

# dilatable

pieza apoyada por el programa Resiliencias Sonoras, Música UNAM

**Iván Naranjo**  
2021

## Aspectos generales

dilatable es un canon, en el que sólo la primera voz (la electrónica) aparece en su versión completa. Las demás voces se presentan cada vez (de arriba a abajo) más recortadas, siendo la voz del contrabajo la que presenta la voz más incompleta. Todas, sin embargo, han sido "estiradas" en el tiempo, de manera que comiencen y terminen al mismo tiempo.

Cada voz está dividida en secciones que articulan espacios armónicos que son compresiones o expansiones de sus contrapartes en las otras voces. De tal manera que escuchamos un mismo contorno melódico en versiones más o menos estiradas o comprimidas en el tiempo y el dominio de las alturas.


## Electrónica

Consta de 92 pistas que deben ser tocadas en el momento que indica la partitura. Esto puede realizarse en un amplio número de aplicaciones.

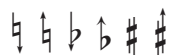
Idealmente, el intérprete de la electrónica debe estar en el escenario como otro miembro del ensamble, y el sonido debe ser proyectado por un par de monitores, de manera local (no a los extremos del escenario sino desde el ensamble).

## Notación y técnicas instrumentales

accidentales:  
escala de cuartos de tono



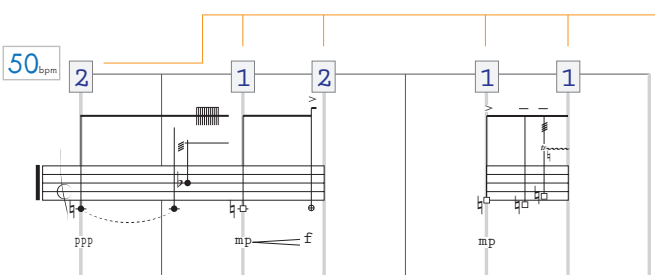
inflexión microtonal (aprox. 1/8 de tono)



—————> transformación gradual

> acento normal

➤ acento muy marcado, como sfz

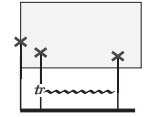


métrica: número de unidades de tiempo en el compás.

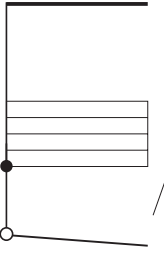
## clarinete

cabezas de nota:

- normal
- sonido eólico (con muy poca presencia de la altura indicada)



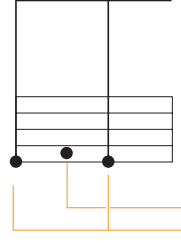

golpes de llaves: la altura del rectángulo gris, que sustituye al pentagrama, representa el rango de alturas perceptibles en los golpes de llaves.



Voz. La posición de la nota sobre el eje vertical del sistema inferior sugiere la altura, relativa al registro del intérprete. La función de la voz es hacer más complejo el timbre mediante la generación de multifónicos, tonos diferenciales y/o batimientos. Procura que la voz se mezcle con el sonido del saxofón, en un timbre nuevo; evita que se escuche como una línea independiente.

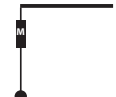
articulación interna:

- re-articulación seca muy rápida
- frulato



nota ligada

notas articuladas



Multifónico. La nota escrita debe formar parte del multifónico.

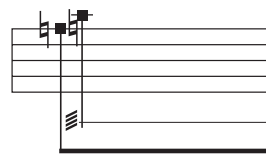
# guitarra eléctrica

## pedales

Los niveles son ad-libitum, cuidando, sin embargo, que no sean extremos. Pueden variar ligeramente a lo largo de la obra.

- OD overdrive
- Del delay
- H harmonizer / chorus

Un Pedal de volúmen es sugerido para resolver las dinámicas.



Con mano izquierda únicamente

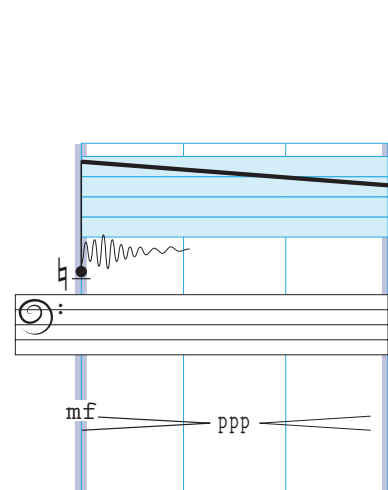


Rasga la cuerda con la púa a través de su longitud, siguiendo la gráfica, haciendo fricción con el entorchado



Movimiento de la palanca de trémolo

# viola y contrabajo



**contacto del arco sobre la cuerda**

- molto sul tasto: aproximadamente sobre el tercer armónico (quinta)
- sul tasto, justo por encima del comienzo del diapasón
- ord
- sul pont: justo entre ord y el puente.
- extremo sul ponticello

NOTA: Cuando no aparecen los cuatro rectángulos, los que faltan son los superiores.

**noteheads:**

- presión normal de dedo
- presión de armónico (no necesariamente sobre el nodo de un armónico natural)
- cuerda "apagada", con la palma o un lado de la mano izquierda

**técnicas del arco**

- arco sin movimiento punta-talón, pero moviéndose, como cepillando, entre las regiones de la cuerda descritas por la gráfica (msp-mst)
- arco circular o semi-circular. Ambos símbolos describen un sólo movimiento (ya sea de una sección del círculo o el círculo completo) cuya duración y tamaño del círculo, (en relación con el largo del arco 2) está sugerida por la altura y longitud del rectángulo gris.
- jeté controlado, siempre a la punta y muy pequeño.
- arco en movimiento vertical [de puente a diapasón o viceversa] sin ningún desplazamiento (punta-talón). Sonido rugoso; scratch.

**otras técnicas y símbolos de notación**

- vibrato: la gráfica indica su amplitud y velocidad relativa
- Altura relativa. La altura del rectángulo gris representa la longitud del diapasón.

50

The musical score is divided into five systems, each with a different instrument or section:

- electrónica:** Features a melodic line with a starting dynamic of *ppp*. It includes a blue-shaded section with a red '4' above it, and another blue-shaded section with a red '2' above it. A red '8' is also present.
- clarinete:** Features a melodic line with dynamics ranging from *ppp* to *pp* and *mp*. It includes a blue-shaded section with a red '4' above it.
- g. elect.:** Features a melodic line with dynamics ranging from *p* to *mp*. It includes a blue-shaded section with a red '8' above it and a red box labeled 'OD'.
- viola:** Features a melodic line with dynamics ranging from *mp* to *ppp* and *p*. It includes a blue-shaded section with a red '4' above it.
- contrabajo:** Features a melodic line with dynamics ranging from *p* to *ppp* and *mp*. It includes a blue-shaded section with a red '4' above it and a red box labeled 'Del'.

Additional markings include a red '3' and blue '4' above the electronic music staff in the second system, and a red '2' and blue '3' above the electronic music staff in the third system. The score also includes various articulations such as accents, slurs, and dynamic hairpins.

2 3  
 8  
 electrónica  
 clarinete  
 g. elect.  
 viola  
 arco  
 contrabajo  
 5 2 6 2 3  
 8  
 p mf  
 mp  
 mp pp p mf  
 mf/ pp mf/ pp mf ppp mf p mf/p mf p mf pp  
 mf pppp mp ppp pp



This musical score is for a chamber ensemble and includes the following parts:

- electrónica:** Features a melodic line with dynamic markings *ppp* and *p*. A red box labeled "2" is above the first measure, and a red box labeled "3" is above the second measure. Measure numbers 14, 15, and 16 are written in blue above the staff.
- clarinete:** Plays a melodic line with dynamic markings *mp*, *p*, and *pp*. A red box labeled "2" is above the first measure, and a red box labeled "3" is above the second measure.
- g. elect.:** Features a melodic line with dynamic markings *ff*, *mp*, *p*, and *mp*. A red box labeled "2" is above the first measure, and a red box labeled "3" is above the second measure. A red box labeled "OD" is below the staff.
- viola:** Features a melodic line with dynamic markings *mp* and *mf*. A red box labeled "2" is above the first measure, and a red box labeled "3" is above the second measure. Performance markings include *pizz* and *arco*.
- contrabajo:** Features a melodic line with dynamic markings *pppp*, *mf*, *pppp*, *mp*, and *pppp/pp*. A red box labeled "2" is above the first measure, and a red box labeled "3" is above the second measure.

The score includes various performance markings such as *ppp*, *mp*, *p*, *pp*, *pppp*, *mf*, *ff*, *bend*, and *tr*. A red box labeled "8" is above the electronic part in the second measure. A blue shaded area highlights the electronic part in the second measure. A blue shaded area highlights the viola part in the second measure. A blue shaded area highlights the double bass part in the second measure.

electrónica

clarinete

g. elect.

viola

contrabajo

2 3 4 3 2 2 1

mf p f/p pp p mp mf p mp

p p bend mp bend mf p mp

p f/mp f p

mp mf

17



2                      2                      2                      19                      20

electrónica [b♭]

clarinete

g. elect.

viola

contrabajo [b♭]

mp    p    mf    p    mp    p    mp    p    ppp    p    ff/p

mf    p    bend

OD    H

III    II

pp    pppp    mf    pppp    mp    pppp/pp

pp    mf    mf    pp    mp    p    f    p > ppp

3 3 2 3 2 3 25

electrónica  
 clarinete  
 g. elect.  
 viola  
 contrabajo

mp, mf, p, ppp, f, pppp, mp, mf, p, pp, mst barely touching the string (flautato), Del

IV, VI, H





**electrónica**  
 33 34 35  
 pp p

**clarinete**  
 mf p

**g. elect.**  
 mp mf f mp mf f p mp  
 H Del OD H Del H Del

**viola**  
 mf pp p mf pp

**contrabajo**  
 p mf pp

electrónica

clarinete

g. elect.

viola

contrabajo

4 4 2 3 2 2

36 37 38 39

mf pp p

pp mp pp mp ppp mp p

p mf pp p mf pp

p p

p mp mf

p

p mp mf

pp mp mf

Detailed description: This is a page of a musical score for five instruments: electrónica (electronics), clarinete (clarinet), g. elect. (electric guitar), viola, and contrabajo (double bass). The score is organized into measures, with measure numbers 36, 37, 38, and 39 indicated in blue. Above the staffs, there are red boxes containing the numbers 4, 4, 2, 3, 2, and 2, which likely represent counts or specific performance instructions. The electrónica part consists of a single line with notes and dynamic markings (mf, pp, p). The clarinete part features complex rhythmic patterns with slurs and dynamic markings (pp, mp, ppp, p). The g. elect. part includes sustained notes and dynamic markings (p, mf, pp). The viola part has a prominent blue shaded area across measures 37 and 38, and dynamic markings (p). The contrabajo part has a blue shaded area across measures 36 and 37, and dynamic markings (p, pp, mp, mf). The score includes various musical notations such as slurs, accents (>), and dynamic markings.

2 3 2 3 2 4 1  
 40 41 42 43

**electrónica**  
 mp pp p mf mp p pp mp pp mp mf p mp pp

**clarinete**  
 p p mp pp p mp pp p mp pp

**g. elect.**  
 p p

**viola**  
 mf pp p mp

**contrabajo**  
 p mp mp f p mp pp mf

IV II

**3** **44** **3** **45** **3** **46** **4** **3** **47** **1**

**electrónica**  
mp  
p mp pp  
mp pp

**clarinete**  
mp  
p mp pp  
p

**g. elect.**  
pp mf pp  
p

**viola**  
pp mp mf p f mp  
mp f p mp

**contrabajo**  
ppp f p pp mf



This musical score page features five staves: electrónica, clarinete, g. elect., viola, and contrabajo. The score is divided into measures by vertical red lines, with measure numbers 2, 3, 4, 48, 49, and 1 marked in red boxes at the top. The electrónica staff shows a melodic line with dynamics mp and pp. The clarinete staff has dynamics mp and pp. The g. elect. staff includes various rhythmic patterns and dynamics pp, mp, mf, and p. The viola and contrabajo staves feature sustained notes with tremolos and dynamics ppp, mf, f, and p. A blue shaded area highlights the lower portion of the viola and contrabajo staves. The page concludes with a double bar line and a first ending bracket labeled '1'.



2 4 4 3 3 1

52 53 54

electrónica  
mp pp p mp

clarinete  
mf pp mf

g. elect.  
mp ppp

viola  
mf pp mf

contrabajo  
mp pp mf ppp



This page contains a musical score for measures 59 through 62. The score is divided into five staves:

- electrónica:** Features a melodic line with notes in measures 59, 60, 61, and 62. Above the staff, there are red boxes containing the numbers 3, 3, 2, 2, 3, 2, 2, indicating a sequence of counts or breaths.
- clarinete:** Contains a melodic line with dynamic markings such as *ppp*, *mf*, *mp*, and *pp*. It includes articulation marks and a *Del.* (delete) instruction.
- g. elect. (guitar eléctrica):** Shows a melodic line with dynamic markings like *mp*, *ppp*, *mf*, and *pp*. It features a *Del.* instruction and a blue shaded area with a wavy line, possibly representing a tremolo or a specific effect.
- viola:** Contains a melodic line with dynamic markings including *pp*, *mp*, *p*, *mf*, *p/mf*, *mp*, *mf*, *p*, *ppp*, *mp*, and *mp*. It includes articulation marks and a blue shaded area.
- contrabajo (bass):** Features a melodic line with dynamic markings such as *mp*, *mf*, *pp/mp*, *pp*, *mp*, *ppp*, *mf*, *f*, *mp*, *mp*, *f*, *pp*, *mf*, and *pp*. It includes articulation marks and a blue shaded area.

The score also includes performance instructions such as *Del.* (delete) and *H* (hairpins), and various articulation marks like accents and slurs. The key signature is one sharp (F#), and the time signature is 4/4.

2 3 4 2 4 2  
 63 64

electrónica  
 clarinete  
 g. elect.  
 viola  
 contrabajo

III  
 III  
 IV  
 bend  
 III  
 IV  
 legno  
 crine

pp p p mf mp p mf mp ppp mp ppp mp ppp mp ppp mp ppp  
 p mf mp mf p ppp mp mf mp ppp mp ppp  
 mp mf pp mp pp mp f mp mf pp mf pp pp mf pp  
 pp mf pp mf ff p pp mf pp mf

Del H Del OD H Del

**2** **2** **4** **3** **4** **2**  
**65** **66** **67** **68** **69**

electrónica  
 clarinete  
 g. elect.  
 viola  
 contrabajo

mp p mf mp ppp mp pp mp f p mp p mp / pp pp mf ppp  
 mp f mp p mf pp mf pp mf ff pp pp  
 mf ff pp mf pp f pp mf  
 mf pp mf ppp mp mf pp

bend bend  
 Del Del  
 tr

2 3 70 2 3 71 72 2 3 73 2

electrónica

clarinete

g. elect.

viola

contrabajo

mf, ff, p, pp, f, mp, ppp, bend, Del, H

Detailed description: This is a page of a musical score for a contemporary ensemble. It features five staves: electrónica (top), clarinete, g. elect. (electric guitar), viola, and contrabajo (double bass). The score is divided into measures by vertical red lines. Above the first staff, there are boxes containing the numbers 2 and 3, and measure numbers 70, 71, 72, 73, and 2 are written in blue. The electrónica staff contains rhythmic patterns with stems and flags. The clarinete staff has melodic lines with dynamic markings (mf, ff, p, pp, f) and articulation marks (>). The g. elect. staff shows chordal textures with dynamic markings (mf, pp, mf, pp, f, pp, p, mf, ppp, mp) and a 'bend' instruction. The viola staff includes fingering numbers II and III and dynamic markings (p, mf, ppp, mp). The contrabajo staff has a melodic line with dynamic markings (mf, pp, mp, pp, mp, p). A green box labeled 'Del' is under the guitar staff, and a blue box labeled 'H' is under the guitar staff. The page number '21' is in the bottom right corner.



This musical score is for a chamber ensemble consisting of five instruments: electrónica (electronic), clarinete (clarinet), g. elect. (electric guitar), viola, and contrabajo (double bass). The score is divided into measures 74, 75, and 76, with measure numbers 2, 3, and 4 appearing above the staves to indicate specific sections or phrases.

**Instrument Parts:**

- electrónica:** Features a melodic line with various articulations, including trills and slurs. Measure 74 starts with a treble clef and a key signature of one sharp (F#).
- clarinete:** Plays a melodic line with dynamic markings of *mp*, *mf*, *pp*, *mp*, *ppp*, and *p*. It includes a trill in measure 74 and a key signature change to one flat (Bb) in measure 75.
- g. elect.:** Provides harmonic support with a melodic line. Dynamics include *mf*, *pp*, *mp*, *ppp*, and *mp*. It features a trill in measure 74.
- viola:** Plays a melodic line with dynamics of *ppp* and *mp*. It includes a trill in measure 74.
- contrabajo:** Provides a bass line with dynamics of *ppp*, *mp*, *ppp*, and *mf*. It includes a trill in measure 74.

**Performance Markings:**

- Dynamic markings:** *mp* (mezzo-piano), *mf* (mezzo-forte), *pp* (pianissimo), *ppp* (pianississimo), and *p* (piano).
- Articulations:** Trills (tr), slurs, and accents (>).
- Other markings:** A red box labeled "OD" and a blue box labeled "H" are present in the lower staves.



3 2 2 4 2 3 1

80 81 82 83

electrónica

clarinete

g. elect.

viola

contrabajo

f mp pp f p mf

bend

OD H

The score is written for five instruments: electrónica, clarinete, g. elect., viola, and contrabajo. It consists of five systems of staves. Above the first system, there are six boxes containing the numbers 3, 2, 2, 4, 2, and 3, and a final box with the number 1. Above the second system, there are four boxes containing the numbers 80, 81, 82, and 83. The electrónica part features a complex rhythmic pattern with many sixteenth notes. The clarinete part has dynamic markings of f, mp, and pp. The g. elect. part includes a 'bend' instruction and dynamic markings of f, mp, pp, f, p, and mf. The viola part has dynamic markings of pp, f, p, and mf. The contrabajo part has dynamic markings of f, p, mf, and f. There are also some performance instructions like 'OD' and 'H' in red and blue boxes respectively.

4 2 2 2 3 4

84 85 86 87

electrónica

clarinete

g. elect.

viola

contrabajo

*p* *mf* *f* *mf* *f* *ff* *p* *pp* *f* *pp* *pppp*

8

Detailed description: This is a page of a musical score for five instruments: electrónica, clarinete, g. elect., viola, and contrabajo. The score is organized into measures, with vertical red lines marking specific points. Above the staff, there are boxes containing the numbers 4, 2, 2, 2, 3, and 4. Below the staff, there are blue boxes containing the numbers 84, 85, 86, and 87. The electrónica part consists of a series of notes on a staff. The clarinete part includes dynamic markings such as *p*, *mf*, *f*, *ff*, *p*, and *pp*. The g. elect. part also includes dynamic markings like *f*, *ff*, *p*, and *pp*. The viola part features dynamic markings including *f*, *mf*, *f*, *ff*, *p*, and *pp*. The contrabajo part includes dynamic markings such as *mf*, *f*, *ff*, *p*, *pp*, and *pppp*. A specific measure in the g. elect. part is highlighted with an orange background and the number 8.



