

Corporality in the timbre vocabulary of professional female jazz vocalists

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In: M. M. Marin, M. Knoche, & R. Parncutt (Eds.)

Proceedings of the First International Conference of Students of Systematic Musicology (SysMus08)
Graz, Austria, 14-15 November 2008, <http://www.uni-graz.at/muwi3www/SysMus08/>

Background. Traube and Depalle (2004) and Bellemare and Traube (2006) worked with pianists and guitarists to explore and document their collective knowledge of timbre. The timbre vocabulary of classical singers refers to perceptible acoustic characteristics, mechanisms of sound production, and the singer's identity and emotional state (Henrich et al., 2007; Garnier et al. 2008). Prem and Parncutt (2007) explored and documented the timbre vocabulary of female jazz vocalists.

Aims. As a part of a broader documentation of singers' practical knowledge about sound and of the acquisition and sharing of that knowledge in the oral tradition of vocal teaching, we explored the extent to which the timbre descriptors of professional female jazz vocalists refer to or imply the human body.

Main contribution

Participants. In a previous study, a list of 250 timbre descriptors (words or phrases) was compiled from transcripts of teaching and interviews with six professional female jazz singer-teachers (P1-P6). In the present study, two additional professional female jazz singer-teachers (P7, P8) categorized or rated all words in the list.

Method. P7 categorized words according to sound/timbre. P8 rated the corporality of each word. Finally, the first author and P2 separately categorized all words into different kinds of corporality.

Results. P7 sorted timbre descriptors into 11 categories including *positive subjective sensation* (57), *referring to timbre* (36), *negative subjective sensation* (33), *physiologically negative* (30), *vocal technique* (25), and *interpretation/articulation* (15). P8 rated 50 out of 250 words as (very) corporal (5, 6 or 7 on a 7-point scale). The biggest categories of the first author refer to *voice sound* (62), *voice production* (58), *corporal sensations* (47), *physical environment* (42) and *emotion/expression* (37). P2 assigned the timbre descriptors to the Sivananda yoga categories physical body, astral body (vital, mental, intellectual) and causal body (bliss).

Conclusions. The results highlight the intrinsic corporality of vocal timbre. The timbre vocabulary of jazz singer-teachers often refers directly or indirectly to the body, suggesting a kind of synaesthesia. Corporality categories and their boundaries are fluid and differ from one singer to another.

Implications. Corporal references in jazz singing teaching could be made more concrete and conscious. They may be more prevalent in the timbre vocabulary of singers (whose body is their instrument) than instrumentalists. This study successfully brings together epistemologically contrasting approaches to questions of musical timbre and corporality, suggesting that further such interactions might be equally fruitful.

Introduction

Timbre, unlike loudness and pitch, is a multidimensional quality of a musical sound. Musicians therefore have acquired a huge vocabulary to describe the timbre of instrumental and vocal sounds (e.g. Traube & Depalle, 2004; Bellemare & Traube, 2006). Timbre of a singing voice sound is individual and depends on *voice and vocal quality* (Sundberg, 1994). *Voice quality* is influenced

by the kind of register the singer uses (chest or head voice), whereas vocal quality is controlled by opening and closing the vocal tract. Emotions and the mood of a singer also influence a voice sound: „Whether we are feeling elated, relaxed, stressed, or threatened, each inner state is likely to be reflected in voice behavior and to be communicated to others and to ourselves“ (Welch, 2000b, p. 265).

One of the most difficult – but also most fascinating – aspects of singing is that the body is the instrument. Because of the matter of fact that everybody has an individual relation to his or her body – depending mostly on his or her personal experience – singers have and do use timbre descriptors intuitively, especially during singing lessons (Prem & Parncutt, 2007). For example the timbre vocabulary of classical singers refers to perceptible acoustic characteristics, mechanisms of sound production, and the singer's identity and emotional state (Henrich et al., 2007; Garnier et al. 2008).

The timbre vocabulary of professional female jazz vocalists has been collected (250 timbre descriptors) by Prem and Parncutt (2007). In a second step, we now want to explore to which extend those descriptors refer to the human body. Together with female jazz singers we categorized the vocabulary.

Method

In a previous study, a list of 250 timbre descriptors was compiled from transcripts of teaching and interviews with six professional female jazz singer-teachers (P1-P6). In the present study, two additional professional female jazz singer-teachers (P7, P8) categorized or rated all words in the list.

First was asked a professional female jazz vocalist (P7) to categorize the descriptors (on index cards) and give each category a title. The categories have been revised by the first author and a colleague.

In a second step, we asked another female jazz vocalist (P8) to rate the vocabulary according to corporality ("1": not at all corporal; "7": very corporal).

Then the first author and a participant (P2) from Prem & Parncutt (2007) each categorized the whole vocabulary according to corporality and give each category a title.

Results

Categories of P7

P7 sorted the descriptors into 13 categories. The first six categories are listed in Table 1. More than 150 (ca. 60%) of the inventory, 5

out of 13 categories, referred directly to corporality. 36 words (about 15 %) – a single category – described the acoustic quality of a voice sound, the vocal timbre, directly (title: vocal timbre descriptors).

The biggest categories referred to subjective sensations, the words that she included in these categories suggest that she is primarily interested in pleasantness and unpleasantness. Other categories included articulation, style and negative clichés in jazz.

title of category	no. of words
subjective sensation (pos.)	57
referring to timbre	36
subjective sensation (neg.)	33
physiologically negative	30
vocal technique	25
interpretation/articulation	15

Table 1. The 6 biggest categories of P7.

Categories of P8

The rating of the vocabulary – according to the corporality which each word induces – was carried out by P8, another female jazz vocalist. The results showed that hardly 20 % of the vocabulary referred to or induced corporality. Another 47 were rated as 50 % corporal (see Figure 1).

The 22 words which were rated "7, very corporal" are: *anchor, articulating, attack, avoiding, constricted, relaxed, fiery, half, hackle, individual, body, forceful, sick, lascivious, layed back, slutty, slimy, stiff, cone, uncontrolled and worldly innocent.*

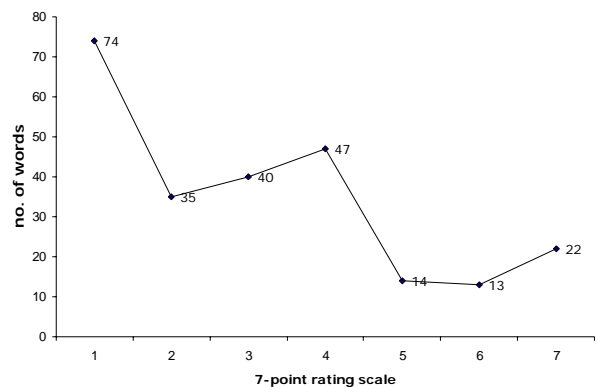


Figure 1. P8 rated the whole vocabulary (250 timbre descriptors) on a 7-point scale (1: not at all corporal – 7: very corporal).

Categories for corporality

The categories invented by P2, are adapted from a Sivananda Yoga¹ theory about the three bodies. P2 used 5 categories, one called *physical body (food sheath)*, 3 different astral body sub-categories (*vital, intellectual and mental sheath*) and one category for the *causal body (bliss sheath)*. The last sub-category (*mental wrapper*) is the biggest of all categories with 96 words. More than 230 words fall in the 3 sub-categories of the *astral body*. The category *physical body* consists of 16 words. Only one word, the word "joy" was categorized in *causal body*.

The categories invented by the first author, are called: *bodily characteristics, bodily/subjective sensations, voice production, voice sound, emotion/expression, instruments* and *directions*.

title of category	no. of words
voice sound	62
voice production	58
bodily/subjective sensations	47
physical environment	42
emotion/expression	37
instruments	5

Table 2. The 7 categories invented by the first author.

Conclusion

When listening to sounds, jazz singer-teachers less interpreted the acoustic qualities and more often referred to how a special sound was produced. They often felt the sound in their own body, and described it with subjective pleasant and unpleasant sensations what suggested a kind of synaesthesia.

Corporality categories and their boundaries are fluid and differ from one singer to another.

The results highlight the intrinsic corporality of vocal timbre. Corporal references in jazz singing teaching could be made more concrete and conscious. They may be more prevalent in the timbre vocabulary of singers (whose body is their instrument) than instrumentalists.

This study successfully brings together epistemologically contrasting approaches to questions of musical timbre and corporality, suggesting that further such interactions might be equally fruitful.

Acknowledgments. Thanks to all the participants that have been working several hours on the vocabulary.

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¹ *Sivananda Yoga Teachers' Training Manual*, True World Order (Ed.), 1969