



Stuart P.

O'NEIL

Machinery

Four Pieces

- 1. Machine**
- 2. Rush Hour**
- 3. Suspension Bridge**
- 4. Assembly Line**

for

6-Part Trombone Ensemble & Percussion

Score



about the music...

The four pieces in this collection are written for 6-part trombone ensemble and accompanying percussion; they may be performed together or individually. Each piece is a study in the trombone's distinct glissando capability and should be approached in a relatively aggressive, but not overly serious, manner: concert music, but with considerable jazz-rock influence, especially in regards to rhythm and dynamics. The pieces are similar, but each has its own character. *Machine* is a well-oiled, highly-functioning machine, with all parts efficiently working together. *Rush Hour* is a hectic, busy traffic scene, but somewhat cartoon-like. *Suspension Bridge* is strong metal under extreme stress, straining but not breaking. *Assembly Line* is a factory conveyor belt: loud, busy, with lots of heavy machinery.

The articulation markings notated in the opening measures of each piece should be applied throughout. Each glissando should be approached as a pair of notes, the first being full length and with a slight accent, the second being much shorter and lighter, almost ghosted. There should be a slight space after each glissando, separating the note pair from the material that follows. This articulation styling also applies to note pairs of the same pitch, such as those found in *Machine*, measure 3, trombone parts 2 and 5. Each glissando should be brought out and made obvious or else the overall texture will merely sound sloppy. The dynamic notation throughout these pieces is merely a guide; care must be taken to ensure that all parts are properly balanced, melodic lines are not covered by accompanying figures, and dynamic contrasts are apparent.

Parts 1, 2, 3, and 4 may be played with regular tenor or F-attachment trombones. Part 5 ideally should be played on a double-trigger bass trombone to cover all of the glissandi; however, most are possible on a regular tenor or F-attachment trombone, and those that are not can be faked if necessary. Part 6 should be played on a double-trigger bass trombone. All parts may be doubled as desired. While alternate slide positions are notated, the conductor and players should be familiar with alternate slide positions and the necessary tuning adjustments involved.

The percussion parts in these pieces are not particularly difficult and do not necessarily need to be played by percussionists; however, it is essential that they be played accurately and with rhythmic precision. The instrumentation requirements of the four pieces are not equal; some are complex, while some are fairly simple. The ensemble should always listen carefully to the percussion instruments, especially the cabasa and shekere, to help with subdividing and to maintain a consistent, steady tempo. Care must always be taken to avoid rushing.

PERCUSSION ASSIGNMENTS

Machine

player 1: cabasa
player 2: anvil

Rush Hour

player 1: small triangle
player 2: cabasa
player 3: guiro
player 4: cowbell, anvil
player 5: splash cymbal, china cymbal, bass drum

Suspension Bridge

player 1: suspended cymbals, steam whistle
player 2: cabasa, cowbell
player 3: large triangle

Assembly Line

player 1: cabasa, shekere
player 2: anvil
player 3: chains
player 4: china cymbal, bass drum
player 5: water gong
player 6: crystal glass #1 (E-flat)
player 7: crystal glass #2 (F)

Cabasa: The cabasa holds the pieces together; it needs to be accurate and steady. Tapping the beads rather than rotating may allow for more control, but this instrument needs to be prominent in the overall texture.

Shekere (*Assembly Line*): Eighth notes should be played *almost* as quarter notes, the offbeats being produced in part by the rebounding shells/beads. There should be a natural accent on the beat. Like the cabasa, the shekere holds the ensemble together and needs to be precise.

Anvil: This part may be played on an anvil, brake drum, steel pipe, or any similar large piece of metal that has a heavy “clang” sound with lots of ring. It should be played aggressively with a hammer or crowbar.

Cowbell: Use a regular drumstick on a large samba cowbell. Experiment with a dampening cloth to reduce the ring, as this will provide a metallic sound without too much of the characteristic cowbell timbre.

Guiro (*Rush Hour*): Use a guiro made of fiberglass and metal. The guiro must project, so use a metal scraper that will provide a fairly bright timbre that can be heard.

Bass Drum: Use a large marching bass drum with a fairly hard mallet; there should be some ring to the drum.

Small Triangle (*Rush Hour*): Use a small, light suspended triangle, something without too many overtones. The technique called for is the same as that in jazz music: some notes ring freely (o) and some are muted (+) with the pinky.

Large Triangle (*Suspension Bridge*): Use the largest, heaviest triangle possible and muffle it somewhat by holding it in a corner with the pinky. When struck hard with a heavy metal beater (i.e. large screwdriver), it produces a “hammer on metal” kind of sound. The triangle may dent a bit, so don’t use a nice one.

Splash Cymbal (*Rush Hour*): Set on a cymbal stand and play with a regular drumstick; let ring throughout.

China Cymbal: Set inverted on a cymbal stand and play with a regular drumstick; let ring throughout.

Suspended Cymbals (*Suspension Bridge*): All cymbals should be played with a cello or bass bow. Use multiple cymbals for a variety of colors. The idea is to suggest metal under stress, so experiment with different cymbals to find those having the most abrasive sounds with high, piercing overtones. The original performance of *Suspension Bridge* used a china, a splash, and two crash cymbals. Ride cymbals and tam tams may not be harsh enough. The cymbal parts are not notated in a traditional manner as they merely provide color, so rhythmic accuracy is not a concern. Measure 1 should be drawn out and played as a cadenza; the player should take lots of time, bow several different cymbals, and let them ring out. (Note to non-string players: use lots of rosin.)

Chains (*Assembly Line*): Heavy steel chains should be dropped against some metallic, resonant object. The original performance of *Assembly Line* used a simple “chain box” about the size of a small suitcase. It was structurally similar to an Orff bass bar box, but it had multiple pieces of steel pipe (maybe 1.5” to 2” diameter) mounted to a sturdy frame made of 2x4 wood. Simply form a handful of heavy steel chain (maybe 2 feet long) into a ball and strike it against the steel pipes.

Water Gong (*Assembly Line*): Play the gong fairly loudly, then submerge into the water (not too fast) as far as possible until sound is nearly muted. This will drop the pitch of the gong. Pull the gong out at the last possible moment to prep for the next note. On its last note, the gong should be submerged and then lifted back out, lowering and then raising the pitch.

Steam Whistle (*Suspension Bridge*): If a steam whistle cannot be acquired, simply use a recorder. Use no fingers and overblow to create a very high, piercing sound. (Do not play so loudly that the audience can hear that it’s just a recorder!) Be sure the player holds these notes the full value.

Crystal Glasses (*Assembly Line*): Use two glasses; these should be very small and tuned to the highest E-flat and F possible.



about the composer...

Stuart P. O’Neil (b. 1969) has taught vocal and instrumental music for Kansas public schools since 1993. He received a bachelor of music education degree from the University of Nebraska and a master of music theory degree from the University of Kansas. His compositions for choir, concert band, jazz band, orchestra, and various chamber ensembles have been performed by school, university, and community ensembles throughout the Midwest. In addition to his work as a teacher and composer, Mr. O’Neil also serves as an arranger, accompanist, adjudicator, and conductor. He currently lives in Lawrence, KS, with his family.

Machinery

Four Pieces for Six-Part Trombone Ensemble & Percussion

Stuart P. O'Neil

1. Machine

Mechanical, with Precision; $\text{♩} = 120$

Musical score for Trombone 1 through Trombone 6 and Percussion, measures 1 through 4. The score is in 4/4 time. Trombone 1 is silent. Trombone 2 and 5 play a rhythmic pattern starting in measure 3, marked *f*. Trombone 3 plays a rhythmic pattern starting in measure 3, marked *f*. Trombone 4 is silent. Trombone 6 plays a rhythmic pattern starting in measure 1, marked *f*. Percussion plays a rhythmic pattern starting in measure 3, marked *f*, with *cabasa* and *anvil* sounds.

5

Musical score for Trombone 1 through Trombone 6 and Percussion, measures 5 through 8. The score is in 4/4 time. Trombone 1 is silent. Trombone 2 and 5 play a rhythmic pattern starting in measure 5, marked *sim*. Trombone 3 plays a rhythmic pattern starting in measure 5, marked *sim*. Trombone 4 plays a rhythmic pattern starting in measure 5, marked *f*. Trombone 6 plays a rhythmic pattern starting in measure 5, marked *f*. Percussion plays a rhythmic pattern starting in measure 5, marked *f*, with *cabasa* and *anvil* sounds.

2. Rush Hour

Bustling, with Confidence; $\text{♩} = 128$

The score is for a 4/4 piece in B-flat major. It features six trombones, three percussionists, and six trumpets. The tempo is 128 beats per minute. The music is characterized by a driving, rhythmic feel with frequent accents and dynamic markings.

Trombone Parts:
Trombone 1: Mostly rests.
Trombone 2: Rests, then a melodic phrase starting in measure 4.
Trombone 3: *f* (6), *sim* (2), *f*.
Trombone 4: *f*, *sim*.
Trombone 5: *f*.
Trombone 6: *f* (T1), *f* (T3.5), *f* (T6).

Percussion Parts:
Percussion 1: *cabasa*, triangle.
Percussion 2: Rests.
Percussion 3: *splash* (*mf*), *china + BD* (*lv throughout*).

Trumpet Parts:
Trb 1: *f* (5), 4, 6, 2, 6, 5, 3.
Trb 2: *f*, accents.
Trb 3: *f*, accents.
Trb 4: *f*, 6, accents.
Trb 5: *sim*, accents.
Trb 6: *sim*, accents.

Percussion 1: *sim*, accents.

Percussion 3: *splash*, *china + BD*.

3. Suspension Bridge

Rigid, with Tension; $\text{♩} = 108$

Musical score for Trombone 1-6 and Percussion 1-2. The score is in 4/4 time. Trombone 1 and 2 are mostly silent with a final flourish. Trombone 3 has a melodic line starting with a forte (*f*) dynamic. Trombone 4 has a melodic line with a forte (*f*) dynamic. Trombone 5 has a melodic line with forte (*f*) and piano (*sim*) dynamics. Trombone 6 has a rhythmic line with forte (*f*) and piano (*sim*) dynamics. Percussion 1 has cymbals. Percussion 2 has a triangle and bass drum.

Musical score for Trumpet 1-6 and Percussion 1-2. The score is in 3/4 time. Trumpet 1 has a melodic line with dynamics 4, 5, and 6. Trumpet 2 has a melodic line with dynamics 4, 5, and 6. Trumpet 3 has a melodic line with dynamics 4, 5, and 6. Trumpet 4 has a melodic line with dynamics 4, 5, and 6. Trumpet 5 has a melodic line with dynamics 4, 5, and 6. Trumpet 6 has a rhythmic line with dynamics 4, 5, and 6. Percussion 1 has a cabasa. Percussion 2 has a triangle and bass drum.

4. Assembly Line

Automated, with Weight; $\text{♩} = 112$

Musical score for Trombone 1-6 and Percussion 1-2. The score is in 5/4 time with a key signature of two flats. Trombone 6 has a melodic line with dynamics *f* and *sim*, and markings T3.5 and T6. Percussion 1 has a rhythmic pattern with dynamics *f* and markings *shekere*, *chains*, and *anvil*. Trombone 2 has a dynamic *f* and a fingering 5. Trombone 3 has a dynamic *f*. Trombone 5 has a dynamic *f*. Trombone 4 is silent.

Musical score for Trumpet 1-6 and Percussion 1-2. The score is in 5/4 time with a key signature of two flats. Trumpet 1 has a melodic line with dynamics *f* and markings 7, 4, 6, and \flat . Trumpet 2 has a dynamic *sim*. Trumpet 3 has a dynamic *sim*. Trumpet 4 has a dynamic *f* and markings 6 and 1, and a dynamic *sim*. Trumpet 5 has a dynamic *sim*. Trumpet 6 has a melodic line with a dynamic *sim*. Percussion 1 has a rhythmic pattern with markings \times and \times . Percussion 2 is silent.

This system of the musical score includes six tuba parts and two percussion parts. The key signature is two flats (B-flat and E-flat), and the time signature is 4/4. The tuba parts are as follows:

- Trib 1:** Plays a half note G2 in the first measure, followed by rests.
- Trib 2:** Plays a quarter note G2, quarter note F2, quarter note E2, quarter note D2 in the first measure, followed by rests.
- Trib 3:** Plays a quarter note G2, quarter note F2, quarter note E2, quarter note D2 in the first measure, followed by rests.
- Trib 4:** Plays a quarter note G2, quarter note F2, quarter note E2, quarter note D2 in the first measure, followed by rests.
- Trib 5:** Plays a quarter note G2, quarter note F2, quarter note E2, quarter note D2 in the first measure, followed by rests.
- Trib 6:** Plays a quarter note G2, quarter note F2, quarter note E2, quarter note D2 in the first measure, followed by rests.

The percussion parts are:

- Perc 1:** Plays a steady eighth-note pattern: G2, A2, B2, C3, D3, E3, F3, G3.
- Perc 2:** Plays a steady eighth-note pattern: G2, A2, B2, C3, D3, E3, F3, G3.

This system of the musical score continues the six tuba parts and two percussion parts. The key signature is two flats (B-flat and E-flat), and the time signature is 4/4. The tuba parts are as follows:

- Trib 1:** Plays a half note G2 in the first measure, followed by rests.
- Trib 2:** Plays a quarter note G2, quarter note F2, quarter note E2, quarter note D2 in the first measure, followed by rests.
- Trib 3:** Plays a quarter note G2, quarter note F2, quarter note E2, quarter note D2 in the first measure, followed by rests.
- Trib 4:** Plays a quarter note G2, quarter note F2, quarter note E2, quarter note D2 in the first measure, followed by rests.
- Trib 5:** Plays a quarter note G2, quarter note F2, quarter note E2, quarter note D2 in the first measure, followed by rests.
- Trib 6:** Plays a quarter note G2, quarter note F2, quarter note E2, quarter note D2 in the first measure, followed by rests.

The percussion parts are:

- Perc 1:** Plays a steady eighth-note pattern: G2, A2, B2, C3, D3, E3, F3, G3.
- Perc 2:** Plays a steady eighth-note pattern: G2, A2, B2, C3, D3, E3, F3, G3.