

This is an article on the first movement of Morton Feldman's LAST PIECES. I do not make any claims about the truth of any statements I may or may not make in this article, but I think that a little circular analysis is not a bad thing in the summertime.

This music was written in late March of 1959. The directions for performance are: "Slow. Soft. Durations are free." Without recordings of Feldman's music that were overseen or performed and approved by him, (or some other means of instruction in his general style) these directions would not be ~~ttoo~~ clear. It is necessary to know what these words mean to the composer. Time Record No. 58007 is very helpful in aurally understanding his conception. If you haven't heard it, run out and do so, now in the middle of the night or afternoon or morning. "Free" seems to indicate minimal differentiation of evenness. The first, the twentieth, and the last (43rd) chords have fermatas over them. The other fourty chords are approximately the same duration.

Aside from the essence-quality of soft-slowness, the registral changes seem to be of greatest interest. The number of chords before and during each change, indicated by an eight above or below the chord, are:
8 4 7 4 8 6 6. The number of notes involved in these groups of chords are:

22 11 22 10 21 22 13.

The numbers of chords are more symmetrical than the numbers of notes due to the thirteen at the end. Since the notes function only as parts of chords, the symmetry of the notes is less important than that of the chords.

The intervallic content of these chords is also of importance. The $m3?M6$ occurs most often; the $P4/P5$ second; the $m2/M7$ third; the $M2/m7$ fourth; the $M3/m6$ fifth; and the $d5/A4$ least. The following chart may or may not make this more clear.

1.	m3/6	a ¹
2.	P4/5	b ¹
3.	m2/7	c ¹
4.	M2/7	c ²
5.	M3/6	a ²
6.	A4/5	b ²

The intervallic "formula" could be expressed in the following way: $a^1 + b^1 + c^1 + c^2 + a^2 + b^2 = 1$. The notes that define these intervals occur the following numbers of times:

NOTE	NUMBER OF TIMES USED
1. c	14
2. c-sharp/d-flat	12
3. d	11
e	11
g	11
a	11
a-sharp/b-flat	11
4. d-sharp/e-flat	10
5. g-sharp/a-flat	8
6. f-sharp/g-flat	7
7. b	6
8. e-sharp/f	4

The notes that are used most often produce the following scale: c, d-flat, d, e, g, a, b-flat, c.

One of the "problems" with this movement is the use of more notes per chord in the thirty-second through thirty-sixth chords. This is close to the end and is, therefore, reminiscent of the excellerated rhythmic movement that occurs in old, Western music just before the cadence, among other places and cultures.

Feldman completely abandoned the graph between 1953-58 and after that uses it intermittantly. Concerning a post-1958, non-graphic piece (DURATION I), Feldman said: "I wrote each voice individually, choosing intervals that seemed to erase or cancel out each sound as soon as we hear the next. In the DURATIONS with the tuba, the weight of the three instruments used made me treat them as one. I wrote all sounds simultaneously, knowing that no instrument would ever be too far behind or too far ahead of the other. Through thinning and thickening my sounds I kept the image intact." (from Time Record cover #58007)

Internal Intervals												8	12
P4 dim5	-	m3 M7 m7	M6 M7 m7	M6	P5	P4 M2 M2	P4 m2	P4 M6	P4 M6	m3	M2	PS dd6 M6	

M_6	m^3	M_6	M_3	m^3	m^3	M_6	M_6	M_6	M_6	m^3
m_6	P_5		M_6	M_6	A_2			M_6	M_6	m_2
m_6	m^3		M_6	M_6	m_6			d^4		

P4	P5	M2	m7	M6	M6	m7	(31)	m6	m2
M3		M7	M7			M2	-	m2	m2
dd 3		PS					PS	M6	d5

P8	m^2	M7	(37) P4	P5	AA6	M6	M2	M6	M7
m_6	M_3	m_2	P5			M_6			(43) M7

m_2	M_2	m_3	M_3	d_4	P_4	d_5	P_5	m_6	M_6	m_7	M_7	P_8
8	6	6	3	1	7	2	8	5	19	5	6	2
A_2	$dd3$						$dd6$			$d8$		



LAST PIECES is more closely related to "the DURATIONS with the tuba" because only one player is involved and because notes are aligned so as to indicate their being treated as chords, i.e., "as one".

The 'thickening and thinning' of chords is of interest to Feldman and seems to occur in random fashion. The number of notes per chord are:

CHORDS	1-8	9-12	13-19	20-23	24-31	32-37	38-43
a	3	3	4	2	4	5	2
b	1	2	4	2	2	6	2
c	3	2	2	3	4	3	2
d	4	4	4	3	3	5	3
e	2		4		2	4	2
d ¹	2		2		2	3	2
a ¹	3		2		3		
	3				1		

The following chart shows the numbers of notes per chord in relation to the number of times they occur in each section.

NUMBER OF NOTES PER CHORD NUMBER TIMES OCURRING

	a		
1		1	
2		2	
3		4	
4		1	
b			
2		2	
3		1	
4		1	
c			
2		3	
4		4	
d			
2		2	
3		2	
a ¹			
1		1	
2		3	
3		2	
4		2	
e			
3		2	
4		1	
5		2	
6		1	
d ¹			
2		5	
3		1	

Chords with 2 notes occur 17 times.

Those " 3 " " 12 ".
 " 4 " " 9 ".
 " 1 or 5 " " 2 ".
 " 6 " " 1 ".

The formula for the number of voices appears to be: $a+b+c+d+a^1+e+d^1=1$. The various formulas given in this article are perhaps of no use to you, but I think that they are not without value. Go hear it. Go play it.

The only element of the music that changes constantly is frequency. The amplitude and timbre remain the same, while the duration is modified only minimally. The low amplitude allows sounds other than those notated NATURE to participate in the sound experience known as music ART.

Even though the notated ART abounds with nearly perfect symmetries, it is understood that Feldman chose the tones aurally rather than intellectually. It is vital that the symmetries are not quite perfect in the human-conscious-art sense, but are more perfect in their relation to the nonhuman-unconscious-nature sense. That his ear is sensitive to symmetries, is the only conclusion. These symmetries have the ability to create a temporal and spacial void which produces an aura of tranquility. And that's WONDERFUL.

Beth Anderson

the musicmusic corporation has acquired portable video facility: jvc $\frac{1}{2}$ " portapack, camera and monitor (b/w). this equipment is available for projects of composers living in the bay area. in addition the corporation has a modest sound system which is available should it meet anyone's needs. information concerning use of this equipment may be obtained from jack at 8242006.



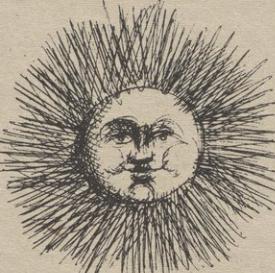
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For information & reservations
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JULY Unless otherwise stated concerts at 8:30pm

5	LORENE ADAMS, Soprano ROBERT M. ADAMS, Piano
6	Charles Boone, M. de Falla, Ravel, Strauss, Wolf
7pm	JAZZ WITH RUBISA PATROL - Art Lande, Piano; Mark Eischen, Trumpet; Glen Crookhite, Drums and perc.
	Bill Douglas, Bass.
9pm	ART LANDE, Piano - Jazz comps. & improv.
7	MAQUETTE KUPER, Flute CLARE WEINRAUB, Guitar
	Telemann, Pergolesi, Ibert, Villa Lobos, Cilensek
11	SPANISH & FRENCH, RENAISSANCE AND BAROQUE
	Anna Carol Dudley, Soprano; Robert Strizich, Baroque Guitar; Kathleen Kraft, Baroque Flute; Lynne Alexander, Harpsichord; Juliette White, Gamba.
12	JULIE STEINBERG, Piano - Bartok, Messiaen, Chopin
13	JULIE CROGER, Soprano; LAWRENCE NOBORI, Clarinet; NOEL BENKMAN, Piano. Spohr, Schumann, Arnold Cook, Schubert.
14	BASTILLE DAY CELEBRATION. Jeanne Stark, Piano; Tom Buckner, Baritone; John Aymong. Trumpet. Faure, "La Bonne Chansons", Piano Music and Trumpet fanfares
18	ELIZABETHAN SONGS AND LUTE MUSIC - Joseph Bacon, Lute
19	Tom Buckner, Baritone. Works by Robert Jones & othrs.
21	BEVERLY BELLOW, Harp LAURETTE GOLDBERG, Harpsichord. premiere by Elinor Armer; Tompkins; Sweelinck; Handel; C.P.E. Bach; Harrison & Bartok
20	POETRY AND MUSIC OF DANE RUDHYAR - Dane Rudhyar and Marcia Mikulak, Piano
25	G.S. SACHDEV - Classical North-Indian flute
26	ALL BACH PROGRAM - Paul Hersh, Viola Laurette Goldberg, Harpsichord. Trio Sonatas 2,4,5 & 6
28	THE PACIFIC WIND - Wind quintets by Villa Lobos, Reicha; Mozart Quartet; De Wailly Trio.



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Friday, July 19 at 8 pm
Hertz Hall

Frederick Tulan, organ

Badings: Music for Organist, with Electronic Mutations
Thomson Passacaglia
Pousseur: Chorale on a Theme of Scheidt
Tansman: Fugue
Bacon: Amherst and Emily Dickinson
Bliss: Praeludium
Harris: Etudes for Pedals Alone
Castelnuovo-Tedesco: Prelude on the Name of Frederick Tulan

General: \$2.00 Student: \$1.00
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next for music

here is the EDITORIAL you have been waiting for about the S.F. Symphony mess. I am good and god damn tired of the arrogance of music critics & various writers of letters to the editors of newspapers which gives said pundits knownothings the idea they know more about the musicianship of a kettledrummer and a bassoonist than the members of the orchestra who play with them. Musicians and management signed the contract which leaves tenure up to both parties to decide, and the contract has been followed. Two out of eight musicians were refused tenure. The orchestra backed up its committee by a vote of 52 to 14. Ozawa was reportedly unhappy about both positions, but only requested a reversal in the case of the bassoonist, to whom he is thought by some to have promised a permanent position.

Two issues are involved: who decides who plays in the orchestra? and What kind of orchestra does San Francisco want? The first issue was decided when the contract was negotiated. In this case, the orchestra has something to say as at its membership. This is logical for an overriding reason: the conductor is here only 12 or 14 weeks out of the playing season. Ozawa is a great musician, perhaps the best of his generation. He deserves a stellar orchestra, both for live performances and for recordings. In fact, he needs one: he is not, reportedly by his own words, a teacher. The S.F. Sym cannot become this sort of orchestra over night. Perh ps it should not aspire to that sort of standing. If it is going to, then it should probably scrap the contract altogether: let Ozawa hire and fire as necessary to maintain a Vienna Phil or an NBC Sym in S.F. Otherwise, let's relax, build the orchestra slowly, and -- if we must -- let Ozawa spend more time in Boston, or where ever. And let's stop making international stars out of bassoonists just because the orchestra doesn't agree with us. And for God's sake let's not drag race into it-- that just isn't interesting any more.

Charles SHAW

What the Famous

CAT'S PAW PALACE OF PERFORMING ARTS is a studio/theatre in Berkeley which promotes the experimental arts through a performance medium as well as sponsoring and staging its own events in the studio and out in the world.

The Palace opened in December with END OF THE WORLD OPENING--two weeks of performances of dance/theatre, poetry, holography, film, video-sculpture. Since then, new music concerts have frequently been held, with seating in the round, bring your own pillow.

The space is a 40 by 40 foot maple floor; there are skylights, seating is on the floor (with cushions) and the atmosphere is warm and intimate. The arrangement for rental of the studio for performances, rehearsals, classes, private time, workshops is either by the hour or a flat rate (usually for all day workshops and performances), both of which are very reasonable. Performers may charge donations or admissions at the door with no percentage taken out. Free performances are still subject to the performance rental rate.

Call for a schedule of events and classes, 341-6911--margaret Fisher.

Do in Their Beds

also...

Thursday, June 20 at 1750 Arch, Berkeley there were New Musics by Ingram Marshall and other CAL ARTS composers. 1750 does a lot of good music and on top of that, they have the most beautiful bed of calendulas my mother has ever seen--big as mums!

The first tape was by John Weisberger--CONCRET II d, and it seemed to have about four sections. The first was inhabited by friendly sounding rhythms and suddenly the second appeared and it was made of rushes between speakers. Every time a section made itself known, it startled me. The third started very small and concentrated and developed into a metallic penetrating sound that entered and withdrew. It alternated between pulsating and being diffused and created stupendous climaxes repeatedly. The last section began with deep bells over a concentrated point of moving sound that seemed to be overcome from underneath by an even deeper roll. And the floor trembled and the rushes were strong and good. A terrific piece!

Chas Smith's ENERGENESIS II came next. It was aptly named. I'm told that this piece and the one before it were made on Buchla 200 series. This one was space music with a smoother than organ sound and yet it was undisturbed by the tones that penetrated through the surface. It somehow managed to be so smooth, so silky, it was tactile. There was a lot of swirling that moved from the background to the foreground and all around. It burrowed deeper and deeper and very continuously and always with sweetness and warmth. Music for THE LITTLE PRINCE, sensuality and wonder.

Harry Breuer wrote HAPPY HAMMERS for marimba, piano, and bells. If Gottschalk and Schoenberg were hired to write for Walt Disney, this might have been the result. It was completely pleasurable and kept disintegrating and recovering with great humor. Someone said that Breuer was alive and living in Long Beach. I'm not sure I believe that Breuer exists. Is Ingram Marshall Harry Breuer? Ingram says there will soon be a complete edition of Breuer's work followed by a Breuer Renaissance.

WEATHER REPORT (from Greenland's Icy Mountains) by Ingram followed. It was a text-sound piece made from the voice of a Danish weather woman. It was very mysterious.

MIND EMISSION by a composer whose name was not on the program and whose name I could not hear when it was announced--came next. It was the most amazing thing I've seen or heard recently. He said that it was based on glissando and that the shape and speed changed directions often and it did. All I know is that the effect was very peculiar and that I'd like to see that again. Amazing.

Ingram's last piece, AUGMENTED TRIAD SHIFTING, for two marimbas, vibraphone and piano, seemed for a long part of the performance to be an extensive introduction to a music that may never exist and that certainly will never crest. There was also a most interesting effect created by the combination of piano and vibes. I kept hearing an organ very clearly and kept looking around for it as if Ingram had hidden one over behind the piano, but of course it wasn't there. Tricky. Finally the piano became apparent and eventually I felt my metabolism lower itself into the minus ranges and I knew I was hearing something terrific. I can always feel it physically when the music is good and the resolution was truly beautiful. Charlemagne, Charlemagne, where art thou?

