

***Gamelan Works Vol. 1:
The Braid Pieces***

Barbara Benary



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Gamelan Works

**Vol 1.
The Braid Pieces**

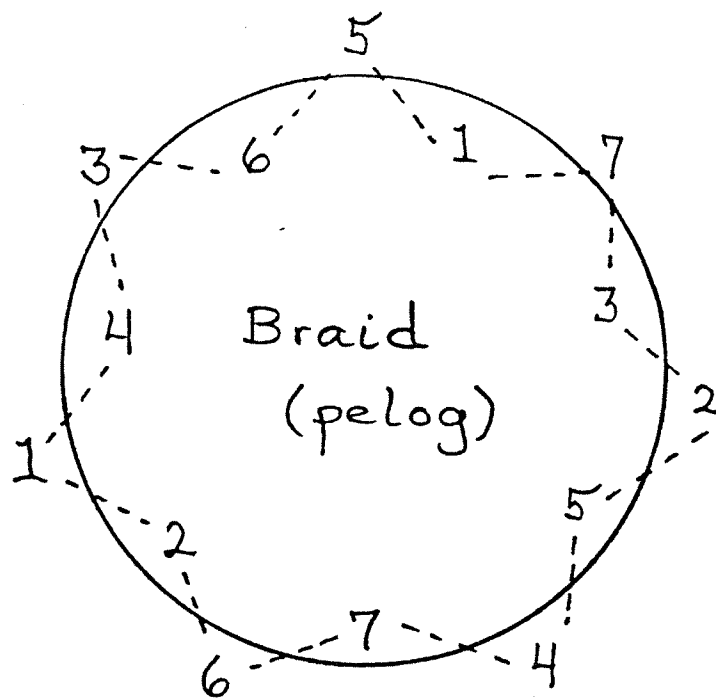
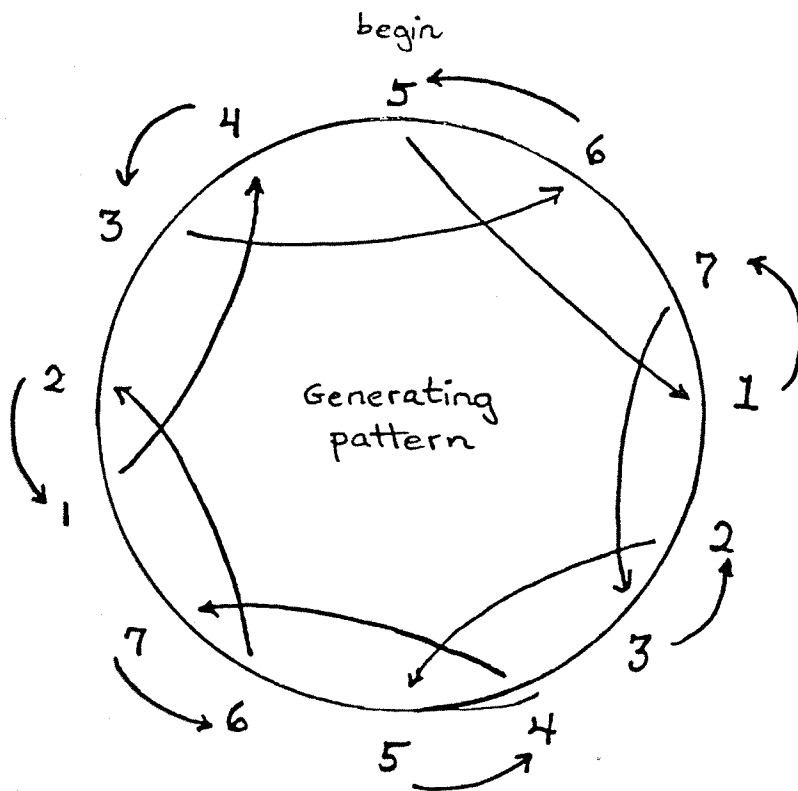
THE BRAID PIECES

The following set of six pieces were composed between 1974 and 1980. They are all based on a numerical process which is shown in the diagrams on p. 2 and p. 19.

The generating process is this: the pitch numbers of the chosen scale are arranged in a circle and are read by going forward three steps then back one, forward three, back one, etc. The first four pieces are based on the pelog scale, and can also be played on diatonic instruments using a similar 7-tone scale. The process yields a 14-tone row. The last two pieces are in the 5-tone slendro scale, which yields a 10-tone row. The "row" of each braid is interpreted in various ways to produce the different pieces.

Orchestration required is as follows:

- p. 2 BRAID PIECE (pelog)
Central to the process are three saron barung. Each is doubled by one or more instruments in the octaves above or below (saron demung or peking). Thus the piece can be played by 3, 6 or 9 instruments. No gongs are required.
- p. 7 MACRAME (pelog)
For a trio of saron barung. This is a short piece, intended as an introduction to Counter-Braid, though it could stand alone. The parts should not be doubled.
- p. 9 COUNTER-BRAID (pelog)
Three saron barung; balungan instruments in all octaves; a set of kempul, gong agung; optional bonang and kendang.
- p. 11 SLEEPING BRAID (pelog)
For two obbligatos (presumably suling and female voice) and two octaves of balungan (demung and slentem), each of which can be doubled by an instrument an octave above. One panerusen part is provided by tjlung, saron, or peking. 4 to 8 players.
- p. 19 BACKTRACKING BRAID (slendro)
For full slendro gamelan. Aside from peking, no panerusen parts are provided, but they could be improvised in the slow, quiet section.
- p. 25 DRAGON TOES (slendro)
Up to three obbligatos: voice, suling, rebab
Minimum of four octaves of balungan (including peking) and gong. Balungan parts can be doubled.



5-1
 7-1
 7-3
 2-3
 2-5
 4-5
 4-7
 6-7
 6-2
 1-2
 1-4
 3-4
 3-6
 5-6
 (5-1)

Braid
Row

5 \ 7 / 2 \ 4 / 6 \ 1 / 3 / (5)
 1 \ 3 / 5 \ 7 / 2 \ 4 / 6 /

Braid
Pairs

BRAID PIECE

This piece is basically a trio of interlocking parts, and may be subject to various orchestration around that basic trio. It is a slow, quiet piece, without climax. Its length is indeterminate, the minimum being the length of one cycle, which takes about five minutes.

Basic rhythmic pattern

The rhythmic interlock is based on three parts, performed by three instruments in the same octave. Each part may be doubled by an equal number of instruments in adjacent octaves, singers, wind instruments.

The three lead players make an interlocking pattern of two alternating notes in moderately slow tempo - what may be thought of as 6/4 time. Each part is rhythmically "off" from the others by one quarter note:

The image displays four staves of handwritten musical notation in 6/4 time, featuring a key signature of one sharp (F#). The notation is as follows:

- 1st:** A staff with a treble clef and a key signature of one sharp. It contains four half notes: F#4, A4, F#4, and A4. Below the staff are the fingerings 5, 1, 5, and 1.
- 2nd:** A staff with a treble clef and a key signature of one sharp. It contains four half notes: A4, F#4, A4, and F#4. Below the staff are the fingerings 5, 1, 5, and 1.
- 3rd:** A staff with a treble clef and a key signature of one sharp. It contains four half notes: F#4, A4, F#4, and A4. Below the staff are the fingerings 1, 5, 1, and 5.
- Resultant:** A staff with a treble clef and a key signature of one sharp. It shows the combined pattern of the three parts, resulting in a continuous sequence of alternating half notes: F#4, A4, F#4, A4, F#4, A4, F#4, A4, F#4, A4, F#4, A4. Below the staff are the fingerings 5, 1, 5, 1, 5, 1, 5, 1, 5, 1, 5, 1.

Beginning the piece

To arrive at the pattern above:

The first player sets up the ostinato on the first two pitches.

The second player enters one beat after the first, on the same two pitches but playing them in reverse order.

The third player completes the pattern by entering in the empty beat, playing one quarter later than the second player, and in reverse pitch order.

Another way to conceptualize this relationship:

Second plays the same pitches as First, but four beats later.
Third plays the same pitches as Second, but four beats later.
First plays the same pitches as Third, but four beats later.

There is no overall downbeat. Each player should hear his own part as being on the beat, and the others as being off beat in relation to him. The desirable tempo of the resultant pattern should be: a little too slow for a waltz.

Pitch sequence

Changing of pitches does not begin until the trio is firmly established. Then, beginning with the first two pitches, the players very slowly go through the Braid Row by changing one note of the pair at a time. The row can be thought of as linear or as cyclical - I prefer cyclical.

Pitch change process

After the initial combination of notes has been heard for some time, the players begin to change notes, one at a time. The changes should also proceed in a liesurely way.

(pelog chart)

Being 5 and 1
Change 5 to 7 - result 7 and 1
Change 1 to 3 - result 7 and 3
Change 7 to 2 - result 2 and 3
Change 3 to 5 - result 2 and 5

(diatonic chart)

Begin F# and B
Change F# to A - result A and B
Change B to D - result A and D
Change A to C# - result C# and D
Change D to F# - result C# and F#

Continue until you reach initial pitch combination again.

Each player proceeds around the cycle (or along the row) at his own speed, but should be aware of the other players and not get too many notes ahead or behind them. Players doubling a part may also make their changes at individual discretion. The cycle ends when all players arrive at the initial pair of notes again. The first players to arrive at that point should stay with the pair of notes until all others have caught up. When all are again on the initial notes, a second cycle can begin. Any orchestration changes - adding of new voices, improvised obbligatos, etc. - should happen at the beginning of a new cycle.

Ending

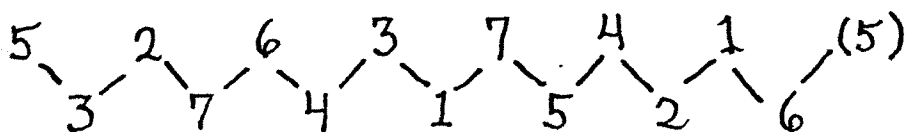
A performance can consist of one or several times around the cycle - or down the row - with or without orchestration changes at the start of the repeat.

After a predetermined number of cycles, all players come to rest on their final pair of notes. Players then drop out one at a time (without diminuendo). Each one's final note should be the dominant (pelog 5 or diatonic F#)

Elaborations of the basic Braid

I have always felt that Braid is a self-sufficient piece in its barest form: a single cycle with only three like-octave instruments. However, more elaborate multi-cycle versions are certainly possible. The following are some possible ways of expanding the orchestration in a longer version of Braid.

1. High elaboration. Peking, tjilumpung, gambang or bonang panerus. Up to three players each make up repeatable fragments in eighth notes based upon the pitches heard at the moment. Fade the fragment in, repeat it a while, fade it out, then listen and find a new one.
2. Low elaboration. A slower braid performed at half tempo. Use same procedure as in the braid row, only the length of each note is a dotted whole. Could be played on slentem or kempuls.

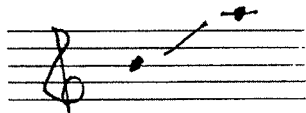


3. Wind instrument obbligato. Suling and/or other winds either improvise with the pitches heard, or pick out and quietly sustain individual notes for the length of a breath.
4. Vocal obbligato. This may be performed by the gamelan players themselves, singing and sustaining one of the two pitches they are playing. This would result in drones reinforcing certain pitches in the matrix.

Diatonic tuning - western percussion

Braid is easily translated into diatonic tuning and can be performed by an ensemble of available keyboard percussion.

The central trio of parts should be played by three instruments of slightly different timbre, such as: piano, marimba, xylophone, vibraphone, electronic keyboard. All three should play initially in the same octave:



As elaboration, each keyboard player can add doublings to the octaves above or below. Other improvisatory parts may be also added, as previously suggested for gamelan.

F#-B

A-B

A-D

C#-D

C#-F#

E-F#

E-A

G-A

G-C#

B-C#

B-E

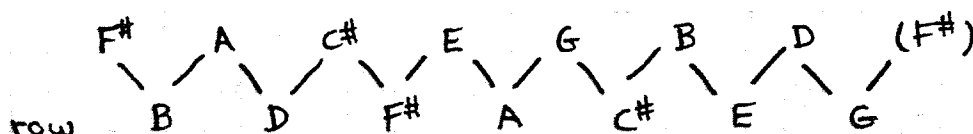
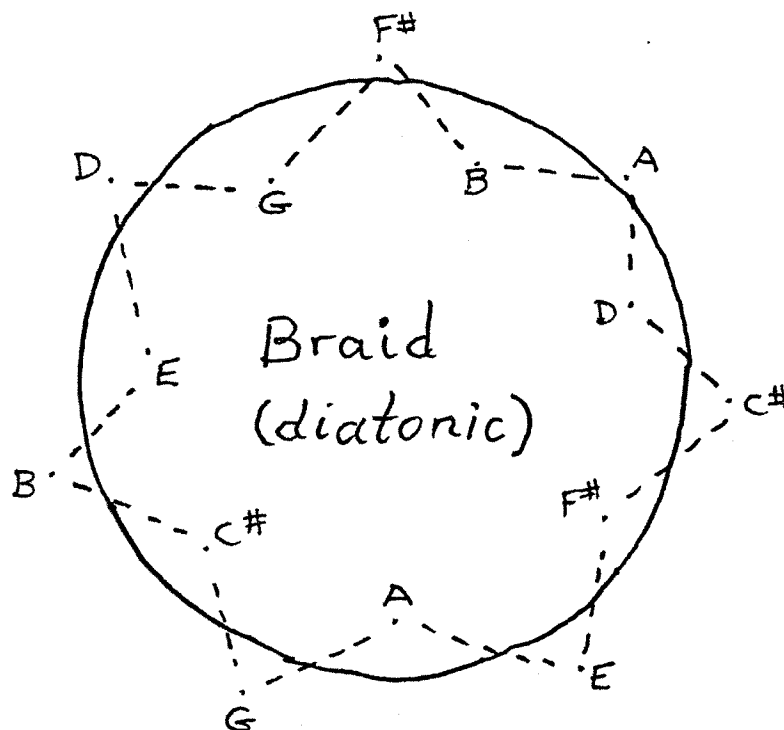
D-E

D-G

F#-G

(F#-B)

pairs



MACRAME

This is a trio for three pelog saron barung. It may be played by itself or in combination with the following piece, "Counter-Braid." The volume of the entire piece is forte.

Beginning

All three players read the pelog Braid Row linearly and repeatedly.

The first player begins, plays the row in a steady, slow tempo of about ♩. = 40

5 1 7 3 2 5 4 7 6 2 1 4 3 6

On the repeat the second player enters, dividing the first player's beat into thirds and playing the row in echo on the second beat:

(1st) 5.. 1.. 7.. 3.. 2.. 5.. 4.. 7.. 6.. 2.. 1.. 4.. 3.. 6..
(2nd) .5. .1. .7. .3. .2. .5. .4. .7. .6. .2. .1. .4. .3. .6.

On the following repeat the third player enters, echoing the first two and filling in the empty beat:

(1st) 5.. 1.. 7.. 3.. 2.. 5.. 4.. 7.. 6.. 2.. 1.. 4.. 3.. 6..
(2nd) .5. .1. .7. .3. .2. .5. .4. .7. .6. .2. .1. .4. .3. .6..
(3rd) ..5 ..1 ..7 ..3 ..2 ..5 ..4 ..7 ..6 ..2 ..1 ..4 ..3 ..6

(result) 555 111 777 333 222 555 444 777 666 222 111 444 333 666

All three parts should be of equal volume so there is no sense of downbeat accent. The meter must be extremely even.

Once all three parts have entered and completed a cycle, all three begin an accelerando extending over one or two cycles that increases the tempo to a pluse of ♩. = 120, or as fast as the players can play with absolute smoothness.

The three parts now go melodically out of phase. Third parts leads: at the beginning of one cycle it repeats the first note (5).

(1st) 5.. 1.. 7.. 3.. 2.. etc.
(2nd) .5. .1. .7. .3. .2. etc.
(3rd) ..5 ..5 ..1 ..7 ..3 etc.

(result) 555 115 771 337 223 etc.

On the next cycle, both second and third parts repeat the first note (5), so that 2nd is one note behind, 3rd is two notes behind:

(1st) 5.. 1.. 7.. 3.. 2.. etc.
(2nd) .5. .5. .1. .7. .3. etc.
(3rd) ..6 ..5 ..5 ..1 ..7 etc.

This yields the middle pattern:

Middle Pattern

(1st)	5.. 1.. 7.. 3.. 2.. 5.. 4.. 7.. 6.. 2.. 1.. 4.. 3.. 6..
(2nd)	.6. .5. .1. .7. .3. .2. .5. .4. .7. .6. .2. .1. .4. .3.
(3rd)	..3 ..6 ..5 ..1 ..7 ..3 ..2 ..5 ..4 ..7 ..6 ..2 ..1 ..4
(result)	673 156 715 371 237 523 452 745 674 267 126 412 341 634

As in Braid Piece, it is suggested that each part think of its own rhythmic place as being the downbeat. However there should be no part louder than any other, no audible downbeat in the combined pattern.

Continue the middle pattern for a number of cycles. "Counter-Braid" may be inserted into this section.

Ending

On a mutual cue, begin a cycle with a gradual slowdown. On the beginning of the next cycle, repeat the first two notes as an ostinato to make the coda. Continue to slow down without diminuendo until a cued ending on pitch 5.

	(end of final cycle)	(coda)
(1st)	1.. 4.. 3.. 6..	5.. 1.. 5.. 1.. 5.. 1.. 5.. 1.. 5
(2nd)	.2. .1. .4. .3.	.6. .5. .1. .5. .1. .5. .1. .5.
(3rd)	..6 ..2 ..1 ..4	..3 ..6 ..5 ..1 ..5 ..1 ..5 ..1
(result)	126 412 341 634	563 156 515 151 515 151 515 151 5

COUNTER-BRAID

As its name implies, in this piece the full gamelan performs a counterpoint to the interlocking pattern of "Macrame" by picking a melody out of the notes of the Braid Row as played on the First Saron part.

If the full beginning of "Macrame" is not used as an introduction to this piece, then a shorter way to get into it is for the three sarons to begin with their middle pattern, starting at a slow speed, then accelerating into the desired tempo for "Counter-Braid." After the desired number of repeats of "Counter-Braid" (I'd suggest two or three at most), sarons finish with the ending & coda of "Macrame."

Balungan part is loud, and is to be played by as many saron demung and slentem as are available. Circled notes are to be played by kempul. On the repeat, kenong doubles kempul and also plays in the following beats, as indicated. Bonang doubles balungan. Peking functions as a balungan instrument the first time through, but may elaborate in peking style on subsequent repeat(s), returning to balungan at letter C.

Kendang emphasises the irregular structure of the measures. If available, bedug can play on the downbeat of each measure throughout.

COUNTER BRAID

saron ostinato ("Macrame" middle pattern)

5 1 7 3 2 5 4 7 6 2 1 4 3 6
6 5 1 7 3 2 5 4 7 6 2 1 4 3
3 6 5 1 7 3 2 5 4 7 6 2 1 4

(hidden Braid Row)

5 1 7 3 2 5 4 7 6 2 1 4 3 6

Balungan of "Counter-Braid"

||: (5) . . | 3 . | 5 . | 7 . . | (1) . | 3 .
| (5) . . | 3 . | 5 . | 7 . . | (1) . | 3 6
| (5) . . | . 2 | (5) . . | . 2 | 1 . | 3 6
| (5) . . | . 2 | (5) . . | . 2 | 1 . | 3 (6)

(A) | . . 7 3 | (2) . . | 7 6 . | (1) . | 3 .
| . 1 7 3 | (2) . . | 7 6 2 | (1) . | 3 .
| 5 1 7 3 | 2 . | (4) . . | 2 . | (4) . (6)
| . . 7 3 | 2 . | (4) . . | 2 . | (4) . 6

(B) | 5 . 7 | (3) . 5 | (4) 7 6 | (2) . | (4) . 6
| 5 . 7 | (3) . 5 | (4) 7 6 | (2) . | (4) . 6
| 5 . 7 | (3) . 5 | (4) 7 6 | (2) 1 4 3 6 :||

(C) | (5) . . | . . | 5 . | (7) . . | 1 . | 3 .
| (5) . . | 3 . | 5 . | . . . | . . | 3 .
| 5 . . | . . . | . . . | 1 . . .
| 5

SLEEPING BRAID

A lullaby for Lyra
to be sung on a winter day.
Sleep soft, little big-cheek
with your hair too young to braid.
Brown cloud, gray eyed
like the dawn of a winter day.
And the twigs and the little bush branches
cast their shadows across the snow
Like the fall of your closed eye-lashes.
Oh the trees on the long hill
And the bushes on the cold hill
And you in your blanket, soft and warm.
Sleep soft, little big-cheek
with your hair too young to braid.

The song is for my daughter Lyra Samara Silverstein, then six months of age and sleeping through her first winter. The piece can be performed on pelog gamelan or on diatonic instruments.

In structure the piece consists of two simultaneous canons. The first is performed by balungan instruments: demung and slentem, which can also be doubled by saron and another demung. The two parts read through the braid row at an interval of two notes, in a slow, even pace. The canon is woven together by the only panerus part, which sounds best on tjlungung, but can be replaced or doubled by a saron barung or peking. Choose a liesurely tempo, but if performing with vocalist, make sure it is not too slow for vocal phrasing. A slight ritard may be added to the very end of the piece; otherwise tempo is consistant.

The second canon, which enters after the first is established is between the suling, leading, and female voice, following. In some performances I have had the suling play its part entirely through to be joined on the repeat by the echoing voice. In the absence of voice, the suling alone makes a good obbligate. The piece can also be performed without the second canon, in which case the length is indeterminate.

If performed with diatonic instruments possible orchestrations are: three guitars, recorder and voice; or else vibraphones for balungan parts, psaltry or harp for tjlungung, flute and voice.

Sleeping Braid C

(first canon)

Hlempung
 or bonang
 demung
 slentem

6453	1675	1675	3127	3127	5342	5342	7564	7564
5	1	7	3	2	5	4	7	6
3	6	5	1	7	3	2	5	4

2716	2716	4231	4231	6453	6453	1675	1675	151.	1515
2	1	4	3	6	5	1	5	.	.
7	6	2	1	4	3	6	5	1	5

Ending

rit ~~~~~

Bracketed section
 may be repeated
 indefinitely ~ or used
 to accompany a song

→ starting place

Sleeping Braid suling (second canon)

1 121 61 212	3 . 353 2	$\frac{3}{321}$ 7 1 1	. . . .	4 6 464 3	6 $\frac{32}{32}$ 12 3	$\frac{5}{56}$ 6 $\frac{7}{5653}$
65 5 . .	. $\frac{3}{123}$ 56543	2 2 . .	. $\frac{3}{567}$ 12 1	$\frac{76}{46}$ 6 .	71 6 35 6	5 7 . .
. . 56 $\frac{3}{543}$	$\frac{2}{21}$ 7 . $\frac{1}{111}$	2 $\frac{3}{454}$ 2 .	$\frac{3}{424}$ 6 7 2	$\frac{22}{22}$ 2 $\frac{12}{12}$ 1	$\frac{46}{46}$ 12 $\frac{3}{333}$ 333	3 . . $\frac{3}{565}$
3 . 21 $\frac{7}{717}$	$\frac{6}{67}$ 5 . .	11 2 1 .	11 23 12 3	$\frac{2}{2}$ 16 1 .	13 43 46 464	3 3 3 .
32 12 3 53	3 $\frac{21}{21}$ 2 .	. . 53 $\frac{3}{216}$	5 $\frac{611}{611}$ 212 3	4 6 $\frac{464}{464}$ 3	6 $\frac{32}{32}$ 12 3	$\frac{5}{5}$ 6 $\frac{76}{76}$ 176
53 65 . .	. . $\frac{3}{21}$ 2	. 3 . 2	$\frac{3}{321}$ 7 1 1	. . . .	4 6 4 3	6 . $\frac{71}{71}$ $\frac{76}{76}$
53 65 . .	. . .	. . .	. . .	. . . .	. . . .	. . . .

Sleeping Braid ~ Voice (second canon)

. 1 . 7 . 6 . 5	. 3 . 2 . 1 . 7	. 5 . 4 . 3 . 2	. 7 . 6 . 5 . 4	. 2 . 1 . 7 . 6	. 4 . 3 . 2 . 1	. 6 . 5 . 4 . 3
.	1 1 1 1 2 a lullaby for Lyra	3 . 3 3 2 to be sung on a winter day	2 2 7 1 1 .	. . . .	4 6 4 4 3 Sleep soft little big cheek	6 . 1 2 3 with your hair
. 5 6 . 7 5 too young to braid	. . . .	. . 5 2 brown cloud	. . . .	7 i . . gray eyed	. . . .	7 i 6 6 6 5 like the bark of the winter
7 . . . trees	. . . .	. . 2 2 4 and the twigs and the little bush branches	4 4 5 4 2 4 .	4 6 . 7 2 2 cast their shadows across the snow	. 2 2 . 3 1 .	1 2 3 . . like the fall
2 1 7 6 5 of your closed eyelashes	. . . .	. . . .	. . . .	1 1 2 1 2 3 oh the trees on the long hill	3	3 3 3 3 4 6 4 and the bushes on the cold
. 3 . . hill	3 3 . . and you	3 3 2 1 1 in your blanket snail	. . 2 3 1 and warm	. . . .	4 6 4 4 3 Sleep soft little big cheek	6 . 1 3 6 with your hair
7 i . 7 5 too young to braid	. . ..	. . ..	. . ..	. . ..	. . ..	. . ..

Sleeping Braid

For two or three instruments, plucked or struck
such as: harpsichord, lute, marimba, etc.

For variety in orchestration top line may be
played up an octave, or bottom lines down
an octave. Lines may also be doubled.

Mood: lyrical, relaxed

Length: piece may be extended by further
repeats.



Handwritten musical notation on three staves. The first staff contains a melodic line with eighth and sixteenth notes, including accidentals (sharps and flats). The second and third staves contain a harmonic accompaniment with quarter and half notes, also featuring accidentals. The system concludes with a double bar line.

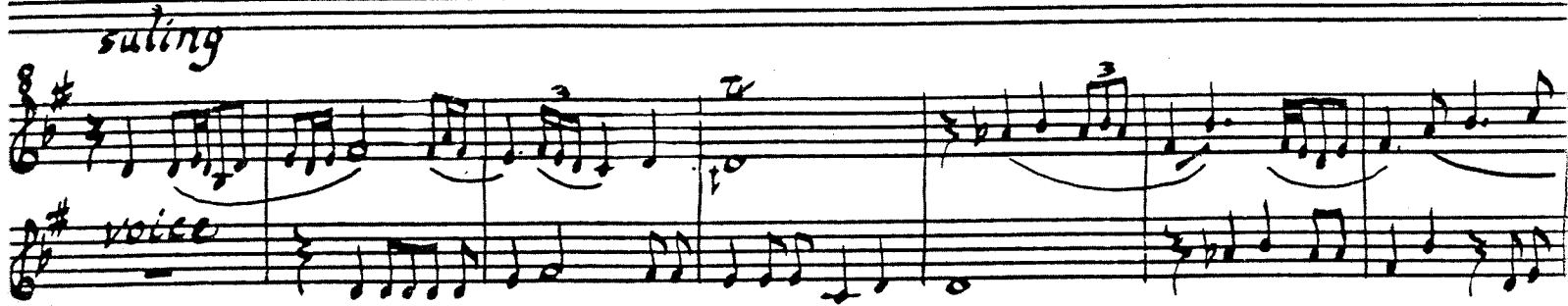
Handwritten musical notation on three staves. The first staff features a complex melodic line with many beamed sixteenth notes. The second and third staves provide a harmonic accompaniment with quarter and half notes. The system ends with a double bar line.

Handwritten musical notation on three staves. The first staff shows a melodic line with eighth notes and rests. The second and third staves contain a harmonic accompaniment with quarter and half notes. The system concludes with a double bar line.

sleeping Braid: second canon

p.1

5 1 7 3 2 5 4 7 6 2 1 4 3 6
3 6 5 1 7 3 2 5 4 7 6 2 1 4



A lullaby for Lyra to be sung on a winter day sleep soft little big-cheek
with your



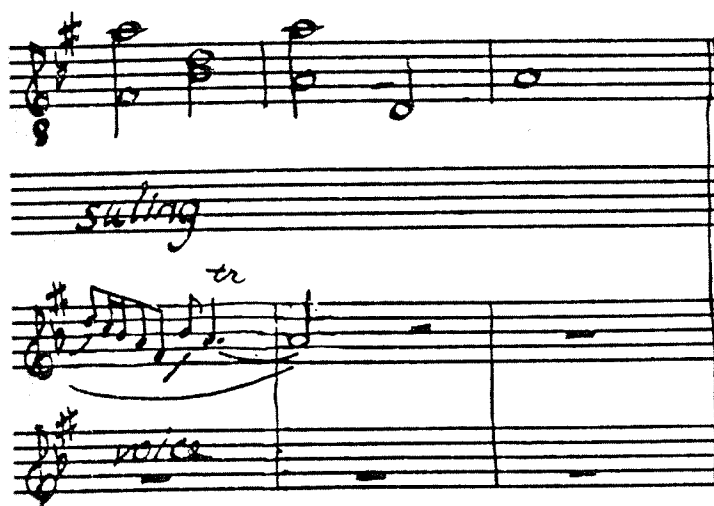
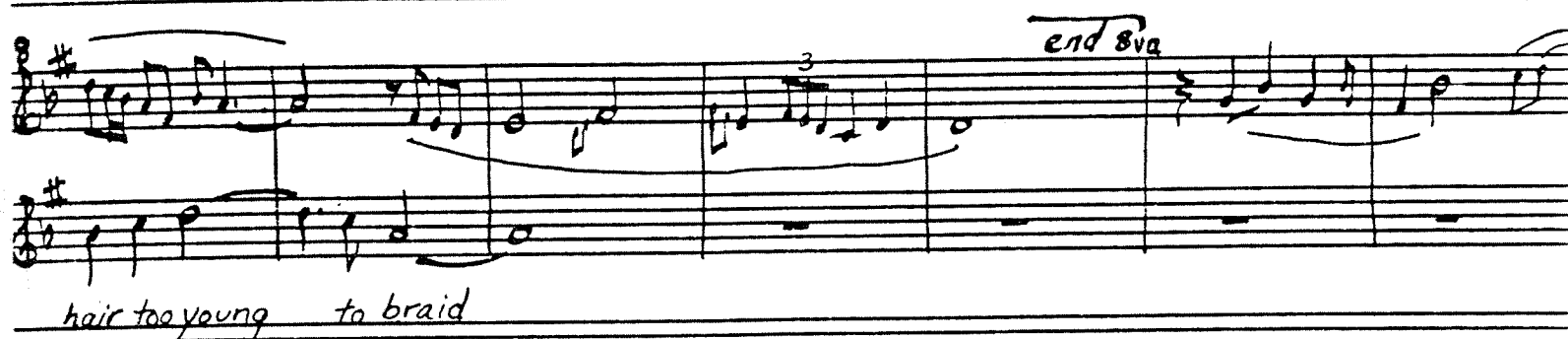
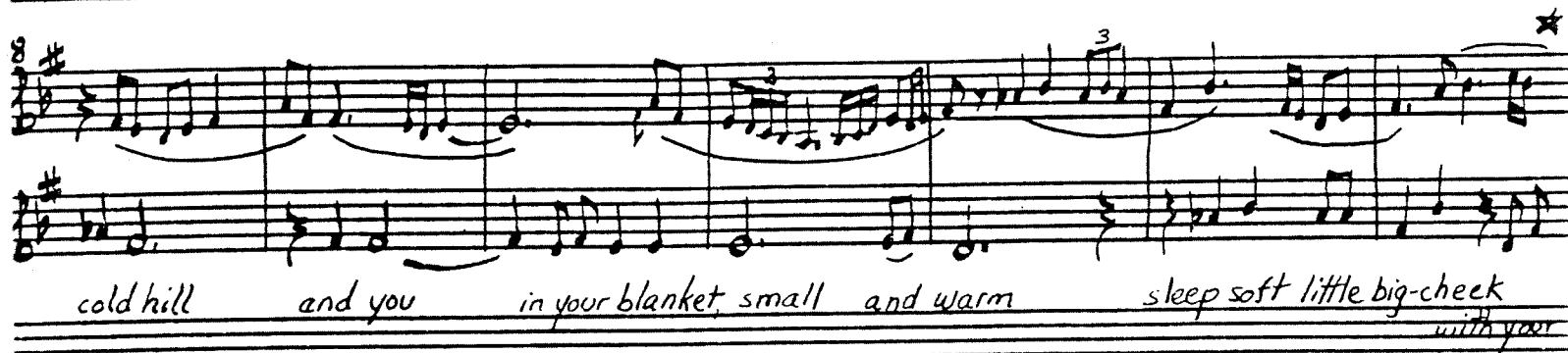
hair too young to braid brown cloud gray eyed like the dawn of a



winter day and the twigs and the little bush branches cast their shadows
across the snow, like the fall

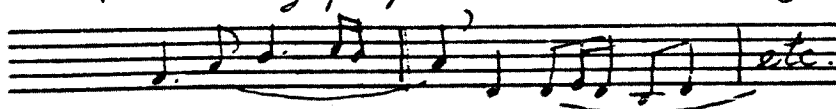


of your closed eyelashes oh the trees on the long hill, and the bushes
on the



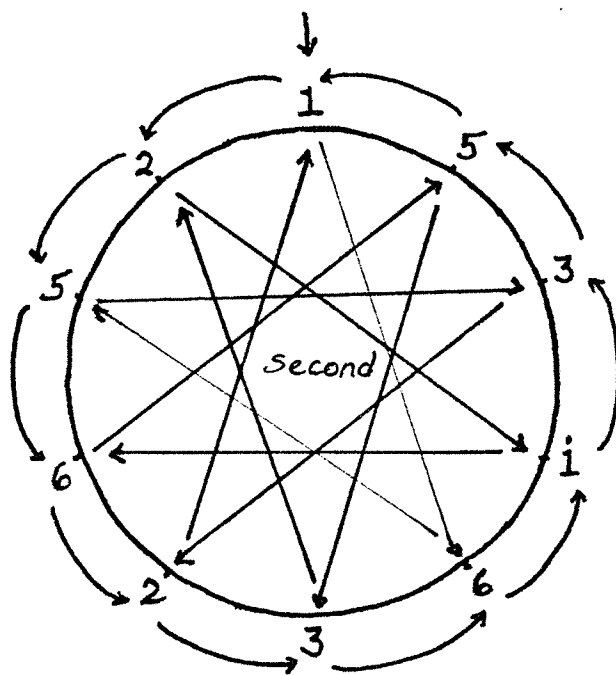
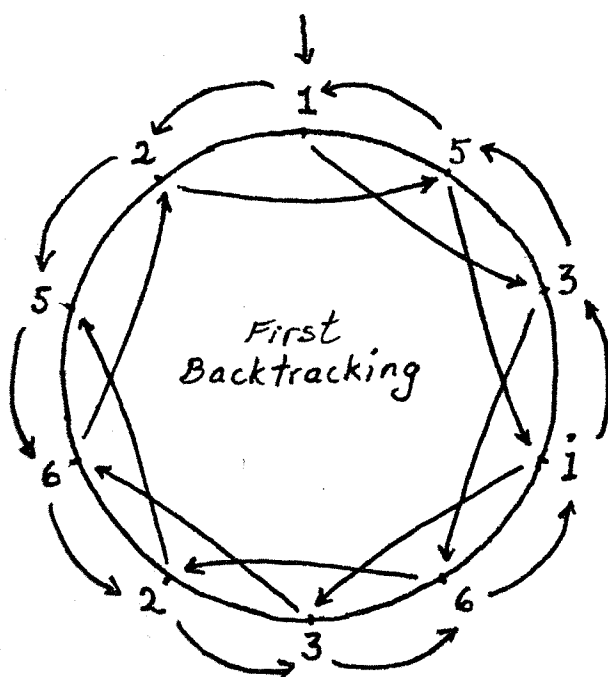
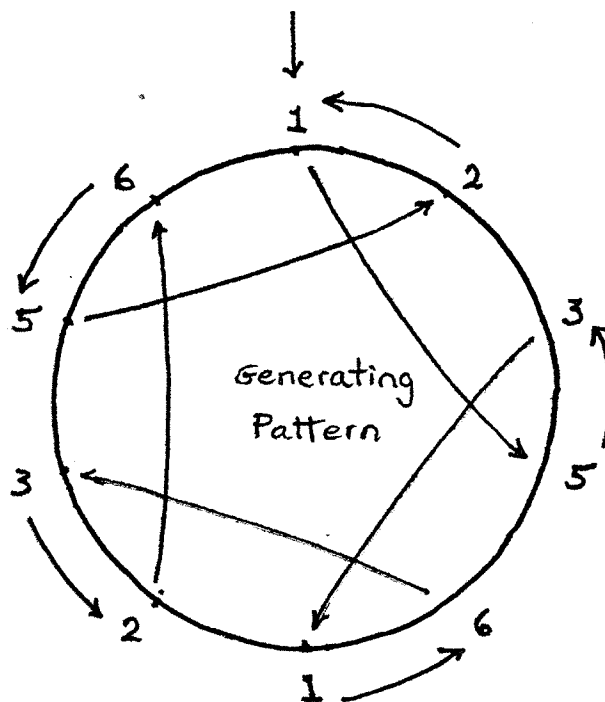
suling: notes marked
tr. may be treated
also as pulsed vibrato.
Further melismatic
touches may be
improvised.

* If suiling plays first as solo, bridge from here to beginning, thus:



Backtracking

Braid



Slendro Braid Row

1 5 3 i 6 3 2 6 5 2 (1)

BACKTRACKING BRAID

A different and more elaborate reading of the Braid chart has been used to generate this piece. The slendro row is generated in the same way as the pelog: by reading three steps clockwise and one counterclockwise around the circle, producing a 10-note row. (The 1 is occasionally read in the higher octave, for variety).

Inversions

In first section of the piece, the march-like melody is derived (as it was in Counter-Braid) by picking out notes from the repeated but unheard pitches of the Slendro Braid Row. The 16 beat melody is longer than five repeats of the row, thus modulating to the next pitch down in the slendro scale. Four more inversions of the melody follow, resolving again to the original melody. The ends and beginnings of each inversion are punctuated by kenong.

Orchestration in this section is by accumulation. Lines A are peking solo. It is joined on B by one saron, on C by one demung, on D by ketuk (off-beats) and cheng-cheng, on E by kendang.

Canon

In the second section, the five inversions are played through in canon at the interval of five beats. All other saron and demung and any other doubling instruments enter at the beginning. The melody instruments (peking included) divide into three parts - preferable in combinations of octaves, such as peking and saron; saron and demung; etc. Part 1 players play straight through. Part 2 players repeat the first line, then continue through. Part 3 players repeat the first line twice, then continue.

Throughout this section the slentem plays a ground - written beneath the balungan parts - a repeated descending scale.

The canon resolves itself in the Braid Row - all notes included - played at a rapid tempo. Kempul and gong join at this point.

Backtracking

The third section, for which the piece is named, involves a secondary process. The balungan slows and breaks into layers, higher instruments at faster speed, lower slower as in traditional karawitan, with corresponding decrescendo. The elaborating parts are generated by the process depicted on the previous page.

The "first backtracking" places a note between each note of the row by reading the wheel one step backward (counterclockwise), then two steps forward. First peking leaves the balungan and moves to this part. The next cycle around (slowing continues) it is joined by the sarons.

The "second backtracking" divides the first in half, the original notes of the row in four. It is derived by reading the wheel one, two, and three steps counterclockwise, then four steps clockwise. Peking moves to this part on the next cycle and stays there.

When all layers are in place, the tempo stabilizes; the gongan is repeated several times. This section of the piece forms the ground for "Dragon Toes," the following composition. "Dragon Toes" can in fact be performed as an insert to "Backtracking Braid," though either piece is complete in itself.

Coda

The coda is a duet. All instruments but peking drop out. Peking continues its "second backtracking" part alone. At the repeat, gambang or bonang pick out a new counter-melody from its notes. At the next repeat, peking abandons its former line and plays with the counter-melody as a unison duet.

The entire score is notated with end-beat rhythm. It can and should be performed from memory.

BACKTRACKING BRAID

Inversions

(parenthetical notes to be substituted by peking ad lib)

A	1	...6	..65	.1.3	...2	.521	.3.6	3..5	...3
		¹ 1.32	....	.3 ¹ .	32.5	.1.3	.632	.5.1	... ⁶ (53 ¹ 6)
B		...5	..53	.6.2	...1	.3 ¹ 6	.2.5	.2.3	...2
		6.21	....	.26.	21.3	.6.2	.521	.3.6	...5 (3265)
C		...3	..32	.5.1	...6	.265	.1.3	¹ 1..2	...1
		5. ¹ 6	....	.15.	¹ 6.2	.5.1	.3 ¹ 6	.2.5	...3 (2153)
D		...2	..21	.3.6	...5	.153	.6.2	6..1	...6
		3.65	....	.63.	65.1	.3.6	.265	.1.3	...2 (1632)
E		...1	..16	.2.5	...3	.632	.5.1	5..6	...5
		2.53	....	.52.	53.6	.2.5	.153	.6.2	6521

Slentem and all other balungen join on last note of inversions.
Continue without break to canon.

Canon

A	...6	..65	.1.3	...2	.521
	.3.6	3..5	...3	1.32	....
	.31.	32.5	.1.3	.632	.5.1

B	...6	...5	..53	.6.2	...1
	.316	.2.5	.2.3	...2	6.21
	....	.26.	21.3	.6.2	.521

C	.3.6	...5	...3	..32	.5.1
	...6	.265	.1.3	1..2	...1
	5.16	....	.15.	16.2	.5.1

D	.316	.2.5	...3	...2	..21
	.3.6	...5	.153	.6.2	6..1
	...6	3.65	....	.63.	65.1

E	.3.6	.265	.1.3	...2	...1
	..16	.2.5	...3	.632	.5.1
	5..6	...5	2.53	....	.52.
	53.6	.2.5	.153	.6.2	6521

A	...6	..65	.1.3	...2	.521
	.3.6	3..5	...3	1.32	....
	.31.	32.5	.1.3	.632	.5.1

braid row	5316	3265	2153	1632	6521
--------------	------	------	------	------	------

kenong	.3..	.2..	.1..	.6..	.5..
slentem	...6	...5	...3	...2	...1

G

(kenong and
slentem play
throughout)

Backtracking

all balungan																				
braid row:	5	3	[•] 1	6	3	2	6	5	2	1	5	3	[•] 1	6	3	2	6	5	2	1
slentem				6				5				3				2				1
kenong	.	3	.	.	.	2	.	.	.	[•] 1	.	.	.	6	.	.	.	5	.	.
kempul				6				5				6				5				1
gong																				G

First backtracking: balungan divides; other parts continue.
Peking, then sarons, gambang move to upper line.

2	5	1	3	5	1	3	6	[•] 1	3	6	2	3	6	2	5	6	2	5	1
5		3		[•] 1		6		3		2		6		5		2		1	

Second backtracking:
peking moves to upper line; saron, gambang stay on middle.

2565	1253	5121	35 [•] 16	[•] 1353	6 [•] 132	36 [•] 16	2365	6232	5621										
2	5	1	3	5	1	3	6	[•] 1	3	6	2	3	6	2	5	6	2	5	1
5		3		[•] 1		6		3		2		6		5		2		1	

Coda (first time peking line alone, then both parts,
third time peking joins gambang on top line.)

gambang	...5	..53	.1.1	...6	.353	. [•] 1.2	3..6	...5
peking	2565	1253	5121	35 [•] 16	1353	6 [•] 132	36 [•] 16	2365
	6.32	....	.56.	12.3	.121	.5.6	[•] 1...3	6.32
	6232	5621	2565	1253	5121	35 [•] 16	[•] 1353	6 [•] 132
	.6..	2365	..32	5...1				
	36 [•] 16	2365	6232	5621				

DRAGON TOES

My little friend
My child, but also my friend
Fellow-traveller walking by my side
 or in my arms and sleeping for the ride
My little child, my friend

Tiny toys and Dragon Toes
 and many clothes
Strange that one so young should own
 so many things
Waterfalls and plastic rings
Equal brightness to your eyes

This world of words and songs and sings
 and things you can say
Telling parents: I can do it by myself
 by myself, I can do it all alone-
You help me.

Fellow-traveller skipping by my side
Shall I give you ponytails
For your brown-eyed, honey-colored hair
Waterfalls and ponytails
For your brown-eyed, honey-colored hair

This is a follow-up piece (1980-81) to Sleeping Braid. The poem is for Lyra again, who at this time is age three. The title refers to a favorite possession of hers at that time: a pair of blue silk Chinese slippers with dragon faces on the toes, which she wore to death long before she was four. The imagery provided by Lyra herself during a visit to the falls at Wadsworth Park (Ct), and also to Auden who describes the child so small beside enormous words...

"Dragon Toes" is an extrapolation of the slow section of the preceding piece, "Backtracking Braid." Over the texture provided by the gamelan is added a chart of structured improvisation, to be realized by vocalist, suling, chung-hu (or rebab) - or any combination of the three.

The improvisation lies in the instrumental soloists' choice of sequence of phrases. The phrases are based upon the Javanese concept of cengkok. Cengkok are the vocabulary out of which panerusen (elaborating) instrumental parts and vocal parts are built. The Javanese cengkok - different and idiomatic for each instrument - each have individual names. They provide melodic elaboration linking each slow note of the balungan instruments to the next, bridging from pitch center to pitch center. The phrases are usually transposable up or down a pitch. Different instruments play their own different cengkok simultaneously, giving the impression of an ongoing texture with a great deal of irregular repetition.

The cengkok I use are not traditional. They are named for, and derived from, key words in certain vocal phrases of the song. There are seven of them, each transposed to the five degrees of the slendro scale. As with Javanese cengkok, they must be played at the right time, joining the tonal centers of the slentem part (a slow, descending scale).

Ideally instrumental soloists improvise their obbligate from the large score of cengkok, although a composed sequence is provided, in staff notation, along with vocal score. The two soloists can either take turn doing sections of predetermined length, or they can imitate each other in canon, using appropriate transpositions. The third possibility is to do non-imitative simultaneous or overlapping playing of different appropriate cengkok.

The song, which is not improvisatory. An alto and soprano version are provided. It can be performed with the set instrumental parts provided, or it can follow an improvised instrumental introduction.

To use the cengkok chart, read across the two pages, always keeping track of the whereabouts of the slentem. Skip freely up or down the staff between cengkok. Note that the slentem part repeats itself midway (middle of second line). It is okay to skip between the slentem part in one half and the other half, thus giving more variety to the cengkok sequence.

The piece begins with the gamelan part: four octaves of balungan plus kempuls 5, 6 and 1, and gong. Peking enters first, then on its second cycle (repeat top line) saron enters; on the next cycle demung; on the next slentem. The slentem's cycle is twice as long as the others; at the end of one slentem cycle (both lines) gong and kempul enter. Obbligatos and/or vocal solo enter only after one full gongan.

peking	2565	1253	5121	3516	1353	6132	3616	2365	6232	5621
saron	2 5	1 3	5 1	3 6	1 3	6 2	3 6	2 5	6 2	5 1
demung	5	3	1	6	3	2	6	5	2	1
slentem	.	.	.	6	.	.	.	5	.	.
kempul	.	.	.	6	.	.	.	5	.	.
gong										

2565	1253	5121	3516	1353	6132	3616	2365	6232	5621										
2	5	1	3	5	1	3	6	1	3	6	2	3	6	2	5	6	2	5	1
5		3		1		6		3		2		6		5		2		1	
.		3		.		.		.		2		.		.		.		1	
.		6		.		.		.		5		.		.		.		1	
																			G

①

6

Dragon Toes (short)	.. .. ..	.. .. ..	.. 13 5. .i	65 3. 3. ..
Dragon Toes (long)	.. 25 6. .2	12 56 12 3.	36 53 21 23	36 6.
Ponytails	.. 22 2. .5	12 1. .. 1216	5. 565 35 62	6.
World of Words	.. 5. 6. 1.	2. .3 5. .6	i. .2 32 i. .5 i6 5.	6. 3.
Friend	.. .. .6 62	1. .. .. ..	.6 12 3..2 1.	6.
Traveller	.. .. .12 321	65 56 1. ..	.5 56 1..23236	3.
Independence	.. 56 12 35	53 23 1. .3	1. .3 16 5612	6.

2

①

DT-s	.. .. ..	.. .. ..	.. 25 6. .2	12 5. 5. ..
DT-1	.. 36 i. .3	23 61 23 5.	5i 65 32 35	51 121 5. ..
P	.. 33 3. 6.	23 2. .. 2321	6. 6. 53561216	1.
WW	.. 6. 1. 2.	3. .5 6. .i	2. .6 2i 6.	5.
F	.. .. .1 13	2. .. .. ..	.1 23 56.5 32	1.
T	.. .. .23 532	16 61 2. ..	.6 61 2..12161	5.
I	.. 61 23 56	65 353 2. .5	2. .5 21 6561	1.

3

2

DT-s	.. .. ..	.. .. ..	.. 36 i. .3	23 6.
DT-1	.. 51 2. .5	35 12 35 6.	62 i6 53 56	62 2.
P	.. 55 5. i.	35 3. .. 32	1. 1. 65 62	2.
WW	.. 1. 2. 3.	5. .6 1. .2	3. .5 65 3.	2.
F	.. .. .2 25	3. .. .. ..	.2 35 6..535.3	2.
T	.. .. .35 653	21 12 3. ..	.1 12 3..23212	5.
I	.. 12 35 6i	i6 56 3. .6	3. .6 32 1612	2.

				5				3								
DT-s	5i	2.	.5	3..2	1.	1.	..			
DT-1	..	62	3.	.6	56	23	56	i.	i3	2i	65	6i	i3	3.	..	..
P	..	66	6.	i.	56	5.	..	53	2.	2.	16	123	3.	..	..	..
WW3	35	6.	.1	2.	.3	5.	.6	i6	565	3.	..	..	..
F3	36	5.	..	..	..	.3	56	1..656.5	3.	..	..	..	..
T56	165	32	23	5.	..	.2	23	5..32123	3.	..	..	..	..
I	..	23	56	i2	2i	6i	5.	.i	5.	.i	5i532123	3.	..	..	..	..

				6				5								
DT-s	62	3.	.6	56	2.	..	..
DT-1	..	12	3.	1.	61	35	61	2.	25	32	16	12	25	5.	..	..
P	..	11	1.	2.	61	6.	..	65	3.	3.	21	25	5.	..	..	..
WW	..	3.	5.	6.	1.	.2	3.	.5	6.	.1	21	6.	5.	..	..	..
F5	51	6.	..	..	..	.5	61	21	6.	5.	..	..	..
T61	216	53	35	6.	..	.3	35	6..56535	2.	..	..	..	..
I	..	35	61	23	32	12	6.	.2	6.	.2	65	3235	5.	..	..	..

Dragon Toes

For ease in checking against staff notation,
this page is written with downbeats, not
endbeats.

Dragon Toes (short)

Dragon Toes (long)

Ponytails

World of Words

Friend

Traveller

Independence

DT-s

DT-1

P

WW

F

T

I

DT-s

DT-1

P

WW

F

T

I

5

DT-s

DT-1

P

WW

F

T

I

6

5

DT-s

DT-1

P

WW

F

T

I

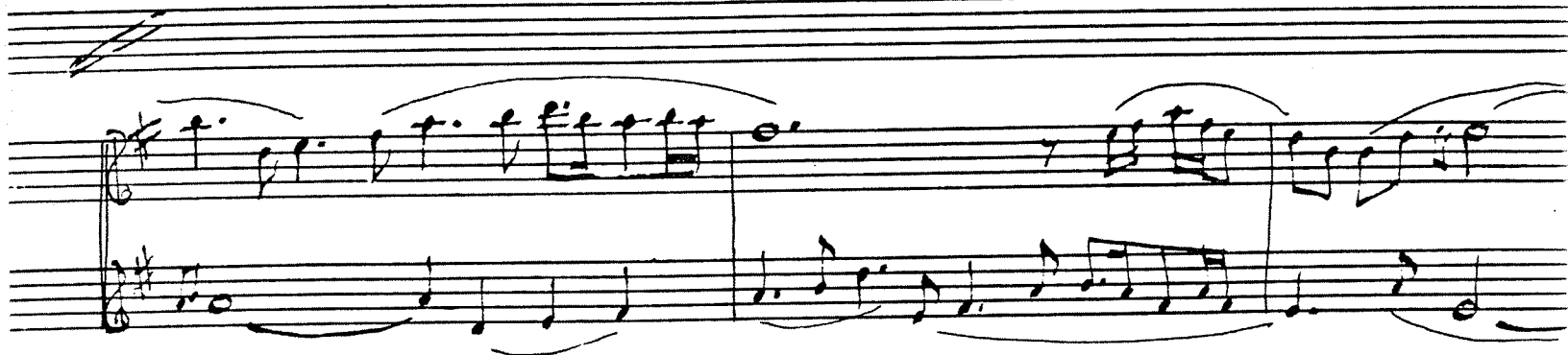
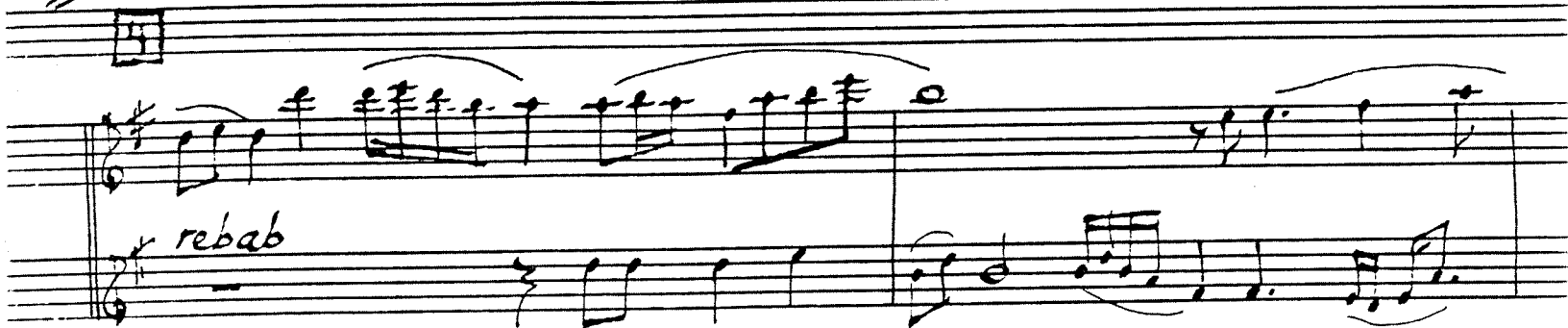
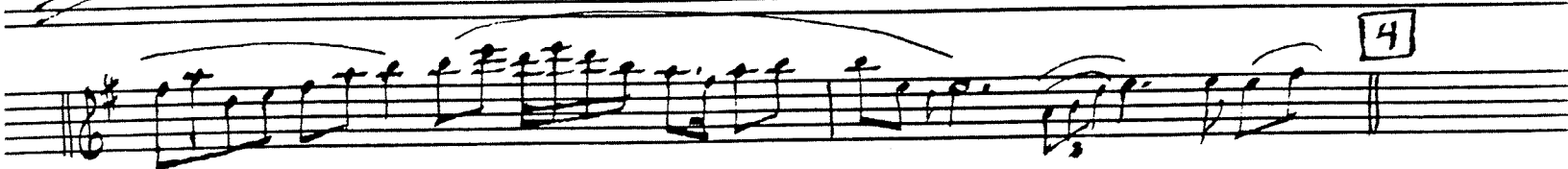
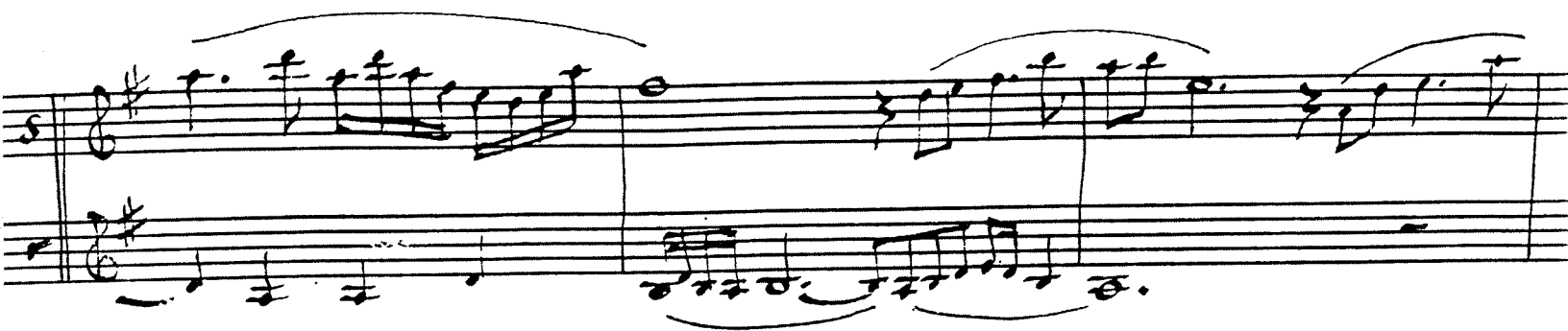
Dragon Toes

voice and
obbligato(s)

suling:

cue:

Dragon Toes



Dragon Toes

Handwritten musical score for 'Dragon Toes'. The score is written on four systems of two staves each, using a treble and bass clef with a key signature of one sharp (F#). The music features various note values, including eighth and sixteenth notes, and rests. There are several measures with triplets and some measures with a '2' above them, possibly indicating a second ending or a specific fingering. The score ends with a double bar line and a box containing the number 7, indicating the end of the piece or a section.

note: if going on to alto version of song, suling continues differently at 7

7

rebab

MY LITTLE FRIEND

Dragon Toes

soprano

TINY TOYS AND DRAGON TOES AND MANY CLOTHES, STRANGE THAT ONE SO YOUNG SHOULD OWN SO

This system contains the first two measures of the song. The melody is written on a single staff in G major (one sharp) and 4/4 time. The lyrics are written below the notes.

MANY THINGS. WATERFALLS AND PLASTIC RINGS, EQUAL BRIGHTNESS TO YOUR

suling

This system contains the next two measures. The melody continues on the same staff. The word 'suling' is written below the staff, under the word 'RINGS'.

10
(0)
EYES

This system contains the next two measures. The melody continues on the same staff. The number '10' is in a box above the first measure, and '(0)' is above the second measure. The word 'EYES' is written below the first measure.

THIS WORLD OF WORDS AND

This system contains the next two measures. The melody continues on the same staff. The lyrics 'THIS WORLD OF WORDS AND' are written below the notes.

11
SONGS AND SINGS AND THINGS YOU CAN SAY TELLING PARENTS - I CAN

This system contains the final two measures of the song. The melody continues on the same staff. The number '11' is in a box above the first measure. The lyrics 'SONGS AND SINGS AND THINGS YOU CAN SAY TELLING PARENTS - I CAN' are written below the notes.

Dragon Toes

Soprano

DO IT BY MYSELF, BY MYSELF, I CAN DO IT ALL A- LONE. YOU HELP ME.

suling

rebab

FELLOW TRAVELER SKIPPING BY MY SIDE, SHALL I GIVE YOU PONYTAILS FOR YOUR

12

BROWN EYED, HONEY COLORED HAIR? WATERFALLS AND

18

(end song)

PONYTAILS FOR YOUR BROWNEYED, HONEY COLORED HAIR?

end 8va

36

Dragon Toes

(soprano)



13



(end obbligato)

Dragon Toes

alto

7

MY LITTLE FRIEND

MY CHILD BUT ALSO

my

suling

FRIEND

FELLOW TRAVELER WALKING BY MY SIDE

OR IN MY ARMS AND SLEEPING

FOR THE RIDE

MY LITTLE CHILD, MY

8

FRIEND

rebab

TINY TOYS AND DRAGON TOES

TINY TOYS AND

9

DRAGON TOES AND MANY CLOTHES

STRANGE THAT ONE SO YOUNG SHOULD OWN SO

Dragon Toes

MANY THINGS. WATERFALLS AND PLASTIC RINGS EQUAL BRIGHTNESS TO *alto*

suling

YOUR EYES

10

THIS WORLD OF

Dragon Toes

17

alto

WORDS AND SONGS AND SINGS AND THINGS YOU CAN SAY TELLING PARENTS I CAN

DO IT BY MYSELF BY MYSELF I CAN DO IT ALL A- LONE. YOU HELP ME

12

FELLOW TRAVELER WALKING BY MY SIDE, SHALL I GIVE YOU

Dragon Toes

alto

PONYTAILS

FOR YOUR BROWN EYED, HONEY COLORED HAIR?

WATERFALLS AND

Handwritten musical score for the first system of 'Dragon Toes'. It consists of three staves: a vocal staff in treble clef with a key signature of one sharp (F#), and two piano accompaniment staves in treble and bass clefs. The music is in 4/4 time. The vocal line begins with a quarter rest, followed by a series of eighth and quarter notes. The piano accompaniment features a steady eighth-note pattern in the right hand and a more complex bass line in the left hand. The system ends with a double bar line.

PONYTAILS

FOR YOUR BROWN EYED, HONEY COLORED

13

HAIR?

(end song)

Handwritten musical score for the second system of 'Dragon Toes'. It continues the three-staff format. The vocal line has a quarter rest followed by eighth and quarter notes. The piano accompaniment continues with eighth-note patterns. A double bar line is placed after the first measure of the piano accompaniment, with a box containing the number '13' above it. The system concludes with a final measure of the piano accompaniment.

Handwritten musical score for the third system of 'Dragon Toes'. It continues the three-staff format. The vocal line features a series of eighth and quarter notes. The piano accompaniment consists of eighth-note patterns in both hands. The system ends with a double bar line.

Handwritten musical score for the fourth system of 'Dragon Toes'. It continues the three-staff format. The vocal line has a quarter rest followed by eighth and quarter notes. The piano accompaniment features eighth-note patterns. A double bar line is placed after the first measure of the piano accompaniment, with a box containing the number '14' above it. The system concludes with a final measure of the piano accompaniment.

(end
obbligato)



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