

An Analysis of Tayutai for Koto (1972)
Composed by Makoto Shinohara.
A 3-dimensional Approach

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ABSTRACT

In 1972 the Japanese composer, Makoto Shinohara wrote "Tayutai" (Fluctuations) for koto, percussion instruments and voice. This text contains a detailed analysis based on the hypothesis that three approaches have been neatly synthesized in the work: the application of traditional Japanese techniques, the influence of Darmstadt-like serial developments as well as a purely experimental approach.

I. TAYUTAI

This work was written by the Japanese composer, Makoto Shinohara (born in 1931, currently residing in Utrecht, The Netherlands) for koto, voice, and various percussion instruments: Chinese shell chimes, Japanese bamboo chimes, urchin chimes from The Philippines, 2 high-pitched wooden boards or boxes and two stone plates (various pitches). The koto player, who plays the percussion part and is equipped with 2 sets of koto plectra, 1 pair of rubber, wooden and plastic sticks and one cembalom stick, is expected to perform the vocal part as well, although this work may also be performed as a duo. The duration, due to the use of visual notation, has no fixed length. A sum of the called-for time lengths is 6'20, yet performances have lasted up to 7'20.

The piece has been chosen for analysis, not only due to its experimental nature, but also due to its binds with specific traditions. It is in fact this meeting of the experimental with the traditional that will be focused upon. The published score (Zen-on Music, Tokyo) and two recordings of the work have been consulted for analysis: first, the solo version as recorded by Akiko Nishigata (JVC-Victor [Japan] K VX-1102) and a non-published recording of a concert at the San Francisco Museum of Contemporary Art (1978) at which the composer performed together with the vocalist, John Duykers.

Tayutai means fluctuation. As Shinohara has written in the program for the San Francisco concert, "The piece represents the psychological fluctuation between hope and despair and has an introspective character." This confrontation of hope and despair is most evident in the vocal part consisting of isolated single words vocalized (sung, spoken and using techniques approaching *Sprechgesang*); yet this conflict can be found in the instrumental parts as well as will be discussed below.

The work will be presented as follows: first the three dimensions implied by this article's title will be introduced in Part II; the three "voices" will then be analyzed, first separately, and then as a whole. After these analyses, the three dimensions will be discussed separately as a re-analysis of the work. Finally, a concluding section will briefly compare *Tayutai* with other Shinohara compositions which might be looked into similarly.

II. THE HYPOTHESIS - A THREE DIMENSIONAL ANALYSIS

It is the opinion of the author that *Tayutai* can be viewed as a work synthesizing three different compositional ways of thinking: (1) that which can be found in traditional Japanese music (and in fact in other distinctly different traditions as well!), (2) that of post-World War II Europe, i.e., techniques developed in Darmstadt, and (3) that of experimental, music which involves laboratory work, be it aleatoric or, alternatively, large-scale pre-compositional experimental development.

The choice of these three "dimensions" is in essence an obvious one. Shinohara is learned in koto techniques and is thus able to use and experimentally "abuse" this instrument musically. The addition of percussive sounds is, according to the composer, hardly revolutionary. In a conversation in June 1984, he spoke of a *noise factor* inherent to much traditional Japanese music. As there are no specific pitches called for in the percussion parts, as many of these sounds are unpitched, as many koto sounds are percussive in nature in the work, this *noise factor* can be said to be highly present. Further the combination of voice and koto is a common one, although we will see that the employed vocal techniques are not traditional ones.

The Darmstadt element is particularly understandable when regarding the fact that the composer studied in the late 50s with Messiaen, worked as Stockhausen's assistant in 1965 and has moved around "Darmstadt circles" for more than two decades. Although the accent on diverse timbral changes in this work may be influenced by a Japanese heritage, the research of the 1950s and 60s in Darmstadt in structuring timbre is nevertheless shadowed in a great deal of Shinohara's compositions.

Finally the experimental is most likely the germ-cell from which *Tayutai* has grown. The large research leading to the collection of possible timbres and sound combinations in this very colorful work shall form the basis of proof that experimentation played a major role in the piece's conception and in its architecture. Although it is premature to make a comparison, one of the reasons which brought the writer to look closely at this composition was the playful hypothesis that *Tayutai* was actually the missing *Sequenza Jū* (ten, in Japanese) for koto.

Before it can be proven how evident this 3-dimensional hypothesis is, the piece will first be analyzed in descriptive terms.

III. A DESCRIPTIVE ANALYSIS

1. The Score

While following this descriptive analysis, the reader is requested to consult the score and the two charts printed below as the following texts will only complete that which is notated on the charts. Rehearsal numbers have been added onto the published version of *Tayutai* for convenience. Charts 1A and 1B correspond to Parts 2, 3 and 4 of this section; Chart 2 belongs to Part. 5.

Before embarking on the koto part, a few words from the composer might be of relevance. Shinohara mentioned in the 1984 conversation that, when composing this work, he began by collecting his materials, building what might be considered to be a data bank from which he did not need to use all collected possibilities. Once this was completed, the architectural phase of the work began. Shinohara claims to be less strictly formalistic than his colleague, Stockhausen, in his work and advised not to try to find a non-implied superstructure in the piece. Instead, he spoke of almost independent links of a chain. Interestingly, the koto part was written completely before the percussion and vocal parts were added. This sort of independent construction is not unique to *Tayutai* as will be discovered in the conclusion. Still, the latter parts can by no means be seen as an accompaniment to a koto solo, for the analysis of the vocal part will show that Shinohara is almost constantly involved in a modern form of word painting – the koto is but one element hereof.

2. The Koto Part

Tuning: One of the most unusual characteristics of the koto part is its tuning (see the prose descriptive page of the score). At reh. num. A not all twelve pitches are present; the IVth string is temporarily tuned to D sharp so that the first truly important tone-center, E, can be approached from close by. At reh. num. B, the IVth string is tuned via B flat to its permanent pitch, A. At this point all twelve tones are present with only one doubling (triple octave), G sharp, on strings III and XIII. At this point the tuning is vaguely Bergian, following the four-interval pattern m2, P4, m2, P5... In this way these intervals plus the tritone and m6 are quite present, yielding intervallic contrast between consonant and dissonant adjacent and alternating strings. Suffice it to say that this tuning is a major deviation from traditional koto tunings.

CHART 1A
KOTO & PERCUSSION PARTS
Descriptive Typology / Rehearsal Number

REH	SUM	TIME	DEN-	Description ¹⁾
NUM	TIME	LEN.	SITY	
A	0'00	34"	1	K:1 – accent on timbre
B	0'34	30"	1-4-1	K:1 – retune IV D sharp-B flat-A; KP:4 – at the end.
C	1'04	21"	1-4	K:2 – establishment of three of the primary tones, A, E, F; then P:wo – <i>gagaku</i> -like accelerando percussive effect [with less traditional mirror rit. and unexpected <i>f</i> > <i>pp</i> decresc.]; change of ambiance; percussion cues <i>utsuro</i> .
D	1'25	7"	5	KP:1,3 – irregular rhythm; grace notes = double fifth A-E- B; rubber sticks used.
E	1'32	14"	6	KP:5 – rub strings with plastic stick handle + tremolo underside koto -> continuity & exchange with vocal part.
F	1'46	5"	6-0	KP:5 – rub strings to the right of the bridge with wo. stick edge [answer to <i>osore</i>]; the first tacet.
G	1'51	12"	1-0	P:wo, b.ch. – two loose sounds; an interruption in the ten- sion derived from the first silence; answered by <i>kanashi</i> and further silence.
H	2'03	15"	1	K:2 – tonal fluctuation, ambiguity (fifths above D sharp, E).
I	2'18	12"	1	K:1 – voice departs on the same note.
J	2'30	4"	5	KP:6 – fluctuation via clusters (use of rubber stick handle); similar to reh. nums. D, K, S.
K	2'34	12"	2-6	K:1,3 – Two hands – two playing techniques: single note tremolo, chords of 5,6,5,6,7,8,9 notes (fluctuating).
L	2'46	17"	6	K:1 – contin. of reh. num. K (voice departs on this note); and KP:4 – on three different strings.
M	3'03	12"	1	P:u.ch – punctuation of end of tremolo; radical change of atmosphere -> 2 x <i>naze</i> .
N	3'15	7"	5	K:5 – first non-chordal atonal fragment.
O	3'22	9"	6	KP:5 – similar to reh. num. E; plastic stick rubs strings vio- lently; other hand strikes underside of koto quickly, irregu- larly (here similarity to reh. num. K – two hands, two parts).
P	3'31	2"	1	P:st – shortest segment = 1 note interruption of continuity between reh. nums. O, Q; announcement of <i>midare</i> ; extre- mely Japanese form of interruption: a discrete, dynamic unpitched sound breaking up a continuum.
Q	3'33	6"	6	KP:5 – continuation of reh. num. O.
R	3'39	3"	4	KP:4 – functions with respect to reh. num. Q as reh. num. F is to reh. num. E; note unusual use of plastic stick handle, and P:st – similar to reh. num. P (i.e. end of disorder); also very short – here not as interruption, but instead as bridge.
S	3'42	6"	2	K:3 – see also reh. nums. J, K: quasi-clusters, all 6 notes wide; fluctuating lowest note (2 chords descend, 1 ascends, and then 3 descend); as reh. nums. J, K <i>ff</i> .

T	3'48	7"	1	P:wo x 2, st x 1 – three loose notes – influenced by <i>ikari</i> , percussive objects are struck at their loudest; breaking up of continuity.
U	3'55	7"	5-0	KP:1,3 – use of freely bouncing plastic stick; similar to the six note chords at reh. num. S – here arpeggiated.
V	4'02	8"	5-0	K:1, P:st – single note accelerando with Japanese closing punctuation via percussive stroke (although the expected dynamics are reversed!); unique segment surrounded by silence – preparation for reh. num. W.
W	4'10	13"	6	K:6 – two hands, two techniques (see also reh. nums. K, O, and Q); nervous equivalent of vocal part.
X	4'23	23"	1	K:1 – on note where voice has arrived at reh. num. W; and KP:1 – for timbral variation; the longest segment after the introduction (reh. nums. B, C); point of reflection between textual negative and positive; beginning of dynamic rest.
Y	4'46	16"	1	K:2,1 + final glissando – first moment of tonal ambiguity and fluctuation since reh. num. H; resolution on the unex- pected note G, although the voice takes over the F at this point; end dynamic rest; only reh. num. which could be divided into two separate parts.
Z	5'02	34"	2-3	K:4, KP:2 – ostinato note is first note in vocal part; segment with the largest register (instrument and voice) and widest dynamic range of the entire work; arrival at dynamic climax of work (end of reh. num. Z); only point of piece defying any form of symmetry.
AA	5'36	22"	6-0- 6-0	KP:5 – similar to reh. num. F; and P: all three ch's – inevitable explosion after reh. num. Z; only use of all three chimes at once; return to tranquility as in the introduction of the work.
BB	5'58	20"	1	K:1 – see beginning; koto tacets before final word.
end	6'18			

1) For the key: see text; for pitches and dynamics, see Chart 2.

Key to Chart 1A: For the first three columns see the score.

Density:	0	- Tacet
	1	- Very few notes (less than one /second)
	
	5	- Very many notes (ca. 10 / second)
	6	- Sound continuum
Descr.:	K:1	- Koto: one specific tone-center (or at most two); each note has a different color; several dynamic changes; tone repetition.
	K:2	- Koto: chordal passage with a tonal basis.
	K:3	- Koto: chordal passage lacking influence by one or two central tones - approaching atonality.
	K:4	- Koto: combination of K:2, K:3 - chordal (may be arpeggiated), somewhat atonal, but repeating a constant lowest pitch.
	K:5	- Koto: atonal passage.
	K:6	- Koto: continuity of sound with free choice of pitches.
	KP:1	- Percussive koto technique: an extra timbre is added through the use of (a) stick(s).
	KP:2	- Percussive koto technique: Bartók pizzicato.
	KP:3	- Percussive koto technique: atonal passage.
	KP:4	- Percussive koto technique: unpitched - <i>suri-zume</i> .
	KP:5	- Percussive koto technique: other unpitched percussive continuity, including use of plectrum.
	KP:6	- Percussive koto technique: clusters (atonal, aggregate effect).
	P:wo	- Percussion: wooden board(s) or box(es).
	P:st	- Percussion: stone plate(s).
	P:sh.ch, b.ch, u.ch	- Percussion: respectively shell chimes, bamboo chimes and urchin chimes.

Key to Chart 1B: For the first three columns, see score.

Fourth column:	p=pitched, rp=relatively pitched.
Fifth column:	0=no glissado, 1=rising, 2=falling and 3=both rising and falling motion.
Description:	'-' (hyphen) means that at least two rehearsal numbers form a group as far as text treatment is concerned.

CHART 1B
VOCAL PART

Descriptive Typology / Word + Interpretation

REH NUM	JAPANESE WORD	ENGLISH TRANSL.	PITCHED/ REL.PITCH	GLISS- ANDOS	DESCRIPTION ¹⁾
A	<i>hitori</i>	alone	rp	0	- First 5 words = introduction;
+A	<i>iru</i>	being	rp	0	- word painting minimal
B	<i>yūbe</i>	evening	rp	1	- continuity is suggestive of Japanese <i>haiku</i> , with <i>yūbe</i> being a special concrete word;
C	<i>urei</i>	anxiety	rp	0	- ambiguous, calm atmosphere; first evidence of "psychological fluctuation...";
+C	<i>utsuro</i>	emptiness	rp	0	- this word staccato with light separation of syllables: solo followed by silence -> emptiness.
D	<i>tanomi</i>	hope	rp	0	staccato; great separation of syllables; first real exchange with koto; hope confronts first dissonant, disordered fragment.
E	<i>osore</i>	fear	p	3	quasi-hocket with koto with repetition of syllable sounds (oso-o-re-e). A sonorous fear in both parts - counterpart of previous hope.
(F)					
G	<i>kanashi</i>	sad	rp	0	half-whisper, introverted (solo) sadness.
H					
I	<i>omoi</i>	thought	p	1	- voice prominent above constant koto tone; a rising thought leading to...
+I	<i>kirameki</i>	sparkle	p	0	- ...sparkling in acceleration answered (psychological contrast) even more dynamically by koto clusters.
(J)					
K	<i>nozomi</i>	wish	p	1	- again a psychological coupling with nervous koto playing with addition of drone; here the wish is accompanied by a similar atonal disorder/dissonance -> tension, leading to...
L	<i>munashi</i>	vain	p	2	- ... a descending "in vain" accompanied only by the tremelo drone.
M	<i>naze x 2</i>	why	rp	0	twice articulated at approximately the halfway point of the piece. An illusion to Berio's <i>why?</i> in "Sequenza V"? First <i>naze</i> arrives after first truly percussive explosion; second gains impact due to a koto tacet; symmetry point-1.
N	<i>mayoi</i>	hesitation	rp	0	staccato with separated syllables; hocket-like hesitations with the koto.
O	<i>kurushimi</i>	suffer	p	(3)	- tremolo nervous suffering, amplified arhythmically by koto; followed, after a sharp percussive explosion, by...
(P)					

Q	<i>midare</i>	disorder	p	(3)	- ...an equally nervous <i>midare</i> (an important term in koto literature) in the same ambience; the inevitable end to the disorder is the noise-amplifying <i>suri-zume</i> along the low strings; symmetry point-2.
(R)					
S	<i>ikari</i>	anger	rp	0	continuity followed by discreteness; similar atonal ambience as at reh. num. K (wish); local dynamic climax.
(T)					
U	<i>kokoro</i>	heart	rp	0	three isolated heart beats between two nervous areas (reh. nums. O-S, W); also placed between non-rhythmical isolated koto fragments; second concrete word in piece -> most poetic moment since reh. num. C.
(V)					
W	<i>nayami</i>	trouble	p	2(,3)	literal trembling in all parts
X	<i>tayutai</i>	fluctuation	p	0(!)	- ironically stable fluctuation; only the koto F sharps fluctuate; turning point between several negative and positive words in text; music reminiscent of beginning of piece.
Y	<i>akogare</i>	yearning	p	0	two single tones (voice - F, koto - primarily G) striving for consonance.
Z	<i>yorokobi</i>	joy	p	1	- as joy leads to radiance, the largest glissando, widest vocal and koto ranges are presented...
+Z	<i>kagayaki</i>	radiance	p	1	- ...leading to the dynamic climax of the work - confirmed by percussive chime explosion at the beginning of the following reh. num. AA.
AA	<i>tomoshihi</i>	light	rp	0	- conclusion (four words) similar to introduction; relative calm; isolated sounds, each of great coloristic importance;
+AA	<i>furusato</i>	home	rp	0	- home = third concrete word -> more poetic influence - made clear through delivery in silence;
BB	<i>negai</i>	desire	p	0	- interval between voice and koto is inversion of reh. num. Y; half-whisper = sound of desire;
+BB	<i>ai</i>	love	rp	0	- as "home", in total silence; possible happy ending left to the discretion of the listener.

1) For the key: see text; for pitches and dynamics, see Chart 2.

Techniques: It is here that East meets West most frequently. The koto notation list (point 5 of the descriptive page of the score) names a few traditional koto techniques as well as a number of "new fashioned" notational symbols (Bartók pizz., quarter-tone symbols, clusters, etc.).

As far as the Japanese techniques are concerned, for the sake of completeness Willem Adriaansz's well-known reference has been consulted (*The Kumiuta and Danmoto: Traditions of Japanese Koto Music*. Berkeley: University of California Press, 1973). Only four traditional left hand techniques were found that had not been specified by the composer:

- *En*; e.g., reh. num. A - 2nd note: pitch is raised to next higher tone in the scale after being plucked.

Kasaneoshi; e.g., reh. num. A - 3rd note: pitch after being plucked is pressed down, released and pressed down again.

Oshihanashi; e.g., reh. num. B - 2nd note: pitch is raised and let loose before following tone.

Ichijū oshi; found relatively often - here a string is raised a m2 before being played.

There were no non-notated right hand techniques found that were apparently derived from traditional koto literature.

3. The Percussion Part + Percussive Koto Effects

As mentioned above, "noise effects", although a relatively unimportant part of traditional koto music, are seen by the composer to be a "natural extension" of pitched, highly timbral material in Japanese music in general. In *Tayutai*, this extension can be found in the form of extended koto techniques and in the fact that the koto player is requested to occasionally utilize a modest assortment of percussion instruments. A quick inspection of Chart 1A shows the following: in the description, percussive koto effects (KP) are more common than purely percussive sounds (P). In the former case, half of the extensions are pitched and can be seen as coloristic augmentations to koto techniques. The non-pitched, or highly atonal koto-percussive sounds (KP:4-6, KP:3) are, with exception of a drum-like approach to the instrument (reh. nums. E, O and Q), also coloristic extensions which can be easily related to the traditional sound of the koto. Only the tapping of the underside of the instrument may be seen as one of the less present percussive sounds. It is in fact the longest percussive sound, the chimes being of middle length and the wooden and stone sounds most staccato-like. The extra instruments are almost entirely used for punctuation, termination, contrast, amplification, in short, typical traditional Japanese percussive elements. In this sense, the percussion part is an extension of the koto part and by no means a second instrumental voice.

4. The Vocal Part

An acquaintance with koto music and a second look at Adriaansz's book for confirmation show that Shinohara has pretty much ignored what might be called standard vocal techniques for koto music. A sole exception is his occasional use of slow-moving vocal glissandi. The text, consisting of twenty-seven single words (only one of which is repeated a second time), is itself a break with koto tradition; it most likely has no link at all with any kind of singing tradition.

The fact is that the vocal part is where the composer's confrontation of hope and despair becomes lyrical, almost literal. Chart 1B illustrates that almost every word in the text is treated as an example of word painting of one sort or another. The voice, like the instruments, presents a large spectrum of timbres. Fourteen of the words are notated on relative pitches, which adds an element of freedom; comparable to that of the visual notation used throughout. The combination of the vocal colors plus the interrelationships between the words

sung and the corresponding musical ambiance makes the work quite unique regardless of the application of the traditional approach of word painting.

One can conclude that the composer spent a great deal of effort finding the correct timbre for each sound/word, an experiment of its own right.

5. The Three Parts as a Whole: a Few Form Elements

A surprising consistency which in the study of *Tayutai* arises is the presence of diverse symmetries, one of the few relatively tangible architectural devices in the work. Symmetry will be treated empirically to illustrate its variety.

- The koto part at reh. nums. A and BB shows a similar timbral treatment of a central tone with restrained dynamics.

- The voice part begins and terminates with what may be called a poetic treatment of the text: 5 words at reh. nums. A-C and 4 words at reh. nums. AA-BB.

- A three-part symmetry can be found at reh. nums. D, N (middle of the work) and Z. The koto part is very dynamic, avoiding any central tone. The voice in the early and middle fragments is treated in hocket fashion with the koto. At reh. num. Z, the vocal part is involved in another symmetry described below.

- Glissandi in the vocal part: reh. nums. I and W contain a rising fifth, reh. nums. K and L rise and fall successively. Only reh. num. Z is exceptional, due to its being the registral and dynamic climax of the work.

- There are two symmetric points of interest in the vocal part in the middle of the work. First reh. nums. K and L form a dynamic pair via the glissandi; this is followed at reh. num. M at which *naze* is twice spoken. Reh. nums. O and Q (with their percussive partners P and R) might be considered the symmetric partner of K and L, making more dynamic the two "why's" at reh. num. M.

- Although time-wise the following is not symmetric with respect to the middle-point, reh. nums. K and S are the only two examples of concretely notated atonal chordal movement, with K rising and S descending in direction.

- The amount of relative pitch vocalization of the text is more present in the beginning and at the end of the work and less so in the middle.

- Finally a special local-symmetry of interest can be found between reh. nums. O and Z with reh. num. X as turning-point. The first words are all negative in nature (*kokoro*/heart has been given a negative tint contextually), the last all positive, with the work's title, "fluctuation", as the balancing point. Provocatively, the instrumental part does not follow this change literally, but more so in terms of musical energy.

Furthermore one could inspect many details of exchange between koto and voice parts in terms of prominence, exchange and so on. However, in Chart 2 one finds rather little pitched interchange between the two voices; at points where one would expect symmetric coordination, this is most lacking (e.g., at the end of the work, the seventh interval at reh. num. BB after the ninth at Y). Also one can hardly speak of nuclear tones in the work, although the double fifth in the koto part A-E-B often comes to prominence along with the ambiguity of the neighboring tritones E-A sharp, F-B.

CHART 2
Weighted Transcription of Most Prominent
Pitched Material and Dynamics
Including Pitch Correspondences

reh.
num.

KOTO

VOICE

H I J K L M N

O P Q R S T U

V W X Y Z AA BB

dynamics: ppp & pp - 1, p - 2, mp - 3, mf - 4, f - 5, ff - 6,

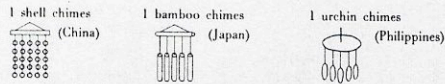
A = atonal; no weighting possible

1. 13 strings (indicated by I to XIII in the score) are tuned at first as follows:



During the beginning section the string IV will be tuned down to then

2. Besides a koto, the following percussion instruments are used:

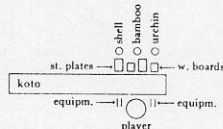


2 wooden boards or boxes (with different pitches in high register)
2 stone plates (with different pitches in high register)

3. For the performance following equipment is used:

2 sets of koto plectra (one is for the left-hand fingers)
1 pair of rubber sticks, 1 pair of wooden sticks, 1 plastic stick (♯)
1 cymbal stick (thick-headed wooden stick)

4. The player should place all instruments and equipment around him so that he can reach them as easily as possible (place the wooden boards and the stone plates on the far side of the koto and suspend all chimes from stands above the boards and plates).



- 5. x damp the resonance of the string
- let the string resonate
- ord ordinary
- NR near the ryūkaku (ryūkaku is the name of the string-holder at the right end of the koto)
- OFFR off the ryūkaku
- L left hand
- R right hand
- ~~~~ yuri-iro (vibrato)
- tsuki-iro (quick fluctuation to a higher pitch after the attack)
- hiki-iro (quick fluctuation to a lower pitch after the attack)

- suri-zume (rub along the string with the plectrum to left or right)
- ▲ sukui-zume (pluck the string with the back of the plectrum)
- ♯ with the finger tip
- keshi-zume (a fingernail of the left hand lightly touches the end of the string before the attack. The string gives a twanging sound with a buzzing vibration.) in one movement the plectrum plucks the string I vigorously and immediately afterwards strikes the wooden body.
- mute (a finger-tip of the left hand touches the end of the string before the attack. The sound becomes damped and loses the resonance.)
- strike the ryūgaku (ryūgaku is the name of the wooden surface at the extreme right end of the koto.)
- cluster
- ♯ 1 quarter tone higher than ♯
- accelerando
- ritardando
- fluctuating rhythm
- normal (for the voice)
- whisper (for the voice)
- ◐ between normal and whisper (for the voice)

6. In the vocal part of the score pitches are indicated sometimes absolutely by traditional notation and sometimes relatively by visual notation.

The vocal part is written for a male voice with the range . For the female voice all notes must be transposed an octave higher.

7. The vocal part and the instrumental part are intended to be executed by a single performer, but a duet performance by a singer and a koto-player is possible.

8. The indication of duration in seconds, given for each passage, is approximate. The duration of each sound is relatively determined by the visual notation.

9. The duration of the whole piece is about 7 minutes.

箏のための たゆたい

TAYUTAI for koto

篠原 真 (ベルリン1972)
Makoto Shinohara (Berlin 1972)

34" [A] 遅く、音符の間には長い休止を
slowly, with long pauses between the notes

30" [B] NR TV (箏柱を動かす) (NR) OFFR ord NR TV (箏柱を動かす) (move the bridge)

21" [C] 木板2 Wooden board 2 R T (ゴム rubber) accel... rit... L T (ゴム rubber) with a slightly irregular rhythm

17" [D] 少くも規則的なリズムで
with a slightly irregular rhythm

中線の音程で in the middle register

14" **E**
 木の駒で弦の頭の上を左右へゆっくりと、木の部分だけ速く鳴らす。
 rub the strings slowly to left and right with the plastic stick handle.
 only the parts indicated by *mu* are to be played fast and *mf*.

14" **L**
 木の駒で裏の駒の下を左右へゆっくりと、木の部分だけ速く鳴らす。
 tremolo on the underside of the koto with the left-hand finger-tips.
 only the parts indicated by *mu* are to be played *mf*.

5" **F**
 R: 木の駒で弦の頭の上を左右へゆっくりと、木の部分だけ速く鳴らす。
 Quickly reverse the stick
 rub the short string lengths on the right side of the *ryo-haku* with the edge of the wooden stick, with a quick movement.

12" **G**
 木の駒で弦の頭の上を左右へゆっくりと、木の部分だけ速く鳴らす。
 unstable, slightly agitated; only the parts indicated by *mu* are to be played more agitatedly and *mf*.

15" **H**
 木の駒で弦の頭の上を左右へゆっくりと、木の部分だけ速く鳴らす。
 put the plectrum on the thumb and middle finger of the left hand.

12" **K**
 木の駒で弦の頭の上を左右へゆっくりと、木の部分だけ速く鳴らす。
 put down the stick quickly

12" **I**
 木の駒で弦の頭の上を左右へゆっくりと、木の部分だけ速く鳴らす。
 cluster with the stick handle (accel.)

4" **J**
 木の駒で弦の頭の上を左右へゆっくりと、木の部分だけ速く鳴らす。
 cluster with the stick handle (accel.)

12" **K**
 木の駒で弦の頭の上を左右へゆっくりと、木の部分だけ速く鳴らす。
 put down the stick quickly

17" **L**
 木の駒で弦の頭の上を左右へゆっくりと、木の部分だけ速く鳴らす。
 create a tremolo effect with the left hand

12" **M**
 木の駒で弦の頭の上を左右へゆっくりと、木の部分だけ速く鳴らす。
 take off the plectrum from the middle finger of the left hand.

7" **N**
 木の駒で弦の頭の上を左右へゆっくりと、木の部分だけ速く鳴らす。
 hastily, with an irregular rhythm

9" **O**
 木の駒で弦の頭の上を左右へゆっくりと、木の部分だけ速く鳴らす。
 agitated

2" **P**
 木の駒で弦の頭の上を左右へゆっくりと、木の部分だけ速く鳴らす。
 rub the strings violently and irregularly to left and right with the plastic stick handle.

6" **Q**
 木の駒で弦の頭の上を左右へゆっくりと、木の部分だけ速く鳴らす。
 strike the underside of the koto with the fingers quickly and in an irregular rhythm.

3" **R**
 木の駒で弦の頭の上を左右へゆっくりと、木の部分だけ速く鳴らす。
 rub the low-pitched strings with the plastic stick handle.

6" **S**
 木の駒で弦の頭の上を左右へゆっくりと、木の部分だけ速く鳴らす。
 rub the low-pitched strings with the plastic stick handle.

7" **T**
 木の駒で弦の頭の上を左右へゆっくりと、木の部分だけ速く鳴らす。
 rub the low-pitched strings with the plastic stick handle.

7" U

石盤 1
stone board 1

石盤 2
stone board 2

石盤 1
stone board 1

石盤 2
stone plate 2

148 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000

hold the stick lightly and let it rebound freely on the strings
accel.
mf p

滑らかに
slightly slower

右手の親指を除く (except the thumb)
L A

13" W

此の音域内にて
all performances in this register only.

177-2番目以降は指は自由に音域内より奏す。自由。
play the trill, shifting freely within the register as suggested by the wavy line.
The sounds played by the left-hand fingers may be damped by the stick held in the right hand.

不規則な音程の順序とリズムで自由に奏す。
pluck freely, in an irregular pitch-order and rhythm

23" X

OFFR

L A R R R RA

na ya mi ta

16" V

L R (1st rubber) R R L R (2nd rubber) f mf f mp p cresc.

pp

OFFR

pp cresc.

ya ta i a ko

34" Z

R (thumb) f L A (親指) plectrum (thumb) OFFR

gliss. simite

subito cresc.

cresc.

ya ra ko bi ka

22" AA

shell chimes shell chimes bamboo chimes

mp f

rattle with the fingers of both hands

右側の短弦長さを奏す。自由。
rub the short string lengths on the right side of the ryohaku with the plectrum.

ya ya ki

20" BB

shell chimes

mp p

furusato

pp P pp PPP

OFFR

ya ga i

In fact, when studying *Tayutai* using the rehearsal numbers as links of a twenty-eight part chain (27 words + 1 repetition, 28 reh. nums.), one cannot find a superstructure, but instead many handles to grab onto and then drop later on. Symmetry analysis, timbral analysis (including the presence and absence of pitched material) are useful tools, but do not provide *the* key to the work, a key which, due to the work's block-structure, probably does not exist. A word-painting analysis is most successful, but implies a very linear structure; *Tayutai* is not so linear.

The reason this writer is not disconcerted by the avoidance of over-definition of the work's form can be found in its notation, that is spatial or visual notation within well-defined boundaries. Shinohara knows at any given moment precisely what he is searching for, but that small amount of freedom in time relationships, in sound-color possibilities, in vocal techniques given to the performer(s) is a reflection of the element of subjectivity, or perhaps better said, the careful avoidance of total-structural thinking that makes formalism only a partial factor of *Tayutai's* coherence. Do keep in mind that, with the exception of the climax at reh. num. Z where the low D is played every 2", there is a total lack of rhythmical pulse throughout the entire work.

As stated in the hypothesis, descriptive analysis is but one approach to the composition. The following section will try to identify three major influences ("stimuli" may be a more proper word) which led to this work.

IV. TAYUTAI'S THREE DIMENSIONS

Sometimes when traveling one spends more time on the road than at certain destinations. To arrive at this section *Tayutai* had to be looked at in detail. Charts will not be necessary in discussing influence. The aim here is to see where *Tayutai* came from, at which points Shinohara broke loose from the various "traditions", and finally to pose the question of the great importance of innovation, that is experimentation in this work.

1. Japanese Music Tradition, among others

Makoto Shinohara is a Japanese composer who has lived in Europe since the 1950s. Yet he is seen by several musicians of his own country as one of the most Japanese (i.e., not as an internationalist) of today's composers. Certainly one can find works by Shinohara which pose great problems when looked upon from the Japanese perspective only; *Tayutai*, on the other hand, is one of the most explicitly Japan-influenced of the works.

The instrument in question leads to such extreme associations with Japanese tradition, that it is hard to disconnect the instrument from its own literature. (The few attempts that have been recorded seem to have led to inferior pop-like studies). Nevertheless, the koto offers great potential to the modern composer. As Japanese tradition and contemporary music both concentrate on sound

color to a great extent, alternative rhythms and rhythmical structures, the liberation of the note, or better said, the sound, the choice of the instrument with its percussive extension is a logical one. Shinohara, fortunately, has honored the instrument while exploring its sound potential simultaneously.

Although the vocal part to *Tayutai* is not Japanese in terms of its techniques, the approach is seemingly influenced by Japanese poetry which easier relates non-associated words like "being" with "evening" than one is accustomed to in the West. The introverted ambience of the entire work is quite possibly influenced by Japanese poetic tradition as well. Also the fact that the koto player is requested to perform the vocal part conforms to tradition.

The punctuating role of the percussion instruments has deep Japanese (or Eastern) roots. It fits so naturally into the continuity of the piece that one wonders why this trio was not discovered earlier in traditional music. Shinohara's use of visual notation may seem ultra-modern at first view, yet it would be virtually impossible to capture the essence of Japanese musical color, time expression and emotion otherwise.

Yet tradition does not limit itself to Japan. Word-painting is an international phenomenon. Shinohara may very well find himself on a list with Janequin, Monteverdi and Schumann in future music history surveys. His approach to word-painting may differ from the known Western models, but diachronically, word-sonorous associations have changed radically. Shinohara's associations are obviously contemporary ones.

Even the recent past has created certain traditions for today's composers. Shinohara's French and German years coincided with a period in which a new tradition was evolving in and around Darmstadt. His Darmstadt influence is the subject of the second dimension.

2. Die Darmstadt-Schule und ein Japaner

When one thinks of Darmstadt, one thinks of works like *Mode de valeurs et d'intensités*, *Structures I & II*, and the *Klavierstücke*. Of course non-neoserialists were present at this famous crossroads; yet, the main subject of early Darmstadt was *Die Reihe* and everything that had to do with it, its parameters, its combinatorial potential, its subharmonic series, and so on.

Shinohara has always been an independent composer, never a true-blue member of any school of composition; still, Darmstadt and especially Stockhausen had their influence on him. Shinohara has not written a serial piece here, but has, by the nature of his totally new koto tuning, allowed himself to try out some of the Darmstadt techniques in this work. He has also written the piece parametrically, if only in the sense that one entire part was completed before the other was begun!

His studies with Messiaen are evident in the use of a block-structure in the piece. Although Varèse was probably the composer who brought this sort of approach to the fore, Messiaen applied it in his own way from the 1940s onward. It is unimaginable that Messiaen would ever take the approach to the extreme of

Tayutai; on the other hand, Japanese tradition has nothing comparable to offer. In this sense, Shinohara is assimilating the old traditions with the new in this work.

Obviously the great presence of tone-color study has been slightly influenced by the Darmstadt years. It was in Darmstadt that tone color was liberated to a full-partner of pitch, rhythm and dynamics as far as dimensionality is concerned in composed Western music.

A Darmstadt composer, whose way to innovation was, in those years, a very personal one was Luciano Berio, translating *Die Reihe* into his native tongue for use in a very special series of works known as *Sequenze*. In these works Darmstadt is only half present. Berio is busy rediscovering the possibility of rows (which became less and less present in his later pieces); at the same time, he was busy discovering experimentally and *musically* the sound potential of various instruments. In other words, his experiment was not only one of sound parameters.

Shinohara has definitely appreciated the *Sequenze* by writing one of his own. The source of the ultimate sound search on a given instrument can be found in Berio. Yet the coupling of this research with tradition is his own. It is in fact this association which makes *Tayutai* so experimental.

3. Experimental Music for Koto

Tayutai has been inspired by a great deal of musical sources and in so doing is totally unique. It is a large-scale experiment of assimilation incorporating various traditions, old and new, techniques of contemporaries and even older techniques of the composer, himself. "Where is there breathing room for creation with all these influences?" one may ask. In fact bringing these highly different approaches, sounds, words, emotions, and techniques together leaves the composer with a great deal of freedom, and an even greater challenge to:

- (1) not overly abuse or make overly present one of the influences,
- (2) combine dissimilar elements,
- (3) add something new, and
- (4) find proportions that have never existed before (i.e., to assimilate the dissimilar).

Herein lies the challenge of *Tayutai*, a truly modern, experimental composition exploiting accessible information which in principle does not belong together. This combination projected onto the musical field of composition yields an experiment *pur sang*, an experiment in which the dosis of innovation, despite the number of influential sources, is by definition high.

Many have said that experimental music has been losing energy since the 1960s; yet one wonders whether those who support such claims have not been keeping track of this sort of assimilation-music. It is the opinion of the writer that a great deal of today's experimental music is based on this very principle. Shinohara is an overt case; he has demonstrated that assimilation deserves evaluation and reaction.

V. SOME CONCLUSIONS AND COMPARISONS

It has often been said that all first, and possibly all second world inhabitants are members of an enormous consumer society. One can purchase products fabricated throughout the world; one can also listen to music of all ages and all cultures. It comes as no surprise with the omnipresence of information in these cultures that an artist turn to assimilation as a source of inspiration.

Tayutai is an excellent example of the combination of various traditions with various contemporary elements as the basis of a musical composition. This article has been an attempt to locate some important points of assimilation through the use of traditional, descriptive empirical analysis.

Shinohara's *Tayutai* is not his only work which deserves this sort of attention. Other clearly Japan-influenced works are worthy of mention: *Kyūdō A and B* (In Quest of Enlightenment) is a particularly interesting case. The "A" version (1974) is for solo shakuhachi player. The "B" version, written a year earlier, is for shakuhachi and harp (East meets West yet again). The "A" version is simply the extraction of the shakuhachi part from the "B" version. Is the "A" version emptier, incomplete? Is the harp unnecessary? Other works of interest are his *Nagare* (Flow-1981) for shamisen and bells, *Juhichigen-No-Umare* (Birth of the Bass Koto - 1981) for bass koto solo, and *Turns* (1983) for violinist and koto player or violinist alone. Equally interesting are his electronic works, such as his *Mémoires* (1966) and *Broadcasting* (1974), which deserve a similar treatment, be it through the looking-glass of modern technology.

In future discussions and analyses of today's music, especially that which fits into the experimental category, it is hoped that one add the questions of the sources of the employed musical material and of assimilation to the list of planned topics. In this way one might better understand how, to use a contemporary term, information is processed in recent compositions.

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