Stream drops

For two or more sustained instruments and piano

Fredrik Rasten

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Stream (sustained instruments):

Long notes, continuous sound. Internally forming the consonances 1/1, 3/2, 9/6/4 or 9/4 (plus possibilities for any added octave of any note)

drops (piano):

The note G played softly with sostenuto pedal in a medium / quick pulse (ca 120 - 132 bpm). Played in groups, alternating between three different octaves - G below middle C, the octave below this G, and the octave above it

The piece consists of 4 sections or harmonic areas, where the fixed note G plays 4 different harmonic roles.

Harmonic ratios and succession of the piece:

Pythagorean	**11-limit**	**7-limit**	**5-limit**
	(18)	(18)	(9)
9	12	12	6
6 (G)	11 (G)	8	5 (G)
4	8	7(G)	4

(ratios relating to G below middle C, while the two other specified G's are also available. Since 9 and 18 are optional in each chord they are put in parentheses)

Each chord should last 4 - 7 minutes.

The piece can either end in the **5-limit area** or continue backwards, mirroring the form and returning to the **Pythagorean** area, or end in any of the preceding areas; the **7-limit** or **11-limit**.

- The Stream should be more or less continuous throughout the piece, but can allow for some silences for the drops to appear by themselves, without any harmonic context

- The Stream should start each area as a unison or a 3/2. 9 can occur after a 3/2 is established, and does not need to appear in all areas

- The different harmonic areas can be introduced either with very slow glissandi (ca 10 seconds or longer) bridging them, or start from a silence

- The drops should come in groups with long breaks in between. Some times, the drops can also come in clusters of groups - the G played for a while in one register, then suddenly changing register while still following the established pulse or with a short break between the registers

- The drops should only be introduced when the Stream forms a stable, tuned sound in the specific harmonic areas. For tuning reasons, added 9s should only occur when the 1/1 or 3/2 is already in tune with G

Any sustained instruments able to execute the specific pitches can comprise the Stream.
The Stream can also consist of a multitude of instruments, alternating between playing, taking over for each other or adding in with unisons or octaves of established notes. It is also possible to use sine waves programmed for each of the harmonic areas,
to subtly blend into the instrument sound, and in this way functioning both as a tuning guide and as tonal colour

Note that the staff notation shows the order in which the notes and the registers should be introduced for Stream and drops individually. However, it does not demonstrate how the two relate to each other in time. For instance, it does not graphically reflect that it takes a long time before drops are introduced “into” the Stream, and that the drops are grouped with long silences between each group or cluster of groups. The sheet music does not say anything about the amount of groups, as this is totally up to the performer(s) to decide or improvise

Accidentals are the Extended Helmholtz-Ellis JI Pitch Notation by Marc Sabat and Wolfgang von Schweinitz

Guitar & piano version:

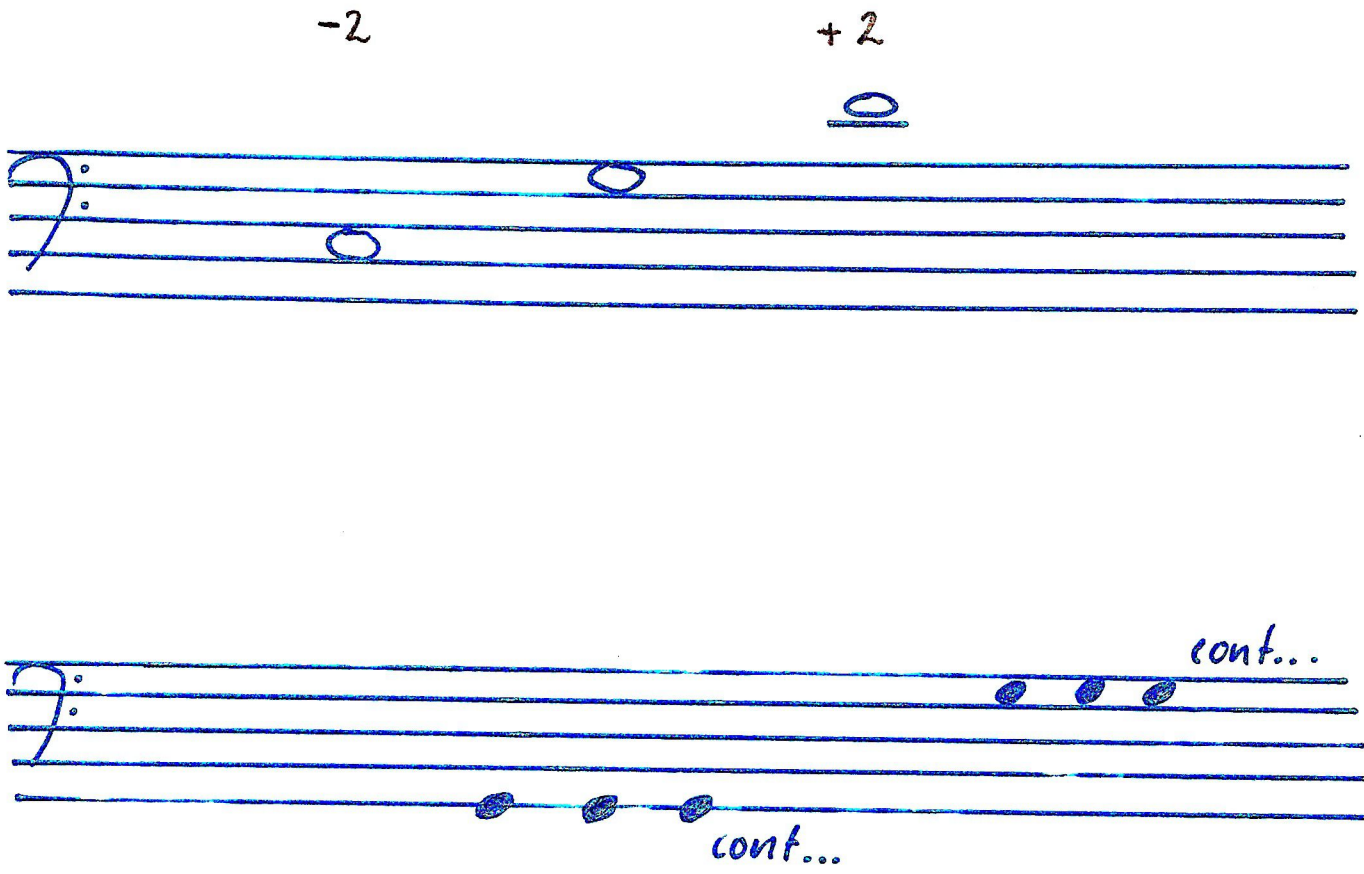
A guitar played with two (or three, or more) e-bows and a slide (ideally a massive steel tone bar) can realize the stream in itself with the following tuning of strings 1, 3 and 5:

1 H 9/4

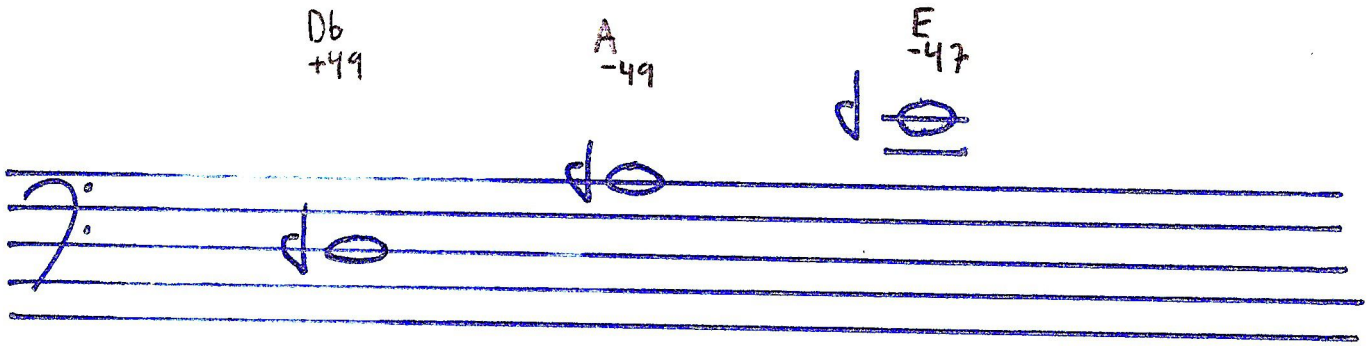
3 E 3/2

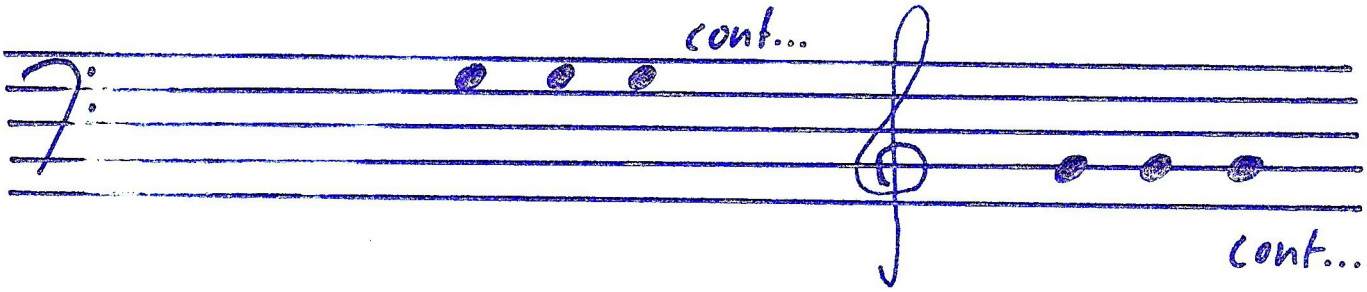
5 A 1/1

In this way the slide can be applied straight on the fingerboard (aligned with the frets), while the e-bows activate the strings. Micro-adjustments of the angel of the the slide will be needed for the fifths to fall into tune with each other (also depending on the area of the fretboard where the slide is applied)

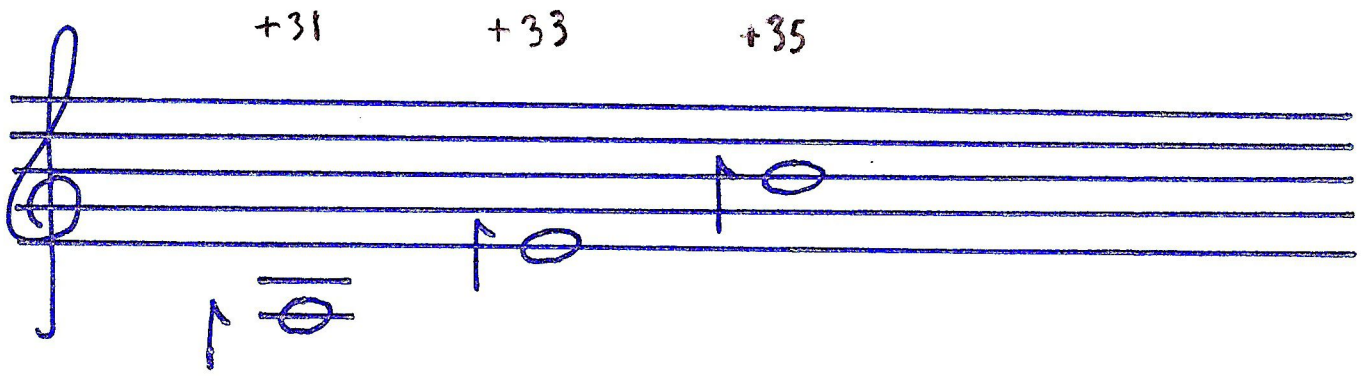


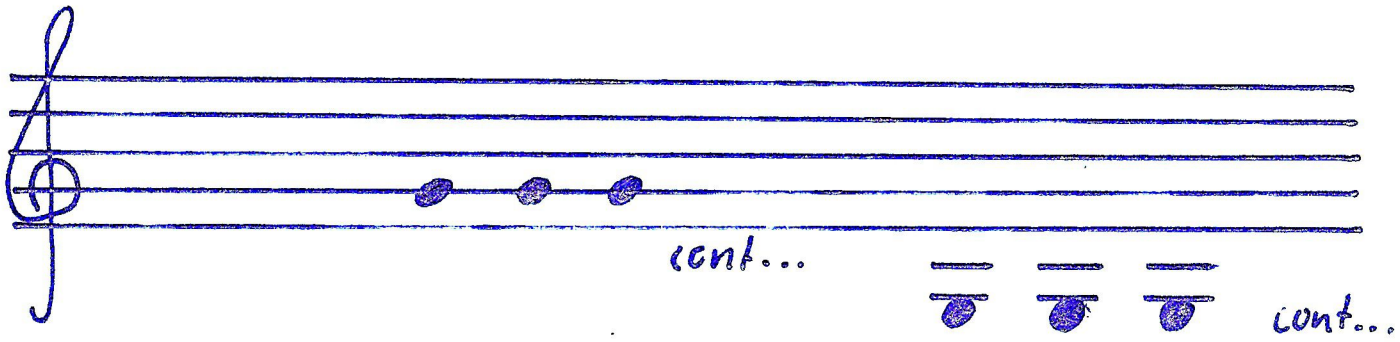
Pythagorean



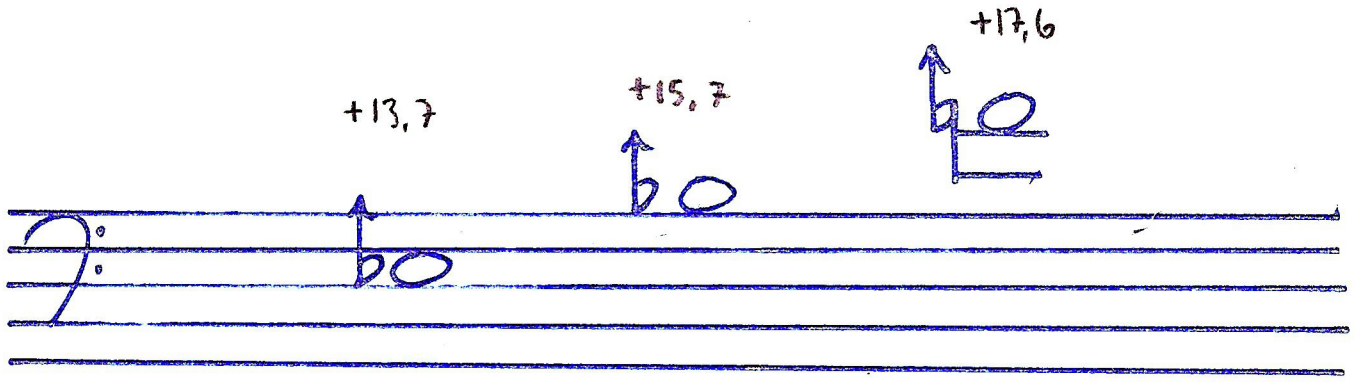


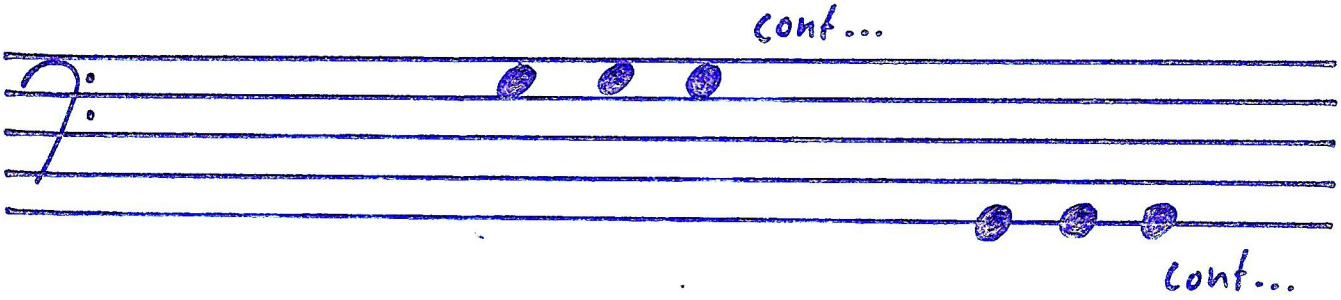
11-limit





7-limit





5-limit