# Murmurations

XIII - XV (2021)

#### Thoughts on instrumentation:

All the *Murmurations* are composed as solo performer pieces for a special adapted fretless acoustic guitar with movable bridges, played with three e-bows on a guitar.

I-V are for one guitar plus voice, VI-XII for two guitars and XIII-XV for two guitars and voice.

However, these pieces can be realized by any instrumentation capable of producing up to seven (in the case of the following Murmurations XIII-XV) simultaneously sounding sustained pitches in the specified registers (see 'pitch ranges' below).

A timbral similarity between the instruments (or voices) is favoured, but not an absolute requirement.

For instance, a septet of strings would work well (with the order of voices as in score):

- 1 violin / viola
- 2 violin / viola
- 3 cello
- 4 violin / viola
- 5 violin / viola
- 6- cello
- 7 cello

Possibly, the piece can also be realized with fewer string instruments by using double stops on violin / viola, (maybe even on cello). For instance - the 1st and 2nd voice or the 4th and 5th voice can probably be combined. These matters are yet to be researched.

#### Notes / Instructions:

Each succeeding part (XIII through XV), harmonically starts off where the preceding part ends. Hence, if more than one part is played, the order should generally be obtained. However, one can also feel free to combine the parts as wanted.

There are no note values in the score, but for any of the voices, a note or pause lasts until it is succeeded by a new note or pause in the given voice.

Note durations are free / flexible, and the graphic spacing between notes is generally not a guide to the pace of the music, but merely showing the succession of the note or pause entries.

The music should unfold with a focus on stability of tuning, combined with a sense of melodic movement.

Each sonority should last long enough to be tuned and then perceived for a while in their "tuned state", but without the music ending up being too static - it should have a sense of forward movement. When a sonority is difficult to tune, take your time to adjust. The searching and fine tuning is an intrinsic musical and human part of this music.

As a general rule - more time should be spent *in* the intended, tuned sonority than in the searching / tuning process.

When a chain of change occur within one part, the movement *can generally* be a little bit faster, like a melodic phrase.

The end of a note should primarily be followed by a little pause (a few seconds long) before starting the new note. However, glissandi between the notes, with or without a little pause between them, is a viable variation.

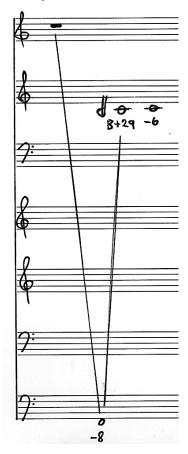
Cent deviations from 12-tone equal temperament are written under each note.

The accidentals belong to the Extended Helmholtz-Ellis JI pitch notation by Marc Sabat and Wolfgang von Schweinitz.

More information about the accidentals: <a href="http://www.marcsabat.com/pdfs/notation.pdf">http://www.marcsabat.com/pdfs/notation.pdf</a>

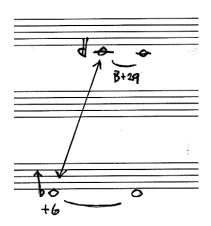
### Symbols and signs:

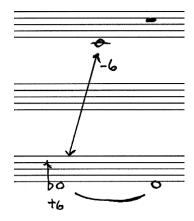
1 - Connecting lines / arrows show the succession of the notes where the narrowness of the graphical spacing makes it potentially hard to read (note that the graphical narrowness is accidental / random, and hence not a guide to the musical pace, which is free):



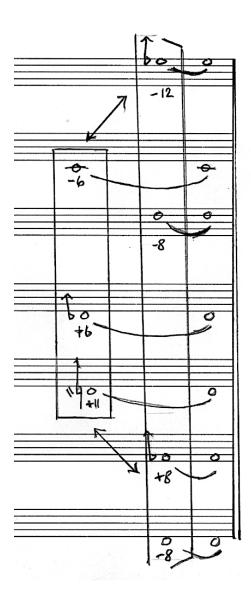
2 - Bidirectional arrows between notes signify a *crossfade* between the two notes in question, meaning that *note 1* enters by a fade-in while *note 2* is already sounding - then they sound for a while together before *note 2* fades out as *note 1* keeps sounding. This process is repeated a few (between 3 to 6) times *ad lib*.

Legato bows and / or pauses show how the music proceeds after this process, either with one of them or with both notes sounding.





3 - In Murmurations XIV, the 'crossfade' described above occurs not between *two notes*, but between *two groups consisting of three and four notes respectively:* 



4 - In the last system of Murmurations XV, the note in parentheses is an optional note. When realized with an adapted e-bowed guitar, it lies in the nature of the instrument to be able to tune a note to a consonance, then dampen it and reintroduce it as a "strange" note in another consonance, like in this example. Hence one can perform small *comma-shifts* that otherwise would be difficult to realize by tuning by ear. When realized in any other ensemble setting, this note might be hard to tune, since it is a "residue" of another harmonic structure - thus, one can omit it or approximate it.



# Pitch ranges

lowest to highest note in each voice (shown by excerpts from the score)

### 1st voice from top:



### 2nd voice from top:



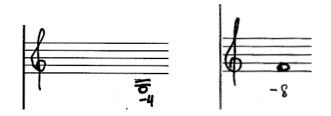
# 3rd voice from top (plays only one note):



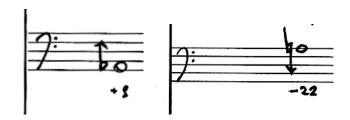
### 4th voice from top:



# 5th voice from top:



# 6th voice from top:



# 7h voice from top:

