

Twittering Machine

by Brian Balmages
FJH Music Company - Grade 2.5



Broad Description:

- Tone Poem depicting the painting “The Twittering Machine” by Swiss-German Artist, Paul Klee
- Utilizes a piano and expressive percussion.
- Commissioned by the Patrick Marsh Middle School 7th Grade Band as a part of their ComMission Possible Project in 2017.
- The composer states that it is through composed or similar in form to a rondo (ABACA). However, the form I noticed has elements of both of these. In general, the composer utilizes musical economy by developing two main motifs from the main theme in the piece.

Contextual Knowledge About The Composer



Brian Balmages (b. 1975) is an active composer, conductor, producer, and performer. He received his bachelor’s degree in music from James Madison University and his master’s degree from the University of Miami in Florida. Mr. Balmages’ works for symphonic band, orchestra, and brass have been performed throughout the world, including the College Band Directors National and Regional Conferences, the Midwest Clinic, the International Tuba/Euphonium Conference, the International Trombone Festival, and the International Trumpet Guild Conference. His active schedule of commissions has included groups ranging from elementary schools to professional ensembles, including the Baltimore Symphony Orchestra, Miami Symphony Orchestra, the University of Miami Wind Ensemble, Dominion Brass, and others. He has also enjoyed world premieres in prestigious venues such as Carnegie Hall.

As a conductor, Mr. Balmages enjoys engagements with numerous honor bands and orchestras, university groups, and professional ensembles throughout the country. Notable guest conducting appearances have included the Midwest Clinic, College Band Directors Regional Conference, Mid-Atlantic Wind Conductors Conference, the Atlantic Classical Orchestra Brass Ensemble, and Meyerhoff Symphony Hall in Baltimore. He has also served as an adjunct professor of instrumental conducting and acting director of the symphonic band at Towson University in Maryland.

Currently, Mr. Balmages is the Director of Instrumental Publications for The FJH Music Company Inc. in Fort Lauderdale, Florida. He resides in Baltimore with his wife, Lisa, and their sons, Jacob and Collin.

As a composer, I used to write music only for advanced level ensembles. However, after marrying an elementary band director, and with the support of numerous friends, colleagues, and directors, I have found great joy and challenge in writing music for younger students along with my more difficult works. After all, the youngest of musicians are equally deserving of good literature and I can only hope that my music will inspire them the way I am inspired by a Mahler symphony.”
— Brian Balmages

Contextual Knowledge About The Artist



- Paul Klee (pronounced “clay”) (1879-1940) was of Swiss-German artist.
- He and his colleague, Russian painter [Wassily Kandinsky](#), both taught at the Bauhaus school of art, design and architecture.
- Klee has been variously associated with [Expressionism](#), [Cubism](#), [Surrealism](#), but his pictures are difficult to classify. He generally worked in isolation from his peers, and interpreted new art trends in his own way. He was inventive in his methods and technique.
- Klee worked in many different media—[oil paint](#), [watercolor](#), [ink](#), [pastel](#), [etching](#), and others. He often combined them into one work. He used canvas, burlap, muslin, linen, gauze, cardboard, metal foils, fabric, wallpaper, and newsprint. Klee employed spray paint, knife application, stamping, glazing, and impasto, and [mixed media](#) such as oil with watercolor, watercolor with pen and India ink, and oil with tempera.
- He was a natural draftsman (a person who is good at making mechanical drawings), and through long experimentation developed a mastery of color and tonality. Many of his works combine these skills. He uses a great variety of color palettes from nearly monochromatic (one color) to highly polychromatic (many colors).
- His works often have a fragile childlike quality to them and are usually on a small scale. He often used geometric forms as well as letters, numbers, and arrows, and combined them with figures of animals and people. Some works were completely abstract.
- Many of his works and their titles reflect his dry humor and varying moods; some express political convictions. They frequently allude to poetry, music and dreams and sometimes include words or musical notation.
- The later works are distinguished by spidery hieroglyph-like symbols. Rainer Maria Rilke wrote about Klee in 1921, "Even if you hadn't told me he plays the violin, I would have guessed that on many occasions his drawings were transcriptions of music."
- Pamela Kort observed: "Klee's 1933 drawings present their beholder with an unparalleled opportunity to glimpse a central aspect of his aesthetics that has remained largely unappreciated: his lifelong concern with the possibilities of parody and wit. Herein lies their real significance, particularly for an audience unaware that Klee's art has political dimensions."
- Among the few plastic works are hand puppets made between 1916 and 1925, for his son Felix



▲ Klee, shown here on the far right in 1900, practiced the violin everyday. This picture was taken in the studio of the private art school Klee attended from 1889-90. The musicians used artists' easels as their music stands.

Contextual Knowledge About The Painting

Twittering Machine (Die Zwitscher-Maschine) is a 1922 watercolor and pen and ink oil transfer on paper by Swiss-German painter Paul Klee. Like other artworks by Klee, it blends biology and machinery, depicting a loosely sketched group of birds on a wire or branch connected to a hand-crank. Interpretations of the work vary widely: it has been perceived as a nightmarish lure for the viewer or a depiction of the helplessness of the artist, but also as a triumph of nature over mechanical pursuits. It has been seen as a visual representation of the mechanics of sound.

Originally displayed in Germany, the image was declared "degenerate art" by Adolf Hitler in 1933 and sold by the Nazi party to an art dealer in 1939, whence it made its way to New York. One of the better known of more than 9,000 works produced by Klee, it is among the more famous images of the New York Museum of Modern Art (MoMA). It has inspired several musical compositions and, according to a 1987 magazine profile in *New York Magazine*, has been a popular piece to hang in children's bedrooms.

Contextual Knowledge – Painting Interpretations "Perhaps no other artist of the 20th century matched Klee's subtlety as he deftly created a world of ambiguity and understatement that draws each viewer into finding a unique interpretation of the work." Kleiner (2009), p. 724

1. The "twittering" in the title doubtless refers to the birds, while the "machine" is suggested by the hand crank. The two elements are, literally, a fusing of the natural with the industrial world. Each bird stands with beak open, poised as if to announce the moment when the misty cool blue of night gives way to the pink glow of dawn. The scene evokes an abbreviated pastoral—but the birds are shackled to their perch, which is in turn connected to the hand crank. Upon closer inspection, however, an uneasy sensation of looming menace begins to manifest itself. Composed of a wiry, nervous line, these creatures bear a resemblance to birds only in their beaks and feathered silhouettes; they appear closer to deformations of nature. The hand crank conjures up the idea that this "machine" is a music box, where the birds function as bait to lure victims to the pit over which the machine hovers. We can imagine the fiendish cacophony made by the shrieking birds, their legs drawn thin and taut as they strain against the machine to which they are fused. Klee's art, with its extraordinary technical facility and expressive color, draws comparisons to caricature, children's art, and the automatic drawing technique of the Surrealists. In *Twittering Machine*, his affinity for the contrasting sensibilities of humor and monstrosity converges with formal elements to create a work as intriguing in its technical composition as it is in its multiplicity of meanings. [Publication excerpt from The Museum of Modern Art, *MoMA Highlights*, New York: The Museum of Modern Art, revised 2004, originally published 1999, p. 127]
2. They speculate that the "twittering machine" may in fact be a music box that produces a "fiendish cacophony" as **it "lure[s] victims to the pit over which the machine hovers"**. MoMA
3. Kay Larson of *New York* magazine (1987), too, found menace in the image, which she describes as": "Like [Charles Chaplin](#) caught in the gears of *Modern Times*, they [the birds] **whir helplessly, their heads flopping in exhaustion and pathos. One bird's tongue flies up out of its beak, an exclamation point punctuating its grim fate—to chirp under compulsion.**"
4. Without drawing conclusions on emotional impact, Werckmeister, in 1989's *The Making of Paul Klee's Career*, sees a deliberate blending of birds and machine, suggesting the piece is part of Klee's general interest in "**the formal equation between animal and machine, between organism and mechanism**" (similar to the ambiguity between bird and airplane in a number of works)
5. According to Wheye and Kennedy (2008), the painting is often interpreted as "**a contemptuous satire of laboratory science**".

6. **Arthur Danto**, who does not see the birds as deformed mechanical creatures but instead as separate living elements, speculates in *Encounters & Reflections* (1997) that "**Klee is making some kind of point about the futility of machines, almost humanizing machines into things from which nothing great is to be hoped or feared, and the futility in this case is underscored by the silly project of bringing forth by mechanical means what nature in any case provides in abundance.**" Danto believes that perhaps this machine has been abandoned, the birds opportunistically using it as a perch from which they issue the sounds the inert machine is failing to produce. Danto also suggests, conversely, that the painting may mean simply that "it might not be a bad thing if we bent our gifts to the artificial generation of bird songs."
7. Wheye and Kennedy suggest that the picture **may represent a sound spectrograph, with the heads of the birds perhaps representing musical notes and the size, shape and direction of their tongues suggesting the "volume, intensity, degree of trilling, and degree of shrillness of their voices"**. This reflects the earlier view of Soby's *Contemporary Painters* (1948) that: **The bird with an exclamation point in its mouth represents the twitter's full volume; the one with an arrow in its beak symbolizes an accompanying shrillness – a horizontal thrust of piercing song. Since a characteristic of chirping birds is that their racket resumes as soon as it seems to be ending, the bird in the center droops with lolling tongue, while another begins to falter in song; both birds will come up again full blast as soon as the machine's crank is turned.**

Contextual Knowledge – Twittering Machine Recordings

- 1) Giselher Klebe (b. 1925, German) *Die Zwitschermaschine* (1950) Orchestra [13:15] Four sections represent the birds in the painting; Klee's colors are translated into orchestral sonorities.
- 2) David Diamond (b. 1915, USA) *The World of Paul Klee* (1958) #4 *Twittering Machine* Orchestra [4:00]
- 3) Gunther Schuller (b. 1925, USA) *Seven Studies on Themes of Paul Klee* (1959) #4 *Twittering Machine*. Orchestra [2:00] In 1959 Gunther Schuller wrote seven pieces describing the paintings of German modernist Paul Klee of which "The Twittering Machine" could be the most descriptive. This recording by the Minneapolis Symphony Orchestra was made on 16 & 17 April 1960.
- 4) Al Payson (b. 1934, USA) *The Twittering Machine* (1968) Percussion Solo [2:55] Performed at the percussion recital of Nathan Haines (Nov. 4, 2012), Brigham Young University.
- 5) Peter Maxwell Davies (b. 1934, England) *Five Klee Pictures* (1976) #3 *Twittering Machine* Orchestra [2:18]
- 6) Seymour Bernstein (b. 1927, USA) "New Pictures at an Exhibition" #6 *The Twittering Machine* (1977) Piano [1:50] Coupled with a reading of a poem by Owen Lewis; the movement portrays the painting with whimsy and satire.
- 7) Harrison Birtwistle (b. 1934, England) *Carmen Arcadiae Mechanicae Perpetuum* (1977) Orchestra [9:20]
- 8) Geoff Mann (b. 1956, England) *Twittering Machine* (1991) Electronics [7:08]
- 9) Stephane Furic (France) *The Twitter-Machine* (1993) Jazz Quartet [54:00] The album title is inspired by the birds in Klee's painting, which represent the performers' philosophy of maintaining individuality while functioning as a cohesive group.
- 10) Cindy McTee (b. 1953, USA) *California Counterpoint: The Twittering Machine* (1993) Wind Ensemble [7:30] Emulates the painting's whimsical, mechanistic, and playful qualities.\
- 11) Nick Didkovsky (b. 1958, USA) *The Twittering Machine* (1994) Computer-controlled piano. [5:07]
- 12) Julian Snow (b. 1971, USA) *Twittering Machine* (1998) Synthesizer [0:56]
- 13) Tan Dun (b. 1957, China) *Death and Fire, "Dialogue with Paul Klee": Insert 4: Twittering Machine* (1998) Orchestra [1:06]
- 14) La Maquina de Trinar - *The Twittering Machine* 3D Animation Shortfilm

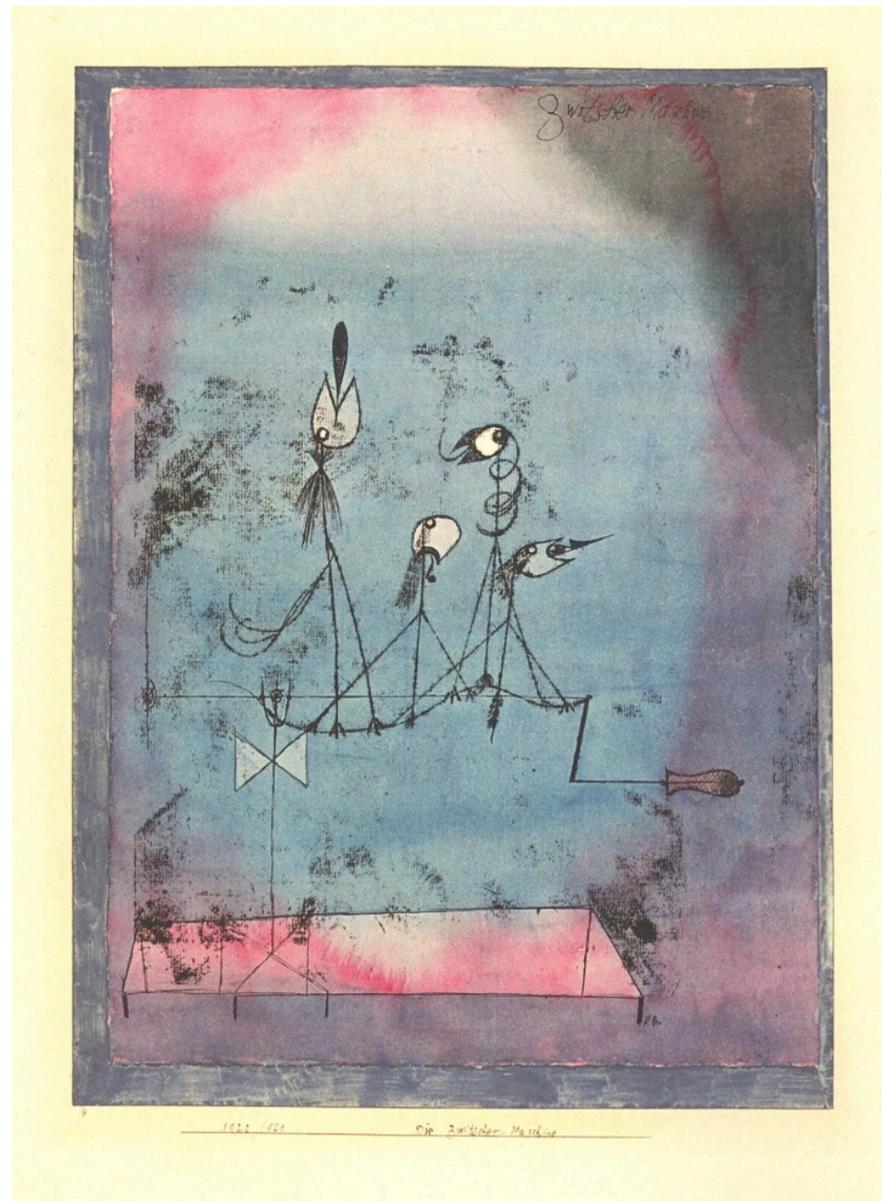
Contextual Knowledge – Program Notes

Inspired by the 1922 artwork by Swiss-German painter Paul Klee, this ambiguous music follows the controversy of a painting that seems to depict some type of struggle between nature and machine. While there are many interpretations as to the real meaning Klee had when drawing and painting the work, it is clearly a dark representation of 4 birds that appear to be shackled to a wire attached to a hand crank. Further, there is a pit below the “machine” and an eerie blueish gray fog surrounding everything. The music seeks to embody this ambiguity, beginning with soft clusters of sound amid the presence of random “machine-like sounds.”

As the music develops, a haunting melody appears and soon begins to transform as the music around it becomes more rhythmic and aggressive. Commissioning director Chris Gleason adds: “In fact, it almost feels like we are on a tour of the painting exploring different parts of it sonically.” The machine slowly begins to take over the entire texture before the melody battles back (representing the possibility of nature against machines).

A disturbing section in 3/4 hits at the idea of a carousel as the birds continue to ride the crank against their will. This moves into the darkest portion of the piece, but also the most aggressive. Percussion becomes more and more engaged as layers of sound embody the concept of resistance. The climax of the piece infuses all the themes into one powerful statement before the music winds down and references the opening, desolate textures. The crank continues to wind just a few more times before everything fades to silence, leaving the audience to wonder about the outcome of the struggle.

Twittering Machine was commissioned by Patrick Marsh Middle School (Sun Prairie, Wisconsin) and conductor Chris Gleason. All students researched the painting and offered their thoughts on its meaning and their reactions to it prior to my writing the piece.



Elements of Music

Meas	Big Form	Form Desc.	Melody	Rhythm	Harmony	Timbre	Texture	Expression
1-8		Piano & Percussion Introduction	Repetitive motif Eb, D, Eb, C outlining the minor third in mallets. Why? To establish the minor key and a sense of eerie wonder.	Rigid eighth note repeated motif soon layered by half notes then quarter notes. Why? To create a “mechanistic” pulse.	C minor. Established by c minor 7 th chord absent of the b3 and with a raised 7 th scale degree. Vibraphone in 5-8 adds weight by alternating between tonic and the leading tone. Why? This adds a bit of dissonance to the sound.	Warm to begin with. Soft Yarn mallets on Marimba, Vibes and Piano.	Thin scoring...very specific percussion instrument to create this eerie soundscape.	Dynamic is marked piano. No specific articulation but notes should be connected and flowing with a light articulation. Why? The composer is trying to set the overall mood of the artwork.
9-16	Intro	Added Wind & Perc. Textures	Motif continues. No real melody just the layering of timbres. Why? The composer is setting the scene and the eventual entrance of the main melody.	Layers of rhythms continue to be added. I notice that the rhythms in each section are different (ex. clar eighths, tpt quarter, low brass half notes) Why? I believe this is to create some degree of uncertainty while building tension.	C minor continued in the percussion but now outlined in the low brass. Trumpets in thirds emphasizing the 5-#4 and b3-2. The clarinets emphasizing the minor third interval. Why? These intervals and notes within the scale create a “spooky” harmonic structure.	The orchestra bells offer a brilliance that contrasts with the opening warm sounds. The ensuing brass and clarinet statements offer another layer. Tom Tom Rim clicks as well as cabasa and temple blocks create a haunting almost machine like quality. Why? The composer is building suspense through the use of layering very specific timbres effectively.	The texture is gradually getting thicker with more and more instruments gradually being added. Why? To build suspense leading to the arrival of the A theme.	Dynamics are all soft with the only subtle variation occurring in the clarinet and trumpet figures. Articulation in clarinet/trumpet figures is staccato. Other sections maintaining legato. Why? The slight dynamic change is to bring awareness to that line while continue to foster this haunting feeling.

Meas	Big Form	Form Desc.	Melody	Rhythm	Harmony	Timbre	Texture	Expression
17-24	A	Main Theme	<p>Melody in C harmonic minor with a V-#IV-V pattern.</p>  <p>The melody moves mostly by step or half-step with a leap of a fifth being the largest interval. Why? The alternating quality of the 4th scale degree presents an uneasiness and loss of tonal center.</p>	<p>Rhythm is mostly quarter notes and eighth notes with the eighth notes landing on beats 2 and 4. Why? The eighth notes on 2 and 4 provide a forward movement to the melody.</p>	<p>Harmonically there is very little movement. In fact, the only harmonic shift happens in one note in the vibe part. The hollow sounding part consists of 4ths and 3rds alternating every two measures between the I chord and the IV chord. Why? The voicing is very intentional as it creates this hollow, open sound for the melody to exist without too much color.</p>	<p>This section of the music is written for 1st flutes presenting the melody over the percussion ostinato with the addition of temple blocks. The clarinet adds color with a counter melody the last four measures. Why? Since this piece recreating this painting sonically, the composer selected flute to portray the birds.</p>	<p>The texture is stark and thinly scored. Why? To portray the lonely image of the birds on the wire in what appears to be a desolate scene.</p>	<p>The dynamic is mp throughout this section.</p>
25-32	(A)	Theme motif developed	<p>Two fragments of the main theme are used in this section.</p> <p>Motif A:</p>  <p>Motif B:</p>  <p>The composer uses</p>	<p>The rhythm becomes very active in this section with steady eighths</p>  <p>in the upper brass/ww and two syncopated figures in the trombone/t.sax</p> 	<p>An augmented triad in first inversion is introduced in the trumpet section. The key “color” note is the Db in the 2nd trumpets. This is set against open fifths on tonic in the low brass with both syncopated figures. Harmonically the composer adds color by using a Db major chord creating an open fifth in chromatic fashion. The last four</p>	<p>The melody motif used as the “call” is found in clar. 2 and horn while the “answer” is found in the bari, alto, bassoon and eventually clar. 1. The timbre is dark with all instruments in comfortable low registers. However, the color continues to change as more instruments are added – most</p>	<p>The texture is becoming more polyphonic with layers of voices being added as we build to 33.</p>	<p>This section has two nicely contrasted articulations – legato in the melodic motifs versus staccato in the rhythmic brass/ww accompaniment. The dynamic markings are still mp eventually leading to mf.</p>

			<p>these motifs in a call and response fashion. Why? This is interesting to me. The composer could have created new material or a true “B” theme. Rather, he continued by reusing material already in place. Could it be that these motifs represent two birds?</p>	<p>and tuba/euph/b.cl</p>  <p>Why? The rhythm adds to the mechanistic nature of the painting and provides motion. I believe this symbolizes the machine overpowering nature.</p>	<p>measures move in chromatic fashion up a fourth. Why? All about unity and contrast – it was necessary to do something with the harmonic structure to add contrast and more dissonance. The augmented chords help to establish “dysfunction” in the painting.</p>	<p>notably the upper woodwinds in the last four measures. China and splash cymbals are used to create excitement. Why? Selecting these instruments to do the call and response is genius in that it keeps the melodic material present without it dominating. The rhythmic harmonic figures in the low brass are the real stars of this show.</p>		
33-38	((A))	Theme motif dev	<p>Motif A is utilized again providing unity however two new repetitive ideas are layered in:</p>  <p>Why? The new material serves to build intensity.</p>	<p>More rhythmic energy is introduced with 16th notes. This is contrasted by the longer durations found in the trumpet and clar. 2. Why? Energy and movement can be created with rhythmic energy. This is all leading to a bigger moment in the piece. This again displays how the machine is winning.</p>	<p>The key is now pitched a fourth higher centering on F. The low winds continue with a rhythmic bass line utilizing the half step to the Gb-Db open fifths. Dissonance is heard most notably in the trombones with minor seconds through out. Why? Contrast was needed with a new pitch center.</p>	<p>The color is becoming brighter with many of the instruments in a higher tessitura. Trumpets are in octaves for the first time as they make their bold melodic statement. Why? The composer is building intensity.</p>	<p>The texture is very thick and dense with four individual lines competing for attention (not including percussion). Why? This is all building to a moment in the music.</p>	<p>The composer utilizes a variety of articulations – slurs, staccato, accent, and marcato. The dynamic marking builds from mf to f. Why? The composer is using all of his tools to create excitement leading to a definitive moment in the music.</p>
Meas	Big Form	Form Desc.	Melody	Rhythm	Harmony	Timbre	Texture	Expression

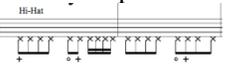
Chris Gleason CMP Teaching Plan –*Twittering Machine* 2017

Meas	Big Form	Form Desc.	Melody	Rhythm	Harmony	Timbre	Texture	Expression
39-42	Trans	Chromatic	The material in this section is taken from motif A. Why? I think this motif works well in this sequence as it emphasizes the flat third scale degree.	Tension is created with a repetitive call and response over block chords in half notes.	This transition takes the motif and sequences it in a chromatic fashion. Why? This is leading us back to the melody in dramatic fashion.	The colors are very bold and bright with the upper winds sustaining chords while the low winds provide the melodic material. Why? The composer could have given the low brass the chords with the upper brass/ww doing the movement, however this choice creates a darker more sinister sound.	Very thick scoring with upper brass and woodwinds all playing in this section.	The composer utilizes trills in the flute and oboe and a crescendo to ff. Suspended cymbal is also utilized for the first time in the work. Why? Trills and Sus Cymbal is like the catalyst to drive a “moment” in music. Composers have to be careful not to use it too often.
43-52	A	Main Theme	Statement of the main theme – first four measures in tpt/hn and last four measures in fl/ob/cl/alto	Melody contains same rhythm however the accompaniment is in an undulating quarter note/half note two part pattern in the lower winds. Why? I believe the quarter/half pattern represents the “tug of war” or turmoil taking place in the photo (good and evil, nature and industrialism, etc.)	Harmonically we are centered on the I chord of C minor again. However, the tuba and bass clarinet are intentionally sustaining a G. Why? I believe this is providing a continued sense of uneasiness. Have these instruments on C would provide too much stability and finality.	The timbre is dark and bold with mostly just brass colors in the low to mid registers. This is followed by the upper woodwinds taking over the melody while the brass perform bell tones. Why? I think the composer wanted to created an arrival point that was captivating and full of emotion.	The texture is exciting as the composer brings us back to the melody with brass and then sustains our interest with the bell tones.	This section represents our first climatic moment. Contrast is created with the alternating bell tone effect created by the brass and chimes in the final four measures. Why? The bell tones bare a resemblance to the “Dies Irae” heard in the Berlioz’s Symphonie Fantastique 5th Movement - Dreams of a Witches' Sabbabth

Meas	Big Form	Form Desc.	Melody	Rhythm	Harmony	Timbre	Texture	Expression
53-56	Trans	Perc in 3	No melody – percussion ostinato	<p>Eighth rest figure:</p>  <p>along with repetitive notes in other perc.</p> <p>Why? This rhythm emphasized by a definite downbeat on beat one creates a lilt. Moreover, this emphasis of 1, as if in a waltz, conjures thoughts of circles or twirling.</p>	<p>Harmonic structure is c minor with the #4 showing up every other measure.</p> <p>Why? It provides just a bit of instability.</p>	The “metallic” timbre of this ostinato helps to, as the composer states, “create the idea of a carousel as the birds continue to ride the crank against their will.”	The texture is thin with only a few specific percussion sounds. The octave leaps in the vibes and bells produces this almost strange waltz/carousel music.	The dynamic is down to mp. This section should be played softly to establish a new eeriness as we “view the crank moving”.
57-64	Dev.	Dev. of theme in 3/4	<p>A variation of the melody is heard in the first flutes, followed by a short motivic figure in the alto then tenor sax. The melody appears to be in tact in the first measure but quickly changes course with new material eventually resting on G. The alto and tenor sax likes present a leap up followed by descending chromatic notes. Why? I believe the composer is creating contrast by limiting the instrumentation and establishing a desolate, lonely sounding section.</p>	<p>The rhythm in the winds utilizes eighth notes on beat two. Why? This seems to keep the section light and uneasy. Beat one would have been too “heavy”.</p>	<p>The percussion ostinato remains constant in this section however the melody continues to emphasize the raised 7th and 4th scale degrees. Why? The chromaticism and altered notes provide instability.</p>	The timbre remains light with the continued percussion and soloistic instruments.	The texture is sparse and thin. Why? Contrast can be created many ways. In the previous section the texture was thick so this is a dramatic shift needed to “paint the sonic picture”.	The dynamics are still soft with legato and slurred passages in the soloistic parts.

Chris Gleason CMP Teaching Plan –*Twittering Machine* 2017

Meas			Melody	Rhythm	Harmony	Timbre	Texture	Expression
65-76			<p>The melody now found in the flutes and clarinet 1 again starts like the original but then quickly sequences a diatonic second descending pattern. This accompanied by a alternating ascending countermelody in clarinet 2. In 73 Clarinet 1 performs the theme in nearly the original form. Why? The composer is taking this melody through it's paces allowing it to struggle and fight to remain in tact (like the birds).</p>	<p>The rhythm in the percussion remains constant. In the winds a notable section is in clarinet 2 with the continuous eighth note passage that moves in an alternating step-wise fashion. Also, the trombones/euphoniums on just beats 2 & 3 accentuate the carousel feel. Why? These rhythms are vital in portraying this "rotation".</p>	<p>The harmony established in the percussion went from a diminished 7th chord to an augmented 7th chord. Minor seconds are found in the trombone part. Why? Dissonance is important as it is eliciting feeling of anguish and unsettledness most notably seen as the birds are strapped to the perch.</p>	<p>The timbre seems to get brighter with movement into the upper flute, bassoon, and trombone ranges but this quickly dissipates as we approach 77. The use of Harmon Mutes by the trumpets creates a great distant timbre.</p>	<p>The texture remains light even though many instruments play in this section. Groups of instruments play short motifs and sections. An important aspect to consider is the material in the clarinet 2 part – it needs to project to be heard in the low register.</p>	<p>A legato style continues through this section, however careful consideration must be given to the accent on beat one of the alternating eighth note figures. Why? The composer could have decided to make this marcato, or any number of different articulations but keeping it legato suggests an almost graceful movement.</p>
77-84		Dev. w/ counter melody	<p>The first two measures are used in original form at 77 back in 4/4 time. Three measures later, an echo of this motif is repeated but a third higher. A countermelody written as a two measure repeated figure is introduced and repeated. Why? The leap of a fifth in the motif sounds hopeful. The countermelody provided new energy and drive.</p>	<p>The rhythm is consistent; however the counter melody reinforces the eighth note movement on 2 and 4. Half note and whole note chords and layered in. Of particular importance is the (& 1) rhythm found in the timpani, piano and tom parts. Why? This helps to propel the music forward building toward a final conclusion.</p>	<p>Stability is found again with open fifths first found in the clarinets at 77 (concert C & G) and later in the low brass and piano. The tuba part also includes a divisi for the open 5ths! Why? The basic harmony provides more depth while not "coloring" the sound too much.</p>	<p>The timbre begins reserved as a woodwind & percussion ensemble from 77-80 but becomes richer with the addition of horn to the countermelody and low brass with open 5ths. Flute 1 and Alto 1 get the lead parts here. Why? I think these color choices are excellent. The flute provides a light, almost optimistic feel .</p>	<p>Begins thin and quickly expands – notably adding brass and toms. Why? I believe this choice was made so that the music could grow to the upcoming climatic moment.</p>	<p>This section begins soft. Dynamic contrast is created mostly by the addition of instruments and colors.</p>

Meas			Melody	Rhythm	Harmony	Timbre	Texture	Expression
85-92			<p>The melodic motif echo utilized in 77 continues, as does the countermelody. Why? There is no need to incorporate new material. The effect can be created with layering and tempo changes.</p>	<p>The rhythms continue from the previous section, however a new syncopated figure is introduced in the brass section.</p>  <p>Also adding rhythmic energy is the hi-hat part:</p>  <p>Why? The addition of the syncopation in the low winds and the energetic hi-hat part make the music dance more – as if nearly out of control.</p>	<p>Harmonically things stay the same, however a descending chromatic passage in the t.sax and trumpets takes place the last four measures adding harmonic movement and tension. Why? This leads us to yet another “level” of intensity.</p>	<p>The timbre continues to brighten. The composer has clar. 1 play the melody up and octave, he adds alto sax, tpts, hi-hat, and tambourine.</p>	<p>This is all about texture! The composer uses much of the same material from the section before but precisely makes additions and changes. At 85 he has clar. 1 take the melody up an octave and asks clar. 2 to do countermelody. He has alto start the melody and t.sax cover counter melody. He has tpt 2 also add to the counter melody. In 89 he layers in tpt 1 in harmony with a descending half notes.</p>	<p>The music states “accel poco a poco”. Why? The driving rhythms, layered parts, and increasing dynamics make for a wonderful climatic moment in the music. I believe this portrays the crank moving faster and faster as this scene becomes more chaotic.</p>
93-100			<p>The melody is the opening motif minus the first note used in a bellicose call and response in the horns/2nd trumpets and the 1st trumpets a 5th higher.</p>  <p>Why? The bellicose call is really effective</p>	<p>Back in ¾ time. The bell part continues a form of the countermelody rhythm used previously. Steady eighth notes and quarter notes in the percussion help to propel the music forward. Why? I think going back into three is</p>	<p>The harmony in the section establishes a dominant V7 chord with each entrance of the trilling woodwinds. Why? This is creating tension and anticipation for the final return of the melody in tonic.</p>	<p>The timbre begins bright with the trill in the clarinets and altos. He gradually adds instruments and octaves as we approach 101. Why? The instruments selected for the trill offer the most volume and precision while</p>	<p>Smartly the composer does not use too much percussion as this would cover up the individual entrances in the woodwinds and the melodic material in the brass.</p>	<p>This is one big musical effect. “Frantic” trills in the altos, clarinets. Ostinatos in the flute, oboe and percussion. Tempo is a 132 with a crescendo leading to 101.</p>

Chris Gleason CMP Teaching Plan –*Twittering Machine* 2017

			in creating a dramatic scene. It is apparent now that something is going to happen...but what?	brilliant as it gets everything swirling around again in a moment of anticipation.		affording the option of layering the ostinato (flutes) to create more drama.		
101-108	A	Main Theme with bold accompaniment	The melody in its original form is performed by clar. 1, alto sax, tpt 1. Why? It was important to bring this melody back again in its original form. The composer doesn't change it but rather uses the other tools at his disposal to make it climatic.	The rhythm is consistent with the rest of the work, however take note of the competing rhythm of the half note descending figure and the bass line. Why? I believe this is still depicting a struggle and needs to have rhythmic "tension".	Harmonically the accompaniment half note passage is in thirds descending by half steps to the dominant and then back up again to repeat this. Why? This pattern creates a wonderfully chaotic scene.	The timbre is bright and bold with many layers of sounds and tessituras. Why? The composer is using many colors to make his point.	The composer layers many textures in this culminating moment. Melody (clar 1, alto, tpt 1) Counter melody (flute, oboe, bells, marimba) Chromatic half note passage (tpt 2, hn, tbone, euph, cl2, tsax) Bass line on tonic opposite of the half note line (bcl, bsn, bari, tuba, timp, bass dr)	The climatic moment is FF with the entire band and all percussion playing. Ratchet reappears as does cabasa, crash cymbals and temple blocks. A special effect to portray the excitement is the "scooped" notes by the trombones.
109-112	Trans	Mostly perc.	Reprise of 1-8			Reprise of 1-8		
113-120	Coda	Selected motifs	The first two measures of the melody are broken into four motifs in this order (alto solo, clarinet solo, euph solo, bass clarinet solo)	Reprise of 1-8	Reprise of 1-8. Only addition here is the low brass in fifths (tonic, dominant) Why? The open fifths create a sense of hollowness and ambiguity.	Melody is performed by increasing "darker" sounds (alto, clar, euph, b.clar) Why? I think these choices are smart as they almost appear as a "decaying" effect.	Reprise of 1-8	Reprise of 1-8
Meas	Big Form	Form Desc.	Melody	Rhythm	Harmony	Timbre	Texture	Expression

Meas	Big Form	Form Desc.	Melody	Rhythm	Harmony	Timbre	Texture	Expression
121-128	Outro	Percussion only	Piano plays intervals highlighting the 7 th scale degree and ending on the dominant. Why? To give it a feeling of not being finished.	Percussion ostinato continues with rim taps in eighth notes and then one half note triplet. Why? The triplet seem insignificant but it is the first triplet in the piece and seems to either signify the crank slowing down or uncertainty.	Harmony continues in c minor.	The timbre continues to lighten as the texture thins out.	The texture continues to thin until it is only the marimba and vibes performing.	Expressively the composer indicates “fade to silence (repeat as needed – exact remaining measures not necessary)” and writes “niente”. This is a very effective ending as it brings to mind this machine continuing to work into the future.

The Heart Statement: The heart of *Twittering Machine* is the tension between the melody (including subsequent thematic statements) and the always present, mechanistic texture yielding a feeling of unsettledness, desperation, and ambiguity.

Why This Piece?

- Quality composer for young bands
- Ties into a significant work of art by a respected, significant artist
- Encourages discussion about art/music and the transfer between the disciplines
- Not in Bb Concert!
- Great example of music economy, layering, thematic development, and texture/timbre.
- Allows for discussion about ambiguity and speculation.

Introducing the Piece (a strategy)

Hold an unknown object (one that you created with parts and pieces of items) up in front of your students and ask, “What is this? Can anyone guess what this might be used for? How does it work?” Gather responses and take suggestions. If the students continue to struggle offer a few fake clues to provide them some context that might lead them down a path. After more discussion ask them if having context made it easier to narrow it down. When they ask what it is say “I’m not sure”. When they grumble at you ask “Does it bother you that I don’t know? If so, why?” Discuss that ambiguity is part of life and that taking educated guesses is fun. There is a fancy word for this called “speculation” - it is the process of thinking about possibilities. I believe this is one of our superpowers as humans. We are going to look at piece that will require you to use your speculation superpowers.

Skill Outcome

Students will match other musician’s articulation, duration, intensity, pitch and release through applied listening and concentration skills.

[The goal of this outcome is to get young musicians to listen beyond their own sound, to become more aware of each other in order to create a more unified homogenous approach]

1. MR. G’S TWIN? (v) [This strategy introduces the concept at a level kids are at]
 - a. Show a variety of slides with Mr. Gleason and other people/animals. Ask “Who matches Mr. Gleason the best?” Are there any perfect matches? Dumb question...we are all unique. 7.5 Billion people on Earth and no two are exactly alike...not even twins.
2. IN A BOX (can’t sit by same type of instr.)
 - a. FIND YOUR MATCH (k, a) [physical way to consider matching followed by aurally matching]
 - i. Hold hand up to each other. Any match? The trouble is that we have to do this musically.
 - ii. Two volunteers to do “voice match” with the rest of the ensemble helping them to sound more alike. What are we listening for?
 - iii. Same volunteers then do it with instrument.
 1. What are we listening for?
 - a. Articulation
 - b. Duration
 - c. Intensity (volume)
 - d. Pitch
 - e. Release
 - b. MAP IT – (v) [Important for visual learners to “see” the sound. Could also do using technology such as TE Tuner]
 - i. Draw the sound diagram on a person playing one note.
 - ii. Find a friend and play a note for each other then draw each other’s sound diagram and compare.
 - c. WORM (a) [This takes the match it strategy to the group level. This will encourage kids to listen to each other more and to adjust.]
 - i. Concert C around the circle (goal – match person before you in the five ways we have indicated)
 - ii. Concert C harmonic minor scale around the circle with each player playing the next note (ghost it as a suggestion)
 - iii. Do Concert C around the circle but one entire side of the box plays the note together.
 - iv. Do the scale again but one entire side of the box plays the note together, followed by the next side playing the next note.
 - v. Do the scale again but the conductor selects the side to play by pointing to them.
 - d. WORM II (a) [This takes it another step in level of difficulty but brings it back to the music]
 - i. Use a piece of music. – each side of the box gets a measure of music
 - ii. Use a piece of music – conductor can choose who plays each measure.
 - e. DUCK DUCK GOOSE (a) [This is a game/strategy that gets kids to listen and react. This is exactly what we want them doing in the full group.]
 - i. In a smaller group within the box have the group face inward. Each person plays a concert C each taking a turn going in a circle. A player can reverse the direction by playing something other than a C (but can only do that once).
 - f. GRAPHIC EQ (v, k) [This strategy offers an opportunity for students to get feedback about their performance and matching]

- i. Single line of students in the middle of the box. Two sides of the box perform a section of the music. Tell the line in the middle to move away from loud sounds and toward quiet sounds. The goal is to have balance so the line stays in the middle.
- ii. Do it again but allow the students to move to a person in the box who is sticking out of the texture.

Skill Assessment

1. Diagnostic – Ask the ensemble to perform a C harmonic minor concert scale with the following rhythm (quarter, quarter, half) at 80 bpm. Video record the performance of this scale and listen back taking note of the sections/players who are sticking out of the texture.
2. Formative – Pay attention to the strategies already in the plan. However, consider recording them to provide you with another opportunity to listen for progress.
3. Summative – Revisit the scale exercise in the diagnostic assessment and record it asking the students to assess progress between the first recording and the second.

Knowledge Outcome

Students will analyze a melody and examine how a composer can alter and use thematic material to unify a work. [This is an important aspect of this piece. Brian Balmages does a great job of unifying the work with his use of melodic material. This provides a wonderful opportunity to analyze the music with the students and to use their speculation chops.]

1. TWINKLEYZE (k) [What better way to introduce analyzing a melody than with Twinkle? This strategy is meant to start with a melody every student can play and enjoy.]
 - a. Before the students come to class create a staff on the floor using blue tape. Ask the students to first perform Twinkle as a group and then to create a human version of that using the staff on the floor. Take seven volunteers and analyze the first measure only using people as notes. Continue this for each measure rearranging people or bringing in new volunteers.
2. JUST THE MELODY PLEASE (a) [Before we can examine the full work we must first really understand the melody. This strategy is to get the students better acquainted with the melody and to begin to better understand its construction and meaning.]
 - a. Using *Twittering Machine Warm-up* play the melody as a group and then answer these questions with a stand partner:
 - i. What key are we in? Why?
 - ii. What scale degree does it start on? Why?
 - iii. What is the biggest interval? Does this have meaning?
 - iv. Does it move mostly by steps or skips? Why?
 - v. Are there accidentals? If so, what role do they serve?
 - vi. What scale degree does it end on?
 - vii. What word or words would you use to describe this melody?
 - viii. What note is your favorite? Why?
 - ix. Can you perform this melody on your instrument? Forward and backwards? Memorized?

Chris Gleason CMP Teaching Plan –*Twittering Machine* 2017

- x. Can you hum or sing this melody?
 - xi. If you could pick just one measure of this melody to be your favorite, what measure would it be and why?
3. WHERE'S THE MELODY? (v) [Now that we know the melody they need to find it in the full work]
 - a. Using the student's score copies ask "How many times is the melody heard in its complete form?" [three times - 17, 43, 101]
 4. THEMATIC MATERIAL (v, a) [Now that we see the melody we need to find the thematic material taken from the melody and discover how the composer uses it through out the music AND speculate why he does what he does]
 - a. Ask "Do you remember when you were asked if you could pick just one measure what measure would it be?" Look at measure 25 in your score. What do you notice? [Two thematic statements]. Have the students locate both of them by putting a circle around one and a box around the other.
 - b. Ask the students to find those two statements in the following sections by circling and boxing them like they did above.
 - i. 1-53
 - ii. 53-93
 - iii. 93-end

Knowledge Assessment

1. Diagnostic – Use TWINKLEYZE as a way to gauge how students do with analyzing a simple melody. If they struggle, target the concept they don't understand (patterns, intervals, scale degrees, etc) and teach to that before going on.
2. Formative – Pay attention to the strategies already in the plan. You may want to collect their scores to look over how they are doing with their analysis.
3. Summative – Ask the students to teach this analysis to a family member. The family member needs to complete a short reflection on what they learned from your presentation and provide the student with feedback.

Affective Outcome

Students will explore their ability to speculate and reflect on how this “superpower” can benefit them. [Students need to realize that they have this ability and that it gets stronger if we nurture it. Students also need to realize that speculation rewards us when we gather contextual information to support our ideas. *Twittering Machine*, the painting, invites speculation, as does this new piece of music. My hope is that through this strategy students will learn something important about them – that they have a superpower called “speculation” and that it is healthy to ponder things, to take guesses, and to stay curious.

1. DEFINE IT (a, v) [This is important so that kids get the general concept and don't confuse it with other similar ideas]
 - a. **Speculating** is like guessing, predicting—anticipating, making ‘educated guesses’ but there aren't any concrete facts. Speculation may or may not be provable. It generally requires a leap in imagination.

- b. **Hypothesizing** is to create a theory based on limited evidence based on data. However, it has a specific way to be tested, proven or disproven.
2. **SPECULATE EVERY DAY** (a, v) [The goal of this strategy is to engage students in this practice of speculating in order to stoke their curiosity]
- Space - Remember when we speculated about those objects? You can also speculate on an idea “Would it be easier or harder to play your instrument if you were on the international space station?”
 - Poem -Nothing Gold Can Stay by Robert Frost, 1874 – 1963. Speculate on the meaning of this poem.
Nature’s first green is gold,
Her hardest hue to hold.
Her early leaf’s a flower;
But only so an hour.
Then leaf subsides to leaf.
So Eden sank to grief,
So dawn goes down to day.
Nothing gold can stay.
 - Photos/Pictures – What do you see in this picture?
3. **YOUR SPECULATION** (a) [The goal here is to make it personal and give them the opportunity to choose what to speculate on]
- Ask students to jot down a few things that they are pondering and to provide some reflection
 - Prompts
 - What is might be like to be your pet?
 - What the future will be like in 10 years, 50 years, 100 years?
 - What life would be like for you if you were blind?
 - What the next Star Wars movie will be about?
 - What life would be like on a different planet?
 - What our world would be like without art or music?
 - What our school would be like without homework?
4. **WHY** (a) [This outcome will not be achieved if students cannot clearly articulate why we are doing it and what benefit it is to them]
- Ask your students to reflect and journal on this question: “Why is speculation important? What benefit is it to you? In other words, why bother?”
5. **TWITTERING SPECULATION** (a, v) [Time to cash in on the analysis and speculation work!]
- Show the students the painting “The Twittering Machine” by Paul Klee.
 - Before the students get too far, remind them that context will help them to build a better guess.
 - Paul Klee’s history and selected works from his different eras.
 - Twittering Machine history



Chris Gleason CMP Teaching Plan –*Twittering Machine* 2017

- c. Twittering Speculation- Ask the following questions:
 - i. Why is the background that color?
 - ii. Why four birds?
 - iii. What is coming out of the bird's beaks?
 - iv. What do those shapes symbolize?
 - v. Why are the bird's legs straight?
 - vi. What are they standing on?
 - vii. What is the purpose of the handle?
 - viii. What is below the birds?
 - ix. What else do you notice?
 - x. What does it all mean?
 - xi. WHY did the artist make those choices?
 - xii. What was he trying to tell us?

Affective Assessment

1. Diagnostic – Pay attention to the responses given during the introducing the piece strategy. This will help to gauge if more time is needed scaffolding this concept.
2. Formative – Pay attention to the strategies already in the plan. Collect the YOUR SPECULATION reflections to make sure students are on the right path.
3. Summative – Ask students to complete the following to be presented to composer Balmages:
 - a. SECTION 1 - Write at least one paragraph describing what you noticed followed by speculating (guessing) why the artist (Paul Klee) made those choices or what he was trying to tell us.
 - b. SECTION 2 - Describe how composer Balmages could portray the artwork musically in the new composition. Be sure to “speak like a musician” by using the elements of music (Melody, Harmony, Form, Timbre, Texture, Expression, and Rhythm) Describe any special sounds/instruments/compositional ideas you would use if you were the composer. Be specific and use examples!
 - c. SECTION 3 - Fill in the Video Report form below so you can read it while we video tape you during lessons the week of Oct. 3.