USA: Cengage Learning, 2018.)

constant elements of this technique include: a synergetic relationship between breath and voice that delivers a seamless transition between vocal registers<sup>13</sup> and between different vowel shapes; a minimization of consonants as they interrupt breath and vocal line; and the modification of vowels to be most sympathetically resonant in relation to pitch. Legato is valued in this tradition and the tonal ideal is chiaroscuro (a balance between light and shade in the voice).

*Vocal Micro-Textures* are defined as the extra vocal sounds that the microphone can bring to the foreground. In classical vocal pedagogy they are considered noise and signs of dysfunction: the sounds of the breath, the articulatory mechanism (lips, tongue, palate) and the process of the larynx.

*The Seven Functions of Amplification* developed by Emmerson refer to the ways that amplification can be used to influence a musical performance.

*The Aesthetic Markers* developed as part of the methodology refer to the range of aesthetic choices that amplification either introduces or enhances in a classical vocal performance.

## **Aim and Objectives**

**Aim:** To examine, provide insight and offer a framework for the evaluation of the mediated classical voice in the 20th and early 21st centuries.

### **Objectives:**

1. Provide a literature review across voice studies, sound studies and vocal sound technology research that addresses the problem discussed in the thesis.
2. Examine the impact of the cultural context and classical vocal works that explore the mediation of the classical voice.
3. Develop a set of aesthetic markers that describe the impact of mediation of the classical voice.

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<sup>13</sup> A vocal register refers to the voices' pitch range and areas of the voice where, in an untrained voice, changes in vocal quality are clearly evident. These changes in vocal quality may be prized in vocal genres and traditions other than classical ones.

4. Provide an evaluative framework for this practice.
5. Apply the framework to case studies and creative work.

### **Approach and Methodology**

The methodology is practice led in which an exegesis provides a conceptual framework for the evaluation and performance of works using the microphone. The exegesis provides a portfolio of performances that demonstrate the methodology.

1. Contextual Case Studies of works demonstrating the varying impacts of the mediation of the classical voice and vernacular works that intersect with these practices.
2. Analysis of texts referred to in the Investigative Field.
3. Establishment of an evaluative framework based on five aesthetic markers underpinning amplified classical singing.
4. Practice led research in performance and its analysis using the evaluative framework discussed in (3) above.

The percentage relationship of the total thesis submission between the exegesis and creative work components consists of 70% (exegesis) and 30% (creative portfolio).

### **Proof of Concept**

The creative component consists of a series of recordings demonstrating the evaluative framework outlined in the methodology. Wherever indicated, a Soundcloud link will be provided to give access to all recorded performances.

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