

Rodney DuPlessis

Coacervate

for Violin & Electronics

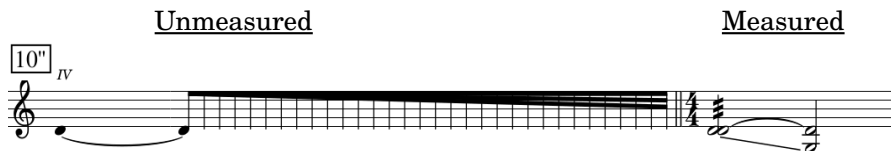
Duration: 7 minutes

Program Notes

Certain mixtures of polyelectrolytes can spontaneously form dense liquid droplets (called "coacervates") suspended in water (dilute phase). These liquid droplets are often filled with complex molecules, proteins, polymers, and nucleic acids. Coacervate formation has been suggested as a possible mechanism through which the first simple cells formed on earth (Abiogenesis). In composing *Coacervate*, I worked closely with violinist and chemical engineer Chelsea Edwards to create a sonic narrative from this chemistry. Distinct musical motives are inserted into dilute textures where they compartmentalize, chain together like charged polymers, and erupt into the beginnings of life.

Performance Notes

This piece has measured and unmeasured sections. The boundaries between these sections are demarcated by double bar lines. All measured sections are taken at 60 bpm and are indicated with a time signature at the beginning of the first bar of the measured section. Unmeasured sections are indicated with their length in seconds in a box at the beginning of the bar, and the notes within are stemless (except for accelerandi, which have stems for the feathered beams). The timing within unmeasured sections is free.

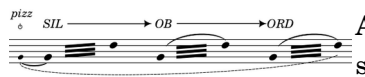


Simile marks



Repeat the figure preceding the simile mark for the duration of the bar while altering articulation and dynamics as indicated.

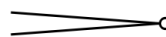
Phrasing and Dynamics



A dotted slur indicates that the contained music should be interpreted as a single, continuous gesture without pause.



Arrows indicate to change gradually from one playing technique to another. For example, from ordinario bow position to sul ponticello or from silent fingering to bowed.



Diminuendo al niente



Crescendo da niente

Bowing

ST → *sul tasto*

MST → *molto sul tasto* (bow where you would finger if you were playing one octave above the current note)

SP → *sul ponticello*

OB → *on bridge* (whispy, white noise effect, no pitch)

ORD → *ordinario*

SIL → *silent fingering* (finger the indicated pitches without bowing)



A black rectangle above the staff indicates to bow with extreme pressure, creating a rough scratch sound. A ramp at the beginning or end indicates a gradual transition in bow pressure.

Tremolo

All tremolos should be rapid and unmeasured with high energy.



Bowed tremolo on double-/triple-/quadruple-stop.



Bowed and fingered tremolo. Alternate the notes and tremolo with bow.



Fingered tremolo. Bowing is legato, although not necessarily in one bow stroke.

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2020

$\text{♩} = 60$

10" *IV*

sfp \longrightarrow *ppp* \longrightarrow *fff*

3 10" *pizz* ϕ

arco *ORD* \longrightarrow *ST*

sfp \longrightarrow

4 5" *SIL*

14" *pizz* ϕ [Gradually apply bow] *SIL* \longrightarrow *OB* \longrightarrow *ORD*

ϕ \longrightarrow *fff* \longrightarrow *ff* \longrightarrow

6 8" *collé* *IV* \cdots *III* \cdots 3" \square

p \longrightarrow

8 12" *ORD* *tr* \flat

sfp \longrightarrow *sfp* \longrightarrow *ff*

The first system of the musical score is written in 4/4 time. It begins with a treble clef and a key signature of one flat (B-flat). The melody starts on a whole note B-flat, followed by a quarter note A-flat, and then a quarter note G. A triplet of eighth notes (F, E, D) is marked with a '3' above it. This is followed by a quarter rest, then a quarter note C, and another quarter note B-flat. A second triplet of eighth notes (A, G, F) is marked with a '3' above it. The melody continues with a quarter note E, a quarter note D, and a quarter note C. A triplet of eighth notes (B, A, G) is marked with a '3' below it. The system concludes with a half note F, a half note E, and a half note D. The first measure of the second system is marked with 'ST' (Staccato) and 'pizz' (pizzicato). It begins with a half note D, followed by a half note C, and then a half note B. The system ends with a half note A, a half note G, and a half note F. A dynamic marking of 'f' (forte) is placed below the final measure of the second system.

11 4" 7" *arco*
OB

The first system of the musical score is written on a single staff. It begins with a treble clef and a key signature of one flat (B-flat). The time signature is 5/4, indicated at the end of the system. The notation includes a whole rest, followed by a bar line, then a half note on G4, a triplet of eighth notes on G4, A4, and Bb4, and finally a half note on G4. Above the staff, there are two boxed measurements: "4" and "7". Above the first measure, the word "arco" is written. Above the second measure, the word "OB" is written. Below the staff, there is a dynamic marking of *ff* (fortissimo) with a wedge-shaped hairpin indicating a crescendo leading up to it and a decrescendo leading away from it.


[illegible]

15 10" *MST* → *OB* 4"

The musical score for the 15th measure is written on a single staff. It begins with a treble clef and a key signature of one flat (B-flat). The measure contains two triplet groups of eighth notes, each marked with a '3' above it. The first triplet consists of B-flat, A, and G, and the second triplet consists of F, E, and D. Each note has a 'v' (accusatory) mark below it. The measure concludes with a double bar line and a repeat sign. The dynamic marking *mp* is placed below the staff. A long, thin horizontal line with a small circle at its end extends from the bottom of the staff across the width of the page.

10" *collé* 5" *OB*

p *ppp*



19 12" *MST* → *ORD* → *SP* [gliss up and out throughout tremolo]

ff *p* *f*

The musical score is written on a single staff with a treble clef. It begins with a measure containing a double sharp (F#) and a double flat (Bb) on the first line, followed by a measure with a double sharp (F#) and a double flat (Bb) on the first line. The score then features a series of tremolos (indicated by multiple horizontal lines) on the first line, with a glissando (indicated by a wavy line) leading up and out throughout the tremolo. The dynamics are marked as *ff* (fortissimo), *p* (piano), and *f* (forte).