

SCAMP Singularity 3b: Algorithmic Computer-Assisted Music as means of Multidimensional Performance and Creation

The intertwining of computation with artistic environments leads to a state of permanent articulation and supports the development of artistic creation. We are immersed in computation, living in a post-humanistic and post-digital world, in which it becomes fundamental to artistic practice, to artworks, and the aesthetic experience. The integration of digital technology and mechanical instruments would not only deconstruct this distinction between electronic and instrumental music, enormously amplify the scope of extended and augmented techniques, but would also question, the traditional understanding of composer, performer and programmer, and their interrelationships. In cases in which the composer and programmer are distinct members of the creative process, insofar as coding affects the compositional options, authorship is deconstructed inasmuch as it does not result from a single mind.

Although instrumental music is by definition technologically mediated, digitalization has fundamentally changed music production, transmission, and reception, in ways perhaps not fully foreseeable at its origins. The work SCAMP Singularity 3b is presented here as belonging to a group of works, Slippery Singularity Studies, composed from two algorithmic computer systems for electronics and multiple saxophones, namely SCAMP and Slippery Chicken. The first pieces were developed over the specialised algorithmic composition software named Slippery Chicken developed by Michael Edwards, written in and functions on the principles of the Common Lisp Object System (CLOS), the Common Lisp facility for object-oriented programming. SCAMP Singularity 3b for Alto Saxophone and four speaker was developed over SCAMP framework in Python, created by Marc Evanstein, designated to act as a hub connecting the composer-programmer-performer to different resources for playback and notation. The structure and spatialization of the piece is based on data sonification thru the reading of CSV files using the pandas library for data wrangling.

Technology is moving faster than musical practices and we are taking some snapshots of techniques applied in musical composition and performance, techniques whose materialities will be quickly replaced with new ones, but whose embodied structures continue and become re-implemented in later technical objects as a recycling of skills. Understanding how emerging digital musical technologies trace their concepts, design and functionality to practices in the current cultural epoch will bring to light a study of new-media archeology, conceptual epistles and performative paradigms, directed, in other words, to the study of how the new technologies of mixed music-making trace their design to the practices of material, symbolic, signal inscription, listening experiences and how practice is transforming and leading to creation.

Keywords: Algorithmic Composition; Saxophone; Mixes Music; Immersive Listening;