Gestures and body-movements in the teaching of singing: a survey into current practice in Australia and Germany

Julia S. A. Nafisi

The University of Melbourne; Monash University

Abstract

In order to investigate the use of gestures and body-movement as teaching and learning tools in one-on-one voice teaching a survey was conducted amongst members of two professional voice teaching organisations in Germany and Australia. The survey questionnaire implemented a terminology devised by the author that distinguished the movements encountered according to their pedagogical intent. It could be shown that a significant number of voice teachers in both surveyed countries regularly use various gestures to enhance and/or illustrate explanation and/or demonstration; and an almost equal number of voice teachers in both countries regularly encourage their students to use various gestures and/or body-movements to facilitate understanding and learning of physiological functions, thought concepts or musical ideas. Differences between the two respondent-groups were outweighed by commonalities and whilst the survey confirmed the prevalence of this teaching and learning tool it also highlighted the wide scope of possibilities and idiosyncrasies inherent in this issue.

Key words: Gesture, Body-Movement, Vocal Pedagogy, Teaching Practice

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Background

The role of the body in singing can be viewed from several different angles: as vocal tone production requires the coordinated functioning of various interconnected physiological mechanisms, the singing voice is a bodily instrument. From this 'the body learns'-perspective, singing is a motor skill with all consequent implications for the learning process and the application of some central principles of perceptual-motor learning to voice instruction is arguably of great value for vocal pedagogy (Verdolini, 1997, 2002; Nisbet, 2010; Maxfield, 2011).

On the other hand, and without contradicting the above, there is the capacity of the body to communicate, to be a medium that may help the brain - or indeed the body itself - learn. Confirming long standing propositions about the power of body-language (Fast, 1977; Argyle, 1975; Pease, 2006) there is mounting evidence that "movement enhances and informs perception" (Rosenbaum, 2010, p. 29) and that gestures help the thinking process (Beattie, 2003; Goldin-Meadow, 2003; Kendon, 2004; McNeill, 2004; Seitz, R. J., 2000; Seitz, J. A., 2005) and also help learning in general (Goldin-Meadow, 2004). Apart from the capacity of communicating to others it seems that gestures' capacity to communicate (Hostetter, 2011) includes the communication with one-self. This perspective could be called 'the body helps learning'.

There is a well-documented tradition of utilising gesture and body movement as teaching and learning aids in music education and choral rehearsal. The Swiss music educator Jaques-Dalcroze first developed a method of learning

and experiencing music through movement in the late 19th century. His method became known as *Eurhythmics* and within only a few decades two other music educators conceived their methods which should prove equally influential: the *Kodály-Method* and *Orff Schulwerk*. Despite certain differences, all three methods utilise an intrinsic connection between music learning and movement (Crosby, 2008, Jaques-Dalcroze, 1921; Kodály, 1965; Plummeridge, 2006). It should be noted that in particular Dalcroze and Orff address the conceptual understanding of music which is not the main focus of this study. Yet, in view of their ongoing and far-reaching influence, a mention of these music-education-pioneers seems only natural in this context. Movement is also widely used in choral practice with plenty of studies attesting a significant positive effect of gesture and movement on learning and understanding of both vocal and musical concepts in the choral rehearsal (Wis, 1999; Bailey, 2007; Chagnon, 2001). However, material regarding the role of gesture and body-movement in one-on-one voice teaching is sparse; very few publications mention teachers' deliberate use of gesture (Kayes, 2004) and the majority of printed matter on vocal pedagogy discourages movement in the student (Miller, 1996; Nair, 2007) – apart from relaxation exercises prior to singing (Caldwell & Wall, 1995; Chapman, 2006).

The author has demonstrated in previous studies that voice teachers deliberately and consciously use gestures in the explanation of singing related concepts (Nafisi, 2008, 2010). This led to the development of a system which categorises movements encountered in the context of vocal teaching according to their pedagogical intent and distinguishes gestures (physiological, sensation-related and musical) and body-movements (Nafisi, 2013a).

In order to investigate the status quo of the use of gesture and body-movement as teaching and learning tools in Western classical singing, the author conducted a survey amongst professional voice teachers using the above terminology. The survey sought to investigate the hypothesis 'gestures and body-movements are widely used tools in the teaching and learning of singing', specified in the following contentions:

1. A significant number of voice teachers use gestures to enhance explanation and/or demonstration;
2. A significant number of voice teachers encourage their students to carry out gestures as well as body-movements whilst singing to enhance their learning experience;
3. The various gestures and movements encountered in the context of teaching and learning singing can be identified and categorised in a way that will be accepted by a significant number of voice teachers;
4. There are some universally accepted and used gestures and body-movements in voice teaching;
5. There is a shared rationale for using gestures and body-movements in voice teaching.

The survey was first conducted in Germany amongst members of the *Bundesverband Deutscher Gesangspädagogen* (Federal Association of German Singing-Pedagogues, BDG) and then in Australia amongst members of the *Australian National Association of Teachers of Singing* (ANATS). Whilst the German results have already been reported (Nafisi, 2013b) the current paper presents, juxtaposes and compares the results from the two countries.

General and statistical information

Invitation to complete the survey went out to 420 members of ANATS with 76 responding and to 301 members of the BDG with 72 responding. In both countries there were significantly more female than male respondents with this trend being more pronounced amongst ANATS respondents (ANATS: 10.5% versus 89.5%, BDG: 20.8% versus 79.2%).

Respondents represented a wide range of age and years of teaching experience (Table 1).

The question if respondents had trained primarily as performing artists (singers) or as

teachers/voice pedagogues or to an equal level in both disciplines brought to light some interesting differences (Table 2).

Whilst a great majority of both respondent-groups identified as "trained to an equal level as performer and teacher" this majority is more pronounced for the BDG-group. It also notable that a significantly higher percentage of ANATS-respondents identified as primarily performing artists compared to BDG-respondents. Taking the opportunity to point out additional fields of training, ANATS-respondents' answers included: "professional training in piano", "composition", "choral conducting", "Jaques-Dalcroze", "class room music", "Tomatis Audio Vocal Training",[1] "current training in speech pathology". BDG-respondents' answers included: "training towards being a Certified Rabine Teacher",[2] "NLP",[3] "church-music (*Kirchenmusik*)"[4] and "repetiteur".

Next respondents were asked to indicate their level of professional training with multiple answers being possible (Table 3).

These responses reflect the profound differences in the professional training of musicians/singers and instrumental/voice teachers in the two surveyed countries. The German *Diplom* (diploma), the by far most common degree amongst BDG-respondents is a degree awarded after a 4 year full-time university course in a dedicated music university/academy or conservatorium. In 1999 there was a gradual introduction of Bachelor and Master degrees in Germany which have since 2010 replaced the old *Diplom* and *Magister*. The low numbers of Bachelors and Masters amongst German respondents suggests that the majority of respondents finished their professional education before 1999. The fact that the pathway to becoming a performing artist and/or teacher of singing is less unified in Australia is reflected in the more diverse responses of ANATS-members. It is also notable that five ANATS-respondents had doctorates compared with just one amongst BDG-respondents. Bearing in mind that this question allowed multiple answers, the relatively high number of privately trained respondents

Table1: Age and Teaching experience.

Respondents' age	**ANATS**	**BDG**
Min	22	25
Max	81	88
Average/Mean	45.9	48.4
Respondents' teaching experience in years		
Min	0.5	3
Max	50	63
Average/Mean	16.6	20

1. A "pedagogy of listening" also known as Audio-Psycho-Phonology founded by the French ear-nose-throat specialist A. Tomatis (1920 – 2001).
2. Named after Prof Eugen H. Rabine, a US born, since 1972 Germany based singer, pedagogue and voice specialist. His method "function-based voice training" (*funktionelles Stimmtraining*) is used both by speech pathologists and singers.
3. Neuro Linguistic Programming is an approach to communication and personal development founded in the 1970s.
4. *Kirchenmusik* is a complete 4-6year university course in Germany aimed to train highly qualified musicians who carry on with the rich tradition of music in churches.

Table 2: Focus of training.

Answer Options	**ANATS**	**BDG**
I have trained primarily as a performing artist (singer)	17.8% (13)	9.7% (7)
I have trained primarily as a singing teacher/voice pedagogue	8.2% (6)	6.9% (5)
I have trained to an equal level as a performing artist (singer) and a singing teacher/voice pedagogue	74.0% (54)	83.3% (60)
Other – Please specify	10	12

in both groups testifies to an important role of private teaching in singer/teacher education in addition to institutionalized training in both countries. Taking the opportunity to add more qualifications, ANATS-members named for instance "AMusA,[5] LMusA,[6] Speech Level Singing".[7] Reflecting a greatly different structure of university degrees which, in many cases have no Australian equivalent, BDG-members specified for instance: "State certified examination for classroom music (*Staatsexamen Schulmusik*), artistic maturity graduation examination (*Künstlerische Reife*).

There were also some notable differences regarding respondents' professional status (Table 4).

The most notable differences between the two respondent groups is that nearly half of all ANATS-respondents indicated to be currently employed as professional singers of various genres compared with only a quarter of BDG-respondents currently singing professionally. Similar percentages of both respondent groups indicated that they were professional singers not currently employed as such. In Table 2 however 91.8% of ANATS-respondents had indicated that they had trained to a high level as performing artists/singers. This means that almost 10% of ANATS-respondents who had trained to a high level of artistry had never actually performed professionally. This phenomenon was even more pronounced amongst BDG-respondents where almost 30% of highly trained artists had never actually performed professionally.

Further comparisons show a clear bias towards classical singing amongst BDG-respondents as well as a significantly higher number of BDG-respondents teaching in tertiary institutions whereas significantly more ANATS-respondents teach in secondary schools. While private teaching plays a great role for both respondent groups, significantly more ANATS-respondents than BDG-respondents teach privately on a beginners/amateur level. A noteworthy similarity between the respondent groups is the important role of teaching in a private studio. This also ties in with the importance given to private teaching in respondents' own training seen above.

A large number of respondents took the opportunity to clarify their current professional status; ANATS-respondents' answers included:

5. Associate Diploma awarded by the Australian Music Examination Board (AMEB)

6. Licentiate Diploma awarded by the Australian Music Examination Board (AMEB)

7. SLS is a singing technique founded by the US American vocal coach Seth Riggs

Table 3: Level of training.

Answer Options	ANATS	BDG
Doctorate	6.8% (5)	1.5% (1)
Master	23.3% (17)	7.4% (5)
Magister (option only offered in Germany)	N/A	8.8% (6)
Diplom (option offered only in Germany as this degree is distinct from the Australian Graduate Diploma)	N/A	77.9% (53)
Honours	8.2% (6)	0.0% (0)
Graduate Diploma (option only offered in Australia as this degree is non-existent in Germany)	39.7% (29)	N/A
Bachelor	30.1% (22)	2.9% (2)
Privately trained	35.6% (26)	25.0% (17)
Self-taught	5.5% (4)	5.9% (4)
Other – Please specify (see below and Appendix B)	12	13

"leading a community choir", "teaching in a primary school", "teaching composition, aural study and theory", performing in amateur productions". BDG-respondents' answers included: "director of music productions on television", "lecturer of *Atem-Tonus-Ton*[8] (breath– muscle-tone – vocal-tone)", "lecturer for voice physiology and pedagogy", "own speech pathological practice".

Gestures in Communication

The main part of the survey concerned itself with respondents' use of gesture and body-movement in their teaching and started out introducing a terminology which distinguished the movements encountered in the context of vocal teaching (Nafisi, 2013a):

- Physiological gestures: gestures (usually of hands and arms with head and/or torso as reference points) that visualise actual internal physiological mechanisms related to the singing process. The pedagogic intention behind these gestures is to make the depicted physiological actions known and understandable to the student or to facilitate the functioning of the visualised mechanism;
- Sensation related gestures: gestures (usually of hands and arms with head and/or torso as reference points) that illustrate singing metaphors, imagery and/or acoustic phenomena. They visualise subjective thoughts and/or sensations connected to a desired vocal sound but do not reflect actual physiological occurrences;
- Musical gestures: gestures (usually of hands and arms with head and/or torso as reference points) in which the hands are used to give a visible form to musical phenomena. Music being an inherently immaterial, abstract matter, these gestures have no reference point in the 'bodily world' but symbolise pure thought-images;

All gestures can be used by teachers in explanation and/or demonstration or carried out by students before or whilst singing to facilitate or enhance learning.

8. Body oriented approach to voice building founded by the physio-therapist Maria Höller-Zangenfeind.

Table 4: Professional status.

Answer Options	ANATS	BDG
I am currently singing professionally in opera/oratorio/concert	14.7% (11)	16.4% (11)
I am currently singing professionally in music theatre	10.7% (8)	0.0% (0)
I am currently singing professionally in contemporary popular music (e.g. Rock, Pop, Jazz, R&B)	20.0% (15)	9.0% (6)
I am a professional opera/concert singer but not currently active as such	18.7% (14)	35.8% (24)
I am a professional music theatre singer but not currently active as such	13.3% (10)	3.0% (2)
I am a professional singer of contemporary popular music but not currently active as such	5.3% (4)	0.0% (0)
I am teaching singing in a tertiary institute	12.0% (9)	41.8% (28)
I am teaching singing in a secondary school	33.3% (25)	13.4% (9)
I am teaching singing in a music school	12.0% (9)	38.8% (26)
I am teaching singing privately on a professional level	57.3% (43)	46.3% (31)
I am teaching singing privately to beginners and amateurs	70.7% (53)	50.7% (34)
Other - Please specify (see below and Appendix B)	12	22
Skipped Question	1	5

- Body-movements: movements (of any part of or the whole body) that students are carrying out upon instruction by voice teachers; they are distinguished from gestures in that they have no explicit expressive component. While gestures can be both a tool of communication (used by the teacher in explanation and/or demonstration) and a learning tool for the student (when carried out whilst singing), body-movements cannot be used as a tool of communication and make only sense as learning-tools for the singing-student;

The first question asked:

1. Do you use musical, physiological and/or sensation related gestures musical, physiological and/or sensation related to enhance and/or illustrate your explanations and/or demonstrations? (Table 5)

The surprisingly unified response confirms contention (1) that propounds that 'a significant number of voice teachers use gestures to enhance explanation and/or demonstration.

2. It was then sought to differentiate between the identified gesture types (Question 2).

Whilst all three gesture-types appear to feature prominently in the respondents' explanations and/or demonstrations, it is notable that physiological gestures have by far the highest number of regular users in both respondents

Table 5: Use of gestures in communication.

Answer Options	ANATS	BDG
Yes	94.7% (72)	100.0% (75)
No (I consciously abstain from "talking with my hands")	0.0%	0.0%
No (I am not really aware of my hands when I am talking or demonstrating but certainly do not use them deliberately)	5.3% (4)	0.0%
Skipped Question	0	1

Question 2.

To what extent do you use physiological gestures in the explanation of mechanisms relevant to voice production?

I use physiological gestures	Not at all	Rarely (every once in a while, in special cases)	Sometimes (once or twice in every 2nd or 3rd lesson)	Regularly several times in most lessons)	Skipped Question
ANATS	0%	6.8% (5)	17.6% (13)	75.7% (56)	2
BDG	4.3% (3)	2.9% (2)	21.5% (15)	71.5% (50)	2

To what extent do you use sensation related gestures to illustrate singing related metaphors and/or acoustic phenomena?

I use sensation related gestures	Not at all	Rarely	Sometimes	Regularly	Skipped Question
ANATS	2.8% (2)	9.5% (7)	27.1% (20)	60.9% (45)	2
BDG	4.3% (3)	9.9% (7)	32.4% (23)	53.6% (38)	1

To what extent do you use musical gestures to communicate musical concepts?

I use musical gestures	Not at all	Rarely	Sometimes	Regularly	Skipped Question
ANATS	0%	8.2% (6)	23% (17)	69% (51)	2
BDG	2.8% (2)	13.9% (10)	30.6% (22)	52.8% (38)	0

groups a result which ties in with Hostetter's (2011, p. 297) finding that "gestures that depict motor actions are more communicative than those that depict abstract topics".

3. The next question sought to pinpoint commonly used gestures (Question 3).

The great spread of answers emphasizes the huge variety of gestures that can be used in a singing context, which is further reflected in the relatively large number of respondents from both groups who took the opportunity to describe their own gestures; suggestions from ANATS-respondents included: "Drawing up hand from low in front of torso, as if stretching up a tapering, elastic substance to depict the sensation of engagement of core muscles through the musical phrase". One respondent gave a detailed description:

> Elevated soft palate - describe as a jellyfish in propulsion using both hands, rounded, palms facing down, hands pulsing upwards and outwards together, sometimes followed by taking left hand above head, fingers to the rear, palm facing down, large opening between thumb and forefinger, travelling up from the crown of the head and described as a funnel.

Question 3.

Here are some examples of musical, physiological, and sensation related gestures. Please indicate to what extent you use any of the below in your teaching. Please also describe any others you might use.

Examples of gestures	Surveyed Group	Not at all	Rarely	Some-times	Regularly	Resp. Count
Conducting gestures	ANATS	8.1% (6)	20.3% (15)	41.9% (31)	29.7% (22)	74
	BDG	13.2% (9)	38.2% (26)	36.8% (25)	11.8% (8)	68
One hand moving horizontally in a smooth line, usually in chest height, depicting "legato"	ANATS	9.6% (7)	9.6% (7)	28.8% (21)	52.1% (38)	73
	BDG	4.3% (3)	11.4% (8)	32.9% (23)	51.4% (36)	70
One or both hand(s) at eyes' height, fingers pointing towards and/or touching forehead, eye-sockets and cheek bones, depicting resonance in the "mask"	ANATS	21.3% (16)	22.7% (17)	25.3% (19)	30.7% (23)	75
	BDG	20.3% (14)	23.2% (16)	23.2% (16)	33.3% (23)	69
One or more fingers point forward, usually in face height, depicting "forward placement/direction"	ANATS	18.9% (14)	17.6% (13)	25.7% (19)	37.8% (28)	74
	BDG	20.3% (14)	20.3% (14)	31.9% (22)	27.5% (19)	69
One hand next to head usually in ear-height with a downward facing rounded palm illustrating the "elevated soft palate".	ANATS	12.2% (9)	18.9% (14)	36.5% (27)	32.4% (24)	74
	BDG	33.3% (24)	22.2% (16)	20.8% (15)	23.6% (17)	72
One hand in front of the body, about halfway between the sternum and the navel, palm down, moving downwards illustrating the "descent of the diaphragm"	ANATS	24.7% (18)	19.2% (14)	26.0% (19)	30.1% (22)	73
	BDG	17.1% (12)	24.3% (17)	41.4% (29)	17.1% (12)	70
Holding one hand palm down and curved describing a "covered" tone	ANATS	47.3% (35)	27.0% (20)	16.2% (12)	9.5% (7)	74
	BDG	57.7% (41)	19.7% (14)	14.1% (10)	8.5% (6)	71
Other – Please specify	ANATS	29				
	BDG	22				
Skipped Question	ANATS	1				
	BDG	0				

Another added: "Fingers laced so arms form dome shape of diaphragm. Fingers laced, body represents backbone, arms showing rib positions in relation to posture." BDG-responses included: "one hand held at mouth-height moves from front to back in order to demonstrate the opening of the backward pharynx/resonance chamber", "Hand signs spell out the functions of the larynx" and "A rounded hand, palm down moves upward-forward in an upward scale; going down the hand opens and stretches upwards, palm up in the Passaggio".[9] Although certain physiological gestures are commonly used to illustrate and demonstrate some of the core concepts and mechanisms of voice production (e.g. the descending diaphragm, wide ribcage, elevated palate, relatively low larynx) the great variance in responses suggests that it would be difficult to agree on a specific form of gesture with an even greater spread for sensation related gestures. It is clear that, apart from well-established gestures like conducting gestures and certain 'obvious' emblematic gestures (e.g. "forward", "legato") gestures tend to be highly individual and variable in their application and form.

4. The next question sought to pinpoint reasons for using gestures in communication (Question 4).

These answers suggest a level of agreement amongst respondents as to the reasons behind using gestures as a tool of communication. One ANATS-respondent added:

A gesture can illuminate a mechanism, making it physical and real to the student. I feel gesture should be used in conjunction with and after a lucid verbal explanation. It can later be used as shorthand but one must check regularly that the student continues to identify the correct sensation with the gesture.

9. Italian term from the bel canto school: transition from one register to another.

Question 4.

Why do you use musical, physiological or sensation related gestures to enhance and/or illustrate your explanations and/or demonstrations? Please indicate your level of agreement with the reasons given below and/or state your own reasons.

Choice of reasons	Surveyed Group	Disagree	Agree partly	Agree mostly	Agree completely	Resp. Count
A gesture can simplify a complex mechanism/concept	ANATS	0.0%	13.3% (10)	45.3% (34)	41.3% (31)	75
	BDG	1.4% (1)	9.9% (7)	45.1% (32)	43.7% (31)	71
A gesture can encapsulate and bring across a point much clearer than words	ANATS	4.0% (3)	16.0% (120	44.0% (33)	36.0% (27)	75
	BDG	1.4% (1)	32.9% (23)	32.9% (23)	32.9% (23)	70
One can communicate through gestures whilst singing/demonstrating	ANATS	2.7% (2)	8.0% (6)	33.3% (25)	56.0% (42)	75
	BDG	2.8% (2)	7.0% (5)	26.8% (19)	63.4% (45)	71
One can communicate through gestures whilst a student is singing	ANATS	1.4% (1)	6.8% (5)	25.7% (19)	66.2% (49)	74
	BDG	1.4% (1)	5.6% (4)	26.4% (19)	66.7% (48)	72
It is natural for you to "talk with your hands"	ANATS	5.3% (4)	22.7% (17)	29.3% (22)	42.7% (32)	75
	BDG	4.3% (3)	17.4% (12)	21.7% (15)	56.5% (39)	69
Other –Please specify	ANATS	20				
	BDG	15				
Skipped Question	ANATS	1				
	BDG	0				

"Gesture can allow 'doing' without or before explanation" and "musical rhythms are based on dance and gestures can indicate the dance-like nature of the music in a way that words do not". BDG-respondents additional reasons included: "A gesture supports and illustrates the spoken word and thus can help avoid misunderstandings. Gestures are a natural part of language that also precede the advent of (spoken) language" and "Nonverbal communication is communication on an additional channel". The diversity of answers shows that, apart from the common ground demonstrated in the above table, there are many more reasons leading to gesture-use and sheer endless nuances in their formulation.

Question 5.

Answer Options	ANATS	BDG
Yes	90.8.% (69)	88.7% (63)
No	9.2% (7)	11.3% (8)
Skipped Question	0	1

Gesture as a learning tool

The next part of the survey looked at teachers encouraging their students to use specific gestures whilst singing.

5. Do you instruct/encourage your students to carry out gestures (physiological, sensation- related or musical) to enhance their understanding and/or facilitate the functioning of certain singing related mechanisms? (Question 5)

Responses from both the ANATS-group as well as the BDG-group confirm contention (2) ("A significant number of voice teachers encourage their students to carry out gestures as well as body-movements whilst singing to enhance their learning experience") of this study – as far as gestures are concerned. The result is however not as emphatic as was in regards to gesture as teaching/communication tool with a still significant 9.3% of the ANATS-group and 11.3% of the BDG not encouraging gesture in their students.

6. It was then sought to differentiate between gesture types (Question 6).

Question 6.

To what extent do you encourage your students to use physiological gestures whilst singing to facilitate learning of physiological mechanisms?

I encourage the use of physiological gestures	Not at all	Rarely	Sometimes	Regularly	Skipped Question
ANATS	1.4% (1)	8.6% (6)	57.1% (40)	32.9% (23)	6
BDG	6.1% (4)	9.1% (6)	39.4% (26)	45.5% (30)	6

To what extent do you instruct/encourage your students to use sensation related gestures whilst singing to enhance their experience of sensations conducive to good vocal tone production?

I encourage the use of sensation related gestures	Not at all	Rarely	Sometimes	Regularly	Skipped Question
ANATS	2.9% (2)	18.8% (13)	50.7% (35)	27.5% (19)	7
BDG	7.7% (5)	18.5% (12)	40.0% (26)	33.8% (22)	7

To what extent do you encourage your students to use musical gestures whilst singing to enhance their musical understanding?

I encourage the use of musical gestures	Not at all	Rarely	Sometimes	Regularly	Skipped Question
ANATS	4.3% (3)	15.9% (11)	52.2% (36)	27.5% (19)	7
BDG	1.5% (1)	15.2% (10)	57.6% (38)	25.8% (17)	6

It is notable that, as was the case with 'gestures as a tool for communication' (see Questions 1 and 2) physiological gestures have the highest number of frequent ('regular' or 'sometimes') users in both respondent groups.

7. The next question sought to pinpoint commonly used gestures (Question 7).

Similarly to the response to Question 3, the wide spread of answers attests to sheer endless variability of gestures, further highlighted by the relatively large number of respondents who added their own gestures/comments. Suggestions from ANATS-respondents included "painting with a large flat brush along an invisible wall to show the legato line making curves in air to show full phrase bowling the sound by lunging and singing at the same time to get air flowing freely" and "'Throwing darts' - to get a sense of precise onset; 'Picking up heavy buckets of water' to get a sense of being grounded when breathing; 'Bouncing a ball' – staccato; 'Spinning hands' around each other - constant airflow". BDG-respondents' suggestions included "A lying 'eight' and other kinesiological gestures", "Moving one or both hands in opposite direction as the pitch, like a 'lift and its weight', "What is high, becomes low and vice versa to unify registers and prepare leaps", "No horizontal lines but rather round ones in front of the body (like sowing seeds)".

It appears that the choice of gesture is limited only by the teacher's inventiveness and depends to a large part on both the students' and the teachers' individuality as well as the situation at hand. Teachers might have a certain 'repertoire'

Question 7.

Here are some examples of musical, physiological and sensation related gestures that can be carried out by students whilst singing. Please indicate to what extent you instruct/encourage your students to carry any of these gestures and/or describe any other gestures you might be using.

Examples of gestures	Surveyed Group	Not at all	Rarely	Sometimes	Regularly	Resp. count
Conducting gestures	ANATS	20.0% (14)	35.7% (25)	31.4% (22)	12.9% (9)	70
	BDG	31.8% (21)	37.9% (25)	22.7% (15)	7.6% (5)	66
Clapping or tapping out a beat	ANATS	20.0% (14)	35.7% (25)	31.4% (22)	12.9% (9)	70
	BDG	13.6% (9)	30.3% (20)	43.9% (29)	12.1% (8)	66
Pointing forwards with one or both hand(s)	ANATS	20.0% (14)	28.6% (20)	35.7% (25)	15.7% (11)	70
	BDG	26.2% (17)	30.8% (20)	32.3% (21)	10.8% (7)	65
Describing a horizontal line with one or both hand(s)	ANATS	10.0% (7)	15.7% (11)	45.7% (32)	28.6% (20)	70
	BDG	6.1% (4)	15.2% (10)	53.0% (35)	25.8% (17)	66
Mimicking a tone shape with one's hands (e.g. "round", "focused")	ANATS	27.5% (19)	23.2% (16)	34.8% (24)	14.5% (10)	69
	BDG	40.9% (27)	18.2% (12)	30.3% (20)	10.6% (7)	66
Tapping with fingertips of one hand into the open palm of the other to learn "staccato"	ANATS	40.0% (28)	28.6% (20)	24.3% (17)	7.1% (5)	70
	BDG	49.3% (33)	26.9% (18)	16.4% (11)	7.5% (5)	67
Mimicking a throwing movement to learn "staccato"	ANATS	52.9% (37)	22.9% (16)	15.7% (11)	8.6% (6)	70
	BDG	32.3% (21)	24.6% (16)	33.8% (22)	9.2% (6)	65
Other – Please specify	ANATS	15				
	BDG	17				
Skipped Question	ANATS	6				
	BDG	5				

of possible gestures whose efficacy has been proven in similar situations, but a high degree of individual preference indicates that it would be difficult to define specific gestures which would be regularly used and encouraged in students by a majority of voice teachers.

8. The next question sought to pinpoint reasons for encouraging students to use gestures (Question 8).

The two respondent groups appear to be in relative agreement with each other regarding their rating of the suggested reasons and most reasons given found wide agreement. The most controversial statement given was "Carrying out specific gestures distracts from the actual singing process". Reasons added by ANATS-respondents included: "Carrying out specific gestures enhances understanding of musical phrasing by giving it a corresponding physical sensation" and another stated succinctly:

> Externalising rhythm can help singers to feel a beat. Singers can show me what they are trying to do internally through gesture. Muscle association is useful for learning soft palate elevation - I've seen an improvement in students' fine muscular control when they make a similar external movement with their hands. A lot of these answers above use the word "visual"... but rather than see it, I think the most important aspect for a singer, is that they learn to feel it.

Additional reasons given by BDG-respondents included: "Carrying out specific gesture makes singing more precise, creating greater awareness for the singing process" and also:

> A gesture can help to commit a voice-technical mechanism to the physiological/kinesthetic part of the brain so that it can later be called

Question 8.

Why do you instruct/encourage your students to carry out gestures (musical, physiological or sensation related)? Please indicate your level of agreement with the reasons given below and/or state your own reasons.

Choice of reasons: Carrying out specific gestures...	Surveyed Group	Disagree	Agree partly	Agree mostly	Agree completely	Resp. count
...enhances understanding of musical phrasing by giving it a visible form	ANATS	0.0% (0)	14.1% (10)	49.3% (35)	36.6% (26)	71
	BDG	0.0% (0)	12.3% (8)	40.0% (26)	47.7% (31)	65
... aids the invisible process of singing by connecting it to a visible action	ANATS	1.4% (1)	8.5% (6)	33.8% (24)	56.3% (40)	71
	BDG	1.5% (1)	7.6% (5)	36.4% (24)	54.5% (36)	66
... improves the invisible vocal tone by connecting it to a visible form	ANATS	2.8% (2)	14.1% (10)	42.3% (30)	40.8% (29)	71
	BDG	6.2% (4)	16.9% (11)	33.8% (22)	43.1% (28)	65
... provides an external attention focus	ANATS	8.5% (6)	7.0% (5)	36.6% (26)	47.9% (34)	71
	BDG	4.5% (3)	24.2% (16)	33.3% (22)	37.9% (25)	66
... achieves greater expressiveness	ANATS	12.9% (9)	12.9% (9)	37.1% (26)	37.1% (26)	70
	BDG	15.4% (10)	29.2% (19)	38.5% (25)	16.9% (11)	65
... achieves greater focus, better concentration	ANATS	7.1% (5)	21.4% (15)	42.9% (30)	28.6% (20)	70
	BDG	6.1% (4)	33.3% (22)	37.9% (25)	22.7% (15)	66
... distracts from the actual singing process	ANATS	29.6% (21)	36.6% (26)	23.9% (17)	9.9% (7)	71
	BDG	11.1% (7)	36.5% (23)	25.4% (16)	27.0% (17)	63
... achieves better timing/rhythm	ANATS	1.4% (1)	25.4% (18)	42.3% (30)	31.0% (22)	71
	BDG	4.7% (3)	32.8% (21)	32.8% (21)	29.7% (19)	64
Other – Please specify	ANATS	17				
	BDG	9				

upon. Also – very importantly – a gesture can (particularly when used to replace useless, tense, habitual gestures) help to get rid of faulty old habits.

And another wrote:

A gesture gives very good feedback about a student's thoughts about a phrase, his/her sensation for voice positioning, breath, etc. Hand and body show a student's unconscious thoughts, with which inner image he guides his voice. Adjusting a movement to a desired gesture also alters voice positioning and breath. The causal connection between brain and hand never ceases to astonish.

These answers testify to the great importance ascribed to gestures as learning tools by the responding vocal teachers and tie in with findings in the field of neurology and motor-learning (Seitz, 1993; Wulf, 2007; Rosenbaum, 2010) and also reflect the advantages of gesture-use in the choral rehearsal as reported for instance by Wis (1993), Chagnon (2001) and Bailey (2007). This suggests that respondents were either aware of the relevant science or, more likely, their experience and intuition told them what is only relatively recently being confirmed by research.

Body-Movement as Learning Tool

9. The next question concerned the implementation of body-movement as a learning tool (Question 9).

Comparing the numbers to the responses to Question No 5 (Instructing students to carry out gestures) it is notable that body-movements are used slightly more by ANATS-respondents (93.2% versus 90.8%) and significantly more by BDG respondents (98.6% versus 88.7%) than gestures. A comparison between responses Question 6 (encouragement of use of the three gesture-types) and Question 9 shows that body-movements are being employed slightly more frequently than any of the gesture types. The differentiated responses to Questions 2 (three gesture-types in communication) and 6 (three gesture-types as learning tools) together with responses to Question 9 suggest that the terminology introduced by the author has indeed been understood and accepted, both where gestures in communication and gestures and body-movement as learning tools are concerned. This confirms contention (3) that "the various gestures and movements encountered in the context of teaching and learning singing can be identified and categorised in a way that will be accepted by a significant number of voice teachers".

10. The next question sought to identify commonly employed body-movements (Question 10).

Like with Questions 3 and 7, there is a wide spread of responses indicating how potentially

Question 9.

Do you instruct/encourage your students to carry out body-movements whilst singing?

Answer Options	ANATS	BDG
Yes	93.2% (69)	98.6% (70)
No	6.8% (5)	1.4% (1)
Skipped Question	2	1

To what extent do you instruct/encourage your students to use body-movement whilst singing?

I encourage the use of body-movement	Rarely	Sometimes	Regularly	Skipped Question	Resp. count
ANATS	5.8% (4)	42.0% (29)	52.2% (36)	7	69
BDG	14.3% (10)	44.3% (31)	41.4% (29)	2	70

controversial this subject is. The difference between ANATS and BDG- respondents is most notable where a suggested body-movement was 'never' used by a significant number of one respondent group whilst attracting only positive ratings from the other like examples (3) and (10). Most controversial was example (9) which was rejected by more than a quarter of all respondents but had at the same time still significant numbers of regular users. Other Body-Movements added by ANATS-respondents included: "Swaying and 'hula'-movements, sparkler circles", "Plus balance-board, Swiss ball, etc. and 8s, spray gun, laser beam".

Question 10.

Here are some examples of body-movements that can be carried out by students whilst singing. Please indicate to what extent you instruct/encourage your students to carry any of these body-movements and /or describe any others you might be using.

Examples of body movements	Surveyed Group	Not at all	Rarely	Sometimes	Regularly	Resp. count
1.Walking	ANATS	1.4% (1)	27.1% (19)	51.4% (36)	20.0% (14)	70
	BDG	0.0% (0)	22.2% (16)	54.2% (39)	23.6% (17)	72
2.Bending the knees	ANATS	1.4% (1)	9.9% (7)	56.3% (40)	32.4% (23)	71
	BDG	11.1% (8)	23.6% (17)	31.9% (23)	33.3% (24)	72
3.Spreading of arms	ANATS	8.6% (6)	17.1% (12)	44.3% (31)	30.0% (21)	70
	BDG	0.0% (0)	11.1% (8)	36.1% (26)	52.8% (38)	72
4.Swinging of arms	ANATS	7.1% (5)	32.9% (23)	38.6% (27)	21.4% (15)	70
	BDG	11.3% (8)	21.1% (15)	40.8% (29)	26.8% (19)	71
5.Turning/rolling of head	ANATS	21.7% (15)	30.4% (21)	33.3% (23)	14.5% (10)	69
	BDG	18.3% (13)	29.6% (21)	25.4% (18)	26.8% (19	71
6. Letting the tongue hang out	ANATS	14.5% (10)	21.7% (15)	42.0% (29)	21.7% (15)	69
	BDG	20.8% (15)	27.8% (20)	34.7% (25)	16.7% (12)	72
7. Leaning against a wall	ANATS	10.0% (7)	25.7% (18)	48.6% (34)	15.7% (11)	70
	BDG	5.6% (4)	18.1% (13)	54.2% (39)	22.2% (16	72
8. Lying on the ground	ANATS	8.6% (6)	27.1% (19)	47.1% (33)	17.1% (12)	70
	DBG	19.7% (14)	28.2% (20)	38.0% (27)	14.1% (10	71
9. Assuming the "monkey" position (feet hip-wide apart, slightly bent knees, the upper body tilts slightly forwards from the pelvis, arms hang freely)	ANATS	25.7% (18)	22.9% (16)	31.4% (22)	20.0% (14)	70
	BDG	30.4% (21)	30.4% (21)	24.6% (17)	14.5% (10)	69
10. Placing hands on various parts of the body (e.g. the epigastrium, abdomen, rib cage, lower back) to sense internal mechanisms (e.g. breathing and support)	ANATS	0.0% (0)	0.0% (0)	36.6% (26)	63.4% (45)	71
	BDG	8.6% (6)	14.3% (10)	31.4% (22)	45.7% (32)	
Other – Please specify	ANATS	8				
	BDG	14				
Skipped question	ANATS	5				
	BDG	0				

BDG-respondents' recommendations included: "dance movements" and repeatedly referred to postural adjustments like "putting one foot behind the other and distributing one's weight equally between both legs helps to feel a diagonal (forwards upwards- backwards-downwards) in the body and the tone is better connected with the body" and "energetic/ dynamic standing, shifting one's weight from one leg to the other similar to awaiting a serve in tennis – high energy, elasticity, flexibility". These descriptions correlate to the notion that "posture is not a static or fixed position, rather it is an active stillness or a physically quiet attitude" (Sell, 2005, p. 71) also mirrored in the dynamic posture mentioned by Bunch (1995) or Chapman (2006). Similarly to Question 7 the sheer choice of possible body-movements means that preference depends again mainly on both the students' and the teachers' idiosyncrasies as well as the situation at hand. The high degree of individuality suggests that, apart from more generic movements like 'walking' or 'swinging of arms', it would be difficult to define specific body-movements which would be regularly used and encouraged in students by a majority of voice teachers.

11. The next question sought to pinpoint reasons for encouraging students to use body-movements (Question 11).

There appears to be a certain level of agreement regarding the rationale of body-movement-use and it is notable that no-one in both respondent groups disputes that 'Carrying out body-movements whilst singing raises body-awareness'

Question 11.

Why do you instruct/encourage your students to carry out body-movements whilst singing? Please indicate your level of agreement with the reasons given below and/or state your own reasons.

Choice of reasons: Carrying out body-movements whilst singing …	Surveyed Group	Disagree	Agree partly	Agree mostly	Agree completely	Resp. count
…raises body awareness	ANATS	0.0% (0)	15.5% (11)	32.4% (23)	52.1% (37)	71
	BDG	0.0% (0)	14.3% (10)	40.0% (28)	45.7% (32)	70
… helps to release tension, achieve relaxation	ANATS	0.0% (0)	8.3% (6)	34.7% (25)	56.9% (41)	72
	BDG	0.0% (0)	12.5% (9)	40.3% (29)	47.2% (34	72
… helps achieve better concentration	ANATS	5.6% (4)	22.5% (16)	49.3% (35)	22.5% (16)	71
	BDG	4.2% (3)	50.7% (36)	23.9% (17)	21.1% (15)	71
… distracts from the actual singing process	ANATS	28.6% (20)	35.7% (25)	17.1% (12)	18.6% (13)	70
	BDG	8.3% (6)	37.5% (27)	29.2% (21)	25.0% (18)	72
… helps to bring the body into a position that is conducive to tone production	ANATS	1.4% (1)	16.7% (12)	44.4% (32)	37.5% (27)	72
	BDG	1.4% (1)	26.8% (19)	38.0% (27)	33.8% (24)	71
… energizes the body	ANATS	1.4% (1)	11.3% (8)	35.2% (25)	52.1% (37)	71
	BDG	2.8% (2)	15.5% (11)	35.2% (25)	46.5% (33)	71
… enhances learning	ANATS	1.4% (1)	16.7% (12)	27.8% (20)	54.2% (39)	72
	BDG	4.2% (3)	30.6% (22)	33.3% (24)	31.9% (23)	72
Other – Please specify	ANATS	11				
	BDG	9				
Skipped question	ANATS	4				
	BDG	0				

and 'helps to release tension'. Additional reasons given by ANATS respondents include "Assists recruitment of 'support' musculature with optimal body freedom", "Distracting students who think too much about how they sing is a good idea. It enables singing to happen in a more natural way" and also: "I believe it is more natural to move when you sing than to stand still". Reasons suggested by BDG respondents included: "(body-movement) releases external tensions and blockages as well as bad habits; affects, depending on the respective movement posture, breathing, Appoggio,[10] neck muscles and secondary breathing muscles etc., generally a liberating effect on tone and timbre". Generally it can be said that respondents' reasons for encouraging body-movements in their singing students reflect the advantages also found in body-movement – use in choral rehearsal (Wis, 1993; Chagnon, 2001; Bailey, 2007). Responses to Questions 4, 11 and 8 mean that contention (5) could be confirmed: There exists a certain level of agreement regarding the rationale of employing gestures and body-movements in the teaching of singing.

Conclusion

This survey has been conducted amongst members of professional voice teacher associations in two countries with high credentials and long traditions in music education and vocal pedagogy. Differences between the two respondent groups were most pronounced in regards to their professional training and current employment status. Professional musical training in Germany tends to be longer and both more streamlined and more diverse compared to Australia and a number of German University degrees have no Australian equivalent (e.g., *Kirchenmusik, Schulmusik*). Whilst the great majority of both respondent groups reported to have trained to a high standard as a performing artist, a surprising 30% of BGD-respondents compared with only 10% of ANATS-respondents had never performed professionally. Rather than suggesting a lack of performance opportunity in Germany, this may be taken as an indicator of the high artistic requirements even in dedicated instrumental and voice teacher training in German Universities and Conservatoriums.

Differences in responses to the actual subject matter of the survey could not be conclusively correlated with either of the respondent groups. The fact that the great majority of all respondents embraced gestures both as tools to enhance communication as well as – alongside body-movements – tools to enhance learning, is heartening but calls for careful interpretation as it strongly suggests a certain 'self-selection' of invitees. It is likely that teachers who were not actively using gestures and body-movements in their teaching had simply not responded. Any assumption that a majority of all voice teachers were using gestures and body-movements in their teaching is contradicted by a substantial amount of anecdotal and empirical evidence attesting many voice teachers employing neither gestures nor movements in any capacity in their teaching. Without reliable evidence from a representative (not self-selected) sample or better still the complete cohort of voice teachers in one or several countries, it remains impossible to put a percentage on users and advocates of gesture/body-movement users versus those who reject using gesture/body-movement in their teaching.

However, the survey responses demonstrated conclusively that a significant number of singing teachers employ gestures to enhance their explanations and demonstration and also instruct their students to carry out gestures and/or body-movements to aid understanding of specific acoustic or musical concepts and/or perform specific physiological mechanisms with greater

10. From Ital. *appoggiarsi* = to lean upon, the term denotes the concept of breath support as taught by the Italian (and arguably also international) school of classical singing technique.

ease. Responses also reflect the scope of variation of gestures and body-movements as well as their dependence on situations and individual idiosyncrasies.

The survey results tie in well with other recent studies about studio voice teaching practice (Maxfield, 2011; Ware, 2013) and encourage further research into this field of vocal pedagogy. As a by-product, the survey has consolidated the author's system of denoting and distinguishing gestures and movements encountered in the singing studio. Further research will be needed to determine the actual effect of specific gestures and body-movements on specific aspects of the singing process.

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Born in Munich/Germany, **Julia Nafisi** has studied voice in her hometown as well as in Vienna/Austria and later completed a MMus (Vocal Pedagogy) at the Sydney Conservatorium of Music and a PhD at Monash University. She has appeared in opera and recital across Europe and Australia and is a researcher, lecturer and presenter with two main fields of expertise: German Lieder (German Romantic Art Song) and Gesture and Body-Movement in the Teaching of Singing. Julia is currently teaching at the Melbourne Conservatorium of Music as well as conducting research at the Speech Neuroscience Unit at the University of Melbourne.