

***Construct Synthesis*** (2010) for electro-acoustic sounds. Duration 10' 11

Construct Synthesis is an electro-acoustic sound composition completed in January 2010 as a commission of the Institute of Electro-acoustic Music in Bourges, France. The work was realized at IMEB's studio Circé. The title of the piece refers to an intuitive sound synthesis model coined by the author where sounds are synthesized acoustically using modular robotics and various orders of control.

For the purposes of the piece I constructed about 7 different robotic generators. The piece uses about 700 sounds from a pool of 1200 created. In a sound to note analogy it could be equivalent to a busy chamber orchestra piece. The meticulous mix of the piece takes into account a timbre classification algorithm developed in PD (pure data), which is defining proximity relationships among the sounds. When the sound material is in close proximity a holophonic texture (all in one) emerges with various levels of fusion. The use of sonic connotations works as an interconnection between conscious and unconscious, real and unreal, concrete and abstract, present and past.

The sounds are generated through a robotic performance system and real-time audio manipulation. The composer/ synthesist builds robotic acoustic systems that serve to the sonic purposes required for the particular composition and then meticulously record them with precision and control. As a result the sound generated has a rich sonic spectrum with great articulation. It is a hybrid between the musician/ performer and sound engineer/ programmer. With Construct Synthesis one can produce virtually any known or unknown sound can imagine manipulated in a way that makes it suitable for the particular composition.

The piece was awarded the First Prize at Computer Space 2011 Media Arts Competition in Sofia / Bulgaria, it was finalist at Acousmatic Composition International Competition Metamorphoses 2010 in Brussels / Belgium and at 2011 Transitio\_MX 04 Edition - Electronic Arts and Video Competition in Mexico City / Mexico. It is released by Musiques & Recherches, MR 2010.