Singing and Jumping Opens the Way to a Vital Music Eurythmy Foundation

A Close Consideration of Our Practice of Music Eurythmy Past, Present and Future

A memoir and report by Kate Reese Hurd

PART I: THE ARCHETYPAL SCALE AND ITS

DISAPPEARANCE – First Third accompanied by two manuscripts (J.S. Bach's Chorale BWV 367 and Jean Marie Leclair's Sarabande) and introducing new methods for showing tonal relationships Posted in November 2019, extensively revised in late March 2023 PREFACE **BASICS FOR THE BEST USE OF THE REPORT** 2 General Remarks For the Reader Regarding Passages Translated From the German A Musical Review and Key For Use Throughout The Tetrachords, Diatonic Scale, Archetypes, the Hexachord A Brief Background on the Art of Eurythmy; Its Foundation Concerning the 'Gebilde' of Our Tonal Music Concerning Steiner's Use of the Word, 'tone' **PROLOGUE: ARRIVING AT A BOUNDARY IN MY** MUSIC STUDIES AND PERFORMANCE 9 THE ARCHETYPAL SCALE AND ITS DISAPPEARANCE – A MEMOIR 10 Introduction to the Angle-Gestures at the End of First Year The Musical World That Opened Began to Close • J.S. Bach, Chorale, BWV 367 - 11 Looking More Closely at Our First Exercise Second Year: Revolution Amongst the Angle-Gestures How We Handled the Angles • Jean Marie Leclair, Sarabande in A Major – 22 Might There Be Value in Angles Fixed to Pitch-Tones? The second half of the PART I Memoir concerns third year, fourth year and some post-graduate classes, and focusses on

eight more pieces of music. It is still in progress. PART II: CONTEMPLATING MORE CAREFULLY **OUR FIXING OF THE ARCHETYPE ONTO ONE**

AUDIBLE PITCH-TONE *(still in progress)*

Taking a Yet More Sensitive Look at Our First Exercise The Hexachord and the Process of Mutation Our Notation: An Earthly, Material Necessity The Musical World Outside of the Piano: Our Other Instruments instruct Us About Musical Realities

The Angle-Gestures Practice as an Outgrowth of Our

Musical Notation and the Piano Keyboard Transcending the Piano and Musical Notation: What If We Restore the Archetype to Our Expression? The Unseen Impacts of What we Do

PART III: FIXED DO AND MOVABLE DO IN **OUR EURYTHMY – DOES IT MATTER?**

First section includes discussions of J.S. Bach's Arioso, BWV 156 and Air on the G String, BWV **1068**. A preliminary article by the same name appeared in the EANA Newsletter for autumn 2021.

Second section will be: KEY REVELATIONS FROM RUDOLF STEINER AND THE HISTORY OF DEVELOPMENTS SINCE HIS TIME

The first section was posted in March 2022 and revised in January and August 2023.

Concerning fixed do and movable do	1
The expression of the scale in eurythmy	2
Movable do in eurythmy expression	4
Fixed do in eurythmy expression	5
Real time consequences of fixed do	7
Moving toward a movable-do practice:	
 J.S. Bach's Arioso 	8
 J.S. Bach's Air on the G String 	11
Expressing changes in tonal center in eurythmy; Closing	12
References, Endnotes and About the Author	13

PART IV: THE SINGING AND JUMPING EXERCISES -**REAL SOUND-EXPERIENCES LEAD TO REAL GESTURES** Posted in March 2022

Introduction to PART IV	1
The Eurythmy Meditation	2
The Agrippa von Nettesheim Drawings Come to Life	2
Beginning to Sing	3
Entering the Scale Degrees	4
Entering the Melodic Intervals and the Triads	5
Exploring Harmonic Progressions and Modulation	6
Entering Music With Fresh Sensibilities	8
Equal Temperament: Does It Change Things?	10
Atonal and Twelve-Tone?	10

Fixed Do and Movable Do In Our Eurythmy: Does it Matter?

In this first section of PART III we will be entering the laws of music. Please take up the discussion gently! If it begins to go beyond your current comprehension, be open to finding something further that gives clarity. Make notes and keep working on any trouble spots; for this is a code that we must crack in order for our eurythmy to thrive! I hope that what I am laying out here can help us take a big step forward. \star Added now are the promised discussions of Bach's *Arioso* and his *Air on the G String*. (See at the end below for these two pieces.) Rather than being included in this discussion, a first exploration of the history of our angle-gesture expression of music is taken up separately in my article for spring 2022, "The Earliest Records Show the Angle-Gestures as Movable Do."

Concerning fixed do and movable do

Are you acquainted with the "Do-Re-Mi" song in the film, "The Sound of Music"?1 Maria von Trapp opens it: "Let's start at the very beginning, a very good place to start. When you read you begin with [one of the seven children answers] A B C!" She continues, "When you sing you begin with do re mi." She then sings up the steps of the scale from do to ti, but stops, leaving the scale unfinished! Then she sings the song: "Doe, a deer a female deer; ray, a drop of golden sun...." What is she doing? She is introducing the children to the **archetype** of the scale, whose lawful nature informs and shapes our songs and music in general in our time: through her, this large von Trapp family began to enter the fundamental structure and formation of music via the gateway of solfège, the singing of songs with the do-re-mi syllables. By following each melody's unique manner of visiting the steps of the scale, the children could begin to experience the inaudible foundation of our tonal music and not merely learn pitches. 'Tonal' means that the music is structured in relation to the pitch-tone that is the first step of the scale; and this pitch-tone serves as the tonal center of each given key. It is therefore called the 'tonic' of the scale and key; it is also called the 'prime' (since it is so primary). Scale steps are also called 'scale degrees.'

When the do-re-mi syllables are applied to the scale of a tune or composition such that the pitch-tone that serves in the role of the first step of the scale is expressed as 'do,' this is called **movable-do** solfège. The Christmas song, "Joy to the World," might be simple enough for us, that with the help of singing in solfège we can begin to perceive and experience how melodies traverse the scale steps. We can even write such a tune using only rhythmic notation and bar-lines, merely showing the relative pitch and the solfège syllable for the scale step of each note, as is done here. Do try to feel your way into singing the syllables. The lyrics go: "Joy to the world, the Lord is come, Let earth receive her King; Let ev'ry heart prepare Him room; Let heav'n and nature sing, (repeat), Let hea– v'n and hea–v'n and nature sing." (Note: I usually use the numbers 1 through 8 instead of solfège syllables now. You might want to try this, too. Numbers can be better in the long run, since they agree with the way that the laws of music are communicated.)

Singing the song in this manner with movable-do solfège, you can begin to enter the structure of our archetypal scale and explore its nature. What do you feel when it goes to prime-do? Does it ever seem to delay going there? If a melodic pattern of notes – a **motif** – sounds at one place in the scale and repeats at another, what is that like? *We can begin to feel the tensions and releases in the melody in relation to the scale*. And in movable do, if we change the pitch we begin with to suit our vocal range, the singing of the syllables remains the same: the archetype of the scale structure holds sway regardless; and we clearly express its first step with 'do' (or '1'), and so on up the scale. Its integrity is preserved in our experience and expression.

In **fixed-do** solfège, the syllable 'do' is fixed to the pitch-tone we call 'C.' This is convenient because the C scale is the one we traditionally notate cleanly without the use of symbols for 'sharps' and 'flats.' The sequence of do-re-mi syllables is then assigned to the audible C-scale pitches. Hence, the above solfège for this song would be correct when the start pitch is the pitch 'C.' But what happens if I change it to the one we call 'A'? The pitch-tones of the scale must then be spelled: A B C# D E F# G# A; and pitch 'A' must be sung as 'la,' its fixed syllable in the C scale. In fixed-do solfège, the do-re-mi syllables must therefore be altered for these new pitches that are notated with sharp or flat signs: basically, the vowels brighten to 'ee' or darken to 'ay,' respectively. So to ascend the A scale, with C#, F# and G#, the solfège here

will have to be: 'la ti **di** re mi **fi si** la.' (See the charts for the syllables at endnote 2. To use numbers, just change the vowels in the same way.)

We can explore these two approaches by singing them and comparing what we feel and observe. In our musical experiences and schooling we have grown up with this archetypal tonal scale structure. It is something that we feel one with in our etheric body (our 'body' of lifesustaining movement which interpenetrates our physical body) and it feels wholesome. How do we feel then, when we sing the syllables that reflect this structure in their proper order versus when we sing them in a different ordering, in which 'do' is no longer the prime? Can we keep our bearings relative to our experience of the archetypal structure? I find that I cannot. My singing of the fixed-do syllables defies my attempts to feel sure of this structure and to know where I am in it. I have lost my mooring. Since I know the song, my singing adheres to the structure; but I feel thrown into disconnection from it because I must now engage my mind in order to determine which note is which scale step. I wish I could learn the sequence of syllables in each phrase so well that I could ignore them, for they do not help my experience. This is fixed do. It does not reflect the structure of the scale that informs the melody. (Note: with years of experience using movable do and fixed do, composer and teacher, Michael Kaulkin, concluded that "over time, using [fixed do] may teach students by rote how to sing the notes, but it will not teach them intervals. It will not teach them anything about harmony or function, to say nothing of voice leading...." (Voice-leading refers to separated entries of the voices, as occurs in fugues. You will find several more extremely insightful remarks from Kaulkin at endnote 3.)

The expression of the scale in eurythmy

So, what relevance do the practices of fixed do and moveable do have to our approach to the scale in music eurythmy expression? We must first review the gestures that we are familiar with, that we have typically been using for the scale. In *Eurythmy: Its Birth and Development*, on page 71 we see drawings showing that on August 23, 1915 as part of the "Apollonian Course," Rudolf Steiner presented a sequence of angle-gesture expressions for the inner experience of the musical scale in **major**. In ascending order he named the gestures: "Prima," "Secunda," "Terza," "Quarta," "Quinta," "Sexta," "Septima." Clearly, these are the rungs of the scale-ladder, the 'Tonleiter'; so they can of course be called 'do re mi fa sol la and ti,' or called by simple numbers, 1 through 8.

What is most striking about the sequence of angleexpressions that Steiner presented is that a strong dynamic of opening and closing is carried out by the arms, and that the legs remain quiet from the prime to the 4th, then become remarkably energetic in expression of the 5th, 6th and 7th – they spring wide apart! – and then cease their activity in a sense of resolution as the arms close upon reaching the octave, 8ve. In this manner, the archetypal musical roles and qualities within our archetypal scale in its major mode are expressed in movement. Everything occurs in relation to the prime and its achievement at a higher lever in the 8ve. Later, Steiner added the use of a simple bend in the angles (much more about this will come below). When on August 26, 1915, he presented the **minor** mode of the scale, the gestures are all straight just as for the major; but they are all carried out below shoulder level. The jumping effort toward the 8ve is in the down-and-forward direction and greatly hampered.

We might ask: why did Steiner name the gestures, 'prime, second, third,' etc., rather than fixing these gestures to specific named pitch-tones? It is quite a telling fact that at the opening of Eurythmy as Visible Singing (EVSing; Eurythmie als sichtbarer Gesang, ESG), he spoke of the phenomenon of the scale in the singular (feminine): he said, "die Skala." He did not speak of a multiplicity. We have one scale; it has two modes: major and minor. The scale structure applies regardless of what the pitch-tone is that serves as the prime. If it were fixed to specific pitches there would be a multiplicity of sequences, for the opening and closing would then appear variously, expressing a multiplicity of scale structures. In regard to letter names and pitches, in EVSing, Lecture IV (3/7 in; ESG 96), Steiner said that to lead up the scale, "obviously one can indeed write any note on [auf] a C" - i.e., write it as a C on the staff (on the C-line or in the C-space). His orientation was obviously movable do. There, he made it clear that he made 'C' the start of the scale in his discussion and used its notations or designations [Bezeichnungen] by custom. In doing so, he did not thereby fix the scale to the pitch 'C,' nor did he fix the angle-gestures to it. However, in her booklet, From the Tone Eurythmy Work (FTE, p. 8), Elena Zuccoli (founder of the Eurythmeum Zuccoli in Dornach, Switzerland) included a note in parentheses concerning a report by Rie 3

Lewerenz that in a general conversation about music, Steiner said that "C is always the prime." Yes, this is absolutely true in the elucidation of musical laws, such as in music theory where 'C' is used as the model prime in major, just as 'A' is used as the model prime in minor. And this conversational context of music theory is possible: Zuccoli also wrote about the activity of the composer, Wilhelm Lewerenz;* and it might well be that he was present at this reported conversation. *(*FTE*, p. 36. In Dornach on April 26 and 27, 1924, Wilhelm Lewerenz performed an Andante for cello. See *The Early History of Eurythmy*, pp. 241-42.)

Taking up these angle-gestures as movable-do expressions, the prime-angle will always express the prime of the scale and key. The 2nd-angle will always express the 2nd of the scale and key; the 3rd-angle will express the 3rd, and etc. And in our tonal music this will mean that we will express the opening scale and key of every piece with this sequence of gestures which Steiner presented, *doing so in accord with our direct experience of the archetypal roles being unfolded by its scale members, prime through 8ve.*

However, pieces often stray from their tonic scale and key; they usually set out on journeys away from this 'home,' to visit other keys. This is the beauty of our tonal music: the tonic key of each piece is in fact a home center for a complete circle of twelve interrelated keys, an archetypal structure known as the Circle of Fifths. And this tonic-scale-key-Circle-of-Fifths structure is what characterizes our tonal music in its most complete sense (as opposed to music which attempts to have no tonal center, or simply lacks a center). When a piece undertakes a tonal journey of transitions, modulations, to sojourn in one or another key in its Circle, movable-do gestureexpression will always convey the archetypal scale experience within each scale and key that is visited for a time during the journey away from and back to the home key, the tonic key, regardless of what the written key is at any given moment in that journey.

Before we can determine how these journeys away from the established home scale and tonic key of a piece might be expressed in gesture, we first need to know how they come about. It happens that any one of the pitchtones that are serving as members of the tonic scale could serve as a new prime for a new scale. We can take as an example the pitch-tone which is serving in the role of the 5th in the tonic scale. We can begin with it and set out to ascend a new scale. Working out of our grounding in the established tonic scale of the piece, we would most naturally take up the existing set of pitch-tones as we find them in their existing roles. Hence, the new scale would ascend as 5th-6th-7th-8ve-2nd-3rd-4th-5th. But how does this scale feel? Beginning with the 5th, the four members of the intended **lower tetrachord** of the new scale will unfortunately still be felt as a rise from the 5th to the 8ve of the tonic scale. And even more unfortunately, when continuing upward with the 2nd-3rd-4th-5th we discover that the intended **upper tetrachord** cannot be felt as ascending to the new 8ve as it should, as expected. Quite frankly, it feels weird. What happened? (Note: if we are familiar with the Medieval church modes, we might recognize this scale structure as that of the Mixolydian mode. It does not reach up toward the 8ve.)

Musical laws are at work: tonal laws. The prime/tonic of the scale (we are focussing on the major mode of the scale at the moment) is the tonic by merit of the fact that the other scale members support it in that role. As a lawful musical experience, the role of 7th in particular points to the prime/tonic so strongly that its role or function is given the name, 'the leading tone.' The 5th also points to the prime/tonic very strongly; and its function is given the name, 'the dominant.' The 5th often leads directly to the prime or 8ve, skipping over the scale members in between in leading there. These laws mean that in the new scale that we attempt to ascend by beginning with the 5th of the tonic scale, these roles must be fulfilled in order for the new prime and its proper scale to be established; but neither the role of the 7th, nor of the 5th, is fulfilled: the pitch-tone that would serve as the would-be 5th/dominant of the new scale is still felt as serving in the role of the 2nd in the tonic scale. And the pitch-tone that would serve as the would-be 7th/leading tone of the new scale *is not even present*, not serving at all in the tonic scale. Aha! Hence, to make the transition to this new scale, the scale must 'call forth' this missing pitch-tone and bring it into service as its 7th/leading tone, which will then point to the new prime and establish the new scale, with its upper tetrachord structure now intact. Then the pitch-tone which had been serving as the 2nd in the tonic scale will be spurred to enter into service as the 5th/dominant of this new scale; and the other pitch-tones will change their functions as well. Once this happens and is felt-sensed-perceived, in movable-do gesture-expression the harmonious tonal structure of the new scale will be asserted, prime through 8ve.

Do we observe these phenomena happening in pieces of music? Indeed we do! Transitions from key to key are in fact set in motion when tones are sounded which serve no normal role within the established scale from prime to 8ve, but *do* serve a normal role in the scale-structure – in the **scale-gebilde** – of another key. (Steiner had used this word, 'Gebilde' in reference to music. It stems from the verb, 'bilden,' and refers to that which holds sway in the structuring, shaping, formation, creation, arranging, etc. of something – such as here in the structure of the scale. I find that the word cannot really be translated, so I propose to use it as-is. However, in English it would not be capitalized, and plural would add -s: 'gebilde, gebildes.')

Movable do in eurythmy expression

For the task of perceiving and bearing witness to these musical gebildes and phenomena, *movable-do eurythmy has not only an immense capacity to express them in gesture and movement: in the process of achieving their vital expression we will be continually taught about them.* With this help we can enter and know the harmonious lawfulness of our tonal music on a deep, experiential level.

During the transition to this scale that will begin with the pitch-tone which has been serving as the 5th/dominant of the tonic scale, where in the existing scale will this new, non-scale pitch-tone sound? Since it is being summoned to serve as the new 7th, to lead to the 5th, to establish it as the new prime, it must sound between the 4th and 5th scale members of the tonic scale. But when it sounds, it could be perceived as just a non-scale passing tone or an ornamental tone - an event that we will typically present with a bent angle in relation to the 4th or the 5th. However, in this case the non-scale pitch-tone heralds a modulation to the key of the dominant - the first stage of the Circle-of-Fifths journey away from the tonic key in the direction of the dominant. With sensitive perception we may detect that when this new tone sounds, we had expected to hear the pitch-tone of the 4th of the tonic scale: the new tone sounds instead of the 4th. In gesture we make a bend in the 4th-angle to express this event (since we expected the 4th, I would say). In a way, one could even say that the bend in the 4th-angle heralds the breaking off of the relationship between the 4th and the prime in the scale of the tonic, and that the way is opening for this new tone to be called in, to serve in the critically-necessary role of the 7th in the key of the dominant. And as the new leading tone, once it points to this new tonal center strongly enough, the relationships within the tonic scale will be vacated, abandoned. Each pitch-tone is instantly called to its role in the new scale (e.g., the pitch-tone which had served as the 2nd in the tonic scale will serve as the 5th in the scale of the dominant; the pitch-tone which served as 7th will now serve as 3rd). With all of the relationships within the scale of the dominant settled, its prime will of course be expressed as such with the prime-angle. The transitional bent-angle expression of a non-member in the tonic scale (F#) is no longer needed: that expression is in fact obsolete. The revelation of the upper tetrachord role that this tone now plays as the 7th-in-relation-to-the-dominant leads directly to its expression as such with the 7th-angle. Normalcy in the entire scale-gebilde of the key of the dominant is established; and all of its angle-expressions now assert this through movable do.

The piece can journey a stage further in the dominant direction of its Circle of Fifths to establish a new key center on the 5th scale step of the dominant – hence this key is called the **dominant-of-the-dominant**. To do this, the same lawful process holds sway as in the modulation from the tonic to the dominant: a non-scale tone will sound between the 4th and 5th scale members of the dominant scale; a bend in the 4th-angle will herald the break in the relationship of the existing 4th to the prime (of the dominant scale, of course), opening the way for this new scale; the relationships within the scale of the dominant will be *abandoned* when the new pitch-tone reveals itself in the role of the 7th of the dominant-of-thedominant and points strongly enough to the new prime. Normalcy in the scale-gebilde of the dominant-of-thedominant is then established; its prime is expressed with the prime-angle and its scale members expressed likewise in movable do, supporting it.

By repeating this lawful process in the dominant direction, a piece could sojourn with each member of its entire Circle of Fifths. And it need not visit the twelve sequentially: with the summoning of more than one nonscale pitch-tone, it could instantly go two or more stages. To go directly from the tonic to the dominant-of-thedominant, the new scale would begin with the 2nd member of the tonic;* and it will need to call forth two new pitch-tones. These will sound between the 4th and 5th and between the prime and 2nd of the tonic scale. And for this latter pitch-tone – since in our feeling we had expected the tonic prime - the bent prime-angle will appear, breaking off the relationship of the prime to its entire scale in the tonic. With both the prime-relationship and the 4th-relationship broken off, these two new pitchtones then reveal themselves in the roles of the new 7th and the new 3rd, respectively; and the normalcy of the new scale is established and expressed. *(Note: if we a familiar with the Medieval church modes, we might recognize the scale structure that naturally results when the 2nd of the tonic scale is taken as the start of a new scale: the Dorian mode. It begins in minor mode and it does not reach up toward the 8ve.)

Going the other direction in its tonal journey through its Circle of Fifths, a piece could modulate to a new key center on the 4th scale step of its tonic scale. As this 4th scale step can be found a 5th below the prime, it is called the *subdominant*. It plays a strong role in pointing to the prime of the scale, but with a different and softer quality than the dominant does. If we begin with the existing set of pitch-tones in their existing roles within the tonic scale, we ascend the new scale as: 4th-5th-6th-7th-8ve-2nd-3rd-4th. But feeling our way up through the 4th-5th-6th-7th as the intended lower tetrachord of the new scale, is everything all right? No. Something goes wrong when we get to the intended 4th member. It is rising away from the new prime and the lower tetrachord, rather than feeling held at the boundary between the two tetrachords as the 4th should: this pitch-tone that has been serving as the 7th of the tonic is still reaching for its resolution in the 8ve of the tonic key. Then, ascending through the last four members, 8ve-2nd-3rd-4th, the intended upper tetrachord closes with some sense of achieving the 8ve of the new scale – yet is the achievement satisfying? I would say, not really; but why not? It gives the feeling of lacking the grounding in the lower tetrachord that it needs for this. Without this support it is not enabled to achieve the 8ve strongly; hence, the new scale of the subdominant will need to call forth a new pitch-tone to serve in the role of the 4th, to ground its lower tetrachord.

This non-scale pitch-tone that the subdominant scale calls forth will sound between the pitch-tones that are serving as the 7th and 6th of the tonic scale. With sensitive perception we may sense that we expected the 7th of the tonic scale at that moment; but instead, this new tone is sounded. So in gesture we make a bend in the 7th-angle to express this event (since we expected the 7th). In a way, one could say that the bend in the 7th-angle heralds the breaking off of the relationship between the 7th and the 8ve in the scale of the tonic, depriving the tonic scale of its 7th. The way is opening for this new tone to be called into service in the role of the 4th in the key of the subdominant. Revealing itself in this role, it will secure the lower tetrachord of the new scale. And once it does this strongly enough, the relationships within the tonic scale will all be vacated, abandoned. Each pitch-tone is called to its role in the subdominant scale (e.g., the pitchtone which had served as the prime in the tonic scale will serve as the 5th in the scale of the subdominant; the pitchtone which served as 2nd will now serve as 6th, etc.). With all of the relationships within the scale of the subdominant settled, its prime will of course be expressed as such with the prime-angle. The transitional bent-angle expression of a non-member in the tonic scale is no longer needed: the bent-angle is in fact obsolete. The revelation of the lower tetrachord role that this tone plays as the 4th-in-relation-to-the-subdominant leads directly to its expression as such with the 4th-angle. Normalcy in the entire scale-gebilde of the new key is established; and all of its angle-expressions will assert this in movable do. And just as in the dominant direction, a piece could journey through its entire Circle of Fifths in this lawful manner in the subdominant direction. (Note: if we are familiar with the Medieval church modes, we might recognize the structure that naturally results if we begin a scale on the 4th of our established tonic scale. It is the Lydian mode.4)

In summary: In such a beautiful way, these lawful tonal movements, which might seem opaque and devoid of excitement on paper, can come alive through movable do when these pitch-tones that intrude into the existing scale reveal their activity in service of a new scale – as the

7th of the dominant or as the 4th of the subdominant, etc. It can also happen that these tonal shifts that lead from key to key in the Circle of Fifths of a piece will occur with no heralding: the new key simply begins – and movable-do expression will be attuned to this, too. All of these activities are aspects of the rich tapestry of formations and structures in our tonal music that Steiner called the "Tongebilde," the 'music-gebilde' (*EVSing*, Lecture 1).

We come to know that our movement-expression is governed and called forth by the laws that govern the music itself. Through movable-do expression each time the sounding of a new tone between the pitch-tones that are serving as the 4th and 5th calls for a bend in the 4thangle, we will perceive the role of the 7th-of-the-dominant being heralded. And when the shift away from the existing key becomes settled fact to our experience for a time (shorter or longer), this 7th will be expressed as the jumping 7th-angle, not as the obsolete, bent 4th-angle relative to the former key. When the sounding of a new pitchtone between those serving as the 7th and 6th calls for a bend in the 7th-angle, we will perceive the role of the 4thof-the-subdominant being heralded. And when the shift becomes settled fact to our experience, this 4th will be expressed as the no-jump 4th-angle, not as the obsolete, bent 7th-angle of the former key. Always, the integrity of the expression of the lower and upper tetrachord of the scale will be preserved. And throughout the journey of a piece of music through stages of its Circle of Fifths, each shift from stage to stage bears and is colored by its role in the structure of relationships within the Circle of Fifths to which it belongs in a piece; and these roles begin to be revealed to us: at the stage of the dominant, 'dominantness' will color the members of the entire scale as primeof-the-dominant, 2nd-of-the-dominant, 3rd-of-the-domi*nant*, etc. How each stage can be lawfully differentiated in expression will be addressed further on.

Fixed do in eurythmy expression

In fixed-do expression, when the pitch-tone that we call 'C' serves in the role of the prime, the quality of primeness will be expressed with the prime-angle. And just as in fixed-do solfège where the syllable, 'do,' is fixed to the sounding of the pitch-tone 'C' – the prime-angle is fixed to this pitch-tone in all of its octave reiterations. But going further, this angle-gesture is re-named, 'the C-angle.' Fixed and named as such, the archetypal prime-angle is no longer an expression of the prime within the archetypal tonal scale: it is not available for the expression of the prime in any scale other than the one that begins with the pitch-tone 'C.' The angle-expressions of the other six members of the scale will likewise be made unavailable, being fixed to the pitch-tones which serve as the 2nd, 3rd, 4th, etc., in the C major scale and re-named to accord with only those pitches: 'the D-angle,' 'the E-angle,' 'the F-angle,' etc.

As in movable do, when applying the fixed anglegestures to the major scale of C, the legs will be quiet during the lower tetrachord and supremely active for the 5th, 6th and 7th scale step. In keeping with the tonal laws governing modulation, if a piece in the key of C journeys one stage in the dominant direction of its Circle of Fifths, the pitch-tone which had served in the role of the 4th of the C scale will of course no longer serve as the 4th after the new non-scale pitch-tone intrudes and reveals itself in the role of the 7th-of-the-dominant. However, unlike in movable-do expression, the transitional bent 4th-angle which expresses the entry of this new pitch-tone, heralding this modulation, will be fixed and kept as the bent F-angle, now called 'the F#-angle'; and the service of this new pitch-tone as the 7th of the key of the dominant will not be openly expressed: the jumped 7th-angle will not appear. In addition, the service of the pitch-tone G as the prime in this scale of the dominant will not be openly expressed: the prime-angle will not appear. Instead, the 5th-angle, the G-angle, will be presented. And each member of this new scale of the dominant will likewise have its gesture-expression assigned without regard for its actual, experienced relationship to this new prime. For example, its 4th and 5th will be presented with the Cangle and the D-angle, respectively. In other words, the 4th-of-the-dominant is presented <u>as-if</u> it were the prime, and the 5th-of-the-dominant is presented <u>as-if</u> it were the 2nd. Everything is becoming abstract, and so much so that in fact - if we possess a genuine musical sensibility - we will find that for the sake of the musical integrity of this new tonal scale and our expression of it, we really must come to terms with the following question: how can the pitch-tone G be expressed as serving in the role of the 5th when it has no vital, experienced <u>5th-relationship</u> to a prime and when it is instead being urgently pointed to by its 7th as the new prime and therefore must serve as this prime? Its service as a 5th was in fact terminated by the process of modulation. Its continuance as a 5th is an abstraction.

Then to move a stage further, to the dominant-of-thedominant, the pitch-tone which served in the role of the 4th in the dominant scale – in the G-scale – will of course no longer serve as the 4th after the new pitch-tone intrudes into the scale and reveals itself in the role of 7th-of-thedominant-of-the-dominant. However, in fixed-do practice the new tone will be determined to be between the tones which served in the roles of the prime and 2nd *in the C scale* (between C and D), not between the 4th and 5th of the dominant scale, the G scale; so it will be presented with the bent prime-angle. This expression will be fixed as the bent C-angle, 'the C#-angle'; and the service of this new pitch-tone as the 7th of the new key of the dominantof-the-dominant will not be openly expressed: again, the jumped 7th-angle will not appear. In addition, the service of the pitch-tone D as the prime in this new scale will not be openly expressed: the prime-angle will not appear. Instead, the 2nd-angle, the D-angle, will appear. And the gesture-expression of each member of the scale belonging to this new prime of the dominant-of-the-dominant scale will be assigned without regard for its actual, experienced relationship to this prime. Its 4th and 5th will be presented with the G-angle and the A-angle – in other words, the 4th-of-the-dominant-of-the-dominant is presented as-if it were the 5th, and the 5th-of-the-dominant-of-the-dominant is presented as-if it were the 6th. And once again, our musical sensibility presses us to ask: how can the pitchtone D that serves as the new prime of this scale of the dominant-of-the-dominant be expressed as a 2nd when it has no vital, experienced 2nd-relationship to a prime and when it is instead being firmly pointed to by its 7th and therefore *must serve as a prime and 8ve?* Furthermore, the pitch-tone (C) for which it had served as a 2nd is not even sounding in the new scale. Its service as a 2nd was terminated by the process of modulation.

And this termination and initiation of service in the scale is what modulation *does* in tonal music: it governs which pitch-tone shall serve as 'do,' as the prime. It governs the relationships within the scale by lawfully and fluidly cancelling out what is old to make way for the new, and then reinstating the old which has now been made new again by what has come to pass in the mean-time. *It does not simply drag the past relationships along*.

And moving one stage in the subdominant direction, the tone which served in the role of the 7th in the C scale will no longer serve as the 7th after the new pitch-tone intrudes into the scale between its 7th and 6th and reveals itself in the role of the 4th within the lower tetrachord of the subdominant. However, in fixed-do practice the bent 7th-angle which heralded this modulation will be fixed and kept as the bent B¹-angle, now named 'the B¹-angle;' and the role of this pitch-tone as the 4th in the new key of the subdominant will not be openly expressed: the no-jump 4th-angle will not appear. In addition, the service of the pitch-tone F as the prime in this scale of the subdominant will not be openly expressed: the prime-angle will not appear. Instead, the 4th-angle, the F-angle, will appear. And the gesture-expression of each scale member that belongs to this new prime will likewise be assigned without regard for its actual, experienced relationship to this prime. Its 4th and 5th will be presented with the Bbangle and the C-angle, respectively. In other words, the 4th-of-the-subdominant is presented with the bent 7thangle <u>as-if</u> it were a non-scale tone, and the 5th-of-thesubdominant is presented as-if it were the prime. And yet again a truly musical feeling-sensing-perception gives rise to this question which may not be ignored: how can the pitch-tone F that serves as the new prime of this scale of the subdominant be expressed as a 4th when it has no vital, experienced <u>4th-relationship</u> to a prime and when it is instead being firmly pointed to by its own 7th and therefore <u>must</u> serve as a prime and 8ve? Its service as a 4th was terminated by the process of modulation.

Real time consequences of fixed-do

In reality, in truth, our musical feeling-perceptions cannot possibly follow and affirm events that are not grounded in direct experience; hence the fixed-do manner of expression becomes unrelentingly abstract. This has wideranging consequences: because the members of every scale other than that for which the pitch-tone C serves as the prime will be expressed contrary to how we directly experience them, this abstractification obstructs the possibility of knowing by experience where we are going in the musical movements of the piece of music at hand. This precious knowledge that comes to us through adherence to experience is something that movable-do expression requires of us. Fixed-do expression does not. Why not? At the most basic level, each fixed angle-gesture corresponds to the written note that bears the same name, whether natural, 'sharp' or 'flat.' By memorizing the pattern of fixed angles for the scale of the tonic key of any given piece, one can learn to navigate adeptly from the start pitch and otherwise learn the notes. If the piece modulates, it will add or subtract a 'sharp' or 'flat' or two, and that is all that the eurythmist needs to do, too. Vastly unlike movable-do expression, in fixed-do expression it is not even necessary to know where 'do' is at any given moment. The written music will make it clear which angles need to appear; but it does not divulge *why* they must.

In fixed-do angle-expression, fifteen different anglegestures will be shown as the prime (and the same holds for the expression of every scale member, prime through 8ve). Every scale in both directions of the Circle of Fifths belonging to the pitch-tone C will require its assigned angles. To serve all of these scales (seven in the dominant direction and seven in the subdominant direction, with three pairs being enharmonic) twenty-one fixed anglegestures will be needed: seven straight, seven 'sharp' and seven 'flat,' plus double-bent angles for double-sharps and double-flats. For instance, a piece that is notated in the key of B major will be presented with five bent angles ('sharps') even though it did not journey from C major to get to that key. In fixed do, if this piece then journeys three stages in the dominant direction of its Circle of Fifths, the new scale will have to be presented either as having seven bent 'sharp' angles and one double-bent 'sharp' angle (called 'the F-double-#-angle'); or it will flip over to be the key of 'Ab' and be presented with four bent 'flat' angles, even though for the piece itself the sojourn in

this key is very much in the dominant region and mood of its Circle of Fifths.

On a feeling-sensing level, one of the most striking features of this system of angle-gestures is that every scale other than the C scale will have a disrupted structure relative to the archetype of the scale. In the key of G, the three jumping angles that express the 5th, 6th and 7th appear in its lower tetrachord. Thus the scale-expression makes an energetic start; but the quiet angles above make it incapable of an energetic rise to its 8ve-do. It could seem right that it has this structure: the dominant is 'brighter' than the tonic. If so, shouldn't the key of D, the dominant-of-the-dominant, be even brighter than G? Yet it has only one jumping angle in its lower tetrachord. This gives it a premature start on its upper tetrachord by jumping with its actual 4th; but it fizzles by its 7th. And the subdominant, the key of F, should surely be 'dimmer' than the tonic; but it has three jumping angles in its lower tetrachord, whereas the tonic has none. The scale structure is crippled at each stage of the Circle. The result? The character of each scale will be marked by its peculiar abnormality in relation to the gebilde of the scale. Only the music remains faithful to this archetypal formative structure; this system of angle-expressions does not.

This fixed-angles system is what typically governs our eurythmy expression. But we do notice the rupture of the archetypal scale structure within our expression; and quite honorably we want to compensate for this. We may try to feel 'do'-ness nevertheless of using the G-angle (the 5thangle) as the prime for the key of the fixed dominant, G. We may send our awareness to our collar bones/shoulder joints to try to supply the fixed G-angle with the missing impulse of the prime. Yet even if we succeed in experiencing and conveying the prime this way (awareness in these bones is not necessarily an experience of the prime), this expression is secondary to the overtly-visible fixed angle-gesture and will be muted and eclipsed by it. And in this effort, we are oddly seeking to express two scale-step 'tones' simultaneously. Since the angle-gestures and the bones-sequence gestures (as I call them) are both expressions of the scale, we are trying to sing the same melody in two different keys, actually trying to sing two voice parts at once, which – as Steiner so directly told Ilona Schubert - we cannot do. (Ilona's account of what he said to her appears in the 6th and 7th German edition of the EVSing lectures, Eurythmie als sichtbarer Gesang, ESG, 2015/16, p. 317.)

Also, in the keys in the dominant direction we might regard a bent 'sharp' angle for the 7th as compensation for the absence of a jumping angle in some of the keys. How is this enough? And in the subdominant direction, with some of the keys we might try to feel that when the 7th is a straight no-jump angle and the 8ve is a bent 'flat' angle, the comparative 'radiance' of the straight angle compensates; but does it really? We can focus on using the bones-sequence gestures in the expression of the melodic intervals, and limit our use of the angle-gestures for the 'tones.' We mitigate the disruption of the jumping angles in their odd placements in the various scales by downplaying or omitting the jump. But what sense do these upper tetrachord angle-gestures have then, if the legs are no longer active? Was there no point to these very specific gestures to begin with? Another approach seeks to give substance to the angles-expressions by trying to bring an experience of the 'being' of each pitch-tone to the gesture. However, the scale is an archetype of relationships. As seen in the above discussions, every pitch-tone can serve as the prime of a scale of relationships and an entire Circle-of-Fifths of relationships. In light of this, what I have read and been told about music students who possess 'perfect pitch' becomes more understandable: they can face challenges precisely because they can identify pitch-tones: this can obstruct their perception and grasp of the inaudible gebilde of musical relationships. A deeply-respected choral director with whom I worked called this capacity of perfect pitch "brittle," and said it is a pity that anyone has it.

Steiner said that "...the essentially musical, *spiritual* element in music is between the tones, lies in the intervals, *is that which one does not hear*" (*EVSing*, Lecture V, second page in; my italics). I want to acknowledge how very uncomfortable it can be to let go of the audible, visual and tactile aspects of music. Yet we must live, rest and trust entirely in the inaudible musical structures and phenomena that inform those specific audible and sensory phenomena. We tend to feel secure only with what is tangible to our five senses. And these securities would include the system and appearance of musical notation on the page and how the layout of the piano keyboard looks and feels in its fixedness. These features are not where music resides. (Note: I have worked with eurythmists as their pianist.)

Moving toward a movable do practice: Bach's Arioso

One of my colleagues told me that she has worked on Bach's *Arioso* in the past. She said that at a certain moment everything changes, and that the music is so beautiful there. She had asked her musician what is going at that point; but the musician had no insight to give, to enlighten her. And indeed, I know their plight very well! Even with musical training, one can still not know what is occurring in the music-gebilde. This is the case even when the notation is right in front of us. And this is why fixed do does not help: fixed do – in whatever form it takes, in syllables, numbers, note-names or angles – merely duplicates the sequences of pitches notated on the page. It misses the relationships between them that are the music.

Yet it has been argued that the fixed-do approach to the angle-gestures, which ties the angles to the pitchtones, serves to expresse the gebilde of twelve within the Circle of Fifths. If so, this gesture-approach should be a special help to us in dealing with the experience and expression of modulations – which is very much the matter at hand in that beautiful passage in the *Arioso*. So, how is fixed do thought to make the relationships of the Circle of Fifths clear?

As explained above, but to recapitulate differently, in fixed-do eurythmy, when the seven pitch-tones known as 'C D E F G A and B' sound in succession and are expressed in gesture they reveal a proper tonal scale; they conform to the archetype of the scale. These pitch-tones and their fixed gestures are then *kept* as the fixed starting point within the Circle of Fifths that belongs to 'C' as the tonic home. All of the scales of the other fourteen keys (including the three that are enharmonic) must then have the proper lower and upper tetrachord structure; so the whole array of named pitch-tones, 'natural,' 'sharp' and 'flat,' fill out these scales accordingly.

As already seen, of particular interest to the fixed-do orientation is that in this layout of pitch-tones, the original seven will preserve their attachment to their starting point in the C scale as 'the' home key of the entire tonal musicgebilde – for C is simply taken as that singular home. So each of the seven specific, named pitch-tones carries the role it plays in this scale of C permanently. For instance (enlarging on the previous section on fixed-do expression, but now from a different side of it), G serves as the dominant in relationship to C in the C scale; so in the key of the dominant it is still the dominant but now playing-therole-of-the-prime. In the dominant-of-the-dominant, it will be the dominant playing-the-role-of-the-2nd; and so on. And going in the subdominant direction, G will be the dominant playing-the-role-of-the-2nd, then the dominant playing-the-role-of-the-6th, and so on. We must stay ever mindful of the identity of G as 'the' dominant by merit of its original service in this role in relation to C, despite *experiencing* the in-the-moment roles that this pitch-tone serves in each given scale - roles which should of course be musically real and thoroughly alive to us. This multiplicity of dualities will be faced by each of the seven pitch-tones, for each of them must also carry their original roles through the Circle.

However, trouble begins for this G, the dominant, when it reaches the key of the dominant-of-the-dominant-of-the-dominant of-the-dominant (the key of A in the Circle of Fifths that belongs to C); for here, *not only is this pitch-tone G not the dominant in this key, we find that it has no role in it at all!:* a different pitch-tone enters, as it must, to serve in the role of the 7th. And to confuse matters further, we call this new pitch-tone by the name 'G-sharp,' and now we consider it to be 'the dominant,' just like 'G.' *Yet this*

G# has no original relationship to the home scale of C as its dominant. And it has no felt relationship to the key of C. What is going on?

Actually, in fixed do what we do is identify and track which audible, named pitch-tones are needed to complete each scale properly in the Circle of Fifths belonging to C; and thus we can spell each scale. In doing this, we see the lawfulness of how for the dominant scale - one stage away from the tonic, C – one new pitch-tone must enter: F#. Then for the dominant-of-the-dominant, another enters: C#. Then another: G#. 'Sharps' are accumulating. Or going in the other direction, a Bb must enter, then an Eb, etc., accumulating 'flat' pitch-tones. In notation and in music theory - and now in gesture - we account for each one. We conclude that the more sharps, the more dominant and brighter in character the key will be; the more flats, the more subdominant, round and subdued the key will be. This is how fixed do is envisioned to reflect the Circle of Fifths. But how does that apply in practice?

We can take up Bach's *Arioso* in light of this orientation to the Circle of Fifths, to see whether it can help us fathom what is occurring within the piece in relation to its key, to the Circle of Fifths, to the phenomenon of modulation, and the scale-gebilde. It should help. Does it?

My colleague told me that the *Arioso* is in the key of G. That is how she has performed it in gesture-expression. The permanent dominant, G, would therefore serve in the role of the prime; and the piece would be understood to bear the character of the first stage in the dominant direction from C, the universal home: this is what fixed-do gestures would be expected to convey.

This piece was new to me and in looking for the piece I was met with some unexpected facts: firstly, that unbeknownst to my colleague and her musician, Bach did not score it in G! It is the first section, a sinfonia, of his Cantata, BWV 156; and he notated i in the key of F*major*. Secondly, I had a surprise when hearing it played on authentic Baroque instruments; for it does not sound in F: it sounds roughly one half-step lower than our modern tuning, in F^{\flat} ... or should we say just as well, in E? This is because the gut strings cannot take the higher tension of modern tuning. I had forgotten that this is the case. Thirdly, one will find that the Arioso is also played by guitarists in A. Arrangements in A (and in G) suit their instrument well. Fourthly, one can learn that it was Bach's practice to rewrite the music for the winds and brass when it happened that they could not tune to the organ at a given church! - since at times the players could not pull apart or press together the pieces of their instruments sufficiently, to accommodate the tuning of the organ. This means that the ensemble would be *playing from manuscripts in two* or more different keys. And fifthly, it can come as a surprise for many people that this is the case in our modern orchestras, too, where the written music for the Bb

clarinets is always a whole step higher than for the strings; and the written music for the French horns is always a 5th higher than they sound. All of these facts press the question: as a eurythmist, what am I expressing? Is it my experience of the *notation* that I wish to express, since this is what my musician and I can look at? Or is it the *actual pitch-tones* that are sounded? I would say that it is neither of these; for there is something that surpasses and transcends both of them: *the one experience which remains regardless of the scoring and regardless of the sounding of named pitches is the music-gebilde of the piece itself.* It is this gebilde that is to be expressed.

Let us look at this *Arioso* (in piano reduction with notes added to correspond with the orchestration of the Cantata– see the manuscript at the end below so that you can work through what happens in it).

Here is just an introductory exploration of the first part of the piece: Looking at the first two measures, what is the shape of the two opening motifs with their long note followed by three short notes gliding upward? Then come two descending triads. What is going on there? Is a **cadence** (close) to the phrase being shaped and completed? If so, what brings it about? Just in these first three measures, an amazing musical event is coming to pass.



To find answers to these questions, we can sing this phrase in *movable-do* solfège or the corresponding numbers 1-2-3 (I encourage the numbers instead of do-re-mi). Do this for both the melody and the bass line, for which the notes are written in bass clef with their stems pointing downward (not the treble clef pitches between them). You might want to print out the first page of the manuscript and write in the solfège as you perceive the steps of the scale here. Sing these two 'voice' lines this way and make observations. How does this feel? Now apply the *fixed-do* solfège or fixed numbers (print the manuscript again if necessary and write them in). For do-re-mi, sing the written Bb as 'tay' rather than 'ti.' And for using numbers, sing B_b as 'sayv' rather than sev'n' (see endnote 2 for details and markings). Remember: you are now flagging the *written* pitch-tones; for in Bach's time these notations would not have been sounded in the F major of our time.

What I observe through singing the melody in moveable do is the striking progression of the two motifs from the **3rd** to the **2nd** to the **prime**. After this, the two descending triads call out, **8-6-4** and **2-7-5**. Do we recognize these? We need to: they are the subdominant, the IV triad, and the dominant, the V triad, respectively. They are shaping a cadence in the tonic key, the home key; and the melody tones **3**—**2-1** at the beginning of m. 3 close to this tonic home. I can directly feel these elements of musical movement. I can hear this affirmation of the tonic home directly in the bass-line, too. After falling from the octave, it re-states it firmly: 8 87 7 | 6 65 5 | 8.

Now compare, that in fixed do these opening motifs in the melody move from the **6th** to the **5th** to the **4th**. The triads are **4-2-7**^{\flat} and **5-3-1**. Do I inwardly notice conflict when singing them as such? What is going on? 5-3-1 should be the tonic, the I triad, shouldn't it? – but it is not! Something is wrong. And according to fixed do, the bassline does **1** | **4** at the cadence; but I *feel* the bass closing to the tonic home, not leaving it to go to the 4th. And the melody sounds **6—5-4**, also not closing to the prime. For my part, at every turn I am thrown out of the flow of this phrase and its formative structure. What was clear in movable do has become inscrutable in fixed do.

In the next phrase (beginning in the middle of m. 3) a scale-step alteration appears. In movable do, we can recognize it as a new non-scale pitch-tone (B^{\dagger}) appearing between the established 4th and 5th of the tonic. As such, this new pitch-tone might be being called in to serve as the 7th of the key of the dominant (C, as written). But it could be that this alteration is merely giving momentary emphasis to the dominant while remaining in the home key. Is it actually going to propel a shift to the key of the dominant? How will we know? And if it does propel a real transition to the dominant, when do we feel that the shift has been completed?

If we perform the same inquiry for mm. 3-7 as we did for mm. 1-2, by learning to sing the melody and the bassline in movable do, we might be able to sense that in m. 4 the tonic triad feels somewhat weakened when this new pitch-tone sounds, when as 7th-to-the-dominant it leans toward the dominant as a place of temporary resolution or home. And then at the beginning of m. 5, we can sense that the tonic feels weakened yet again when its triad sounds with its 3rd (A) as lowest – 'standing' on its 3rd in **first inversion** – an unstable position compared to standing firmly on its root, the prime, in **root position**. However, the minor iii triad is outlined as **3-5-7**; and with the leading tone sounded, 7th (E \natural), we might still feel that **8** of the tonic will come next. (Note that m. 5 is divided in half in this manuscript.) But the melody retreats to the 6th. Where is the piece going? In movable do, we can perceive the cadence in the dominant (C, as written) at m. 7; and we feel the sense of 'lifting up' that this shift brings about: this is 'dominant-ness' in relation to the 'grounded-ness' of the tonic foundation of the piece. We can then try fixed do, following the note-names of the pitch-tones (the Et as 3, D as 2, and so on). Does fixed do help us to feel and grasp this lawful musical shift? I find that it does not.

But then, in the second half of m. 7, three new nonscale pitch-tones sound. • One (Bb in bass) is between the 7th and 6th of the key of the dominant. This means that the dominant must end: its 7th (B¹) is no longer in service. The piece shifts back to the tonic. • But another new pitchtone abruptly sounds (Eb in melody) between the 7th and 6th of the tonic. Without its leading tone, the tonic cannot be restored. The piece is being pulled from the tonic to the subdominant (Bb) in its Circle of Fifths. • However, yet another new pitch-tone sounds (F# in alto) between the 5th and 6th of this subdominant! Before we panic at this, let us take stock. What is going on? What do we perceive? Can we recognize this new pitch-tone as being called for service as a new 7th? For what key? Either G major or G minor. It feels minor here. Considering shifts close-by first, we find that G minor is the **relative minor** of the key of the subdominant - the minor shares the same pitchtones, but its prime is a minor third lower; and the two other new pitch-tones (Bb and Eb) will serve as its 3rd and 6th! A painfully hampered ascending harmonic minor scale is sounded in m. 8:



One could also grasp this transition as taking the piece in the other direction, though not so close, beyond its dominant (C) to the dominant-of-the-dominant* (G), but sounding the minor of that key – its **parallel minor**, which shares the same prime. In any case, *this minor key and its relationship to the tonic of the piece is what my colleague's musician was unable to help her recognize*. We can practice applying movable do to the melody and bass voices and witness the musical miracle of how they traverse the scale steps of this new key that is being visited during the journey that is made by this *Arioso*. *(In ENDNOTE 5. I propose a way to note the stages in the Circle of Fifths without the repetition of words.)

For singing the minor mode in movable-do solfège, I take the **natural minor** as its normal form. Hence, I apply the numbers 1-2-3-4-5-6-7-8* to it as normal while singing the minor 3rd, 6th and 7th of natural minor. Then the solfège syllables change to reflect changes to this normal structure: they brighten to 'ee' (or 'y,' 'eye'), or darken to 'ay' (or èh). (See endnote 2.) For example, in both **harmonic minor** and ascending **melodic minor** a new pitch-tone must sound between the 7th and 8ve to serve as the leading-tone; so I sing this new pitch-tone as 'seev.' For ascending melodic minor, another new pitchtone must sound between the 6th and 7th, to join the leading tone in reaching upward toward the 8ve; I sing it as 'seex.' *(This is similar to how the 1915 angleexpressions in minor are all straight, just as in major.)

So now we can sing the ascending harmonic minor scale of the *Arioso* melody that sounds in m. 8. Please note that the signs for 'sharp,' #, and 'flat,' \flat , that I write here merely indicate that the new pitch-tone is higher or lower than one of the normal scale members. (In fixed do, the signs mark pitch-tones that would be higher or lower than one of the scale members *belonging to the 'C scale'*). Here is the ascending scale in m. 8, in movable do:

7# ---- 7#-1-2-3 4-5-6-7# 2-4 | 3-2-1.

In fixed do it would be:

4# — 4#-5-6b-7 8-2-3b-4# 6-1 | 7b-6-5.

But how does it feel to sing it in fixed do? Does fixed do augment and illuminate what is happening? For me, it ruptures my feeling of the lawful structure of the scale and of the music.

After this sounding of the relative minor of the subdominant, the *Arioso* will return to the tonic (m. 11), go briefly to the subdominant (mm. 12-13), return to the tonic and end in the dominant. This mood of the dominant will cease when the next section of the Cantata, an aria (scored in F major), begins directly with the tonic.

Bach's Air on the G String

Looking briefly at the piece by Bach that is known as the *Air on the G String*, we see that it is notated in the key of D. (See the next column, but also see the manuscript at the end here so that you can work through what happens in it more closely.)

The melody begins on the 3rd, leaps to the 6th, falls to the 4th, descends stepwise to the 7th, resolves to the 8ve (prime), but then right away sounds the 7th again. But instead of resolving to the 8ve, the melody falls further, sounding the 6th and 5th. When the phrase ends with the 5th (end of m. 2), we feel dominant-ness and feel sure that now the prime or the octave will be sounded next, along with the its triad, the major tonic triad, I. But what comes (beginning of m. 3) is the minor triad, iii, that belongs to the 3rd scale-step (F#): this is an odd sort of fake-out for our musical feeling-sense! This triad-of-the-3rd has a seventh added to it, too (E is this chordal seventh).

Then, to add to the instability of this sudden loss of the sense of 'home' here, in the very next moment the prime of the home key is itself abandoned (D), and instead of it the non-scale pitch-tone between the prime and 2nd is sounded (D#). The 7th of the home key is simultaneously abandoned (C#) and the non-scale pitch-tone between it and the 6th is instead sounded (C⁴)! Oh dear. But if we have learned some things from our work with his Arioso, we might say: Aha! Perhaps Bach is taking us to the key of the relative minor (e minor) of the subdominant (G). And sure enough, that is what he does. The pitchtone, D#, serves as the new 7th, and the pitch-tone, C¹, serves as the new 6th in this key. And in the middle of m. 3, we hear the hampered struggle of the melody in this minor key, as the motif that Bach introduces falls and then rises, falls by a 2nd and rises, and falls again by a 2nd. But then in the middle of m. 4, the tonal shift is reversed: the prime (D¹) and the 7th (C#) of the tonic are restored; and we hear exactly the same motif now in the tonic key, expressed in the same pattern of scale steps but now sounded in major. This is what is so beautiful here. When these two repetitions of the motif are sung in movable do so that the mere notation on the page is transcended, the musical correspondences become wonderfully clear.



After this, a new pitch-tone (G#) will sound between the 4th and 5th of the tonic. It will serve as the 7th of the dominant. This draws the piece away from its tonic home and brings the first part of the piece to a close with a cadence in the key of the dominant. And with this, we feel the uplift of dominant-ness relative to the tonic, regardless of the written or sounded key.

This piece is, needless to say, complicated. It will again visit the relative minor (e minor) of the subdominant (G) and then go to the relative minor (b minor) of the tonic. (I had grasped these differently in this document's earlier versions, having overlooked their closest relationships to the tonic!) Soon after that, it will undergo an amazingly-dense sequence of tonal shifting from m. 13 through 15^6 and then make a brief visit to the subdominant before finding its way home. We can follow the soundings

of new non-scale pitch-tones and abandonments of existing scale members, which constitute the trail of the 7ths and 4ths that signal and reveal the shifts here.

Another amazing feature of this *Air on the G String* is that during mm. 1-3, at each chord change the *root* of the chord descends by a third. These roots would be: prime, 6th, 4th, 2nd, 7th, 5th, 3rd, next-higher-neighbor-to-the-prime, and 6th (D B G E C# A F# D# B). So many mysteries are hidden in the structure of our tonal music.

Expressing changes in tonal center in eurythmy

The aspects touched on here, which movable do brings so strongly to our awareness, press us to address the next question: how might the dynamic tonal movements of a piece of music be expressed when these are essential to the nature of the piece?* Steiner suggested the use of spatial and movement differentiations in EVSing, Lecture V (about $\frac{2}{3}$ in). Because the tonic is felt as 'home' it can be sensed to occupy a central area within our movement in space; and our movements will be felt as freer there as being 'at home' - and also larger. We can then sense the dominant zone as needing to be in a right-forward space in relation to this free, tonic zone, and the subdominant as needing to be in a *left-forward space*. When the leading tone of the dominant of a piece is sounded, this might herald an actual shift to the key of the dominant. Then the dominant zone in space temporarily becomes a new tonic zone for the musical expression, characterized by the freer movement, with less movement in its dominant and subdominant zones to its forward right and forward left. The normal scale-gebilde will be fully expressed, prime, 2nd, 3rd, etc., through the angles. However, by merit of the expression being removed to the right-forward of the home tonic, the experience will be colored by the mood of dominant-ness. *(Some pieces do not venture away from their tonic home. Their nature or essential feature might instead be melodic or rhythmic or major-minor-dissonant chord changes within the home key, or the counterpoint of the relationships between voice lines, etc.)

All of the same will hold true when a piece modulates in the subdominant direction, except that the subdominant will find *its* zones to the *left-forward of the home key*, the tonic zone. At each stage, by merit of being progressively removed to the left-forward direction of the tonic, it will be colored ever more by the mood of subdominant-ness.

In proceeding even further in the dominant direction of the Circle of Fifths of a piece, each stage will find its space of expression yet further to the right-forward with a correspondingly greater degree of dominant-ness. But as a Circle, in lawful order the location of the zones in the right-forward dominant direction of stages would need to proceed counterclockwise, for they will lawfully overlap with the left-forward subdominant direction of stages proceeding clockwise from the home key, the tonic.

As pointed to before, for this expression, bent anglegestures (sharp or rounded) will appear only during transitions between keys or as passing or ornamental tones. The fact that in movable do, the scale-gebilde in its normal form re-emerges after each transition - again and again - means that our work with movable do can engender in us a direct awareness, to sense and know when non-scale pitch-tones are just passing through, versus when they are actually signaling tonal transitions, being summoned to serve in a new scale and key. And we will come to know where in the Circle of Fifths of the piece at hand we are going. Sometimes we will find that a transition is instant, and no bent angles will herald it in advance. Then only a lawful change in spatial zone will occur within which the new scale as normal will be expressed. The restatement of the motif in Bach's Air of the G String is an example (mm. 3-4) of this: with no heralding, the motif that is stated in the minor mode of the dominant-of-the-dominant is instantly restated in the tonic.

Closing

The gradual, progressive deepening of our direct experience of all of these musical facts through working in the spirit of movable do is so important, and not just for ourselves. As our experience becomes deeply and purely musical in this beautifully conscious way, our expression will carry our onlookers, too, so that they may securely accompany us through each remarkable transition and resolution in the unique tonal journey that each piece makes. There is therefore much to explore here!

In PART IV of my *Singing and Jumping* report – the section on the singing and jumping exercises – I explore further the movable-do approach to the expression of the harmonic movements within music. PART IV is also posted at the EANA website, artistic category. As mentioned in the opening here, the material on the earliest records of the expression of music in eurythmy which I had intended to include here is in a separate article that was published in our EANA Newsletter for spring 2022; and much more will appear in the second half of this PART III.

Please feel free to be in touch with any questions you have or experienes to share as you work through these descriptions concerning the foundation of movable-do expression in eurythmy I want to mention that I have been preparing harmonic analysis for both the *Arioso* and the *Air on the G String*. You may contact me to see if the drafts of these scores are ready to be shared. My plan is that they will accompany the *Singing and Jumping* music eurythmy report when it is published.

As always, blessings on your way!

Kate Reese Hurd

ENDNOTES

¹ For p. 1. "The Sound of Music" began as a Broadway musical in 1959 with music by Rodgers and Hammerstein. 20th Century Fox released it in 1965. Here is the song: "Do-Re-Mi" - THE SOUND OF MUSIC (1965) <u>https://www.youtube.com/watch?</u> <u>v=drnBMAEA3AM</u>.

² For pp. 1, 10 and 11. When pieces journey from their home key, the solfège will need to reflect the changes during transitions between keys. Here are the two charts from my article, "The Scale Degree Intervals Give Rise to our Tonal Music Gebilde." I base everything on the *normal* scale degrees as experienced in both major and natural minor; hence the solfège syllables change to reflect changes to the normal structure: in general they brighten to 'ee' (or'y,' 'eye'), or darken to 'ay' (or èh).

Here are the numerical syllables that I strongly encourage. The syllables for the next-higher non-scale pitch-tones are above the normal ones and for the next-lower pitch-tones are below. The vowel 'y' is sounded as 'eye,' and the è is short 'eh':

ween	tee	thry	feer	feev	seex	seev'n	eet
one	two	three	four	five	six	sev'n	eight
wayn	tay	thray	fayr	fayv	sayx	sayv'n	èt

I mark them in the music as follows:

1>	2>	3>	4>	5>	6>	7>	8>
ween	tee	thry	feer	feev	seex	seev	eet
1	2	3	4	5	6	7	8
one	two	three	four	five	six	sev 'n	eight
<1	<2	<3	<4	<5	<6	<7	<8
wayn	tav	thrav	favr	favv	savx	savv	èt

Here are the do-re-mi syllables:

dee	ree	my	fee	see	lee	ty	dee
do	re	mi	fa	sol	la	ti	do
day	rèh	may	fay	say	lay	tay	day

³ For p. 2, regarding movable do. "The Case for "Movable Do" in Classroom Musicianship," by Michael Kaulkin, composer and teacher in the San Francisco Bay Area. Feb 4, 2009 https:// medium.com/@michaelkaulkin/the-case-for-movable-do-inclassroom-musicianship-6c06eb93c621. He wrote (his bold and italic; my *): "The Movable Do system emphasizes each note's function in the given key. In the major, Do is always scale degree 1, So [or sol] is always scale degree 5, etc., no matter what the key. Here what's important is knowing what each note's role is in whatever key you're in. People with perfect pitch have a hard time with this. ... The Fixed Do system is nothing other than what's used in certain European countries* as an equivalent to our letter names [for pitch-tones]. Over time, using it [or letter names] may teach students by rote how to sing the notes, but [fixed do] will not teach them intervals. It will not teach them anything about harmony or function, to say nothing of voice leading...." *****"The mistake being made here is to think that this would ever be a quick or easy process. [Movable do] is in fact a very slow-moving process whose purpose is to bring about deep understanding of the musical processes that drive the music we're learning to sight read. It is not meant to be a quick way to get your chorus to learn their material." He indicated that it could take three years for a group to gain fluency in movabledo solfège – and why would this be? With movable do we are getting away from the encoding of pitches and entering into the real gebilde of the music, i.e., into its inaudible, archetypal realities. "Yes, you have to decide where the *do* change occurs [during key changes] and there isn't always one right answer, but with practice you become adept at analyzing music on the fly and $[\star]$ you always know where you are within the big picture." Kaulkin also includes some interesting links. *(Countries such as Spain, Portugal, France, Italy or in Latin America.)

⁴ For p. 5 regarding the Medieval church modes. If we begin our scale with the 3rd or the 7th of the given tonic scale, we can recognize the **Phrygian** and the **Hypophrygian** modes, respectively. Neither have the structure of the major scale: in the Phrygian mode, the 4th is felt to be not really tethered to the initial note as needs to be the case in the major tonic scale, and the upper tetrachord does not care to reach the 8ve; the Hypophrygian mode is similarly flawed. Neither could be expressed with the angle-gesture sequence presented by Steiner. This sequence is specifically the expression of our *tonal* scale. In the modes - from what is historically known about them the manner in which the scale members of each mode were traversed had a much looser tie to the initial and ending pitch; and in fact the scale members were experienced as two sets of three notes in relation to each other within a recognized hexachord structure, not as two sets of four that complete an octave structure. We sing, 'do-re-mi-fa | sol-la-ti-do;' but in the modes, two sets of three were sung as, 'ut-re-mi | fa-sol-la,' and melodies were learned and conceived of as existing within this system of overlapping hexachords. (Our 'do-re-mi' solfège had its beginning with Guido d'Arezzo, who lived from 990 to 1050 A.D.) The lower and upper tetrachord relationships and the process of reaching up to achieve the octave of the starting tone, that we experience so strongly today, were not experienced as such in the singing of these Medieval modes.* This may be difficult to grasp, but when a pitch-tone was sounded that we would feel to be the 7th of a scale, it was not called 'ti' (or 'si'). It was grasped musically solely as a member of a set of three pitch-tones within the next-higher hexachord structure. The two modes, Ionian and Aeolian, which became the major and minor modes of our tonal scale, developed much later than the other modes and only came to the fore in the mid-16th century. The preludes and fugues of Bach's The Well-Tempered Clavier were published in 1722 and 1744. *(See the entry on the hexachord in the Harvard Dictionary of Music. Also see texts such as A History of Western Music: Revised Edition, Donald Jay Grout. I will be describing the nature and workings of the hexachord more thoroughly in PART II of my Singing and Jumping Opens the Way report, still to be completed.)

⁵ For p. 10, regarding a way to note the Circle of Fifths. Tonic, I; dominant, V; dominant-of-the-dominant, V₂; dominant-of-the-dominant, V₃; etc. Subdominant: IV₂, IV₃, IV₄, etc. [Note – *chord inversions* can be as follows: ¹I, ²I, ³I.]
⁶ For p. 11, regarding the dense tonal shifting in mm. 13-15. I note this sequence of tonal movements: 7–8 (V, A, alto) and 5–1 (V, A, melody); 5–8 (I, D, melody); 7–8 (IV, G, bass); 7–8 (V, A, bass); 7–8 (VI, B, a surprise tonal jump to V₃, bass); 5–8 (rel. minor/IV, e, bass); 7–8 (rel. minor/IV, e, alto).

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ABOUT THE AUTHOR

Kate holds degrees in English literature and music. She has sung in choruses and chamber groups and played a number of musical instruments over the course of her life. She also served as a pianist for four years while studying at the School of Eurythmy in Spring Valley where she graduated in 1985. In 2016, she completed and published *The Speech Sound Etudes, Volume I: Revelations of the Logos*. The subtitle is: *Poetic miniatures for sounding our language: a body of speech-work for speakers, actors, eurythmists, poets, writers, singers, teachers, therapists.* It is available as a booklet on request. A description of it appeared near the end of the autumn 2015 Newsletter of the Eurythmy Association of North America (EANA).

In late 2012 she had begun to work intensively on this body of speech sound etude studies, honing them thoroughly through using them to evoke the movement-impulses of the sounds. Her efforts have been so successful that in 2014 she wrote a detailed report on it, *The Speech Sound Etudes: Feeling the Gestures and Finding the Figures*. This report is posted at the EANA website in the artistic

category and is also available as a booklet. She is slowly at work on miniatures for the combination-consonants (e.g., *br*, *fl*, *sn*, etc.) as well as for the vowel-to-consonant soundings.

In addition to articles on speech eurythmy, Kate began a detailed research report on music eurythmy: *Singing and Jumping Opens the Way to a Vital Music Eurythmy Foundation;* and in December 2019 she posted the Basics, Prologue and first half of "PART I, The Archetypal Scale and Its Disappearance – a Memoir," at the EANA website (artistic category). The autumn 2018 EANA Newsletter includes a description of this report which is still in progress, now in four parts. Her first article on the musical branch of eurythmy came out in spring 2019, followed by several others (as listed below). The content of these will be included in PART III of the *Singing and Jumping* report. In March 2022, she posted "PART IV: The Singing and Jumping Exercises – Real Sound-Experiences Lead to Real Gestures."

Kate's intensive report on poetic speech, *Revealing the Music of Pentameter: Putting Shakespeare Through His Paces*, was posted at the EANA website in the artistic section and is available in hardcopy on request.

Her articles for the EANA Newsletter thus far are:

- "'The Word of My Feet:' The Three Parts of Walking," spring 2015;
- "The Seven Rod Exercises: Honing the Agility of our Conscious Awareness," autumn 2015;
- "Etheric Bodies are Moving to the Speech Sound Etudes," spring 2016;
- "Eurythmy as a Critical Art: What This Means for Its Future," autumn 2016;

"Eurythmy as an Art that Makes Visible the Inaudible, Invisible and Unsounded Contents of Poetic Speech and Wordless Singing," spring 2017;

- * "Beginning With **B** in Light of Goethe's Sensible-Supersensible Process," autumn 2017;
- "Finding Unison in the Vowels: The Hope and Blessing of Whitsun," spring 2018;
- "The Scale Degree Intervals Give Rise to Our Tonal Music Gebilde," spring 2019;
- * "Speaking Visibly in Genuine Rhythm," autumn 2019:
 "The Agrippa von Nettesheim Positions: Rudolf Steiner Told Lory to Jump!" spring 2020;
- * "The Kindling Character of **K**," autumn 2020; "Fixed Do and Movable Do in Our Eurythmy: Does It
 - Matter?" autumn 2021 (see enlarged at the EANA website); "The Earliest Records Show the Angle-Gestures as Movable Do," spring 2022;
- * "Imitation and Mental Imagery in Professional Eurythmy," autumn 2022.

And for the *Performing Arts Section Newsletter* from the Goetheanum in Switzerland: "The 1915 Angle-Gestures are Movable Do," Nr. 78, Easter 2023. The first four of the above articles are available as a booklet: *A Quartet of Articles*. And *A Second Quartet of Articles* contains those marked * in the list above.

Also available are: a *Slim Edition* of *Vol. 1* A *Slim Edition* of *Vol. 1* of the etude studies without the intensive texts of the original, and a tutorial on movable do in eurythmy is now available: *Awakening our Empfindung-Sensibilities to Movable Do and the 1915 Angle-Gestures* (from the Eurythmy Festival workshop in August 2023).

Since 2015, Kate has been reciting poems and the poetic miniatures at poetry gatherings. After moving to Philmont NY, she has continued writing and has begun to orient toward making full use of this new foundation in speech and movement to prepare and present pieces in eurythmy. She plans to establish a website for easier access to her articles and reports (year 2023).

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Johann Sebastian Bach

Arioso

BWV 156

AND

Air on the G String

BWV 1068

Arioso from the Cantata BWV 156 Scored for solo oboe, first and second violins, viola and cello (coninuo)

J. S. Bach

1. Sinfonia

Adagio

















Piano transcription with notes added to correspond to the score for first and second violins, viola and continuo

"Air on the G String"

Movement II from Suite No. 3 in D Major, BWV 1068

J.S. Bach

Adagio















