

TONE CONSTELLATION: A PERSONAL SPATIAL SCALE PRESENTATION. SEARCHING FOR AN ALTERNATIVE APPROACH TO TEACHING MUSIC THEORY

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ABSTRACT

In order to free students from a restricted view offered by standard notation, which does not reflect the sound, not even the most common phenomena, we embarked upon a four phase project “**Searching for an alternative approach to Teaching Music Theory**”

1. Feeling i.e. seeing (FS) tone positions during Solmisation scale singing (SSS)
2. FS basic cadences
3. FS changes of hierarchy of tones when varying rhythm in a given melodic sequence
4. FS changes in tonal hierarchy varying melodic and harmonic rhythm

This paper deals with Phase one

1. INTRODUCTION

1.1. Aims

To encourage student’s imagination in understanding and analysing music both written and heard, concentrating on listening in an uninhibited way.

1.2. Method

First year students majoring:

music pedagogy (28), composition (3), conducting (2), musicology (3), and piano (1) were involved in major SSS (Scale Singing using Solmisation syllables) both ascending and descending) in group and individually. In order to complete the investigation, they were later requested to try major SSV (Scale Singing, one Vowel at the time both ascending and descending) individually. The additional testing was to check if vowels used in solmisation syllables affected tone positions. Namely, while SSS and SSV the participants were expected to locate tones they sing: within their body and around them in three dimensional space.

1.3. Results

1. SSS both in group and individually show better results in locating tones in space than within their body.
2. SSV shows almost no affect solmisation vowels have on locating tones

1.4. Conclusion

Students feel/imagine scale tones mostly in space, less within their bodies. The functionality of scale positions is much more significant that the effect of the vowels involved in the solmisation syllables.

2. BACKGROUND

Professional musicians become conditioned by the terminology and score visualisation loosing the spontaneity of non-professionals. The static scale image with equidistant notes, rectilinear slope, direction from left to right as on the keyboard tends to restrict imagination necessary for transforming the two dimensional score image into a multidimensional musical expression. In score, however, rhythm spreads from left-right leaving the scale with the bottom-top direction, which rarely corresponds to any instrument fingering, where the scale orientation differs from instrument to instrument.

“**Searching for an alternative approach to Teaching Music Theory**” project tries to encourage “searching for“ sound equivalents, by developing a “feeling for” tone, time and harmonic positions sets, rather than “looking at“ the soundless score. It aims to encourage bending score edges, as it were – leading to score relativisation. We propose to achieve this by using a number of techniques, which we plan to implement and test in four phases.

Phases:

1. Feeling i.e. seeing (FS) tone positions during
 - a) Scale Singing using Solmisation syllables (SSS) ascending and descending in group and individually
 - b) Scale Singing, one Vowel at the time (SSV) ascending and descending individually
2. FS basic cadences
3. FS changes of hierarchy of tones when varying rhythm in a given melodic sequence
4. FS changes in tonal hierarchy varying melodic and harmonic rhythm

The paper analyses the results achieved by phase one

2.1. Aims

To encourage student’s attention to “hearing” the score and “finding” its equivalent on the instrument i.e. singing using solmisation syllables instead of comparing written music image with the instrument fingering .

To encourage their musical imagination in understanding and analysing music by concentrating on listening in an uninhibited way, trying to achieve spontaneity in understanding music that nonprofessional musician with no music education have

2.2. Method

Project participants were first year students majoring music pedagogy (28), composition (3), conducting (2), musicology (3), and piano (1).

They were expected to complete two tests:

1. SSS (ascending and descending), a major scale both as a group and individually. They were also expected to locate tones they sing within their body and in three dimensional space.
2. SSV (ascending and descending) in order to see if the vowels in solmisation syllables themselves affect the space positions. This was performed by singing one vowel at a time

- a) Collective SSS, 20 students and teacher unison (Tempo: MM 80)
- b) Individual SSS and SSV 40 arbitrary tonality and tempo

2.3. SSS Results

	in front blackboard	behind	left	right	below	above	diag.left	diag. right	piano	center	whole space
DO	11	/	4	3	/	3	/	5	2	4	/
RE	12	2	3	5	/	/	/	2	7	/	/
MI	12	1	4	2	/	/	/	3	3	/	1
FA	7	/	3	3	/	/	5	8	4	1	1
SOL	10	1	2	5	/	1	2	4	4	1	/
LA	8	2	3	1	/	1	1	3	3	3	/
SI	11	3	3	4	/	/	2	6	3	1	/
DO2	10	/	1	2	/	2	/	2	/	/	/
DO2	6	/	1	2	/	1	1	1	/	/	/
SI	6	6	5	3	/	1	/	5	3	/	/
LA	9	2	1	1	/	3	3	3	3	/	/
SOL	7	2	3	2	/	1	4	5	4	/	/
FA	8	4	5	5	/	/	1	2	1	/	/
MI	8	1	3	2	/	/	2	4	1	/	1
RE	9	2	5	4	/	/	1	2	2	/	/
DO	10	5	4	1	/	1	2	3	2	/	1

Table 1:Space location upward and downward*

a) Group Inner body and Space Location

Within		Space		Combined	
rectilinear	2	rectilinear	9	by tetra chords	2
curved	1	shattered	2		
no specification	3	random	5		

b) Individual

	head	eyes	ears	mouth	nose	cheeks	forehead	back of head	crown	throat	chest
DO	3	/	2	2	1	1	1	/	/	3	2
RE	3	/	/	1	/	/	/	/	/	1	/
MI	3	/	/	/	/	/	/	/	/	3	/
FA	/	/	/	1	/	/	/	1	/	/	1
SOL	1	/	/	1	3	/	/	/	/	/	/
LA	2	1	/	/	1	/	/	/	/	/	1
SI	/	2	/	/	1	/	1	/	1	/	/
DO2	4	/	1	2	/	2	1	/	1	/	/
DO2	2	/	1	/	/	/	1	/	1	/	/
SI	/	1	/	/	2	/	1	/	2	/	/
LA	/	1	/	/	2	/	/	/	/	1	1
SOL	1	/	/	1	1	/	/	/	/	1	/
FA	/	/	/	1	/	/	/	/	/	/	1
MI	/	/	/	/	/	/	/	/	/	/	1
RE	/	/	/	1	/	/	/	/	/	2	/
DO	1	1	1	1	/	1	1	/	/	1	1

Table 2: Inner body location upward and downward*

* numbers in the tables represent the number of students

The SSV confirmed that vowels used in solmisation syllables do not affect their positions in space. For an example: The space positions of the fourth and the sixth degree set by SSS, although sung by the same vowel “Ah”, do not coincide. Furthermore, they do not either coincide when tested by SSV i.e. using “Ah” throughout the scale.

3. CONCLUSION

The results show that students have a reasonably developed space imagination but it takes approximately 20 to 30 minutes to complete their tasks when tested individually. Some of them searched positions tone by tone, others located them only as positions within a sequence. Their feel/imagine scale tones positions are located mostly in space, less within their bodies. Vowels involved had no greater significance. The force of functionality of each scale degree i.e. solmisation position was far more significant.

4. REFERENCES

1. Daniel J. Levitin: *Measuring Music in Non-musicians*, Conference London 12-13 April 2002.
2. Vera Milankovic: *Music Performance and Appreciation*, Workshop following five dimensions of rhythm, CSRPMME Conference Sheffield, 4-5 April 1998.
3. Vera Milankovic & Gordana Acic: *Performance in education: a field to explore*, ISMPC Conference Keele University 5-10 August 2000.
4. C.Gayford, C. Minassian, & J.Sloboda Enchancing expressive musical performance through bodily awareness ESCOM Conferene Liege 5-8- April 2002.
5. Vera Milankovic: *A different view on Solfege*, ESCOM Conferene Liege 5-8- April 2002.
6. C.Gayford, C. Minassian, & J.Sloboda, Feeling Sound, Conference London 12-13 April 2002.
7. R.Aiello: *On the integration of musical knowledge*, Conference London 12-13 April 2002.
8. Vera Milankovic: *A model for developing better music perception*, SRPMME Conference London 12-13 April 2002.