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ACOUSTICAL PLANNING & ITINERARY IN BUILDINGS

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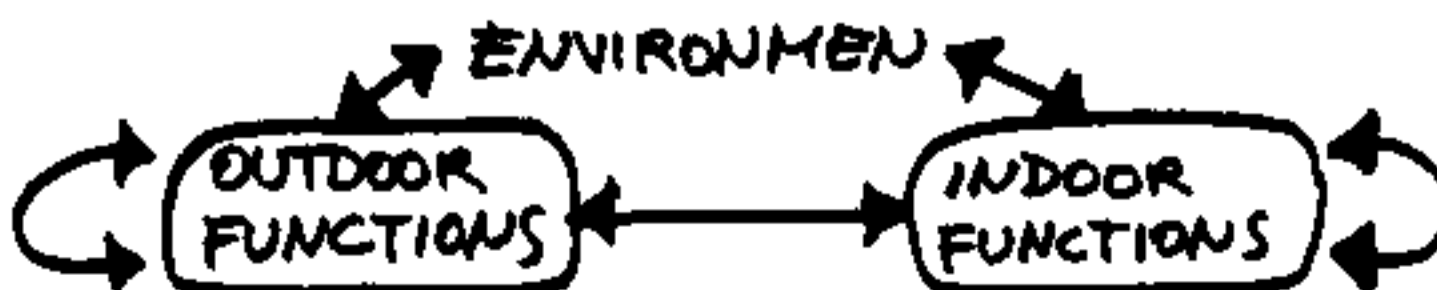
ABSTRACT

We propose to use the own Topologic Distribution of Functions as a first method of acoustical design against sound energy fluxs of the buildings; indoors or outdoors, and the exterior environmen.

Each function is analysed in accordance to their acoustical necessities, if generates or does not noise, and if needs or does not silence. If they have in the building some functions which don't produce noise and don't require silence, it is better to use them substituing sophisticated insulator walls.

INSULATOR FUNCTION	{	PRODUCE : NOT NOISE
		REQUIRE : NOT SILENCE
MATTRESS FUNCTION	{	PRODUCE : NOT NOISE
		REQUIRE : SILENCE
BI-NOISY FUNCTION	{	PRODUCE : NOISE
		REQUIRE : NOT SILENCE
UNI-NOISY FUNCTION	{	PRODUCE : NOISE
		REQUIRE : SILENCE

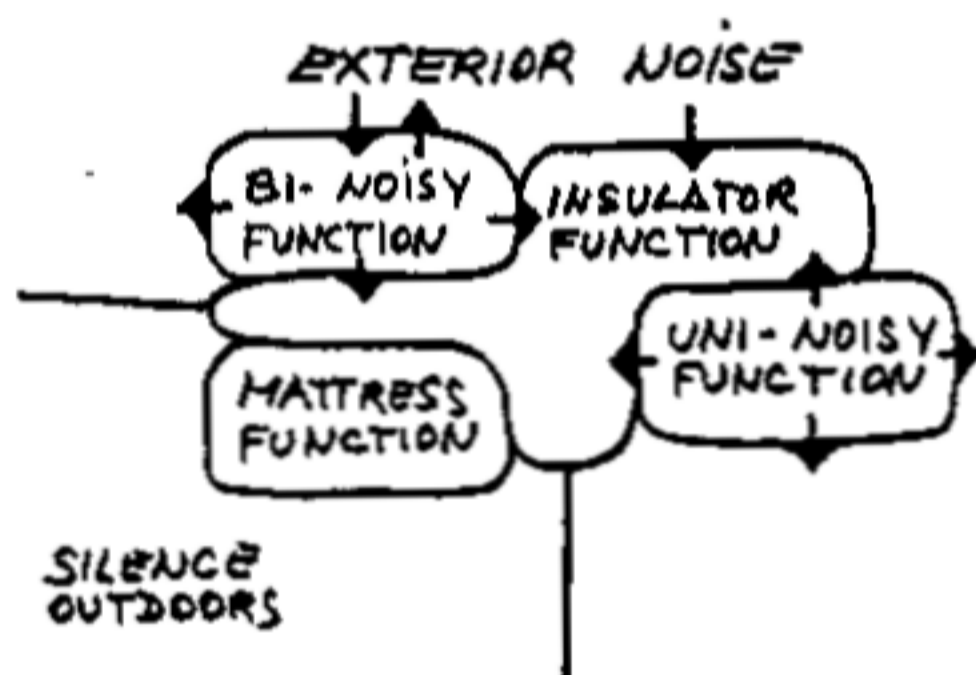
A specific Function Compatibilities Matrix of each building may help to its planning.



	INSULATOR	MATTRESS	BI-NOISY	UNI-NOISY
INSULATOR		↑	←	▨
MATTRESS	←	▨	←	▨
BI-NOISY	↑	↑	▨	▨
UNI-NOISY	▨	▨	▨	▨

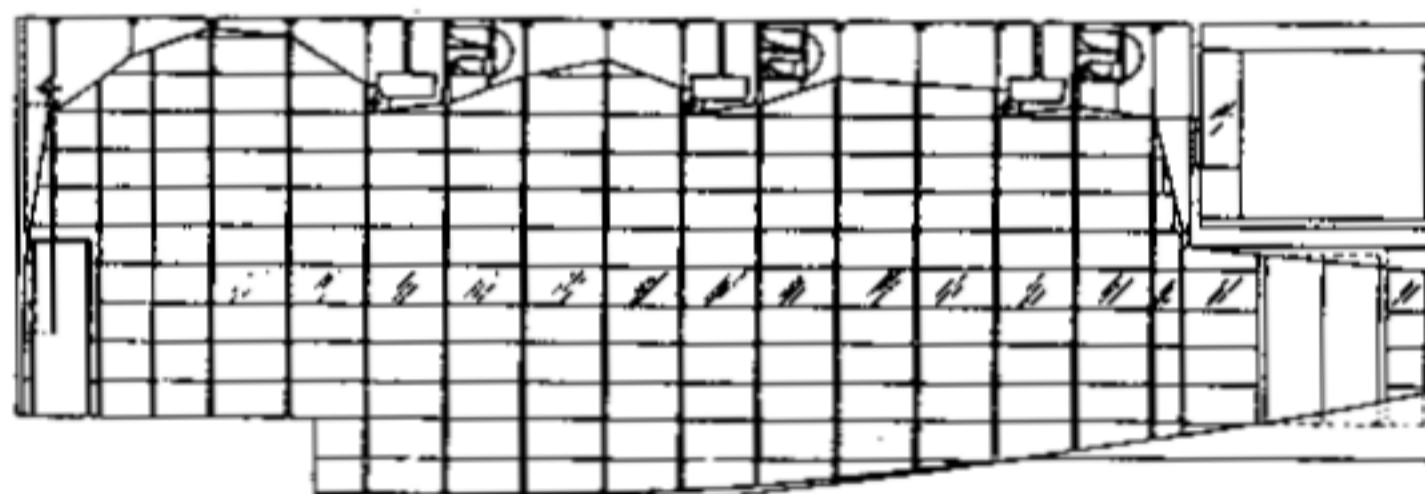
▨ COMPATIBLE
 ← COMPATIBLE ONLY IN ONE DIRECTION
 □ ~~COMPATIBLE~~

The Topologic Distribution of Functions can be established.

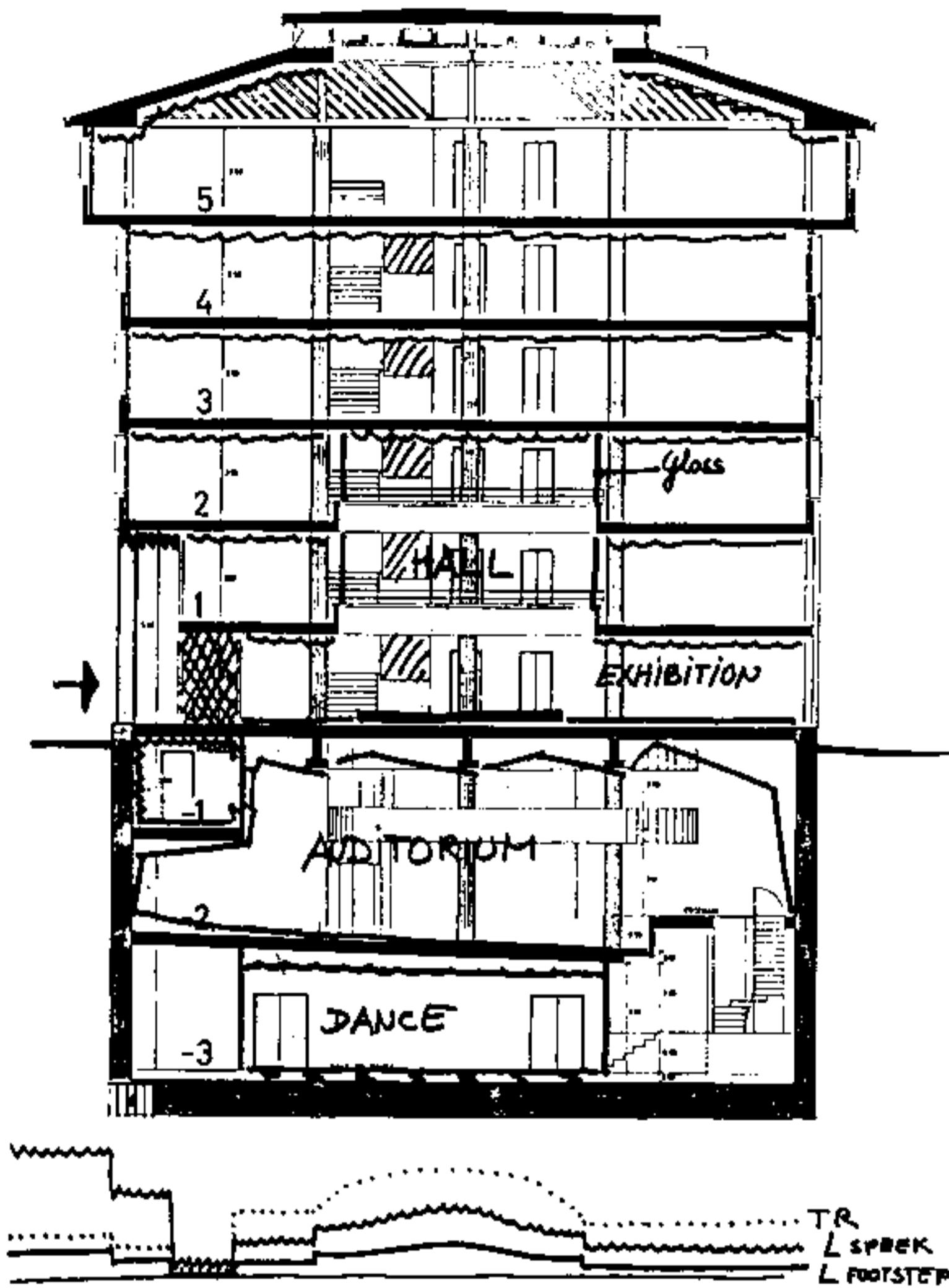


Furthemore, the analysis of the Acoustical Personality of their functions is a basis for the Acoustical Itinerary Design Method, in accordance to the specific poetry of the building author.

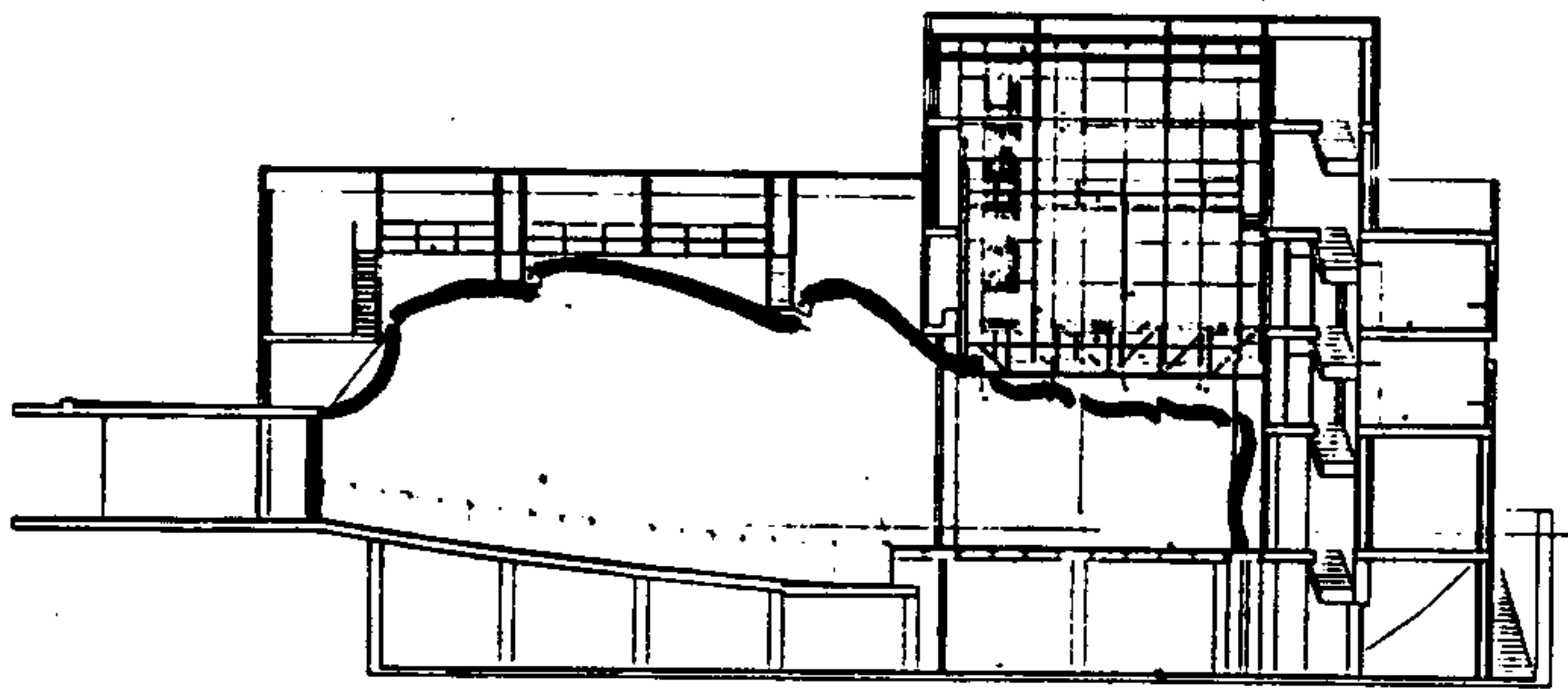
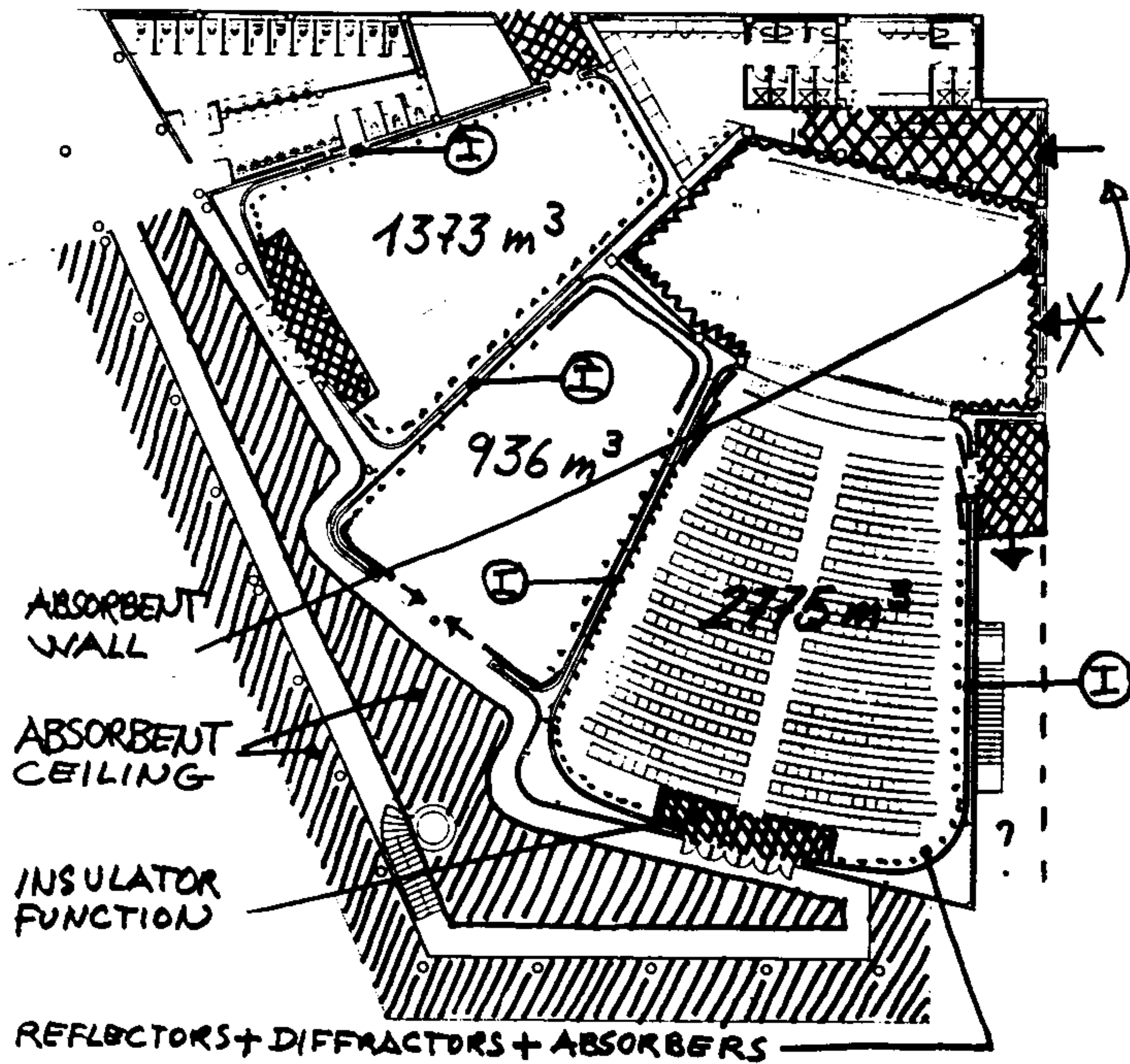
Two buildings in which we are actued as acoustical consultor are realized with those two methods; the Town Hall of Escaldes d'Engordany, Andorra, opened in 1987, and the Theatres Pavilion in the Civical Center of Ciutat Badia, Barcelona, under construction.



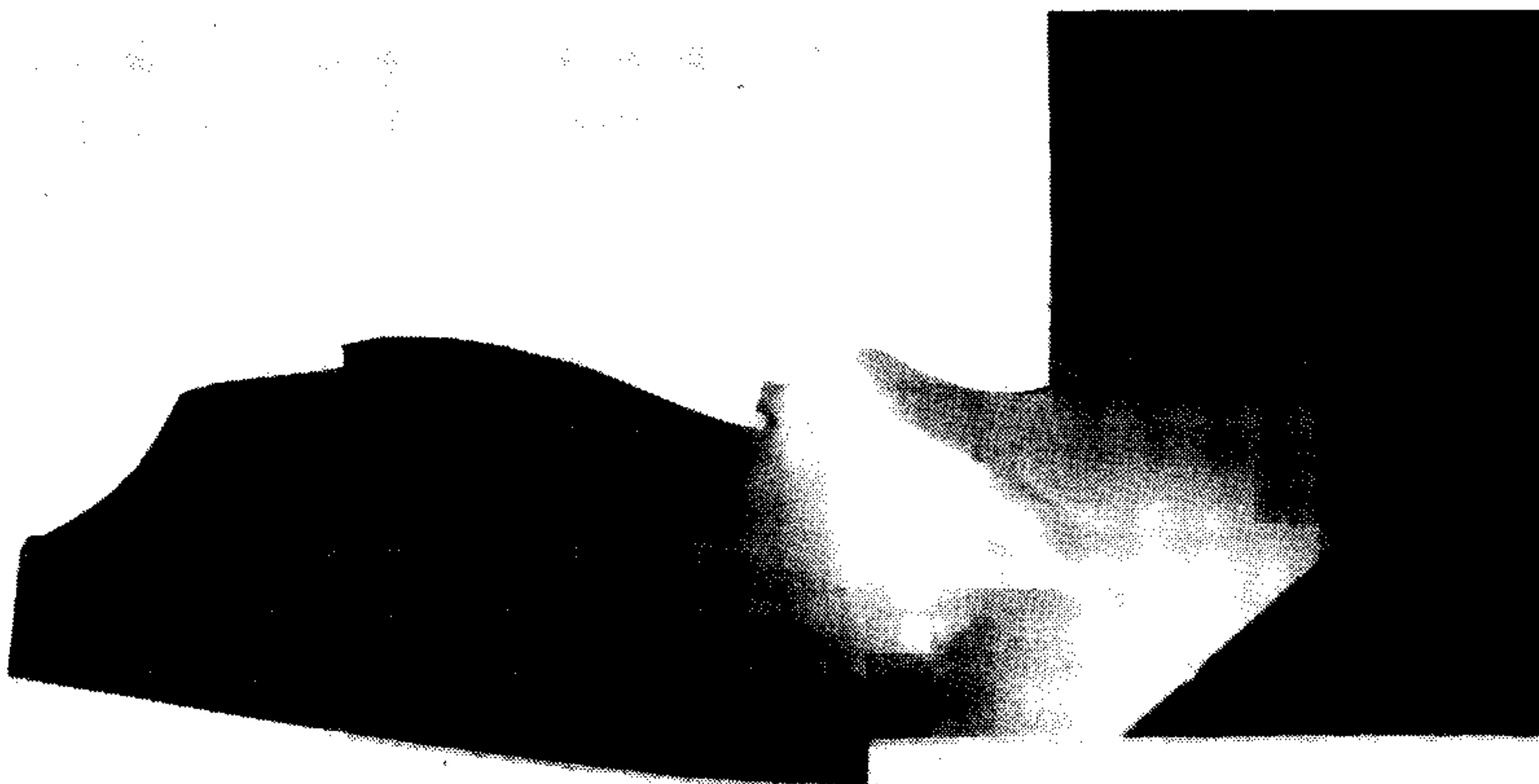
Auditorium in Town Hall of Escaldes d'Engordany



Acoustical Itinerary Design in the Town Hall of Escaldes d'Engordany.



Topologic Distribution of Functions proposed by the authors. Civical Center of Ciutat Badia.



(not shell contributions are considered)

Lighth-tracing used in the Theatre.