

## CHAPTER 1 – INTRODUCTION

### Part 1: Why I choose to research music in speech

As a vocalist and pianist<sup>1</sup> I have always been fascinated by the various inflections and tones in the act of speaking. Influenced by Hermeto Pascoal, Jason Moran, and others, I decided in 2016 to start transcribing speeches exactly 10 years after I had first taken a lesson with Moran. This inspired me to create a proposal that revolved around the musicality of speech for a commission funded by PBS FM radio to be performed at the Melbourne International Jazz Festival. This opportunity allowed me to build upon that initial inspiration to transcribe, compose, and play speech compositions live in a project called 'Things That Have Been Said (TTHBS)'<sup>2</sup>.

In this research, I wish to analyse the process of transcription, harmonisation and/or composition from the first listen to a speech to the very last phase of practicing musical material attained from the findings.

### Part 2: The need for current study

Existing information is published about speech and how it can sound more like song with perpetual repetitions<sup>3</sup>. Deutsch discovered the 'speech-to-song illusion', in which a spoken phrase was heard as sung rather than spoken. This illusion has also indicated a strong connection between speech and music. The academic world and the 'jazz' world need more literature about the musical aspects of speech, particularly in an improvisational context<sup>4</sup>.

---

<sup>1</sup> The piano is an instrument that is perhaps far removed from the sound of the voice. Grainger: A brilliant concert Pianist, hated the piano. He called it the "box of hammers" and wrote practically no original solo music for it. Almost all his solo works are dazzling re-workings of his chamber and orchestral stuff, undertaken mainly at the insistence of his publishers'. Bird, 1999, p 379

<sup>2</sup> Commissioned by PBS, 'Things That Have Been Said (TTHBS)', June 2017, Melbourne International Jazz Festival Premiere, financed by Mark Newman.

<sup>3</sup> Deutsch – *Musical Illusions and Paradoxes* (1995); *Phantom Words and Other Curiosities* (2003)

<sup>4</sup> 'Music improvisers often need to develop a context or 'common ground' for themselves and their

The importance of exploring this topic further comes from several reasons. There is no guide for how to transcribe<sup>1</sup> a speech and set it to music. Steven Neville mentions that ‘scholars seem reluctant to engage with the application of recorded speech to jazz performance practice’<sup>2</sup>.

One perplexing aspect of this topic is that both musicians and non-musicians are not widely aware of the musical possibilities that speech<sup>3</sup> inherently has in it. As shown in my exam survey question,<sup>4</sup> “Would you like to see more concerts like this in the future”? One answer was simply, “not really”.



**Figure 1-1** Looped voice on 'Ringing My Phone (Straight Outta Istanbul)' Moran'-Neville

In the history of Jazz, few musicians<sup>5</sup> have used speech to create improvisational frameworks<sup>6</sup>. Jason Moran talks about how he came up with the idea to record 'Ringing My Phone'<sup>7</sup> (Figure 1-1). In an interview conducted for this paper, he talks about his first encounter on hearing speech music.<sup>8</sup>

“ This is the first time that I heard it implemented in a way that totally charged me and I wanted to know more about who Hermeto was<sup>9</sup>. ”

---

community and may seek music outside their practice’ quote from Gary Peters,’ that appears in Hannaford, 2012

<sup>1</sup> Hannaford talks briefly about the history of recorded sound in Jazz and is surprised that it is not more widely implemented, Hannaford, 2017

<sup>2</sup> Neville, 2014

<sup>3</sup> “Speech is special”, Studdert-Kennedy et al, 1970

<sup>4</sup> Given to the audience at the May 2018, Hue Blanes’ 1<sup>st</sup> Year Master Recital, KvB Zaal, Den Haag.

<sup>5</sup> Ted Panken ‘experimental attitudes’ (Journalist and affiliate of Association for the Advancement of Creative Musicians AACM) mentions Monk (Thelonious Sphere Monk, October 10, 1917 – February 17, 1982) using influences and experiences with speech but Monk does not connect with the use of ‘Recorded speech in a music setting’.

<sup>6</sup> Pieces with repetitive chord structures to allow for improvisation

<sup>7</sup> ‘Ringing My Phone (Straight Outta Istanbul)’ from his album *The Bandwagon*, Live at the Village Vanguard (2003).

<sup>8</sup> Moran talks about the pianist Nikki Yeoh (London) who, while in London, first introduced the iconic Hermeto Pascoal recording, ‘Hermeto Pascoal e Grupo - Festa dos Deuses (1992)’ to him.

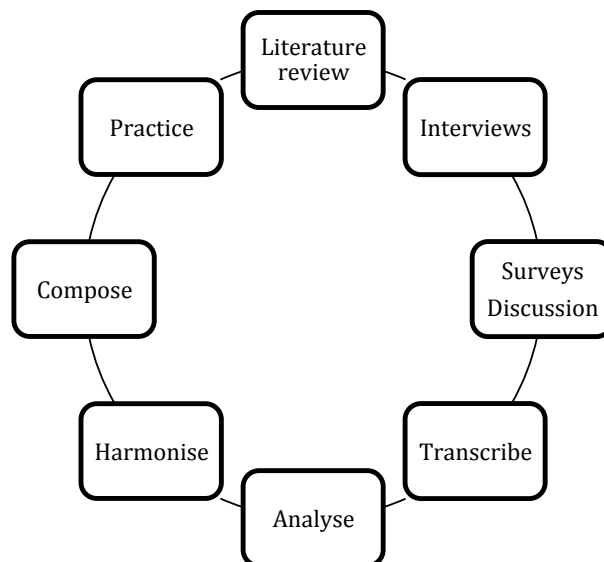
<sup>9</sup> Moran, 2018

Hermeto was an influence on Moran, the same way that Moran is an influence on my playing.<sup>1</sup>

There are great advantages to studying speech, including being labelled a 'contemporary and current voice in improvised music'. For instance, Jason Moran has been described as 'Jazz's wild card, a probing conceptualist who transforms everything he touches into a bracingly contemporary statement'<sup>2</sup>.

### Part 3: Methodology

Each chapter has its own inherent methodology within it. Various methods were



**Figure 1-2** Different methodologies used in this study used to explore the musicality of speech

used for the body of this research (Figure 1.2). Briefly, the literature review provided an overview of what has been achieved in the field of speech music. Surveys and interviews were used to expand on the literature review. These findings then determined the approach on how to effectively build a structure of speech-music practice. This begins at the reading/survey level, then moves to more practical aspects that consist of i) transcribing, ii) analysing, iii) harmonising, iv) composing,

<sup>1</sup> <https://www.youtube.com/watch?v=06Qm-Z5OsHw> Música da Lagoa, Hermeto Pascoal

<sup>2</sup> SFJAZZ SFJAZZ Center is a hub of art, music, culture, and community in the Civic Center performing arts district, <https://www.yelp.com/biz/sfjazz-san-francisco> (SF JAZZ 2012)

and v) practicing improvisational material based on the above findings. The order of this structure is important to provide a solid foundation for speech practice.

The interviews were self-conducted, and the information sourced comes from direct contact with the artists themselves.

For anything that did not make it to this paper for size reasons, you can find these files via the link below. They are worth a listen, look, read.

Dropbox Video, Recordings, Scores, Transcripts

#### **Part 4: Limitations in this research**

This paper focuses on both the pitch<sup>1</sup> and harmonic capabilities of speech study. When rhythm is a concern, I simplify my rhythmic analysis by stating the message or the intention of the speech.

Recurring rhythms are rarely used in human speech and therefore further work is needed to identify a solution to the study and notation of its workings. Perhaps it would be easier to study speech rhythms if humans could be more like birds<sup>2</sup>.

All elements of speech and music cannot be covered in this single paper. The full '*gestalt*'<sup>3</sup> can only be found through the undertaking of further research.

---

<sup>1</sup> Every instrument contains an example of relative pitch, i.e. 'the memorisation of the qualities found on various pitches of the instrument' See pg. 35 Coker. An E on the piano will have unique characteristics from the E in the same register on the violin.

<sup>2</sup>Messiaen (December 10, 1908 – April 27, 1992 (<http://www.oliviermessiaen.org/messbiog.html>)). Since the age of eighteen Messiaen had been collecting the songs of thousands of birds throughout France and the world. Early works showed inkling of birdsong influence but after the war in the late 40s and 50s he began notating their songs in great detail and this became a vital musical source for him.

<sup>3</sup> 'A face is comprised of a nose, mouth, lips, eyes etc. However, the simple isolated knowledge of these elements will not help to form a face. You need to know the relationship between all of these elements to get the full picture/image', Daneer 2018, Den Haag, Netherlands

## Part 5: Literature Review

At the commencement of this research it was important to try to answer the question, what is speech and what is music? Burns<sup>1</sup> says, ‘music first developed as, and still largely remains, a *social* phenomenon associated with religious or other rituals that, like *language*, necessitated an easily remembered common framework like improvisation.’

Of importance was identifying the various elements that form the overall body of a piece of communication. ‘Certain things mean certain things in certain settings’<sup>2</sup>. It was important to find similarities between the human voice and commonly known music.

There is already an affiliation with the speaking voice and the western notation system. Ross<sup>3</sup> says,

“ In about 70 percent of the speech sounds, these ratios were bang-on musical intervals. This predominance of musical intervals hidden in speech suggests that the chromatic scale notes in music sound right to our ears because they match the formant ratios we are exposed to all the time in speech, even though we are quite unaware of this exposure. ”

And, ‘intriguing similarities between musical scales and speech continua in the relationship between identification and discrimination and in the separation of categories along their respective continua’<sup>4</sup>. Jazz artists such as Max Roach, Robert Glasper and Dan Weiss have all experimented with the application of recorded speech<sup>5</sup>. Keith Potter, in his book, *Four Musical Minimalists*, mentions that modern US composers were inspired by, ‘the use of raw material drawn from everyday life’<sup>6</sup>.

Then there is Hermeto Pascoal who, as an influential figure in the music world, found unique ways to investigate this ‘everyday life’. He wondered, ‘the sound of the aura

---

<sup>1</sup> Burns, 1999

<sup>2</sup> Paul F. Berliner, 1994

<sup>3</sup> Ross, 2007

<sup>4</sup> Burns, 1999

<sup>5</sup> Neville, 2014.

<sup>6</sup> Four Musical Minimalists: La Monte Young, Terry Riley, Steve Reich, Philip Glass (Music in the Twentieth Century)

that I have perceived since childhood, that people are singing instead of speaking, could it be only in my head that this happens?’<sup>1</sup>. Pascoal<sup>2</sup> possesses a gift. ‘He has perfect pitch, which has led him to perceive music in everyday situations’<sup>3</sup>. Pascoal says, ‘Speech is perceived by the musician in terms of its rhythmic-melodic contours’<sup>4</sup>. I hope to find a logical relationship between music in speech by ‘doing’ and learning’ and being practical in approach<sup>5</sup>.

Moran notes that speeches ‘challenge my notion of what is a melody’<sup>6</sup>. In an interview conducted for this paper Moran adds to this by seeking to find the ‘code’ in each person’s communication. Finding the meaning, searching for the minute details that are unique to the individual<sup>7</sup>.

### **Part 6: Summary**

Although there are articles available about the musicality of speech, there has been little research about speech in jazz transposition, composition and improvisation. While an improviser transcribes speeches ‘we start to see a different approach to phrasing that is a direct result of the study of speech patterns’<sup>8</sup>.

This research focuses on the study of speech through musical practice and on how speeches can be applied to build improvisational musical language. Other literary sources will be quoted in the following chapters according to the topic in question.

---

<sup>1</sup> Neto, 2000

<sup>2</sup> Pascoal (1992) Festa dos Duseses the songs ‘Aula De Natacao’ and ‘Pensamento Positivo’ have speech excerpts.

<sup>3</sup> Neto, 2000

<sup>4</sup> Neto, 2000, p 131

<sup>5</sup> Hannaford ‘Synchronicity between “doing” and “learning” results in process that constantly reinvents the artist while he continues to produce informed art’.

<sup>6</sup> Moran, 2013, interview with the Kennedy Center, Washington, DC, USA.

<sup>7</sup> Moran, 2018

<sup>8</sup> Neville, 2014