A is for Azimuth and Arnica

for found objects and found texts

Ben Leeds Carson

for Chris Froh
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Arnica montana

1, rhizome and stem; *2*, flowering stem;
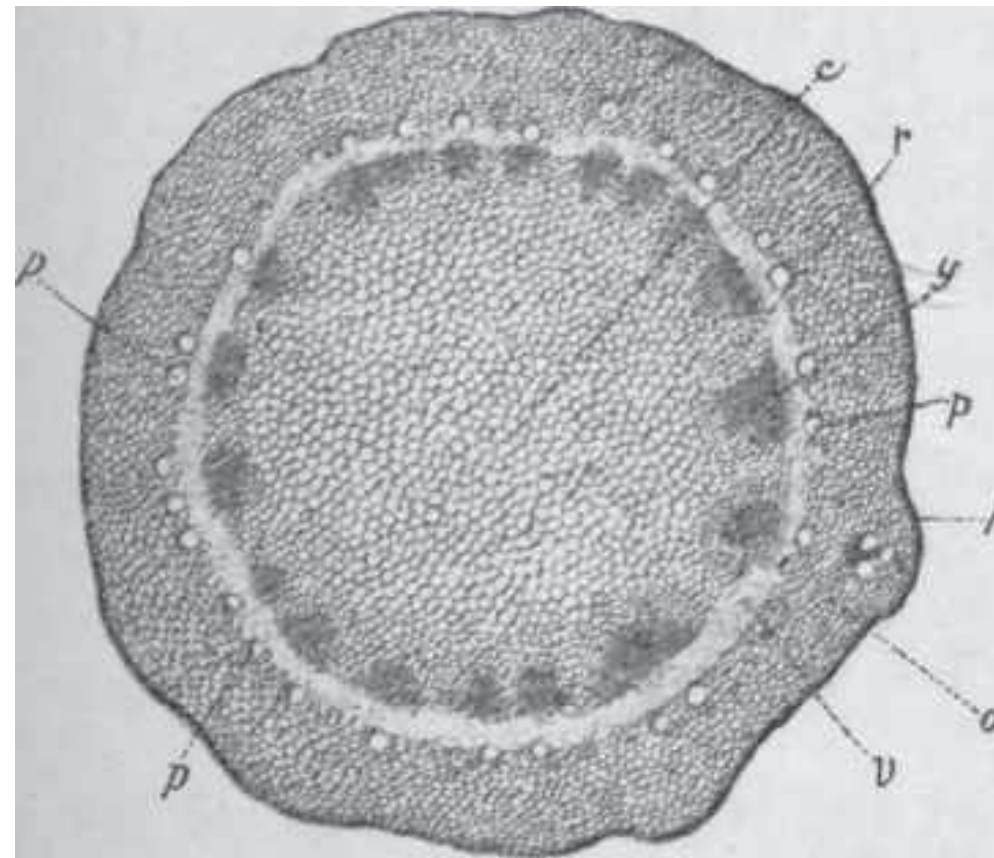*3*, vertical section of disk-flower; *4*, ray-floret.

Fig. 175. - Arnica rhizome. Transverse section of rhizome, v, bast; o, primary cortex; y, wood-bundles; r, medullary rays; c, pith; p, oleo-resin ducts. Magnified 10 diam. (Berg).

INTRODUCTION

Here are thoughts on this score's tentative status as a *composition*: its possible differences and similarities from other scores that are called compositions.

A is for Azimuth and Arnica is a collection of six activities that a musician can prepare, either in parts or as a collection; either for performance on or off stage, or screen; either for extemporaneous reading with improvisation, or with detailed advance planning; either in sections to be manipulated and assembled in recording, or as a trajectory to be brought-about in real time. In any case, the activities' sequential order, and the order of specific events, rhythms, and counterpoints within each activity, is to be determined by the performer. The score presents the performer with a network of specific pathways that connect activities and events to one another using an invariant set of rhythmic ideas.

Like other familiar performance-determinate work, and like some traditional improvisation practices, "*A is for ...*" sets out to make a unique and unrepeatable context for playing and listening, dependent on the particulars of a scene; it gives up any persistence of form. But "*A is for...*" is also meant to produce persistent identities, infinitely. In the variety of possibilities within each activity, not only the form, but the work's immediate surface—its local, behavioral identity—is also in question, excepting its rhythm. The performer should make use of one version's meaningful departure from another, and feel free to "name" versions of the work, and claim coauthorship of them. And yet every one of this composition's infinite path-driven transformations is immersed in the same world. Each accomplishes a different shape within a nearly-pulseless and rhythmically invariant world. The diagrams on the first and last page of the score illustrate the main timespan proportions that always structure this "azimuth" of movement between the activities.

A is for Azimuth and Arnica is thus a composition only in a limited sense of the word: the sense of a "make-up", a *process in which the materials of a thing, and relationships among its materials, become what they are.* We apply that sense of the word to soil, to bodies of water, to student movements and labor forces, to animal or plant populations, and to expense accounts. (At 5-30-09 4:11p, the time of press for the first edition of this score, the top Google Scholar result for a quoted search for "the composition of", was Paulo Mauro's *Corruption and the Composition of Government Expenditures*[1].)

1. Journal of Public Economics 69 (1998) 263–279.

In order to go further than this, and give this work that more stable, music- or language-literature sense of the word 'composition'...to give it the status of an "assemblage", or "design", that connects musical ideas intentionally, one has to complete the score by reading it. Like any other "make-up" or plurality (and like compositions, in Mauro's sense), this score's identity is in its process of becoming a 'composition' (in the literary sense) of its invariant activities and passages.

Each activity in this score consists of staves arranged to allow passage between them, via bridges within each activity (disrupting one staff with notes from another), and exit- or entry-routes across the score's pages (disrupting one activity with another).

Each of the activities (described in the next section) reflects a separate, "piece-like", framework for a performer to use as she pleases. But none has its identity without these essentially porous and amorphous features. Some bridges and routes imply a kind of transformation, since the placement of a departure point determines something about the starting materials on the other side of it. Other ways of moving from one part of the piece to another will produce intuitive restrictions on later movements, in accord with a performer's aversion or attraction to repetition, and her intuitive interest in maintaining ranges and contrasts of tempo.

HOW TO USE THE SCORE

Read the score first in page order, from beginning to end, and gather a rough sense of how one staff might be connected to another, and under what conditions. It won't be necessary to grasp the interactions of staves completely.

Then return to the page titled "**Map of the Composition**", exploring its features with reference to the activities described on the other pages. A performance of this work consists of a planned or unplanned foray through the activities, in which the tempo changes and other musical results incurred in each activity have a cumulative but dynamic effect on the remainder of the piece.

Feel free to copy and clip printed pages of these activities into a new arrangement that resembles a new score, with determinations and choices recorded in the order of a prospective performance. Alternatively, try realizing a performance of this work exclusively in the studio, taking advantage of options to loop and adjust tempos, elisions, and overlaps, with flexibility and precision.

ACTIVITIES IN THE SCORE

Azimuth (Capo)

Four groups of four staves each, four ways to begin. Each is something like a choir, singing some fragment of the same monodic work. The 'choirs' might hockett, to form a single line, and/or disperse as complementary fragments.

Syncline

A broken ritornello. Tempo changes in mm 25, 29 (slowing) and 38 (quickening), will balance each other into a slight acceleration (by a factor just under 9/8), with each full, uninterrupted, repeat.

Anticline

A self-referential knot of elaborations, on overlapping pairs of rhythm and text. Choose two of four notes in the score (designated by ultra-long stems) to replace, always, with whole passages (marked with boxes), some containing, in turn, the four designated notes. Execute tempo changes in measures 54, 56, 63, and 65 strictly, regardless of what path brought you there. Retain the resulting tempo even after an elaboration that brought it about is complete.

Arias: Aleph and Zain

The instruments' pitches, filtered by an unpulsed rhythm, generate two melodies whose notes are interleaved. The percussion sounds accompany/complement your voice singing one, then both, and then the other, of the arias, with changing contours resulting from octave displacements of the melodies' notes. Aleph anchors, Zain is transfigured. In the course of repetitions, Aleph's longer departures accompany the return of Zain's original form, obscured until the end.

Arias: Qaph and Nim

The instruments' pitches, filtered by an unpulsed rhythm, generate two melodies for use in the algorithmic setting of a found text. The text separates carefully into disconnected fragment-categories, its meaning speaks through a *Gestalt* process of gradual and partial exposures.

Azimuth (Fine)

Four choir-like groups of four staves each, interrupting Qaph/Nim, or Anticline. The page can be read as one simultaneous system, or four in succession, and can end the piece in four ways.

LEGEND

Capo / Fine

The music begins on p 3 at m 1, 8, 11, or 20; it ends on p 8 at m 104, 109, 119 or 125. The variety of possible pathways available through the work is summarized on the following page ("Map of the Composition").

+

Notes modified with a plus sign should be played as deadstrokes, which should also have the effect of diminishing the distinctions between instruments or staves. This sign does not appear in connection with wood or paper; deadstrokes on glass and drumheads should have a more "wooden" sound.

MAP of the SCORE

The number of satisfying realizations of this form is constrained by the oscillation of acceleration and deceleration. Passages like mm 23-30 in "Syncline" (p 4) and "Arias Qaph and Nim" (p 7), as well as "modulating" returns to m 8 or 11 in the *Capo*, are decelerations, and losses of energy. They should be compensated by movements to "Arias Aleph and Zain," where steady acceleration is the norm, and "Anticline," where rapid acceleration is possible.
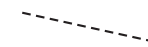
–

Tenuto notes should be held for their precise length and then silenced; if possible, play them slightly louder so that the end of the note value can be heard. Unresonant glass should be avoided.

Implied pitch relationships are approximate and can be unstable. The four categories of instrument (wood/paper, small glass, large glass, and toms) do not need to be those exact materials, but should be materials that differ in the ways approximately suggested by those words. They do not need to be precisely arranged, nor associated with any suggestion of consistent intervals on the staff. Players only need to conceive of a gamut from high to low, and preserve a sense of connection between notes that appear to be the same height.

◆

Nested square noteheads indicate some strong thumping gesture with fingers or thumb. Consider procuring, for one hand, a ring-pick (for guitar, mandolin, etc.) that affixes firmly to the thumb or index finger, and experiment with possible material/pick combinations that produce distinctive results for this indication.

X

X-noteheads indicate distinctive scraping or rubbing sounds.

Reuse or ignore repeat-signs at will, excepting those found in the "Aria" sections. Some greyed-out repeat signs offer special "Da Signa"-style opportunities, allowing returns or skips to remote parts of the score.

- - - - - - - -

Dotted "glissandi" represent a quick but thorough survey of every small instrument on the table; resembling a sound-track accompanying the fall of a cartoon character down a stairway.

Play small noteheads with a sense of ornamentation to those that are not small. They might be freely modified to help bridge a timbral gap between contrasting instruments. Small notes may also be omitted at higher tempos.

Mark time-spans:

Metric modulations and a few periods of rhythmic intensity often involve an overarching simple rhythm that 'transcends' the local meter(s) and tempo(s). Pronounce the marked events firmly enough that their relationships to one another might be audible and appreciable as an independent rhythmic "stream."

MAP of the SCORE
and paths that can emerge from it

AZIMUTH (CAPO) p 3: mm 1-22
Begin at ♪ = 75 - 85, when enteing at m 11 or m 8 (from 84 or 37), tempo will be extremely slow. Consider exiting m 22 to Antecline.

Beginnings

19
20
22
10
11
7
8
1

*.333

*.5

66
ALEPH and ZAIN p 6: mm 66-85
83-84
m68: *1.45
m72: *0.78
= *1.13
85

87
102
QAPH and NIM p 7: mm 86-102
m95: *.69
m98: 0.92
= *.63
86

57
65
56
ANTICLINE p 5: mm 48-65
m54/63: *0.75 *
m56/65: *1.6
48
63
60

107
103
AZIMUTH (FINE) p 8: mm 103-125
Endings
119
105
125

SYNCLINE p 4: mm 23-4
46-47
m25: *0.8
m28: *0.9
= *0.64 --> m38: *1.75 = *1.12
37
23

*Anticline's modulations permute and repeat so variably that no general prediction can be made about their collective effect.

2

AZIMUTH (CAPO)

**Stems that connect one system to another
are forks in the performance path.**

Capo
♪ = 75 - 85

(Elision, m 37)

wood/paper
small glass
big glass
toms

Capo
♪ = 75 - 85

(Elision, m 37)

wood/paper
small glass
big glass
toms

(Mark equal timespans.)

Capo
♪ = 75 - 85

(Elision, m 83–84)

wood/paper
small glass
big glass
toms

Capo
♪ = 75 - 85

(Elision, m 46–47)

wood/paper
small glass
big glass
toms

+ = deadstrokes; these should have the
effect of diminishing distinctions between
staves.

- = tenuto; hold for full value, perhaps a
little longer.

♩ small noteheads are subordi-
nate and ornamental; they can
be omitted at fast tempi.

Dotted lines = quick address of
all small instruments (top staff).

SYNCLINE

wood/paper

small glass

big glass

toms

(4/5 tempo)

(4/5 tempo; a little less than 2/3 of m 23 tempo)

25

30

$\frac{1}{4}$ $\frac{9}{32}$ $\frac{3}{4}$ $\frac{5}{8}$ $\frac{9}{32}$ $\frac{3}{4}$ $\frac{5}{8}$ $\frac{3}{4}$ $\frac{5}{16}$

ppp   ff   pp   mp   ppp   ff   mp   pp   ppp   pp   mp   pp

m 1
m 8

(7/4 tempo; a little less than 9/8 of m 23 tempo)

35   40   45

m 20

$\frac{2}{4}$ $\frac{6}{16}$ $\frac{9}{32}$ $\frac{5}{16}$ $\frac{2}{4}$ $\frac{5}{16}$ $\frac{2}{8}$ $\frac{9}{32}$ $\frac{2}{4}$

m 48
(next page)

mf   mp   p   ff   pp   mp

19:    16:
Mark background timespans
with a structured accelerando
(proportions are approximate):

14:    13:   end:

Optional "elision" with Azimuth: Return to Azimuth
(p 3) and play a set of boxed notes in the time
placement of these. Continue there a little stronger
the second time than the first.

+ = deadstrokes; these should have the
effect of diminishing distinctions between
staves.

♩ small noteheads are subordi-
nate and ornamental; they can
be omitted at fast tempi.

- = tenuto; hold for full value, perhaps a
little longer.

Dotted lines = quick address of
all small instruments (top staff).

4

ANTICLINE

A- cross the hall- way by the first few re- plen- ish- ers. No more will

m 66
(next page)

50   55

$\frac{3}{8}$ $\frac{5}{8}$ $\frac{9}{8}$ $\frac{15}{16}$ $\frac{3}{8}$

3rd 16th of $\frac{3}{8}$

pp *First im- press -ions: un- hinge un- der false re- morse un- der*

4th 16th of $\frac{5}{8}$

mp *the hand-lers, then the man*

5th & 6th 16ths of $\frac{15}{16}$

mf *But re- deem the whole ef- fort first. Then me.*

Choose one

pp

Antecline: At a chosen notehead, interrupt the current line's rhythm using the 'projected' box. Return to the original line at the box's end...(if you reach it before the box is interrupted by another chosen note).

mf

Choose one

ff

mp

Double-stemmed interruptions act as bridges: when interrupting the upper staff, "return" to the lower, and vice versa.

but

65

Repeat, or m 105 (p 8) →

ff

m 86
(p 7)

60

wood/paper
small glass
big glass
toms

$\frac{2}{4}$ $\frac{3}{8}$ $\frac{5}{8}$ $\frac{9}{8}$ **ppp** **mp** $\frac{15}{16}$ $\frac{4}{4}$

p

Mark equal timespans:

5

Arias Aleph and Zain:

(1) Each small blank staff on the lines marked Aleph and Zain should be filled with a note, within your vocal range, in the same pitch-class as the one most audible when striking the object indicated on the same stem. These are to be hummed and held approximately through *to the end of the next rest* in the percussion line. For some of the notes, where permitted by your vocal range, write an octave transposition in the same staff, in parentheses.

(2) Develop an approach to humming the two arias so that they differ in sound: for example, hum one with mouth closed and the other with mouth slightly open, or cultivate a distinction between a nasal tone and a guttural tone, a chest voice and a head voice or falsetto.

(3) On the first iteration of the repeated measures, hum only notes from Aleph; on the second, sing from both Arias, and on the third, sing only from Zain, changing its contour by shifting some notes up or down an octave. On the fourth and final repeat, sing from both Arias, with Zain still in its changed version. The fourth is a new section, developing and departing from the arc of the first three.

| ALEPH | ZAIN | ZAIN' | ALEPH | ZAIN' |

(4) Upon returning to this page a second time in the performance, sing both arias on the first iteration of the repeated measures, utilizing new variations of contour for both arias. Finally, the second, third, and fourth iterations are a reprise of the first three, except that it begins with the new Aleph, and is mixed only with the original Zain. Sing only the original Zain in the fourth iteration.

| ALEPH' | ZAIN" | ALEPH' | ZAIN |

ZAIN

ALEPH

(From m 7 or 56)

(16/11 - a little slower than 1 & 1/2 x tempo)

(7/9 - a little slower than 4/5 x tempo: 9/8 of m 67)

70

wood/paper

small glass

$\frac{3}{8}$　$\frac{9}{16}$　$\frac{6}{8}$　$\frac{6}{16}$　$\frac{3}{4}$

big glass

toms

(Mark equal timespans.)

(Mark timespans: almost twice as fast as markers in mm 66-69.)

Optional "Da Capo Azimuth": Return to m 11 (Azimuth, p 3), at 1/2 tempo, by playing the boxed notes there in the time-placement of these.

ZAIN

ALEPH

75

80

The repeat will be faster by a little less than 9/8.

85

wood/paper

small glass

$\frac{9}{16}$　$\frac{2}{4}$　$\frac{5}{8}$　$\frac{2}{4}$　$\frac{9}{16}$　$\frac{4}{4}$

big glass

toms

Repeat 4 times

+ = deadstrokes; these should have the effect of diminishing distinctions between staves.

♩ small noteheads are subordinate and ornamental; they can be omitted at fast tempi.

- = tenuto; hold for full value, perhaps a little longer.

(From m 10 or 107)

NIM.

QAPH

95

9/13 tempo; a little faster than 2/3 x tempo.

90

wood/paper

small glass

big glass

toms

(Mark equal timespans.)

NIM

QAPH

12 / 13 tempo; a little slower than 2/3 of mm 86-94.

100

The repeat will be slower by a little less than 2/3.

wood/paper

small glass

big glass

toms

m 103 (next page)

or m 60 (p 5)

mp

ff

mf

(Mark timespans: not quite 1/3 slower than the previous markers.)

Arias Qaph and Nim:

(1) Make three copies of this page.

(2) Check pitch-classes of instrumental sounds occuring simultaneously with each small blank staff on the lines marked Qaph and Nim. Again, write a pitch of that class, in your vocal range, in the associated staff. Produce at least one leap greater than a sixth.

(3) Find a text about 25 words in length. Divide the whole into two lists, one consisting of iambs and trochees (syllable-pairs), and the other of dactyls and anapests (3 syllables, with the first or last one stressed) —the lists will of course be non-contiguous, and some groups of syllables will be easy to parse in more than one way. Some syllables will have to go in both groups in order to avoid isolated syllables. For the sake of example, the two lists below are one possible division of the first 27 words in this paragraph. (The contorted arrow between the lists illustrates the original order of the syllable groups.)

"FIND a" = trochee	"TEXT about" = dactyl
"-five WORDS" = iamb	"TWENty-five" = dactyl
"in LENGTH." = iamb	"into TWO" = anapest
"diVIDE" = iamb	"SISting of" = dactyl
"the WHOLE" = iamb	**"Iambs and"** = dactyl
"PORtions" = trochee	"and the OTH-" = anapest
"ONE con-" = trochee	"-er of DAC-" = anapest
"TROchees," = trochee	"-tyls and AN-" = anapest
"aPESTS." = iamb	

(4) Write iambs and trochees in Qaph and dactyls and anapests in Nim, in the order of their occurrance in the text, leaving room for three "verses." (You may use the text example in step 3.) Write the syllable-groups in sequence, continuing down the list as the arias progress through the repeated section. (The relationship of pairs in Qaph will reverse itself, while groups of three syllables will remain consistent in Nim.) If one list runs out of words, begin drawing from the top of that list again.

(5) Continue the text-writing process, uninterrupted, on the remaining two copies of the page. When planning a performance (see p 2: "Map of the Piece…"), make sure to reach these Arias at least three times, and use your three versions in the order they were created here.

+ = deadstrokes; these should have the effect of diminishing distinctions between staves.

♩ small noteheads are subordinate and ornamental; they can be omitted at fast tempi.

- = tenuto; hold for full value, perhaps a little longer.

Dotted lines = quick address of all small instruments (top staff).

7

AZIMUTH (FINE)

Stems that connect one system to another are forks in the performance path.

Non-final system endings also proceed to the beginning of the next system below.

Fine

wood/paper
small glass
big glass
toms

105

Fine

Ossia: to m 87

(From m 63)

wood/paper
small glass
big glass
toms

110

115

wood/paper
small glass
big glass
toms

Fine

120

125

Fine

wood/paper
small glass
big glass
toms

♩ small noteheads are subordinate and ornamental; they can be omitted at fast tempi.

+ = deadstrokes; these should have the effect of diminishing distinctions between staves.

‾ = tenuto; hold for full value, perhaps a little longer.

8

(Mark equal timespans.)