



Shape Shifting

Composer **Edgard Varèse** composed *Density 21.5* in 1936 for George Barrère's **platinum** flute. The title refers to the specific gravity of platinum, which is about twice the density of silver. On May 4th 2020, BCMG's **flautist Tony Robb** performed *Density 21.5* as part of a series of online concerts featuring the music of Edgard Varèse. Have a listen:

<https://youtu.be/kT5hQy411Hc>

Just for fun, imagine....

.... your instrument being made out of **different material**. How would it sound? Can you play like your instrument is made of **feathers, stone, jelly**...?

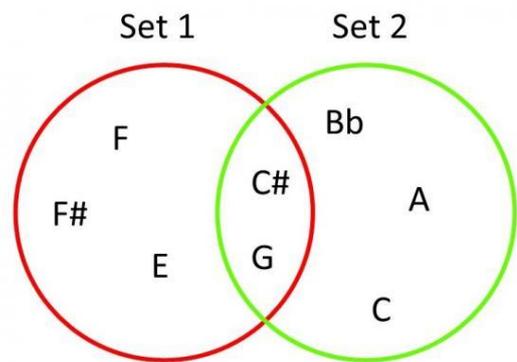


Varèse based *Density 21.5* on **two melodic ideas** from which all the musical material is developed. Varèse often wrote melodies that used particular **intervals** (the distance between two notes), in this case - **semitones, fifths** and **tritones**. This gives the melodies a particular **character** and **shape**.

Look at the score, Varèse uses F, E, F#, C# and G in the first 5 bars (red), then swaps the F, F# and E for A, Bb and C for the next 5 bars (green), keeping the C# and G.

The image shows a musical score for a flute part. It consists of three staves of music. The first staff has five measures with red markings above the notes. The second staff has five measures with green markings above the notes. The third staff has five measures with green markings above the notes. Dynamics include *mf*, *f*, *p*, and *mf subito*. There are also markings for *f* and *mf* with arrows indicating changes. The tempo is marked $\text{♩} = 72^{**}$. There are also markings for *f* and *mf* with arrows indicating changes.

Here are the **two sets of pitches/notes** from the first 10 bars:

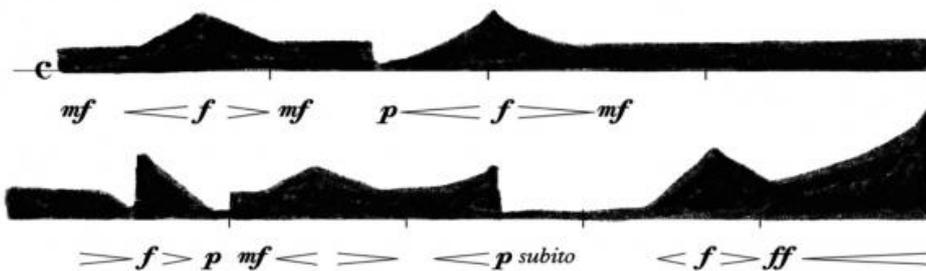


Another idea we are going to borrow from Varèse is how small **musical ideas/cells** keep returning throughout the piece to create **structure** and **unity**. Notice how the first **3-note motif** returns throughout the piece: **repeated, transposed, expanded** and **altered** and, how dynamics and articulation are varied each time.



Your Turn!

In this activity, we are going to think about **choosing notes** and, creating and **transforming melodic** and **dynamic shapes**. Listen again to Tony playing the opening phrase of *Density 21.5*. Follow the contour of the dynamics (see below), instead the pitch contour. Also, notice the changes in **tone** and **vibrato**.

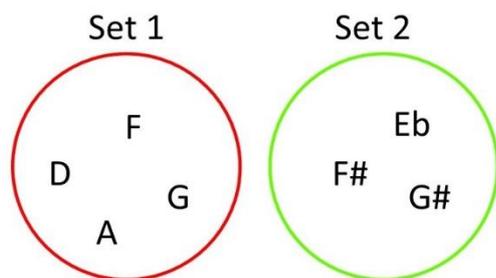


Warm up:

Choose any **3 pitches/notes** and improvise an opening phrase. Try following the same **dynamic contour** as the one above but with your own notes. Try again, this time really expanding your dynamic range. It might help to think of the sound changing density as you move from **piano** (quiet) to **fortissimo** (loud).

As you become more familiar with your notes, explore **performance techniques** and different **registers** (what octave a note is in).

Solo improvisation - note swap:



1. Start by using these **sets of notes** or your own two sets. Try playing them across the **whole range** of your instrument.
2. Begin your improvisation, using one set of notes – noodling, remembering to repeat some of your ideas.
3. After a while, begin to pick notes from the other set to add a different **flavour** to your melody. You can **add, swap** or **switch** the entire set.
4. Return to your original set of notes and try to repeat some of your original material if you can remember it. Musical memory is a really useful skill to develop.
5. Try again, this time focusing on **expression** and **dynamics**.
6. As you become more confident, spend more time moving between your two sets of pitches, dipping in and out, and exploring different combinations.
7. You could try also this technique using the opening pitches from *Density 21.5*.

If you can, **record** yourself and **evaluate** your ideas and performance. Try to **notate** some of what you have created.

Final piece:

Varèse talked about '*groups of sound constantly changing in shape, direction, and speed, attracted and repulsed by various force*'. Using the activities you have explored above, choose one of the following ideas for your final piece:

Atoms and molecules: imagine your musical ideas as atoms and molecules interacting. How do your atoms (ideas) move through the piece, how do they attract other atoms to form molecules (new ideas) or how do they repel other atoms?

Shape shifting: use your music to tell the story of an object or character changing its shape, form and density. What is its shape to start with and how does it musically turn into something else?

Learning **how to develop a melody** is important to both composition and improvisation. Often, the **movement** of the melody is more important than choosing the 'correct' notes, particularly when experimenting and exploring sounds. The more you practice, the more **control** you will have over the shape and direction.

Please send any music you create to learning@bcmg.org.uk