Raphaël Belfiore

Seven instantiation studies

for (C and B-flat) trumpet and trombone

revised score, may 2020

2020

written for Jens Bracher and
Stephen Menotti

The realization of a complex mathematical object is enacted seven times in a location. Five of the realizations are played successively by musicians while two others, printed on paper, are placed close to where the sounds are produced. What can be considered here as the artwork is not medium-specific: It is a series of arbitrary decisions resulting in parallel successions of numeric values. The different versions of this mathematical object can then be understood as equivalent versions of one artwork, regardless of how they appear.

The performed occurrences are composed of the same sonic material. The different components of the ideal object, assigned to different instrumental parameters, are systematically recombined in order to create new sonic results. However, listening here seems to be less the perception of auditory events than an ontological experience in which sounds indicate the virtual presence of their « conceptual » cause. Each sounding study is then better understood as a diachronic « object » than a musical piece.

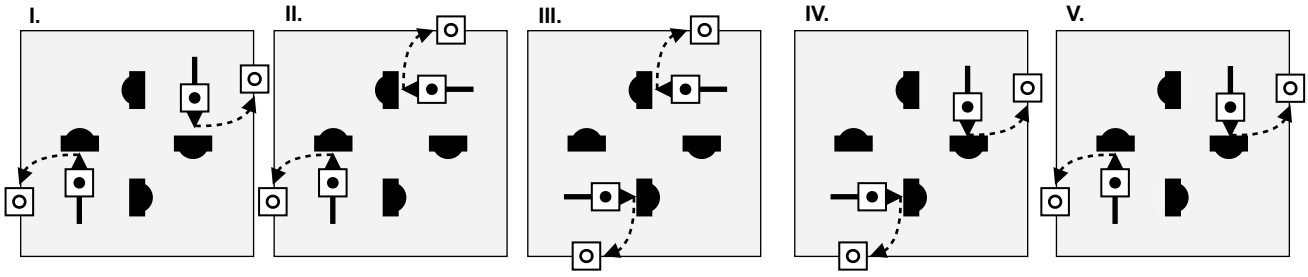
The term "instantiation" is a technical term in contemporary metaphysics describing the relationship between an universal property and its actualized and perceptible occurrences.

Material needed

- a tenor trombone and two trumpets: C and B-flat.
- for each player, two hat mutes with stands. If two hat mutes are not possible to find for each player, alternative solutions with everyday material can be found.
- 20 + 20 to 50 + 50 printed thin white card stock (a5) and various music stands (see the "Additional media » section below)

Concert situation

The piece has been concieved to be played in a medium-large open space with no stage. The performers are in the middle of the space. Around them are placed four hat mutes as shown in the diagrams below. Each diagram represents the position of the performers in every study as well as the direction in which they should move in order to create the timbral variation notated with the full, half-full and empty circles in the score.



Additional media

The six and seventh instantiation studies are not composed of sounds. Nonetheless, they still have to be present during the performance for the work to be complete. The recommended presentation is the following. Study VI (alphanumeric instantiation) and VII (graphic instantiation) should be printed on a5 sized thick paper (180 - 250 g/m^2). Depending on the number of people, the number of copies of each study would be between 20 to 50. They are then presented (possibly on music stands) across the room with consideration for the site. The papers, not overwhelming the space, should remain a mere presence. They can be read or taken by members of the public. As they persist in time differently than sounds, they can be installed for some time before and after the performance of the sounding part of the work.

At the end of the score, a ready-to-print two sided (long edge) page is included. It should be printed or photocopied on a4 paper and cut in half.

Performance notes

● ◐ ○

These signs refer to two linked sonic effects: timbre variation (closed/half-closed/open) and the projection of sound in space (inside/outside). (See the "Concert situation" section above). One thing should be clear here: the half-open position refers to the timbre and must not be interpreted as an equidistant point between the "inside" and the "outside". The spatial movement should follow the following logic: the half-open position close to the mute and the open position clearly away from it (see graphic below).

n

"niente", no sound.

splt. *fltz.*

"split tone" and « flatterzunge/fluttertongue" ("*fltz*. " is always indicated with tremolo articulation.)

-15ø

Indication of microtonal deviation, i.e. 1ø means one hundredth of tone.

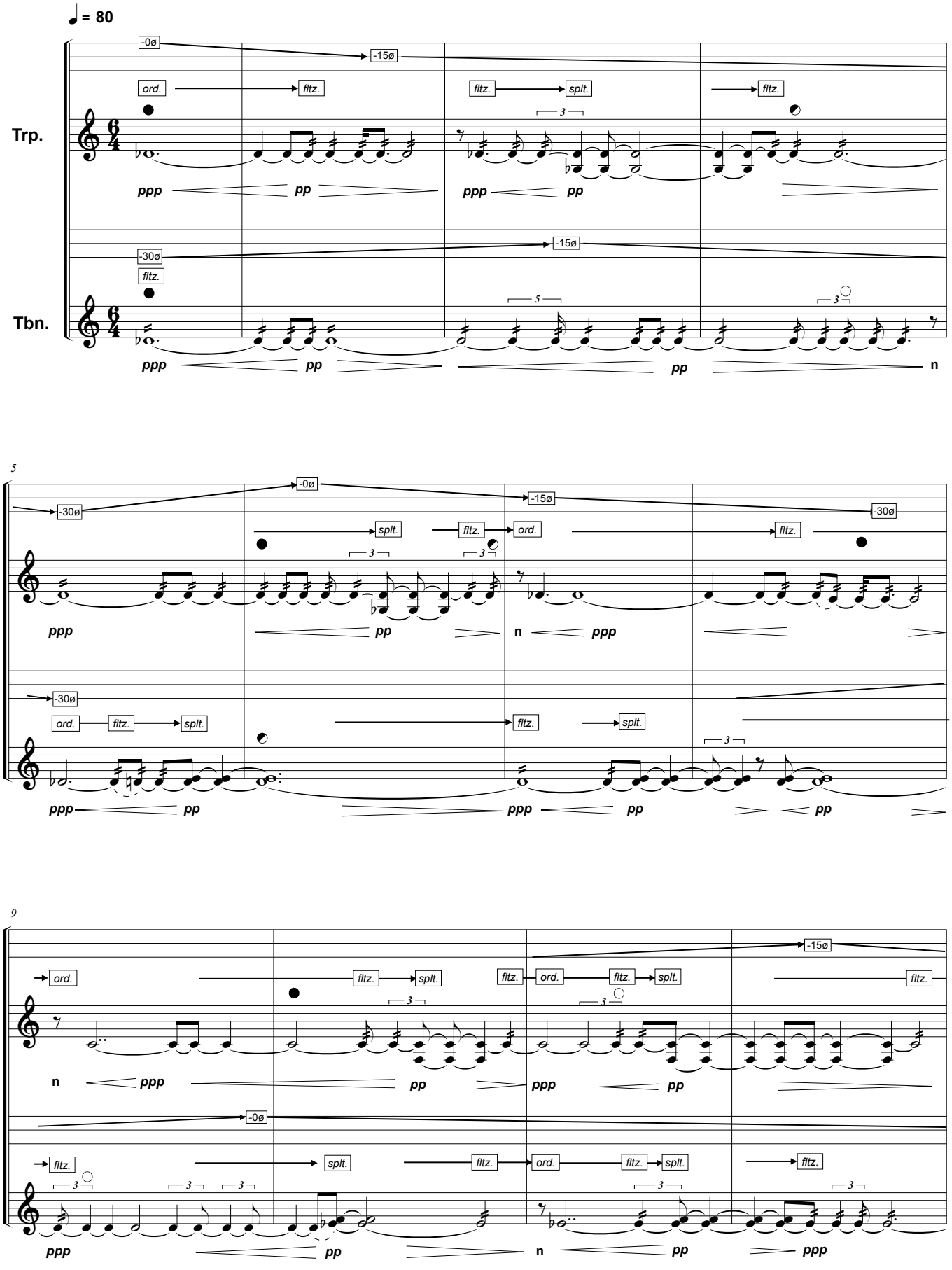
Indicates gradual transition between parameters. Without it, the parameter changes have to be made as fast as possible.

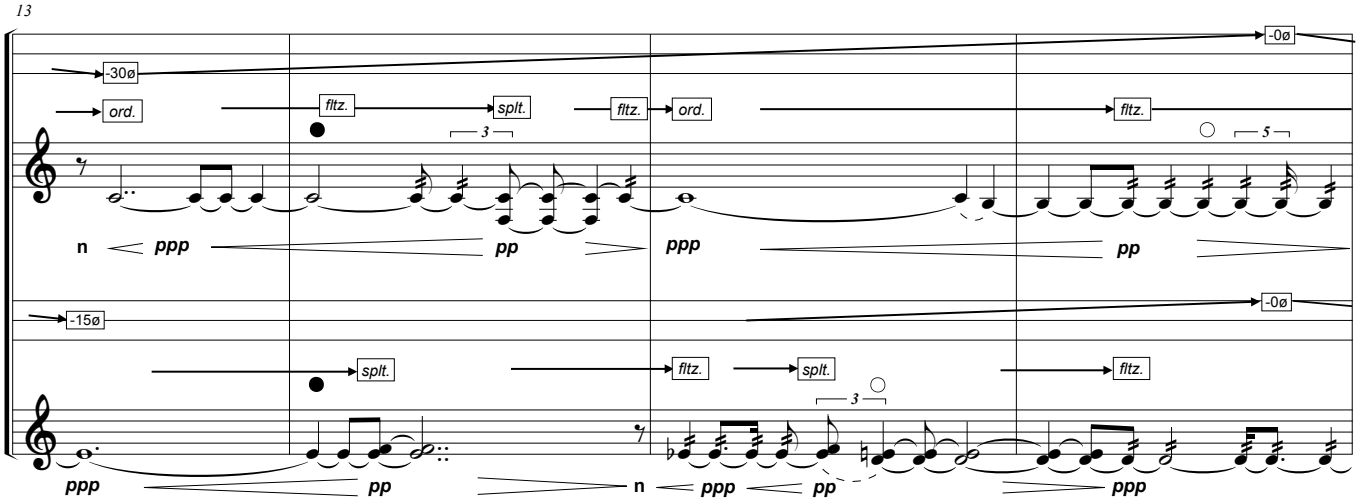
composed breathing. Ideally, there should be no breaths outside of these rests. Their duration is however relative and should not be taken too seriously. They should preferably begin early than end late.

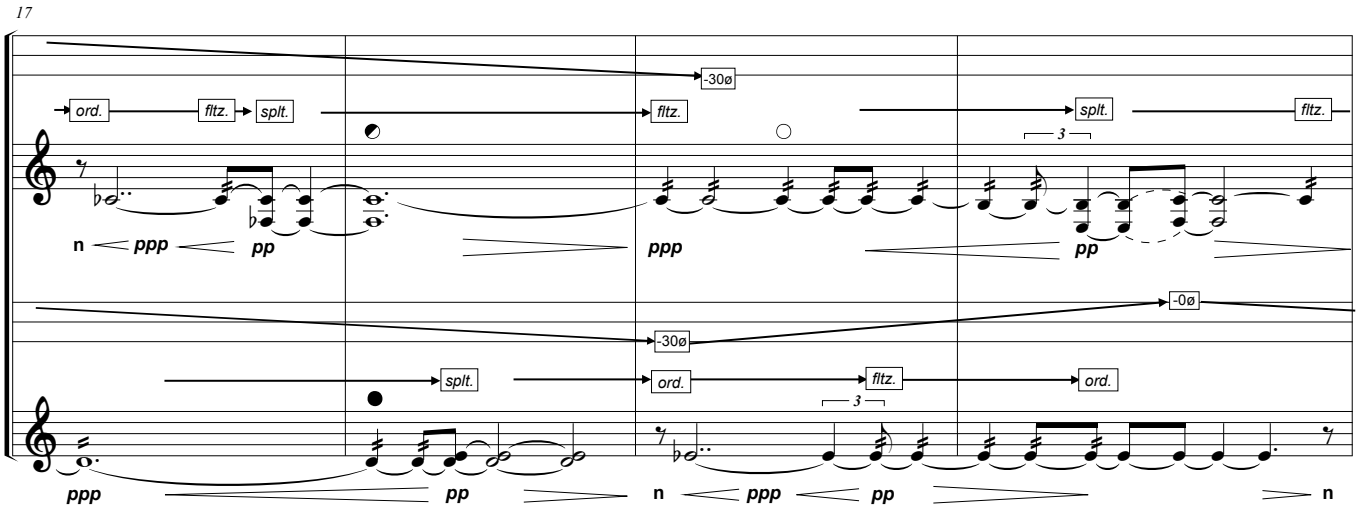
The legato ties are dashed in order to differentiate them from the standard rythmic ties.

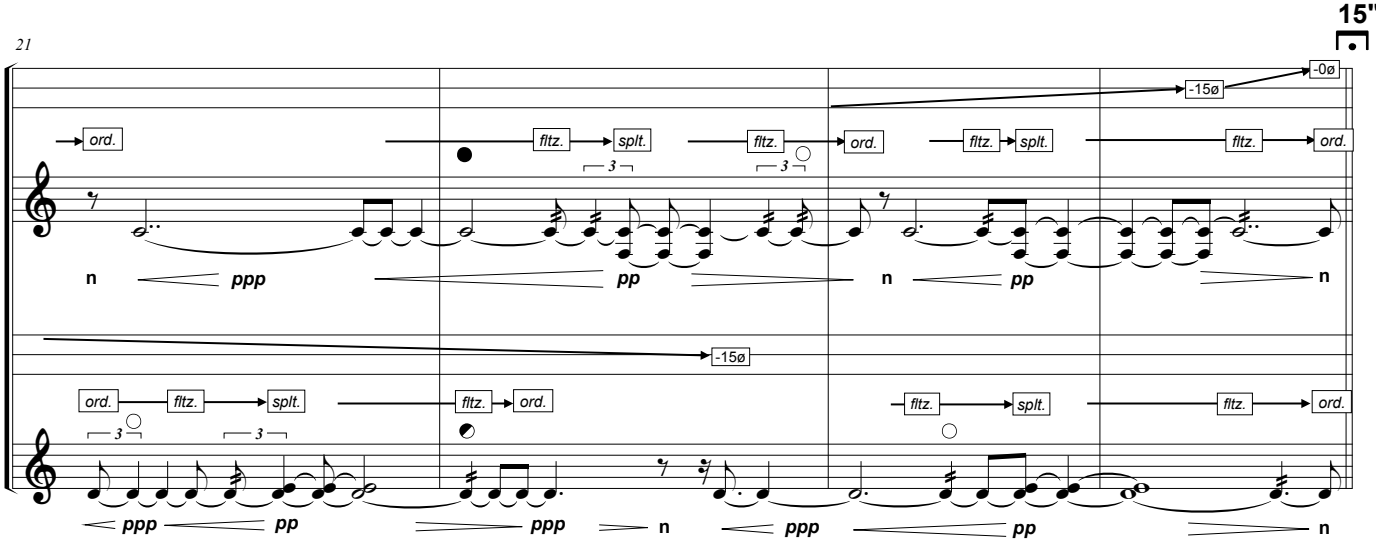
Seven instantiation studies (2020) - I

Raphaël Belfiore



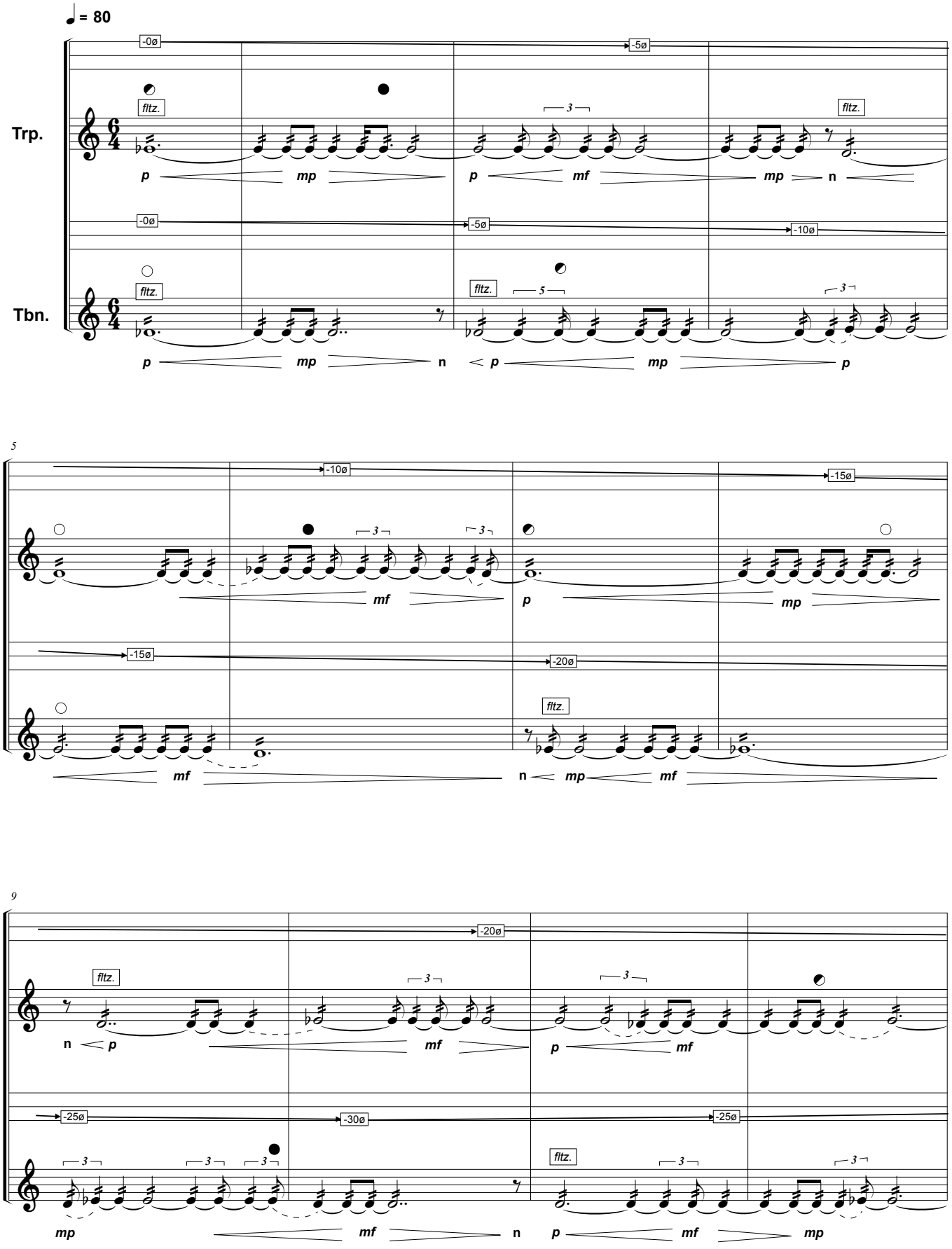

13
-30ø
-0ø
ord.
fltz.
splt.
fltz.
ord.
fltz.
3
5
n
ppp
pp
ppp
pp
-15ø
-0ø
splt.
fltz.
splt.
fltz.
3
ppp
pp
n
ppp
pp
ppp

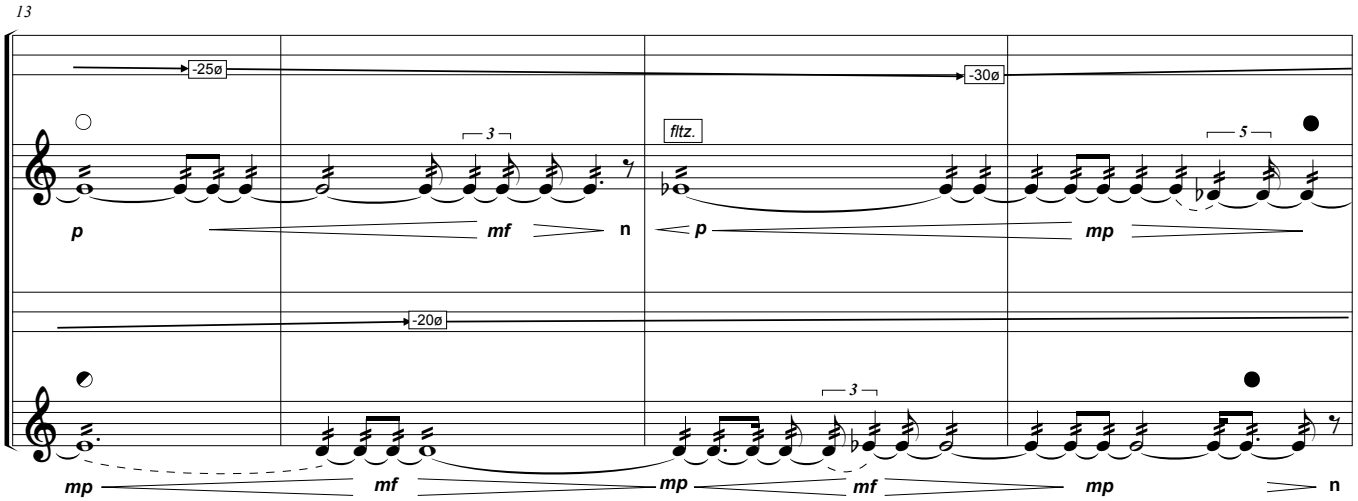

17
-30ø
ord.
fltz.
splt.
fltz.
splt.
fltz.
3
n
ppp
pp
ppp
pp
-0ø
-30ø
splt.
ord.
fltz.
ord.
3
ppp
pp
n
ppp
pp
n

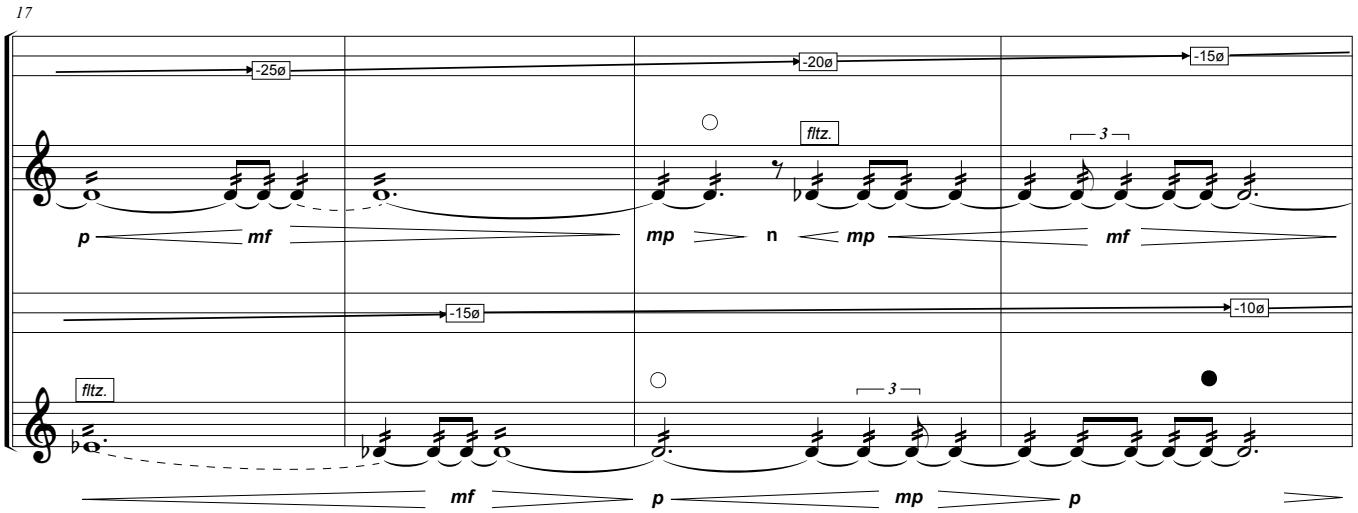

15"
21
-0ø
-15ø
ord.
fltz.
splt.
fltz.
ord.
fltz.
splt.
fltz.
ord.
3
3
n
ppp
pp
n
pp
n
-15ø
ord.
fltz.
splt.
fltz.
ord.
fltz.
splt.
fltz.
ord.
3
3
ppp
pp
ppp
n
ppp
pp
n

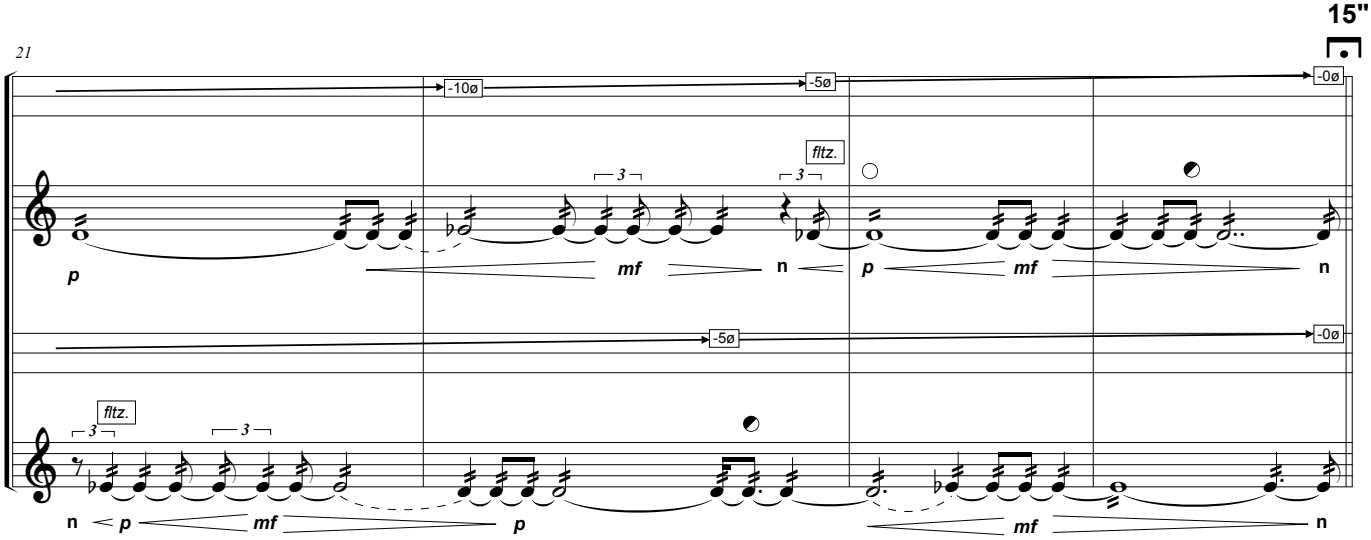
Seven instantiation studies (2020) - II

Raphaël Belfiore




13
-25ø
-30ø
fltz.
3
5
p
mf
n
p
mp
-20ø
3
mp
mf
mp
mf
mp
n


17
-25ø
-20ø
-15ø
fltz.
3
p
mf
mp
n
mp
mf
-15ø
-10ø
fltz.
3
mf
p
mp
p


15"
21
-10ø
-5ø
-0ø
fltz.
3
3
p
mf
n
p
mf
n
-5ø
-0ø
fltz.
3
3
n
p
mf
p
mf
n

Seven instantiation studies (2020) - III

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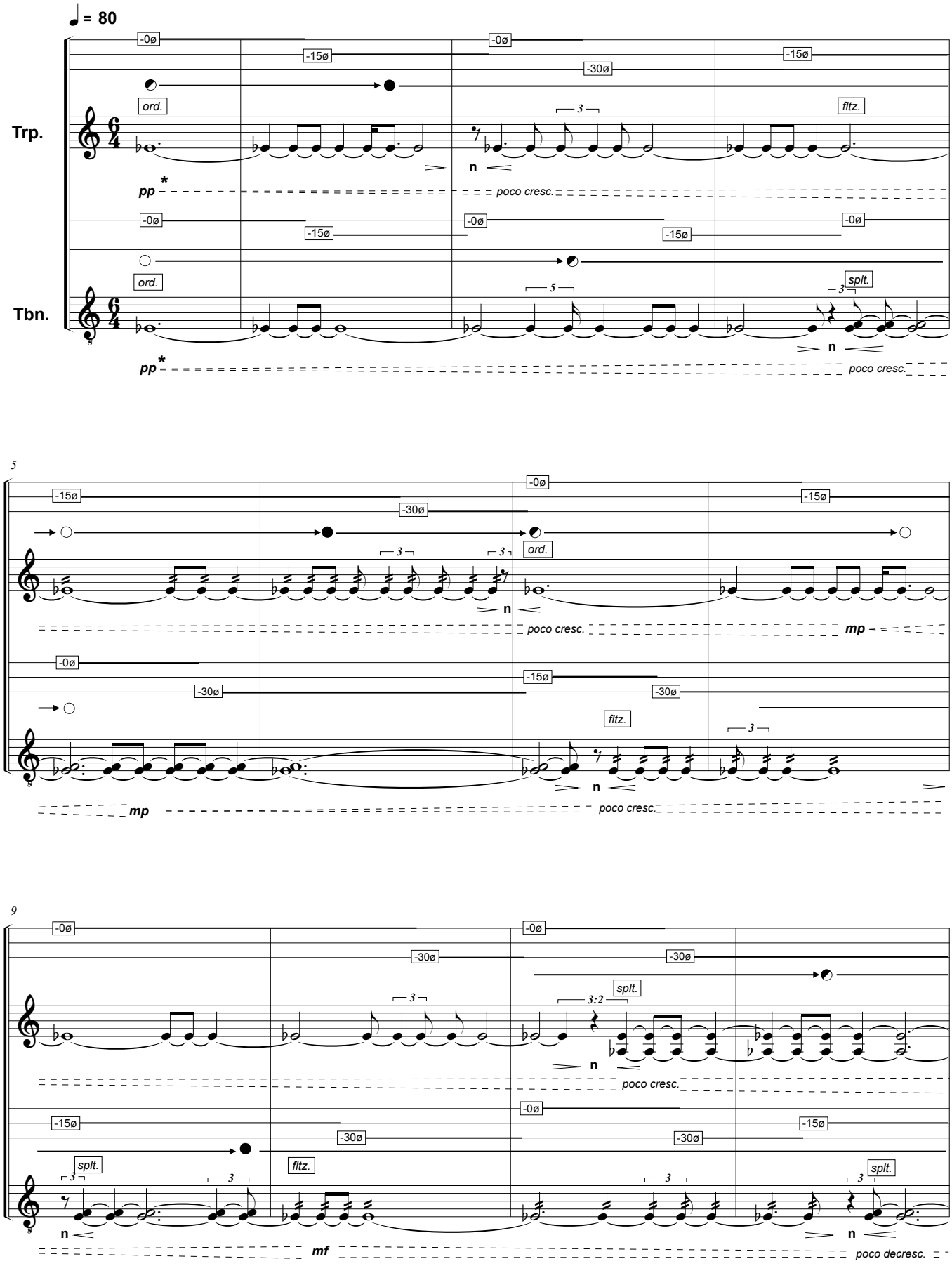
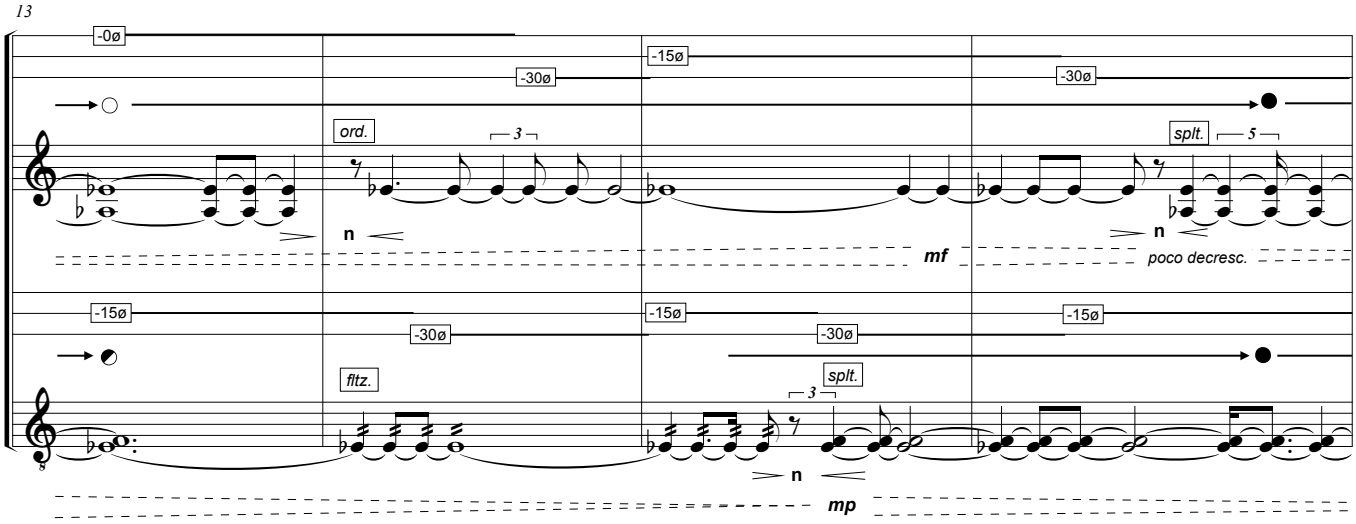
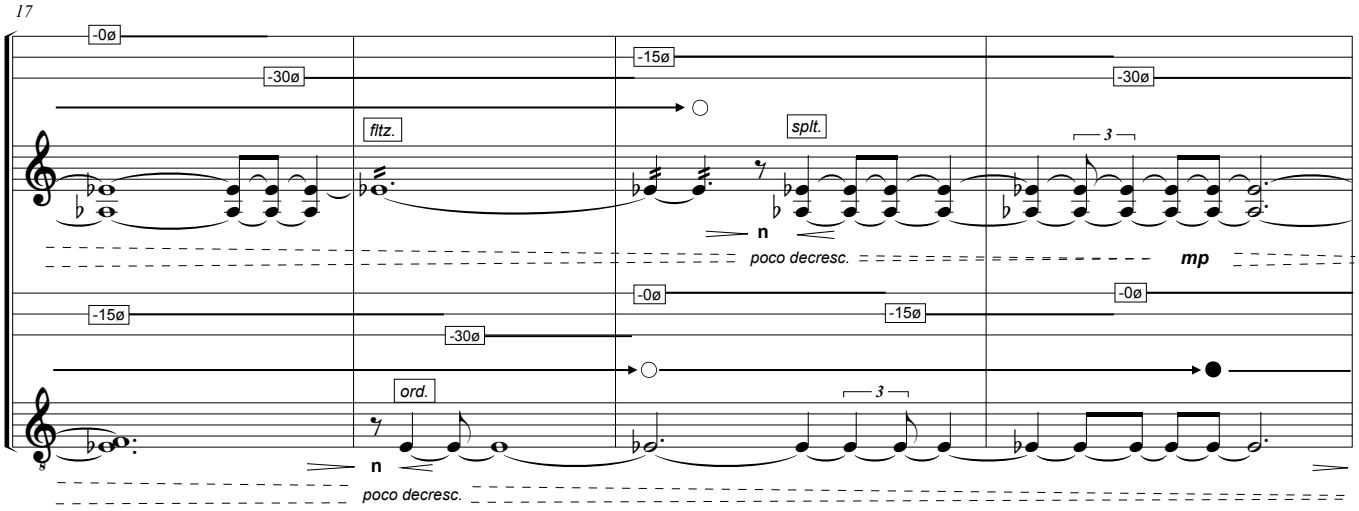
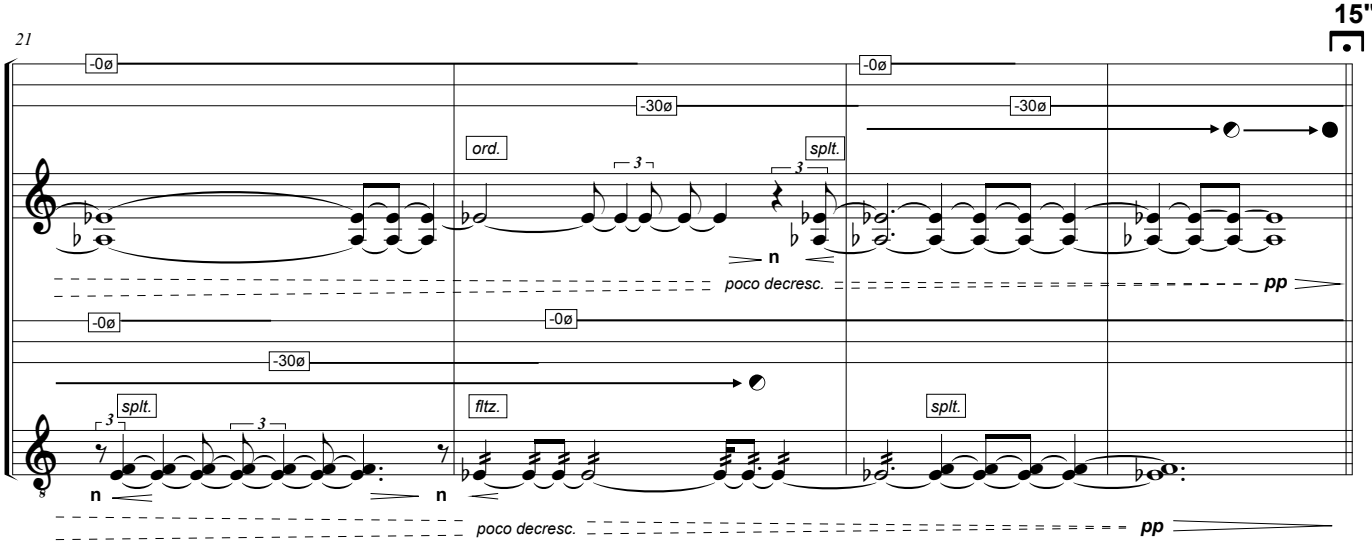
** The dashed crescendo represents the general dynamic direction of the sounds. The "poco de-/cresc." are to be understood as steps between the two dynamic indications and not as a specific point in time in which the intensity increases. In practice, the effect desired would be a very gradual crescendo-decrescendo independent of the breaths. The standard crescendo marks are then just articulation indication: Nothing should stand out because of an accentuation.*



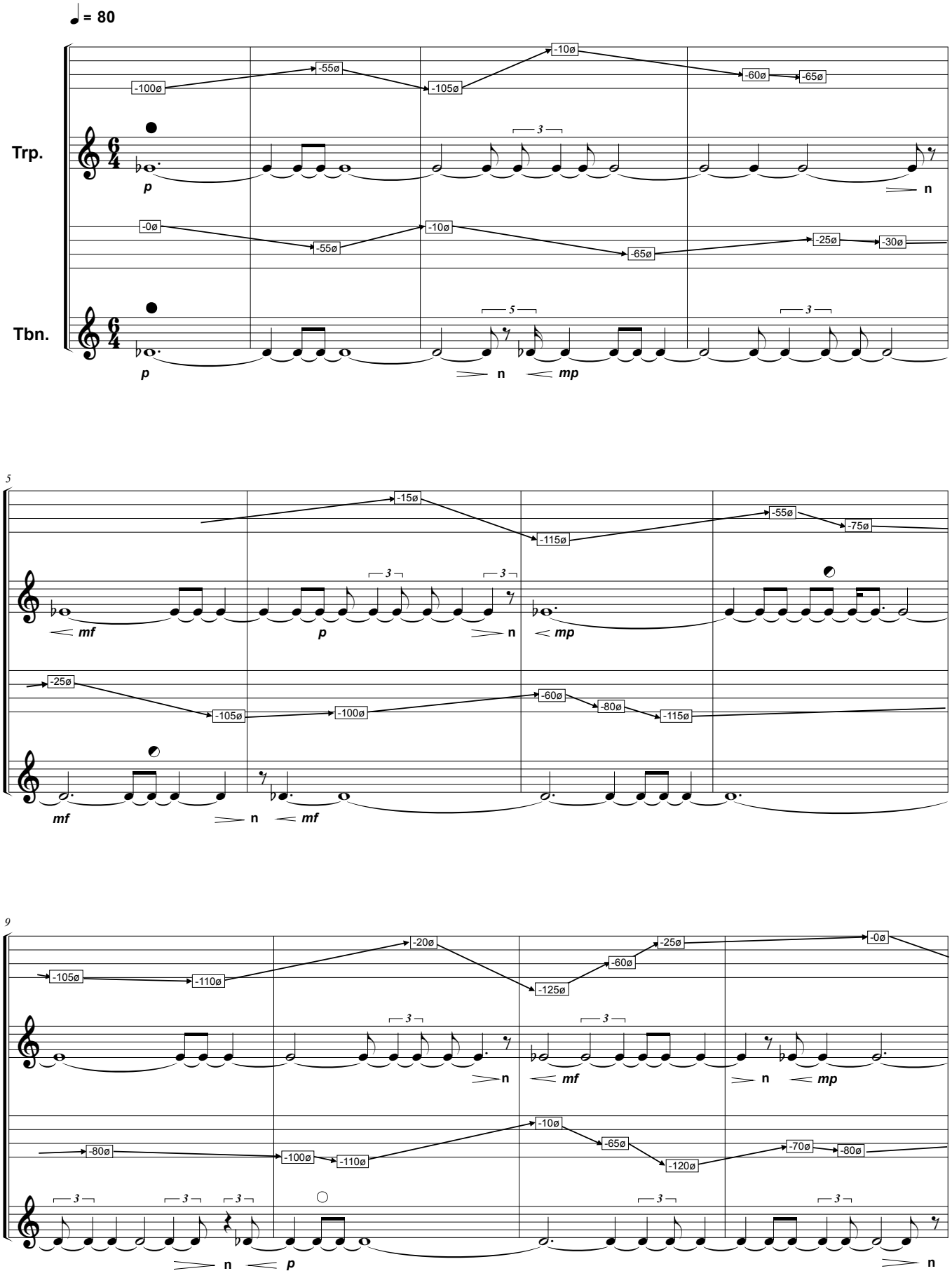

13
-0ø
-30ø
-15ø
-30ø
ord.
3
splt.
5
n
mf
poco decresc.
-15ø
-30ø
-15ø
-30ø
-15ø
fltz.
splt.
3
n
mp

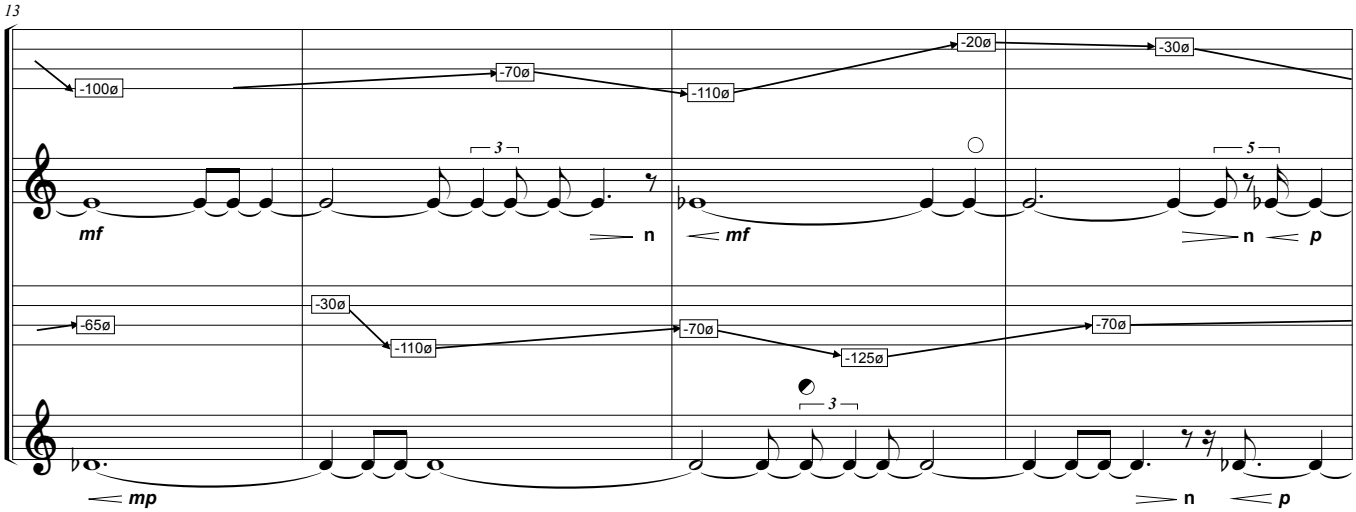

17
-0ø
-30ø
-15ø
-30ø
fltz.
splt.
3
n
poco decresc.
mp
-15ø
-30ø
-0ø
-15ø
-0ø
ord.
3
n
poco decresc.

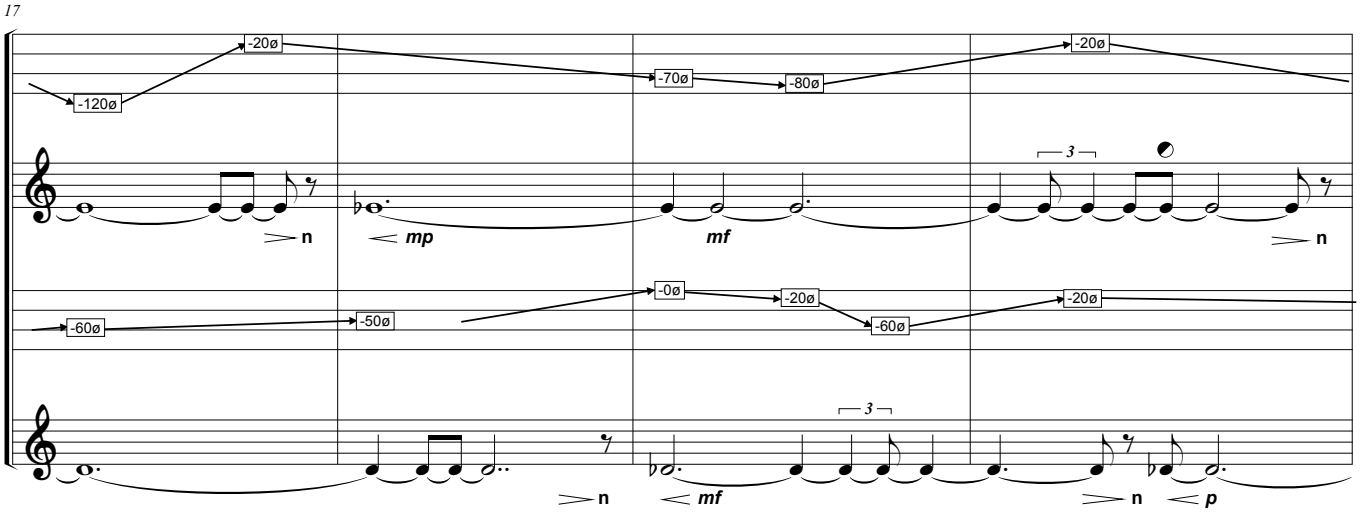

15"
21
-0ø
-0ø
-30ø
-30ø
ord.
3
splt.
3
n
poco decresc.
pp
-0ø
-0ø
-30ø
splt.
3
3
fltz.
splt.
n
n
poco decresc.
pp

Seven instantiation studies (2020) - IV

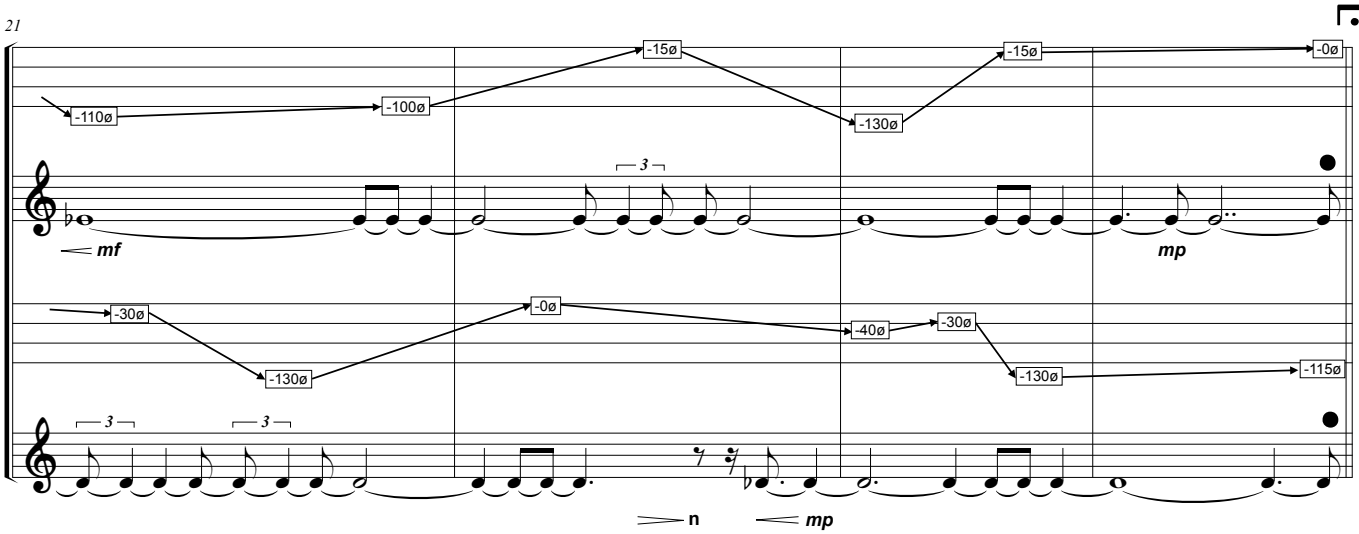
Raphaël Belfiore




13
-100ø
-70ø
-110ø
-20ø
-30ø
3
5
mf
n
mf
n
p
-65ø
-30ø
-110ø
-70ø
-125ø
-70ø
3
mp
n
p

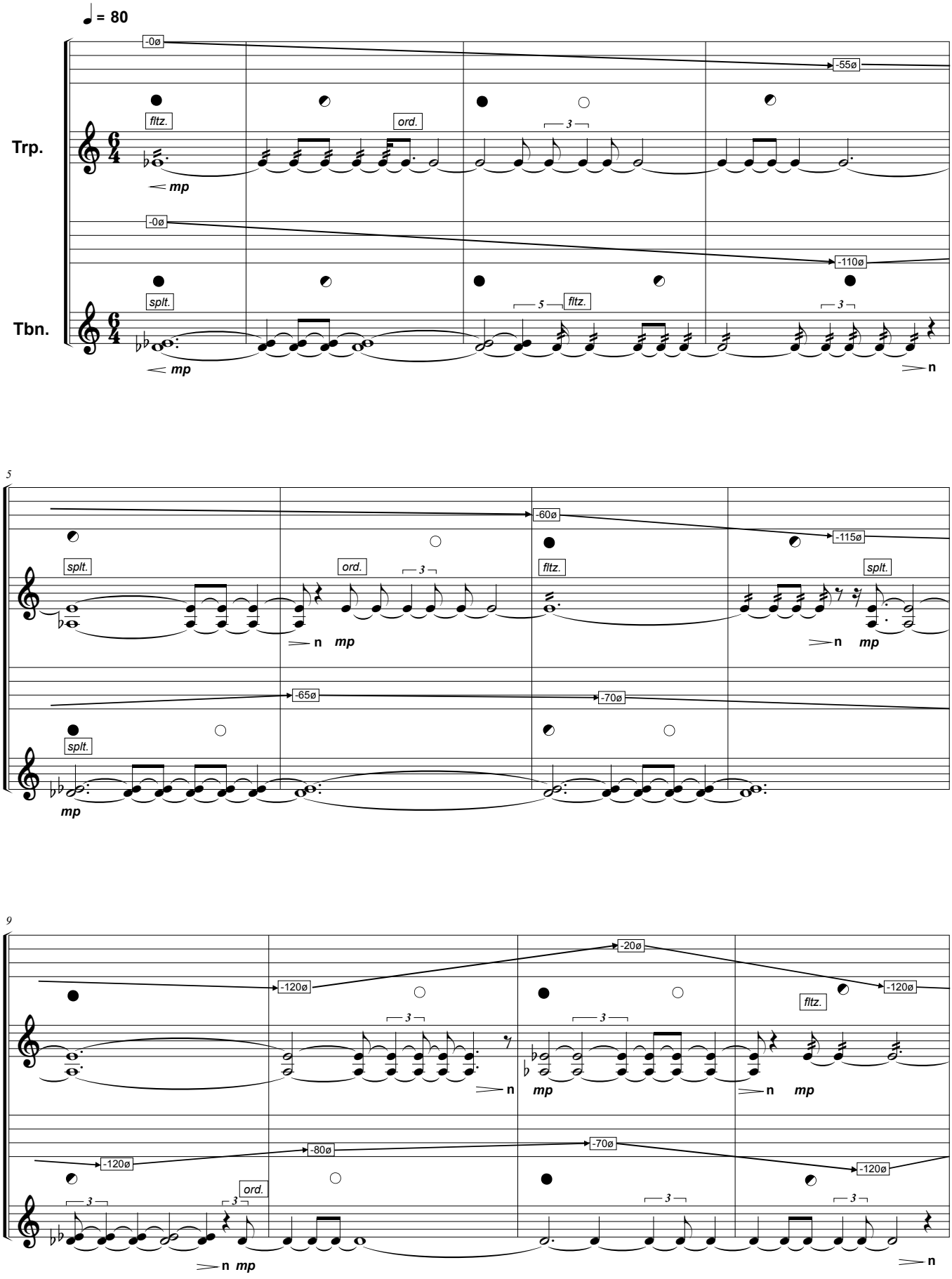

17
-120ø
-20ø
-70ø
-80ø
-20ø
3
n
mp
mf
n
-60ø
-50ø
-0ø
-20ø
-60ø
-20ø
3
n
mf
n
p

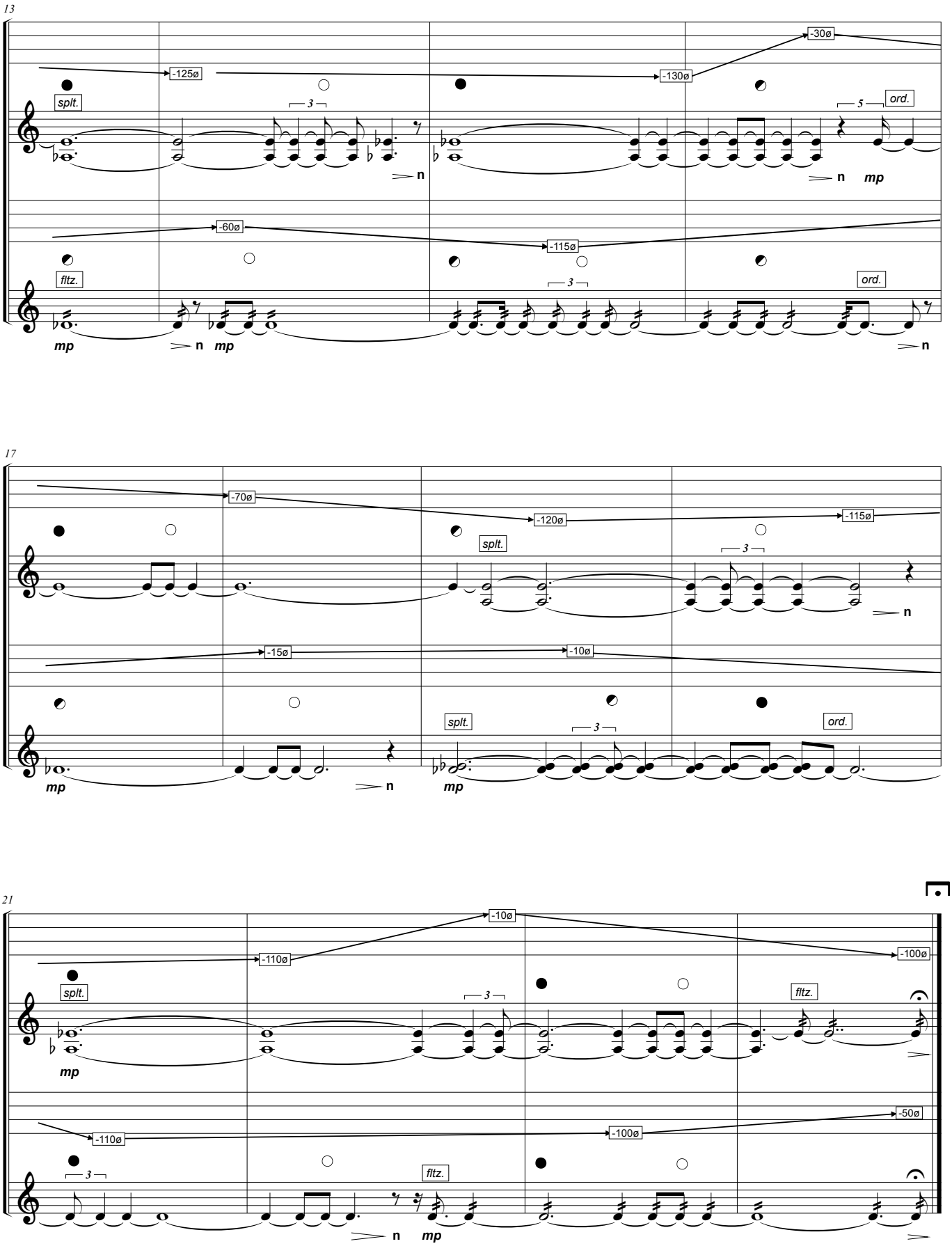
15"


21
-110ø
-100ø
-15ø
-130ø
-15ø
-0ø
3
mf
mp
-30ø
-130ø
-0ø
-40ø
-30ø
-130ø
-115ø
3
3
n
mp

Seven instantiation studies (2020) - V

Raphaël Belfiore




13
-125ø
-130ø
-30ø
splt.
3
5
ord.
n
mp
-60ø
-115ø
fltz.
3
ord.
mp
n
mp
n
17
-70ø
-120ø
-115ø
splt.
3
n
-15ø
-10ø
splt.
3
ord.
mp
n
mp
21
-10ø
-110ø
-100ø
splt.
3
fltz.
mp
-110ø
-100ø
-50ø
3
fltz.
n
mp

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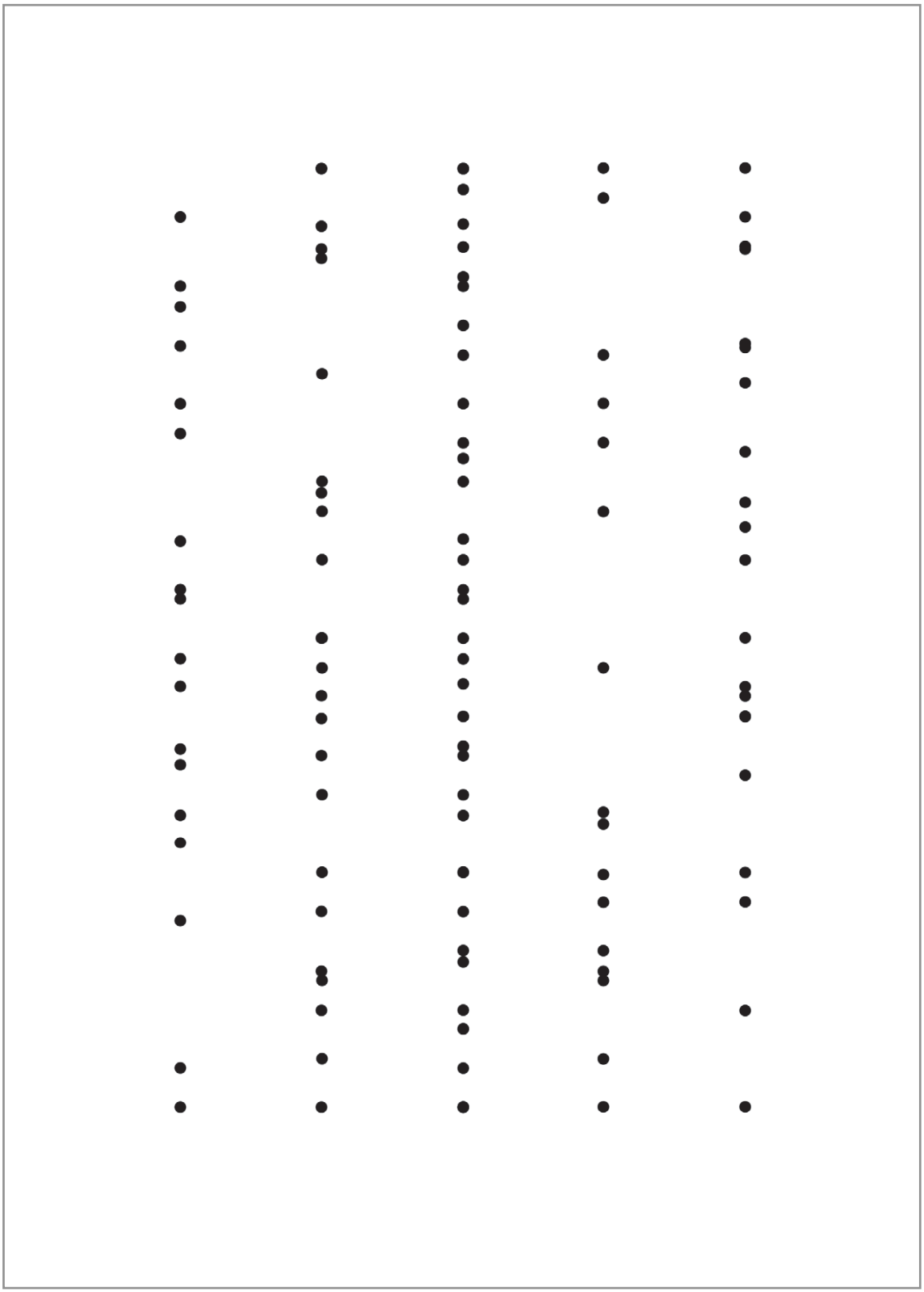
Seven instantiation studies (2020) - VII
Raphaël Belfiore & Angelo Barbattini (graphic design)