

Epilogue: and then?

More than ten years after the publication of the *Traité des Objets Musicaux*, the author, in his third edition, added a postscript entitled *In search of music itself*, in which he spelt out the basic misunderstanding which greeted this work: people presumed to reproach him for not being what he had never claimed to be!

“The main fault of this work is indeed that it remains the only one. More than six hundred pages on objects weigh down one side of the scales. To balance them out the author also ought to have produced a Traité des Organisations Musicales of equivalent weight.

Would those who censure me be so good as to excuse me: I had neither the time nor the genius to embark on such a work, in a field where, furthermore, everything has yet to be done.

The Traité des Objets Musicaux can, therefore, be interpreted in two ways: positively, as a bridgehead, from the point of view of materials and the faculties of hearing. Negatively, as having missed the point, since it seems to ignore the other bank, of combinations which give meaning to collections of objects. Between these two banks, a deep river: referential structures, that term vague or precise according to usage and users, describing the intermediate configurations by means of which the river can be crossed.” (663)

So what is to be done? Lots of things. Especially if the assertion has been made that music is not of one type: *“We maintain that there are musics, and that there are not solely differences of genres (such as lyrical or symphonic), but doubtless differences of nature. For the arts which involve the ear, there could be as great a variety as in the arts which use space.” (679-680)*

It seems that the originality of this hypothesis was misperceived, misunderstood: what a revolution, what a change of perspective if we accept it! None of the problems which people present at the moment is beyond the consequences of such an idea. On that basis, if we allow that there are *several* musics, we can look afresh at contemporary works, and wonder what they *really* communicate, no longer taking for granted that we can perceive the composer’s intentions as a matter of course.

Thus, the research in the *Traité*, begun with objects, can be continued with works: “Where these are concerned, we shall put the researcher back into the initial situation recommended by the *Traité* for isolated sounds. We shall suppose he has the same, perhaps excessive ambition: to consider the general notion of (musical) works just as he considered (sound) objects. As a consequence he will [167] have to renounce almost all traditional approaches, or at least avoid inappropriately applying his particular cultural references to the whole field. The project would certainly be insane if it did not rest on the possibility of experimental outcomes similar to those which guided previous research.” (681-682)

To composers themselves, and not only researchers, we suggest exercises to develop the art of *better listening*. Better listening to what they compose or what others compose.

Furthermore, music will no longer be based on preconceived notions: “If we only make the music that we can conceive of, we perpetuate banality. If we challenge the absurd, we encounter refusals, and it is very fortunate for us. Because, our own needs are revealed by our successes and sometimes chance comes to our aid. What is ‘inherent to man’, can be disclosed to us by music: let us only learn to be guided by our divinations, rather than our deliberations.” (700)

Is not music indeed *another way of knowing*? “In contrast to science which ensures the mastery of nature, it can in a complementary sense, shed light on us ourselves. But the way of knowing which it offers is not the same as anthropology, does not respond to a purely – and coldly – intellectual curiosity. What interests us in fact, is less to explain our own mechanisms than to activate them, in a word to live and no longer be alone in the world.” (700)

All the author can do is refer man back to the question of music: if, to repeat the final words of the *Traité*, music is: “*man disclosed to man, in the language of things*” (662), it is up to man to work out the consequences, and to stop the reassuring pretence that the essence of music is “objective”. It is himself that he engages in the “battle” which the musical act is, his flesh and his being. By referring the musicianly man back to his ear and his perceptual structures, that author of the *Traité* challenges the whole question of conventional music. Whether or not we follow him in his opinions, his denunciation of current music, we must recognize that the questions he asks are not negligible. It is not necessary to be a “disciple” to acknowledge this. We simply hope to have given to these major questions – even if we don’t share in all of them – an increased chance of getting through to those who should be concerned: musicians, all people concerned with music, who usually get nothing from contemporary music but a formal discourse steeped in progressivist optimism.

May this discourse, all pervading, mechanical, leave a little space for a true speech-act, may certain words recapture a little of their meaning – at last.

THE SOUND OBJECT IN FIVE DIAGRAMS

Note: of the many diagrams in the *Traité des Objets Musicaux*, we have chosen five which contain almost all his fundamental concepts and which, above all, show the interrelationships created by these concepts:

- the *Four Listening Modes* diagram, because with its four sectors, numbered clockwise, it is fundamental to many of the diagrams throughout the work (including the *Programme of Musical Research*);

- the *Final Summary of Listening Intentions* (called BIFINTEC), because it explains the fundamental concepts of Reduced Listening and the Sound Object;

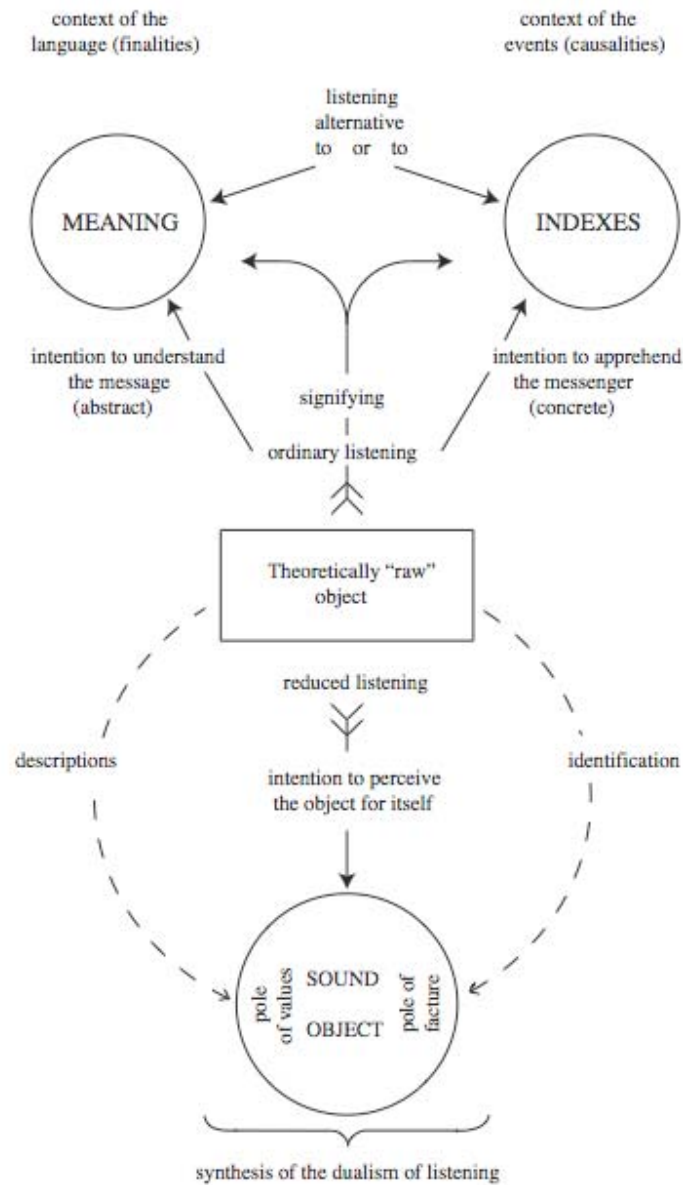
- the *Programme of Musical Research*, because it summarises the whole intended programme of research. The quite complex principles of the PROGEMU are explained in the article 'Music Theory' (38);

- the two *summary diagrams* for *Typology* (TARTYP) and for *Music Theory* as a whole (TARSOM), because, as their name indicates, they recapitulate what the Theory has achieved;

In this Guide, these diagrams are frequently referred to by their acronyms which are our own invention, intended only to make it easier to use them.

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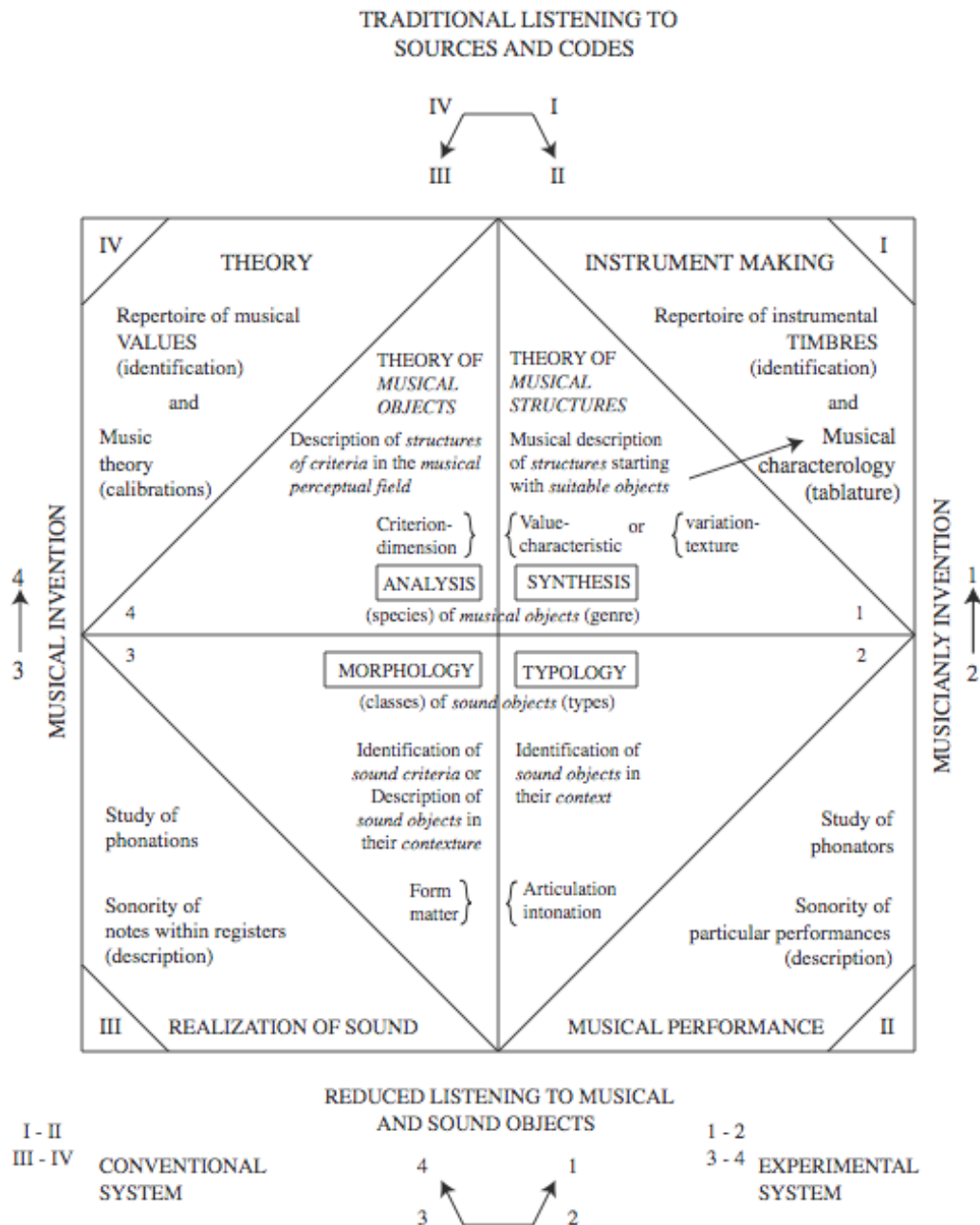
2. Final summary table of listening intentions (BIFINTEC, fig. 2, p. 154)



For this diagram, see **REDUCED LISTENING (11)**, **SOUND OBJECT (12)**, as well as **INTENTION (9)**, and **IDENTIFICATION/DESCRIPTION (23)**, **VALUE/CHARACTERISTIC (28)**, **FACTURE (62)**, **ABSTRACT/CONCRETE (15)**.

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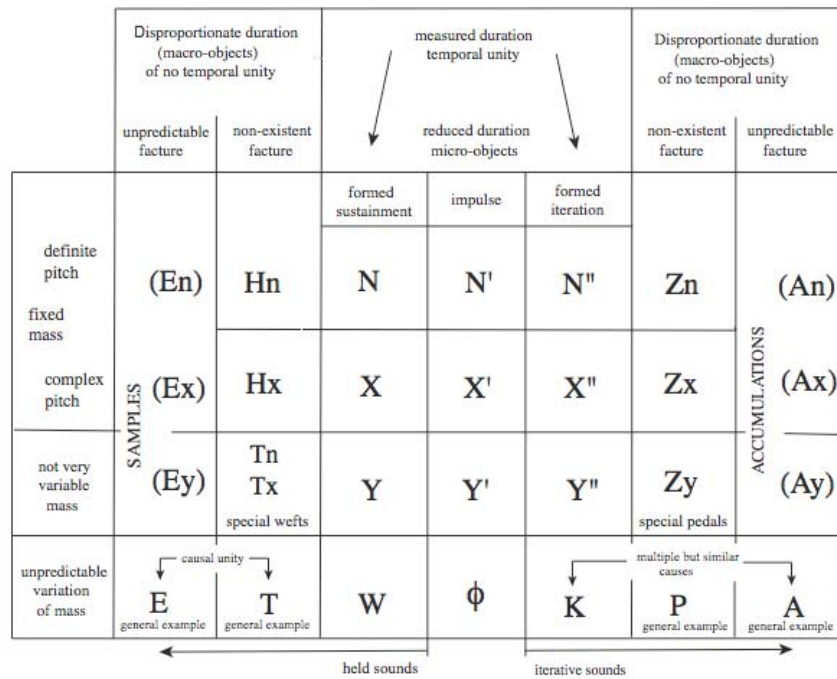
3. Programme of Musical Research (PROGREMU, fig. 24, p. 369)



To understand this diagram, see **MUSIC THEORY (38)** and **FOUR LISTENING MODES (6)**. See also **TYOLOGY (41)**, **MORPHOLOGY (43)**, **CHARACTEROLOGY (46)**, **ANALYSIS/SYNTHESIS (48)**. ... and also at **TYPE (42)**, **CLASS (44)**, **GENRE (47)**, **SPECIES (49)**, as well as **ARTICULATION/STRESS (59)**, **FORM/MATTER (60)**, **CRITERION/DIMENSION (50)**, **VALUE/CHARACTERISTIC (28)**, **VARIATION/TEXTURE (28)**, and at **MUSICALITY/SONORITY (27)**, **IDENTIFICATION/DESCRIPTION (23)**, **MUSICAL/MUSICIANLY (16)**, **OBJECT/STRUCTURE (22)**, **CONTEXT/CONTEXTURE (24)**

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4. Summary diagram of Typology (TARTYP, fig. 34, p. 459)



For the central boxes (N, N', N'', X, X', X'', Y, Y', Y'') see **BALANCED SOUNDS (71)**.

For intermediary boxes (Hn, Hx, Tx-Tn, Zn, Zx, Zy) see **REDUNDANT SOUNDS (73)** and **HOMOGENEOUS SOUNDS (74)**.

For boxes at the periphery, see **EXCENTRIC SOUNDS (76)**, and also, for special cases:

E (SAMPLE): 82;

T (WEFT): 78;

W (LARGE NOTE): 80;

Φ (FRAGMENT): 80;

K (CELL): 79;

P (OSTINATO): 81;

A (ACCUMULATION): 83;

For the classification principle, see **MASS/FACTURE (68)**, **DURATION/VARIATION (69)** and **BALANCE/ORGINALITY (70)**.

Also see **ITERATIVE (64)** and **IMPULSE (63)**.

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5. *Summary diagram of the Theory of Musical Objects* (TARSOM, fig. 41, p. 584-587)
















This diagram shows the 7 morphological criteria (see: **MORPHOLOGICAL CRITERIA, 88**) in horizontal rows from 1 to 7, and in vertical columns (numbered 1 to 9) various distinctions arising from the various stages of the programme for musical research.

Reference should therefore be made, on the one hand:

- for criteria, to the sections **MASS (89)**, **DYNAMIC (96)**, **HARMONIC TIMBRE (93)**, **MELODIC PROFILE (99)**, **MASS PROFILE (100)**, **GRAIN (95)**, **ALLURE (98)**;









- and on the other hand, for the description and evaluation to which they give rise, to the sections **TYPE (42)**, **CLASS (44)**, **GENRE (47)**, and **SPECIES (49)**, and also **SITE/CALIBRE (51)**, and to **WIDTH (52)**, **WEIGHT (53)**, **RELIEF (54)**, **IMPACT (55)**, **MODULE (56)**.

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		1	2	3
	Description (2-3) Evaluation (4-9) of CRITERIA of musical perception	TYPES typo-morphological recapitulation	CLASSES musical morphology	GENRES musical characterology
1	MASS	TONIC type N COMPLEX X VARIABLE Y OTHERS W, K, T	1. PURE SOUND 2. TONIC 3. TOMIC GROUP 4. CHANNELLED 5. NODAL GROUP 6. NODE 7. WHITE NOISE	characteristic TEXTURES of mass
2	DYNAMIC	homogeneous H nil: iteratif Z weak: web N, X, T formed: note N, X, N', X' impulse N', X' cyclic Zk reiterated E accumulated A	SHOCKS  Anamorph: RESONANCE  profiles cresc.  decrease.  delta  hollow  mordant  Lifeless: flat 	ATTACKS (dynam. timbre) 1. abrupt  2. solid  3. soft  4. flat  pseudo 5. gentle  mordant 6. stressed  7. nil 
3	HARMONIC TIMBRE	either: GLOBAL TIMBRE or: secondary masses M1, M2, M3, ... timbre of masses th1, th2, th3, ...	(conneced to masses) NIL 1-7 TONIC 2 COMPLEX 6 CONTINUOUS 3-4 CHANNELLED 4-5	CHARACTERISTIC OF THE SOUND BODY hollow-full round-pointed bright-matt] etc.

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4	5	6	7	8	9
SPECIES (site and calibre of the dimensions of the musical field)					
<i>PITCH</i>		<i>INTENSITY</i>		<i>DURATION</i> of the variations of emergence	
SITE TESSITURA	CALIBRE WIDTH	SITE WEIGHT	CALIBRE RELIEF	IMPACT	MODULE
7 oct. x 12 = 84 deg. HARMONIC COLOUR ↓ REGISTERS ex. low -1 very low 0 low 1 med. low 2 diapason 3 med. h. 4 high 5 very high 6 ex. high 7	HARMONIC INTERVAL ↓ COLOUR THICKNESS ↑	WEIGHT OF A HOMO- GENEUS MASS [1 ppp 2 pp 3 p 4 mf 5 f 6 ff 7 fff]	PROFILE of the texture of mass		(threshold of recognition of the masses for short sounds)
		WEIGHT OF A PROFILED MASS according to its module [1 ppp 2 pp 3 p 4 mf 5 f 6 ff 7 fff]	MODULE OF THE PROFILE weak medium strong	VARIATION OF THE PROFILE slow modernic lively 1 2 3 4 5 6 7 8 9	SHORT SOUNDS MEASURED SOUNDS LONG SOUNDS
COLOUR	FULLNESS	RICHNESS		variation: of fullness, of colour, of richness no. 1 to 9	(threshold of recognition of the timbres for short sounds)
	narrow ample		dens.? vol.?		
dark	1 2	poor timbre	1 2		
light	3 4	rich timbre	3 4		

		1	2	3																
	<p>Description (2-3) Evaluation (4-9) of</p> <p>CRITERIA of musical perception</p>	<p>TYPES</p> <p>typo-morphological recapitulation</p>	<p>CLASSES</p> <p>musical morphology</p>	<p>GENRES</p> <p>musical characterology</p>																
4	<p>VARIATIONS</p> <p>MELODIC PROFILE</p>	<table border="1"> <tr> <td></td> <td>Progress</td> <td>Profile</td> <td>Anam.</td> </tr> <tr> <td>Fluc.</td> <td>N, X</td> <td>N, X</td> <td>N', X'</td> </tr> <tr> <td>Dev.</td> <td>Y, T</td> <td>Y, W</td> <td>Y'</td> </tr> <tr> <td>Mod.</td> <td>G, P</td> <td>G, M</td> <td>K</td> </tr> </table>		Progress	Profile	Anam.	Fluc.	N, X	N, X	N', X'	Dev.	Y, T	Y, W	Y'	Mod.	G, P	G, M	K	<p>(Only Y notes)</p> <p>podatus </p> <p>torculus </p> <p>clivis </p> <p>porrectus </p>	<p>characteristic of the profile: pizz, melodic, dragging, etc.</p>
		Progress	Profile	Anam.																
Fluc.	N, X	N, X	N', X'																	
Dev.	Y, T	Y, W	Y'																	
Mod.	G, P	G, M	K																	
5	<p>MASS PROFILE</p>	<p>Typological development</p> <p>Fluc. N/X or X/N Dev. Y/W or W/Y Mod. G/W or W/G</p>	<p>(Only thickness)</p> <p>swelled </p> <p>delta </p> <p>thinned </p> <p>hollow </p>	<p>Characteristic development of mass, of harm. timbre</p>																
6	<p>SUSTAINMENT</p> <p>GRAIN</p>	<p>Pure or mixed of</p> <p>resonance friction iteration</p>	<table border="1"> <tr> <td>Quiv.</td> <td>Shim.</td> <td>Limpid</td> </tr> <tr> <td>rough</td> <td>mat</td> <td>smooth</td> </tr> <tr> <td>coarse</td> <td>net</td> <td>fine</td> </tr> </table>	Quiv.	Shim.	Limpid	rough	mat	smooth	coarse	net	fine	<p>harmonic compact-harmonic compact compact-discontinuous discontinuous discontinuous-harmonic</p>							
Quiv.		Shim.	Limpid																	
rough	mat	smooth																		
coarse	net	fine																		
7	<p>ALLURE</p>	<p>Pure or mixed</p> <p>mechanical living natural</p>	<table border="1"> <tr> <td>order</td> <td>fluct.</td> <td>disord.</td> </tr> <tr> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>4</td> <td>5</td> <td>6</td> </tr> <tr> <td>7</td> <td>8</td> <td>9</td> </tr> </table>	order	fluct.	disord.	1	2	3	4	5	6	7	8	9	<p>regular cyclic vibrato progressive irregular abrupt decay, muffled incident</p>				
order	fluct.	disord.																		
1	2	3																		
4	5	6																		
7	8	9																		

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4	5	6	7	8	9	
SPECIES (site and calibre of the dimensions of the musical field)						
<i>PITCH</i>		<i>INTENSITY</i>		<i>DURATION</i> of the variations of emergence		
SITE TESSITURA	CALIBRE WIDTH	SITE WEIGHT	CALIBRE RELIEF	IMPACT	MODULE	
or site of the profile (see mass)	melodic width. } weak medium strong	linking of the melodic profile		slow mod. lively		
		→		1	2	3
		→		4	5	6
		to the dynamic profile		7	8 9	
				Partial see col. 3 } onset cont. term.		
or total						
incidence on the tessitura or colour (mass and harmonic timbre)	width of interval or thickness } weak medium strong	linking of the profile of mass		slow mod. lively		
		→		1	2	3
		→		4	5	6
		to the dynamic profile		7	8 9	
				Partial see col. 3 } onset cont. term.		
or total						
GRAIN APPRECIATED THROUGH MASS OR TIMBRE		Relative weight	Dynamic texture	variation of grain fullness/speed		
colour of the grain	thickness of the grain	GRAIN-MASS LINKED		no. 1 to 9		
		of the grain } weak medium strong				
		tight med. slack				
				1	2 3	
				4	5 6	
				7	8 9	
GRAIN APPRECIATED THROUGH MASS OR TIMBRE		Relative weight	Dynamic texture	variation of allure fullness/speed		
pitch width of allure	pitch width of allure } weak medium strong	GRAIN-MASS LINKED		no. 1 to 9		
		of the grain } weak medium strong				
		tight med. slack				
				1	2 3	
				4	5 6	
				7	8 9	
GRAIN APPRECIATED THROUGH MASS OR TIMBRE		Relative weight	Dynamic texture	variation of allure fullness/speed		
pitch width of allure	pitch width of allure } weak medium strong	GRAIN-MASS LINKED		no. 1 to 9		
		of the grain } weak medium strong				
		tight med. slack				
				1	2 3	
				4	5 6	
				7	8 9	
GRAIN APPRECIATED THROUGH MASS OR TIMBRE		Relative weight	Dynamic texture	variation of allure fullness/speed		
pitch width of allure	pitch width of allure } weak medium strong	GRAIN-MASS LINKED		no. 1 to 9		
		of the grain } weak medium strong				
		tight med. slack				
				1	2 3	
				4	5 6	
				7	8 9	

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- "De la Musique Concrète à la Musique même", *Revue Musicale*, nos. 303-304-305, éd. Richard-Masse, 1977 (a selection of texts by Pierre Schaeffer, some [182] unedited, covering all the years of research and reflection between 1938 and 1977; collected with the collaboration and commentary of Sophie Brunet; also includes a chronology and a bibliography).

3) *On Pierre Schaeffer and the T.O.M.*

- *Pierre Schaeffer*, by Sophie Brunet, éd. Richard-Masse, 1969.
- "Le T.O.M. dix ans après", *Cahiers Recherche/Musique*, no. 2 (see above).
- *Étapes*, limited publication from the Service de la recherche, under the direction of David Rissin published for several years until 1975 the proceedings of the Seminars given by Pierre Schaeffer and the G.R.M. at the Paris conservatoire.
- n.b. the articles of the "Lexique du T.O.M." published in the *Bulletins-Programmes* in a limited publication of the G.R.M. (18 issues between 1973 and 1975) should be considered as sketches for the present guide.

Note that the *Traité des Objets Musicaux* is published by Seuil (last edition in 1977) and that it is supplemented by the *Solfège de l'Objet Sonore*, with sound examples plus commentaries, re-published on cassette by I.N.A./G.R.M.

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