

# EXPLORING CLASSICAL MUSIC THROUGH THE NATURAL WORLD

## Bird Flight Patterns and Music



Discover the unique connection between bird flight and classical music. In this lecture, we will analyze six bird flight patterns and hear music that shares the same contour and motion as demonstrated in each. Throughout the presentation, attendees will gain a deeper understanding of melodic contour, rhythm, harmony, and meter by observing various species of birds in flight. Repertoire includes pieces by Glass, Haydn, Mendelssohn, Bermel, Strauss, and Vaughan Williams.

## Tracking Rhythms



Whether walking through a wooded area or right outside your back door, evidence of animal activity is all around us. In this lecture, we explore the concept of rhythmic motion through analysis of quadruped track patterns and gaits. Throughout the presentation, attendees will hear these same gaits illustrated through classical music that shares the same rhythmic figures. Repertoire includes pieces by Brahms, Dvorak, Handel, Debussy, Verdi, Glass, and Strauss.

## Presenting Lecturer: Terry Wolkowicz

For more than two decades, Terry Wolkowicz has explored the intersection of classical music and the environment. She serves as Education Director of the nonprofit Sound Explorations, and Education Director for the New Bedford Symphony Orchestra. Terry received her bachelor's degree in music from the New England Conservatory of Music and a master's degree in education from Harvard University.

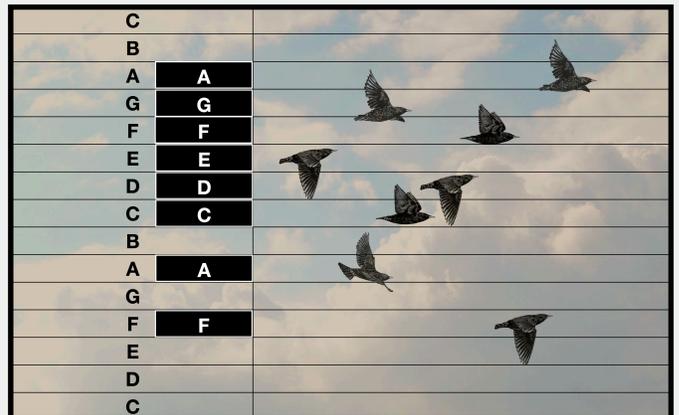
Terry has presented at numerous conferences including the League of American Orchestra, the Association of Zoos and Aquariums, and other music and STEM organizations. As an author, she has written articles about concept-based arts integration published in the Music Educators Journal, the A.Z.A.'s Connect Magazine, Polyphonic.org (Eastman School of Music Paul R. Judy Center for Applied Research) and Musicovation.

# Sound Explorations

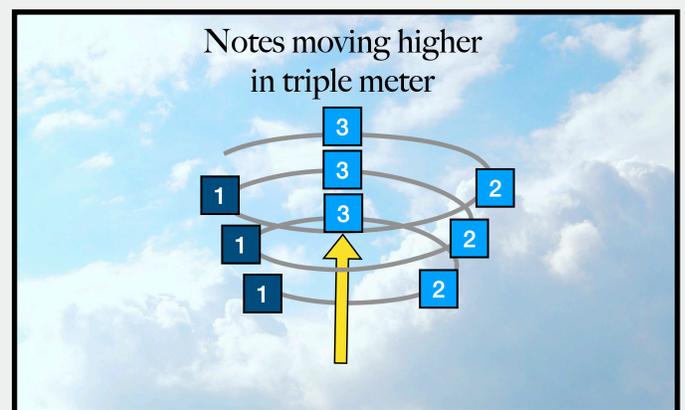
Many people believe that their understanding and enjoyment of classical music is directly linked to their previous study of music or to their familiarity with musical notation. However, in these presentations we explore musical concepts by connecting them to our everyday experiences, and interactions with the natural world. Throughout each presentation, musical concepts are illustrated using multiple representations including video footage of animals, graphic notation, illustrations, numbers, and of course, captivating musical repertoire.

For example, in the Bird Flight Patterns and Music presentation, soaring birds provide an understanding of melodic contour, contrary motion, and meter. Geese flying in v-formation provide an example of rhythmic groupings. Starling murmurations provide examples of tone clusters and chord voicing. A movement from a Haydn Symphony provides an example of phrase length and contrasts in melodic contour.

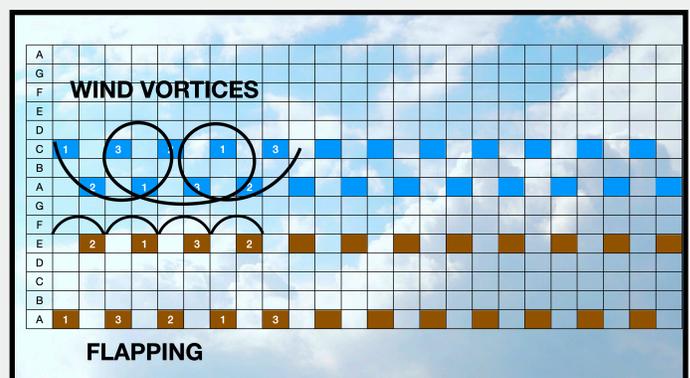
Throughout each presentation, music recordings are accompanied by animated screen illustrations that move in time with the music. Video footage of animals in motion also move in time to emphasize the connection between the motion of the animal, and the motion in the music.



Tone clusters from Bermel's *Swarming Rome* provide an auditory example of starling murmuration.



Mendelssohn's *String Symphony No. 4* illustrates the static soaring flight pattern using ascending melodic contour and triple meter.

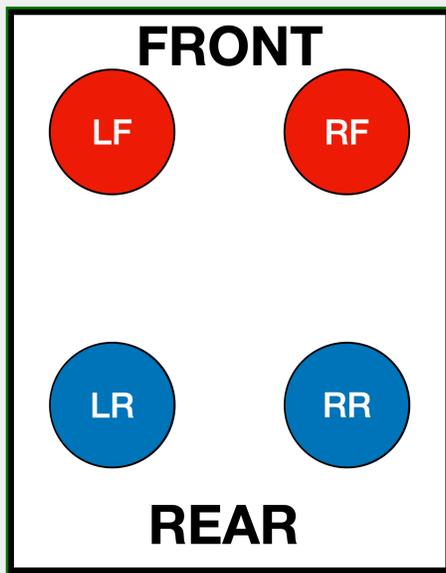


*Facades* by Philip Glass combines different rhythmic groupings imitating geese flapping motion and wind vortices generated in V-formation flight.

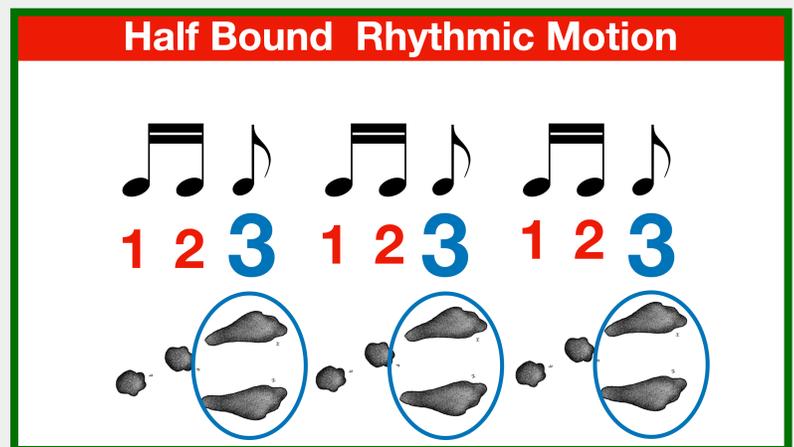
# Sound Explorations

In the “Tracking Rhythms” presentation ground tracks provide examples of rhythmic groupings, and accent. Music recording provide examples of texture, orchestration and the composer’s development and combination of rhythmic ideas.

Throughout the presentation, participants also have the opportunity to drum the rhythmic figures on Tap and Track boards to perform each rhythmic idea on the correct limb markers.



Tap and Track Board



Screen animations of the Radetzky March by Strauss illustrate the half bound gait through rhythmic notation, numbers, and rabbit ground tracks.

## Upcoming Presentations:

Naples Philharmonic Lifelong Learning Lecture Series:  
January, 2024 and February, 2024.

**Contact** Terry Wolkowicz at [terry@soundexplorations.org](mailto:terry@soundexplorations.org) to learn more or schedule a lecture presentation.

**Visit** Sound Explorations’ website to explore recent projects at [www.soundexplorations.org](http://www.soundexplorations.org)