

Erosphère

Erosphère is my name for that membrane of nerves which surrounds our world with its network of waves modulating into an infinite number of frequencies; that cloud of infra- and supersensible heat radiating from megabillions of biological sources; that ring where the force of this cosmos of desire circulates.

We live within the erosphere and desire is our destiny.

Audible vibrations are part of the continuum of that general vibrational state ranging from the very low frequency pulsation - for example the cycle of a human life - to the extremely hot and excessively dangerous rays of cosmic space.

The geometrical laws which surge together like waves on a wind-tossed sea - in the vibrational field, the laws of the octaves, the genesis of the harmonics, tonalities, phases - all have an intense existence in the narrow traveling band of frequencies our ear discerns.

To express the generality of these laws, to make them felt musically, is the dream - or the delirium - which mobilized me in EROSPHERE.

Simply to make it felt.

For example, by violently contracting or expanding masses of sound events (playing back acoustic images at speeded-up or slowed-down rates);

distorting groups of frequencies on the computer by playing them through comb filters consisting of hundreds of fine teeth;

making acoustic imprints of bodies on surfaces (comparable to Max Ernst's frottages or some of Yves Klein's pictures);

producing reverberations which synthesize virtual spaces.

..let us explore the erosphere a little further..

Side 1

Eros bleu BLUE EROS 1980 3'50

Flames pushing up their transparent surfaces.

Plasticity of their curves.

Fluid, gas, sonic plasma.

Harmonic watersprite skin.

Familiar character of their blaze. Where does it come from?

From the fact that the generating body is the voice, speech articulating its colored congeries.

All that remains is the dynamic movement of the verbal flux. Nonetheless a trained ear will discern the following drawn out words by computer:

... ciel ... ciel fin ... ciel très doux ...

bruit de terre ... tremblement fin ... terre

douce ... fin douce ... toupie ... terre ... fin

... ciel ...

La fin du bruit ENDNOISE 1978-79 26'

Synopsis...to map out the "seven territories"

1. 0'00	electricity	5. 10'23	sky
2. 1'50	traffic	6. 19'03	styrene song
3. 4'45	crowd	7. 21'45	sphere
4. 9'30	storm	8. 26'	blue eros
		29'50	end

Finistère, land's end, is the name ancient travelers gave to this gradual caving-in of the continent, this dislocation engulfed in fog, beyond which, they sensed obscurely, there stretched an endless sea...

My title designates the limit of sound - the end of solid matter and the foamy fringe where it dissolves into silence.

Seven "territories" are traversed in a sweeping arc. They are interspersed with electric "skies". Sounds of the earth and of men: conflicts, traffic (1-4). Clouds of pulsed matter, showers of brittle reflections (5). Textures and song, pathetic friction (6). Giration, ascension (7). This describes the symbolic side of this composition, a side to which I attach a great deal of importance.

The musical side calls for some comments. For the technique deployed here ramifies into a variety of dynamic species, into work based on contrasts between lines and masses, into temperatures and velocities.

The generative impetus (as against the music's development) is given by something that pertains to categories I have already tried to establish in my cycles like l'EXPERIENCE ACOUSTIQUE and SON VITESSE-LUMIERE. These works are the result of the special treatment of the materials and the psychoacoustic reactions they produce.

Thus the field of metamorphoses of audible energy is based on a vocabulary of transformational operations, which constitutes the theoretical foundation of a general music beyond all sound and noise categories.

The end of noise, as suggested by the word end, has a double meaning: (1) as limit, frontier, resting point, death; (2) as intention, project, progress, principle. Endnoise is the fringe of silence, the silhouette of the audible, the extreme limit, the goal. Just as it is the substance (the unconsciousness) of form, the root of procreation, of gradual unfolding - growth! - from the beginning of time.

...from rain to the well spring...

Through music, opposites are reconciled. I might have called this: "Endless noise".

Side 2

Eros noir BLACK EROS 1980 2'45

I associate the notion of temperature with the harmonic climate produced by a cloud. Temperature, in this sense, is the general case announced by the terms tempered and temperament in traditional music.

I stumble across this idea in Claude Lévi-Strauss "...fish, like so many aesthetes, distinguish between light and dark perfumes, and bees

classify intensities of light in terms of weight - perceiving darkness as heavy and brightness as bouyant - ..." etc.

Strange as they sound, these speculations suit my purpose. They generalize familiar experiences of quality and situate them along a continuum.

Distance. Speed. Pressure. Density. Temperature. Color. Intensity. I attach more importance to these qualitative categories than to the quantifiable categories of frequency and duration.

The title "Toy top (toupie) in the sky" is a reminiscence of ... the Beatles' "Lucy in the sky".

Toupie dans le ciel

TOY TOP IN THE SKY 1979 22'30

A bundle of lines bent by the force of the very rapid rotations are derived from the sounds made by an antique toy top - its breezy siren's whisper. Various figures of this type emerge during this piece.

A wave oscillates over two descending minor thirds. This low-pitched oscillation, always unchanging but at the same time always varying, revolves amid a multitude of high-pitched designs in sheets of increasing density and mobility.

The monotonous unity of this movement is organized into a suite whose 27 parts connect imperceptibly in variations of speed, depth, acceleration and orchestration. Skies dotted with little comets punctuate the sound texture at intervals.

In the middle, a slow sliding motion picks up distant harmonics from the basic chord. Towards the end this sliding dissolves in flames.

Return to Black Eros. Chromatic scrolls..

... noise... Sheaves. Silver ashes...

Break-down of the 27 variations :

	0'00	top siren, theme a, theme b
	1'56	large top
1.	2'13	1st fairly rapid exposition
2.	3'19	sweeping, crescendo
3.	4'01	transposition and
	4'16	inversion
4.	4'45	sweeping, decrescendo
5.	5'34	agitated repetition against a
		sweeping, crescendo
6.	6'02	decrescendo in space
7.	6'55	counter-melody
8.	7'14	(top theme) insert 1
9.	7'50	crescendo repetition
	8'45	space
10.	9'09	ratata 10.01
11.	10'47	counter-melody
12.	11'22	rapid high, slow low
13.	12'16	(large nonharmonic top) 2
14.	13'15	very melodic and nimble
15.	13'45	released
16.	14'30	slow, two voices
17.	15'22	(top theme) 3
18.	15'40	slow repetition, for three voices
19.	16'27	(top theme) 4
20.	16'38	repetition and anticipation
21.	17'50	transposition, see n°3
22.	18'09	very melodic and vibrational
23.	18'48	higher, sweeping base
24.	19'37	transposition to the 3rd
25.	19'48	(large top) 5
26.	20'20	eros
27.	20'32	release
		and octave ending
	21'07	theme a, theme b see beginning

F.B.

BAYLE

Born in Madagascar, 1932. "Non-occidental" childhood and education.

First compositions in the sixties.

Participates from the very beginning in the experiment of **GRM** (1958) in the **Service de la Recherche**, and now in the **INA** (Institut National de la Communication Audio-visuelle) where he is director of the **INA.GRM** department since 1975.

Acousmatic production or Composition, Procedure and creation

1 The ear is one's guide. One selects the outline of a contour, the imprint of an energy, from the material -sound- the essentially ephemeral story of the irregular oscillations of matter caught more or less by surprise, disturbed, caressed or agressed.

2 Thus the instrument is no longer a sound object or scene, but a faithful or deformable electroacoustic mold of their form or image.

The sensitive terminal points of the body (the ear, the fingers) come in contact -they enter into conversation- with various sensitive points along the energy circuit : keys, cursors, buttons, tuning and/or untuning devices on the electric acoustic converter.

The human hand on the dials, etc, is part of the machine. The system is open.

It is the hand-machine hybrid that acts (becomes active, articulates).

4 The physio-psychological levels of awareness participate in making the decisions, the skillful or feverish choices of the hand-machine : pleasure, nervousness, emotion, capriciousness, controlled or uncontrolled madness (action - audition).
But also: reasoning, organizing, efficiency, the elegant and fruitful solution (operation-audition).

5 Gestures can be directed, or even replaced, by their outline or by an equivalent number-suite (a line consists of points which are close together. Each point represents a value that can be translated into a number. The series of values represents the analogy of the gesture's trajectory). The computer calculates them and assists in forming sounds. Or, if one wishes, in creating sounds from particular models.

6 Owing to the high degree of precision attained by these operations, an extremely large number of which can be stored (and made ultrarapid by the processers), new evolutionary properties of the materials can be made to emerge.

Metamorphoses. We are moving towards a music that is increasingly virtual with respect to physical causes and increasingly close to imaginary models.

7 But at the same time we are able to approach closer to the secret properties of the ear. Even in infancy our listening apparatus reveals as yet unknown aptitudes, and these can be developed considerably. Dormant faculties of feeling, apprehending, divining and dreaming are waiting to be released. The deep laws of the world from which we came forth have to be fathomed !

We learn to read, write and count. We must learn to hear and see as well, to listen and understand. In order to realize our "second nature", the faculty to grasp signs instead of things.

Acousmatic: from the Greek akousma: auditory perception

Four definitions by François Bayle:

1) PYTHAGORAS, 6th century BC, created an ingenious listening situation by placing himself behind a curtain; there, in the dark and in total silence, he would speak to his disciples, thus enabling them to develop their faculties of concentration. Acousmatic is the word he uses to designate both the situation and the disciples themselves.

A philosopher, mathematician and musician, Pythagoras left no writings.

2) In our times, with the development of radio broadcasting in the 50's and the birth of "noise music" (with its main methodological features first outlined by P.Schaeffer), the poet and writer Jérôme Peignot once stated on a radio program: "What words do we have to designate the distance separating sounds from their source? ... Acousmatic noise is used in the dictionary to designate a sound one hears without being able to determine what has produced it. Well, there you have the definition of the sound object, that building block of concrete music, the most general music there is, the music

" ... whose head is heaven's neighbor

and whose feet rest in the kingdom of the dead ... "

("Musique animée", a Groupe de musique concrète program, 1955).

Acousmatic projection or Performance, Interactions

1 Using the work-model (prepared on one or more magnetic supports) as a basis, a reinforced image is projected, blown-up to the dimensions of a collective listening space. This public act requires:

- . someone to be in charge
- . someone to objectify a work that up until now has been developed to the limits of subjectivity
- . someone to distribute an activity among a professional team in charge of the equipment
- . someone to satisfy the acoustic requirements
- . someone to enable a musical concept to emerge from these criteria.

2 In the final stages of composing in the studio, a mixing/dosing of the elements was obtained on a limited number of channels. With the installation of the equipment and the actual rehearsals the elements are distributed over two, four or eight modulation channels which are in turn distributed over eight, sixteen, twenty, thirty or more projection tracks.

3 The sound-projectors (more or less specialized loudspeakers) are placed according to their character - bass, large, medium, clear, sharp, oversharp - their output, their caliber and their direction - converging, diverging, direct, reflected, indirect...

4 Break-down of the projection space (stage, periphery, ceiling, audience areas):

- . a couple of speakers are placed in each "screen" area to provide a phase center. Care should be taken to balance the centers in relation to the different listening areas.
- . the phase screens are distributed over at least three levels of depth: close, middle and distant.
- . the sound-projectors are arranged by size: very large, medium and very small.
- . the stereophonic couples are paired on the control panel in a convenient right-left arrangement, keeping in mind that this will control the acoustic mixing of the phase screens and the projector levels.

5 Break-down of the work:

During the preparation of the sequences for the acoustic and musical performance (identifying and numbering them), establish the duration of the passages that are to be executed freely and locate the fixed positions determined by the overall structure of the work.

Using your memory, a timer and the score, work out the exact sequence of the gestures...

Once the installation has been checked, an acousmatic composition obviously requires as many partial and general rehearsals as an orchestral work.

Acousmatic:

3) In his *Traité des Objets Musicaux* (1966), Pierre Schaeffer associates the term acousmatic with "reduced audition": "...the tape-recorder has the same function as Pythagoras' curtain: it creates new phenomena to observe, but mainly it creates new conditions of observation..."

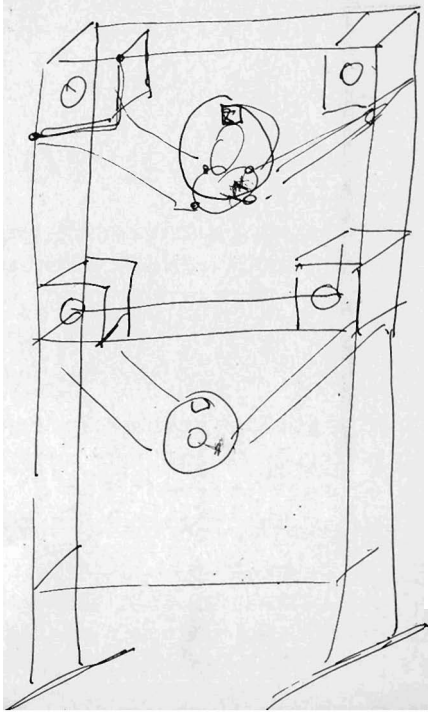
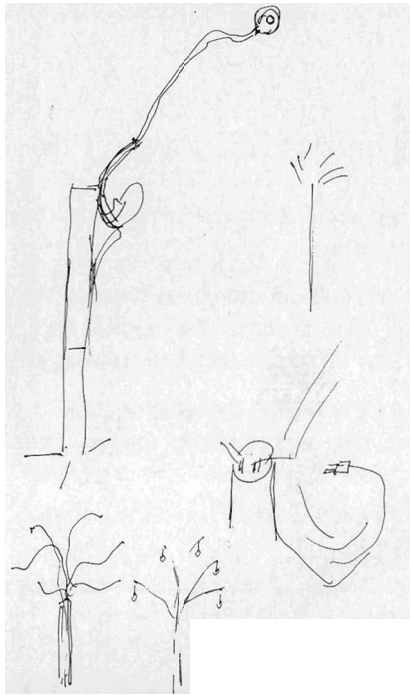
4) More recently - in 1974 - François Bayle employed the term to designate a type of music "that is "filmed", developed in the studio and projected in a theatre like a movie". He proposed using it instead of the cumbersome and ungainly word "electroacoustic", rendered obsolete by the appearance of electroacoustic stage instruments (onde Martenot, electric guitar, synthesizers, microprocessors...).

"For him (ie. F.Bayle), the terms acousmatic music and acousmatic concert are more suited to the aesthetics and the listening and production conditions of this invisible music..."

Michel Chion

Larousse de la Musique - 1982 edition







Voici avec ces "titres-catastrophes" un survol très caractéristique de mes musiques dans ce que j'estime être la part la plus sensitive de ma production. Je suis heureux de l'offrir à cette nouvelle série - conçue pour être séduisante et ouverte au plus grand nombre.

Convaincu que le public est par définition l'artisan exemplaire de l'analogie, de l'image, le gardien de l'inconscient, je suis sûr qu'il trouvera plus spontanément que les professionnels surinformés comment s'installer dans le plaisir de l'écoute.

Il reconnaîtra en effet sans peine comment cette forme musicale, contemporaine de la photo, de la radio, du cinéma, ajoute aux forces reconnues de la mélodie, de l'harmonie et du rythme, une foule de catégories à la fois nouvelles et familières qu'il est possible de maîtriser et de rendre expressives.


Ainsi entrera-t-il très naturellement dans ce "pénétrable", cette enveloppe de matières sonores invisibles, de vibrations d'air organisées, composées selon la réaction des lois de l'énergie au contact des propriétés de notre perception, attention, invention.

Ainsi se libère le désir, selon les trois formes habituelles qu'emprunte la psychée : métamorphose transfert, voyage.

Ce que j'appelle, par mes titres, correspond - et c'est bien normal - à ce que la mathématique, la physique, la poésie contemporaines désignent sous le terme de catastrophe, c'est-à-dire la brusque modification d'un état (physique ou sensitif) au passage de certains seuils.

La ligne sonore et sinueuse d'une mélodie coupant un "fond",
la condensation d'un nuage en pluie plus ou moins chaude d'évènements,
la transformation d'une "température" harmonique, le "sillage" laissé par une friction de corps vibrants l'un contre l'autre en battements,
la forme d'épanouissement d'une gerbe, d'écroulement d'une vague,
le "climat" d'un "paysage",
l'"allure" d'un "personnage",
voici des aperçus de ce que je désigne comme pouvant être aujourd'hui - pourquoi pas - le champ des sensations et des idées en musique.

Un dernier mot avant les notes techniques.
Ces musiques dessinées, peintes, sculptées, filmées n'ont d'autre interprète que votre écoute.



Tremblement

Ce titre (à "effet Max Ernst") avoue une tendance certaine de ma part à provoquer par surprise l'expérience sensitive. Justifier l'ordre grammatical ou l'organisation de sons trop libres, qu'aucun système ne saurait tout à fait contraindre, reste à faire.

Cette note est alors utile pour indiquer que l'oeuvre se donne comme une succession de "climats", "de paysages", de "transits".

S'enchaînent des températures harmoniques, des espaces clos, des mouvements sourds, un moment d'affolement, des brillances, des reprises graves qui restent en suspend...

Peut-être que l'essentiel à dire avec cette espèce de musique que nous appelons acousmatique réveille (révèle) nos réactions aux matières familières.

Les propriétés souterraines de l'écoute bousculent doucement les idées.

de terre

Voici une suite de remarques qui guideront l'écoute, indiqueront la nature des décisions d'organisation et quelque fois l'effet voulu.

CHRONOMETRE	CARACTERE	INSTRUMENT	SONS FAMILIERS	SONS CACHES
0.00 à 1.37	climat 1. Mobilité	flux électronique	vent	coups sourds
	(Pourrait-on dire qu'il s'agit d'une aube aux premiers rayons, frémissement des couleurs, de la lumière, réveil des oiseaux, de l'activité.)			
	(Ou bien alors, un exercice de vide pour créer chez l'auditeur un temps ultérieur.)			
1.37 à 3.19	<i>transit I</i>	<i>images/mirages</i>	<i>trappe/porte, aspiration</i> <i>voix féminines</i> <i>entrechocs</i>	<i>transfert vertical</i> <i>boules</i>
	<i>(cris étouffés / non vu / par surprise et le plus vite possible)</i>			
3.19 à 6.40	paysage 1	roulé. choqué. pulsé.inversé.	roulement/grésillement vent léger	glissements fins
6.40 à 11.00	<i>climat 2</i> <i>coloré par les 7ème</i>	<i>flux et rythmes</i> <i>irréguliers/régul.</i>	<i>battues nerveuses</i>	<i>frappé / compté</i>
11.00 à 15.29	paysage 2	boucles composées en diminution	les doubles glissés	les petits chocs le piano
15.29 à 16.45	<i>transit 2</i>	<i>transpositions</i>	<i>le cresc./sub. ppp</i>	<i>les reprises du climat 2</i>
16.45 à 20.20	paysage 3 maximum des valeurs rapides et des va- leurs lentes	images / mirages transpositions variées	pas, trafic, radio, météo	marcher / sauter glisser / voler
20.20 à 22.30	<i>climat 3</i>	<i>flux et</i> <i>transpositions</i>	<i>coups sourds</i>	<i>retour au climat I</i> <i>à l'envers</i>
22.30 à 24.09	paysage 4	nappes et chocs	perspectives	craquements
24.09 à 27.29	<i>climat 4 et transit</i>	<i>flux et variation</i>	<i>mélodies/glissandi</i>	<i>les mélodies vibratiles</i> <i>retardées</i>
27.29 à 28.00	paysage 4, suite et fin	nappes et chocs	profondeur	couleurs de la nuit

Les formes au contact des surfaces laissent leurs empreintes. C'est-à-dire ce résultat à la fois dissimulé et familier des choses.

Je voudrais qu'après l'oeuvre, et par elle, survienne la sensibilité aux faits familiers - si riches mais arbitraires et insuffisants en eux-mêmes. C'est-à-dire la lucidité.

très

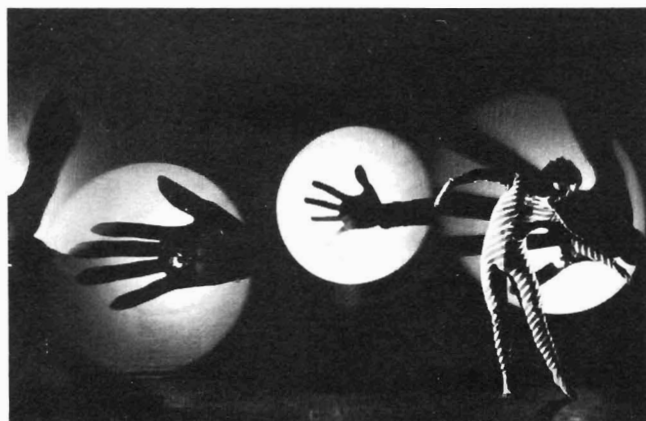
doux

Pour le compositeur une seule vérité -et toujours le "grand exercice"- sera d'apprendre à écouter, c'est-à-dire à surprendre les cheminements instinctifs qui mènent du pur "sonore" au pur "musical". C'est dans les mouvements spontanés et dirigés de son intention d'écoute, en approfondissant cette faculté d'y voir à l'avance des formes ou d'y trouver des repères d'organisation, qu'il va effectuer ses choix intuitifs et conscients, déterminer son activité.

De cette activité résulte ce qu'il est convenu d'appeler musique.

Quelle musique ?

Par exemple la musique acousmatique, celle qui, par définition, cache les gestes qui l'ont produite. Paradoxalement c'est dans cette musique que le geste est le plus présent. Non pas tellement comme cause immédiate et visible de la production des sons, mais comme énoncé d'une forme purement sonore. La musique acousmatique construit un domaine de signification dans cette disposition.



ESPACES INHABITABLES
Chorégraphie Mimi GARRARD
New-York 1969

Photo: Peter MOORE



François BAYLE . 1932 . Tamatave . Madagascar

Oeuvres principales

- 1967-68 Espaces inhabitables
 Jeïta ou Murmure des eaux
 (Philips Prospective)
- 1969-72 L'Expérience acoustique
 Trois-rêves-d'oiseaux
 Divine Comédie, Le Purgatoire
- 1972-74 Vibrations composées
 Grande Polyphonie
 (INA collection G R M)
- 1976-77 Camera oscura
 Cristal, pour orchestre et sons projetés
 (Radio France)
- 1977-78 Tremblement de terre très doux
 Camera lucida -



ESPACES INHABITABLES
Chorégraphie Vittorio BIAGI
Lyon 1972

Photo: Charles SINCLAIR

Ces titres - parmi une cinquantaine de cet auteur - appartiennent au catalogue de l'INA et GRM.