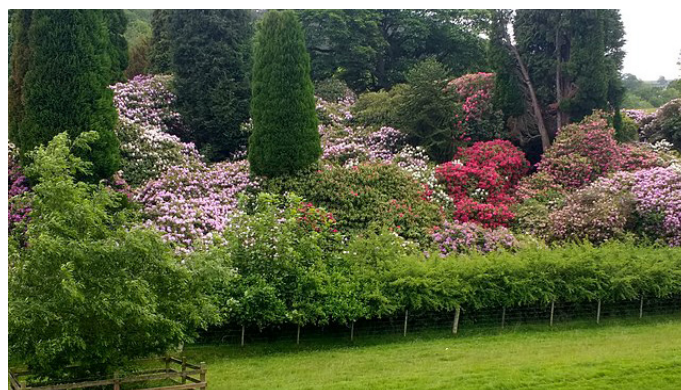


**Listening Guide 2: Symphony No. 6 “Pastoral,” Mvt. 4 “Gewitter Sturm: Allegro”
 (“Thunderstorm: Allegro”) – 1808
Ludwig van Beethoven**

Timeline	Musical Features
0:00	<i>Pianissimo</i> tremolo in low strings [<i>distant thunder</i>]
0:02	2nd violins play staccato, conjunct, descending phrases (also <i>pianissimo</i>) [<i>pattering of raindrops</i>].
0:06	1st violins play longer, legato, disjunct notes [<i>gusts of wind</i>].
0:10	In background, tremolo resumes in low strings.
0:16	Low tremolo continues as at beginning, and subsequent staccato and legato lines recur at varying pitch levels; <i>crescendo</i> at end
0:32	Timpani play a drum roll on the tonic pitch F while the full orchestra plays a series of sustained <i>fortissimo</i> F minor chords; cellos & basses play 4-against-5 ostinatos [<i>thunder</i>].
0:53	Strings and bassoons play repeated descending lines [<i>lightning strikes</i>].
1:01	Low strings play a subito <i>pianissimo</i> rapid conjunct line that rises and falls while the violas and 2nd violins play steady tremolos [<i>more wind during downpour</i>].
1:03	Winds and the 1st violins begin a series of short, sharp <i>sforzando</i> chords [<i>thunderclaps</i>].
1:21	1st violins play a series of rapid descending phrases [<i>continuing downpour</i>].
1:29	Low tremolo resumes as at beginning, and subsequent staccato, and legato lines recur at varying pitch levels.
1:37	4-against-5 ostinatos resume in cellos & basses.
1:51	<i>Fortissimo</i> chords in the wind instruments while the strings play rapid descents
2:13	The piccolo is prominent on a sustained high Gb [<i>powerful wind gusts</i>].
2:17	1st violins begin long conjunct chromatic running lines [<i>blowing winds</i>].
2:31	<i>Forte</i> , sustained chords, tremolos, and 4-against-5 ostinatos in the full orchestra (including trombones, for the first time)
2:42	Music starts to descend and <i>diminuendo</i> ; quintuplet ostinato ceases.
3:12	Strings and low winds waver between <i>forte</i> and <i>piano</i> chords.
3:27	Winds and strings play lyrical passage as storm moves on.
3:39	Flute plays rising line to link to the final movement of the symphony.

THE GLOBE’S GROWING THINGS

Natural wonders such as the Grand Canyon are magnificent, and dramatic weather conditions can be awe-inspiring. Still, there would be no life on Earth without oxygen, and most of that oxygen comes from plants and ocean organisms, such as algae or bacteria. When students are in elementary school, they start to learn about photosynthesis—the process by which plants absorb carbon dioxide and excrete oxygen.⁵⁵ Vegetation is therefore critical in supporting the cycle of life on our planet.



Plants are essential contributors to the life cycle on Earth.

Gvidon (in his disguised shape) hears the sailors tell the Tsar about the magnificence of the island city, but when the Tsar says he wants to visit, the evil sisters try to dissuade him. Angrily, the bumblebee stings them and flies home. There, Gvidon discovers that the Swan-Bird

is a princess in disguise, and he takes her as his bride. The Tsar soon arrives and is overwhelmed with joy to see that his wife and son are alive; he is so happy that he even forgives the wicked sisters, and the opera ends with an enormous feast.⁸²

LISTENING COMPANION 4: *The Tale of Tsar Saltan*, “Flight of the Bumblebee” (1900) – Nikolai Rimsky-Korsakov

Even though *The Tale of Tsar Saltan* is an opera—which normally focuses on singing voices—Rimsky-Korsakov was extremely gifted at writing effectively for an orchestra. The transformation of Gvidon into a bumblebee occurs at the end of Act III, Tableau 1, and the [Swan-Bird briefly sings](#) to the disguised Gvidon, wishing him luck and warning him not to stay away too long. However, the orchestral interlude surrounding her brief message is so vivid that it can stand alone, without the voice, as a depiction of what is happening. Therefore, most performances of the “Flight of the Bumblebee” today are shortened concert versions—without any vocalist at all.

Whether performed during the opera or in a concert hall, the “Flight of the Bumblebee” opens the same way: the full orchestra plays a loud *sforzando* chord, and then the flutes and the first violins play a very fast descending chromatic scale. There is also a *diminuendo* during the scale (to emphasize the idea that Prince Gvidon is shrinking in size). The violins are told to play *con sordino*, which means “with **mute**” in Italian; a mute is a small device that quiets the volume of an instrument. In this case, the mute helps the violins not to overpower the softer sound of the flutes.

At the end of the scale, the violins begin to play a rapidly rising and falling melody that resembles the buzzing of a bee; it is shown in the lower staff of Figure 2-5. Listeners who have viewed the full opera would realize that the melody has some special significance: it is an embellished version of a **leitmotif** for Prince Gvidon. A leitmotif is a short melody that serves as a musical symbol; many operas of the nineteenth century employed leitmotifs for various characters. Moreover, sometimes a leitmotif could reference an object—the Holy Grail, for instance—or even an abstract idea or emotion such as “love” or “longing.” The practice of writing leitmotifs has persisted onward into many film scores of the twentieth and twenty-first centuries: John Williams composed a very famous [two-note leitmotif](#) to represent the shark in *Jaws* (1975). Williams often repeated the leitmotif as an ostinato in the movie, usually with a *crescendo* and/or an *accelerando*, to increase the audience’s sense of terror.



An evil-doer tries to escape the bumblebee (a disguised Prince Gvidon) in *The Tale of Tsar Saltan*.

FIGURE 2-5



Prince Gvidon's leitmotif 1, in simple and embellished versions.

Earlier in the opera, Rimsky-Korsakov had introduced a fairly simple leitmotif for the prince, shown in red on the upper staff of Figure 2-5. During “The Flight of the Bumblebee,” the leitmotif’s same “core” pitches are used—shown again in red in the lower staff of Figure 2-5—but Rimsky-Korsakov elaborates the leitmotif by filling in steady sixteenth notes between the core pitches (so that the “bee” buzzes unceasingly).

Figure 2-5 is identified as the “first” leitmotif because Gvidon actually has *two* symbolic melodies in the opera. The second leitmotif quickly falls and rises through an arpeggiated F major seventh chord (Figure 2-6). During “Flight of the Bumblebee,” Rimsky-Korsakov incorporates the Gvidon leitmotif 2 in the “**B**” section of the “Flight’s” ternary form.

Hearing the angry buzzing of the bumblebee must have been a huge delight for the audience at the opera’s premiere in 1900. Subsequent generations of listeners have continued to enjoy the sound of this energetic insect since it has been performed not only by a wide array of instruments, but also in some fairly ridiculous contexts: a [butter commercial](#), [The Muppet Show](#), and even a 1948 [boogie](#) version courtesy, yet again, of Walt Disney.

FIGURE 2-6



Prince Gvidon's leitmotif 2.

**Listening Guide 4: *The Tale of Tsar Saltan*, “Flight of the Bumblebee” – 1900
Nikokay Rimsky-Korsakov**

Timeline	Form	Musical Features
0:00	Intro	<i>Sforzando</i> chord in full orchestra; rapid descending chromatic scale in flutes & muted 1st violin
0:05	A	Violins play embellished Gvidon leitmotif 1 (<i>pianissimo</i>), accompanied by pizzicato strings.
0:10		Solo flute takes over the Gvidon leitmotif 1.
0:16		Series of short <i>crescendos</i> and <i>diminuendos</i> on “buzzy” repeated notes that rise in pitch
0:28		Solo flute plays the Gvidon leitmotif 1.
0:32	B	Horn plays a sharp sustained note while bassoons & low strings play Gvidon leitmotif 2 quietly.
0:37		Horn plays a sustained note while flutes, oboes, & pizzicato violins play Gvidon leitmotif 2.

If you examine the score for *Hermit Thrush at Morn* (Figure 2-8)—after the first four introductory bars—you will see that the right hand plays very irregular rhythmic patterns: some pitches are a full quarter note in duration, but sometimes there are groups of thirteen or fourteen notes that need to be performed within a single pulse of the triple meter. This erratic tune is the actual [bird melody](#) (notated, as Beach explained, an octave lower). Beach’s ingenuity was to devise a **waltz**-like accompaniment of quarter-note chords for the left hand that coordinated beautifully with the bird song. (A waltz is a triple-meter ballroom dance for couples that surged in popularity in the nineteenth century.) In fact, Beach’s tempo indication at the beginning—“Quasi valse lento”—means “Like a slow waltz.” However, in an interview, Beach cautioned performers that “the tempo of these numbers should be very irregular—‘very free,’ with ‘excessive rubato’ to present their mood,” reminding players to “concentrate on the bird songs and consider the remainder as background.”⁹⁷

As shown in Listening Guide 5 (at 0:49), the hermit thrush created a melodic sequence, singing the same short three-note pattern three times but descending a step lower each time. Beach’s transcription of that passage is shown in Figure 2-9.

FIGURE 2-9



Hermit Thrush at Morn, *sequence* (ms. 18–20).

Beach follows the bird-plus-waltz-chords material (A) with a faster passage marked “Poco agitato” (“A little more agitated”). In this B section, Beach uses only fragments of the bird’s melody; she incorporates the first phrase of bird song shown in measure 5 of Figure 2-8 as well as the three-note pattern illustrated in Figure 2-9. These two “bird motifs” are much less prominent since they now appear in the left hand in a much lower register. Our attention is instead drawn to the right hand, which plays a busy pattern of arpeggiated sixteenth notes as well as a flowing melodic line of very conjunct quarter notes.

The energy of the “Poco agitato” gradually dies down, allowing the A section to return. Then, the B section also makes a second appearance. Beach has a surprise for listeners, however: as the “Poco agitato” starts its downward descent a second time, she moves the sixteenth-plus-quarter-notes melody (B) into the left hand and puts a four-measure excerpt of the high-pitched bird song (A) into the right hand. By presenting both melodies at the same time—an illustration of counterpoint (sometimes called non-imitative polyphony)—Beach creates a C section, and thus turns the architecture of *Hermit Thrush at Morn* into a rondo form.

Beach did an outstanding job of incorporating the birdsong into this character piece. In fact, a person who hears a performance of *Hermit Thrush at Morn* without knowing its title might never realize that a real bird had been responsible for a good deal of the melodic material. Even for an uninformed listener, however, there is one hint that Beach was not the sole creator. The overall harmony of *Hermit Thrush at Morn* is D minor, and the left hand concludes with a prolonged D minor chord during the last six measures of the piece. The right hand, however, continues to play the transcription of the bird warbling its tune, and the final pitch that the thrush sings is a “C”—it does not resolve to a D, F, or A that comprise the D minor triad. Clearly, the thrush needed more musical training!

short, stepwise **conjunct** phrases.

- ◆ The “Burro” motif got its rhythm from the sound of pile-drivers at a construction site and its melody from a popular song titled “Horses.” The “Cowboy Song” was a spontaneous lullaby that Grofé sang to soothe his restless infant son.
- ◆ A passage of polymeter occurs when the “Burro” motif, in $\frac{3}{8}$ meter (emphasized by the clip-clop sound of coconut shells), is presented in counterpoint with the “Cowboy Song,” which is in cut-time. The arrival at a waterfall and oasis is supported by the sound of a **celesta**.
- ◆ Musical illustrations of storms were present in the **Baroque** era (circa 1600 to 1730), in both instrumental works and in theatrical **operas**. Composers of the **Classic** era (circa 1730 to 1815) also included storm depictions in some **symphonies**. Many **Romantic** composers also wrote programmatic “storms” in the nineteenth century. Ludwig van Beethoven created one of the most celebrated examples in 1808 as the “Gewitter Sturm: Allegro” (“Thunderstorm: Allegro”) movement of his “Pastoral” Symphony (Listening Example 2).
- ◆ The Sixth Symphony’s “Thunderstorm” opens with a rapidly bowed **tremolo** to evoke thunder, and more thunder is suggested by the subsequent polyrhythmic ostinato patterns of four-note groups versus **quintuplets**. Sharp **sforzando** accents mimic thunderclaps, while the unusual timbre of a piccolo helps the storm’s winds to howl. Trombones add another unusual tone color to the “Thunderstorm.”
- ◆ Beethoven presents these effects in an unpredictable **through-composed** form. Walt Disney adapted the movement to become the score for an often-criticized portion of the animated *Fantasia* (1940).
- ◆ The plants, or **flora**, that contribute to Earth’s oxygen supply have been showcased musically, as have the planet’s animals, or **fauna**, that depend on that oxygen.
- ◆ Tōru Takemitsu blended his Japanese heritage with his Western training to produce works that illustrated both backgrounds. He adopted the Japanese value of **sawari** by reproducing sounds of nature. His “Waterscape” series emphasized water in many forms, and—like water, he wanted his series to undergo a process of mutation. Moreover, he linked the works with an “S–E–A” motif as a unifying symbol.
- ◆ Creating unity within multiplicity was always important to Takemitsu, and in 1981 he applied that Zen Buddhist principle to *Ame no ki (Rain Tree)*, Listening Example 3. Inspired by his friend Kenzaburō Ōé’s description of a Hawaiian rain tree, he used a **trio** of three players and multiple instruments to evoke the unified image of a tree slowly shedding its rain droplets. The work begins with isolated notes played on **crotales (antique cymbals)**.
- ◆ One of the instruments in *Ame no ki (Rain Tree)*, the vibraphone, has a motor that can produce a pulsating sound called **vibrato**; sometimes Takemitsu asks the motor to be turned off. In other passages, the two marimbas play **call-and-response** patterns.
- ◆ Visual drama is added to *Ame no ki (Rain Tree)* by means of three spotlights that intermittently focus on the players.
- ◆ Massive as rain trees can be, they still need tiny pollinators to help them reproduce. Bees perform that function for many plants.
- ◆ Nikolai Rimsky-Korsakov juggled responsibilities as a naval officer with an increasingly successful compositional career. He was helped to grow as a musician by his participation in “The Mighty Handful,” also called “The Five,” led by Mily Balakirev.
- ◆ Rimsky-Korsakov created the famous “Flight of the Bumblebee” (Listening Example 4) as a scene in his fairy-tale opera *The Tale of Tsar Saltan* (1900). In the scene, the Swan-Bird transforms Prince Gvidon into a bumblebee, so he can secretly visit his father’s court.
- ◆ Although the Swan-Bird briefly sings during the scene, a shortened version of the orchestral music is often presented in concert without a vocalist.
- ◆ To illustrate the shrinking of the prince, the orchestral interlude opens with a descending