Laniakea

“Laniakea” was born as an exploration into the nature of causality. How can we be made aware of the extent of the repercussions caused by our actions? Can the character of this effects be changed by reinterpreting or recontextualizing their cause? The approach I took was to employ live looping as a tool to freeze in time and alter quasi-improvised instrumental gestures, exposing the lingering effects of what are usually considered transient or even cursory elements.

The piece is scored for the relatively uncommon string quartet composed of Violin, Viola, Cello and Double-bass as well as for a MIDI controller. The latter should have an interface that allows the performer to record, playback and modulate volume and playback speed of at least 5 samples with a length of 8 seconds. Two prerecorded samples are also provided and should have their own dedicated sections within the interface. The patch is provided as a SuperCollider file and is configured to work with a Korg NanoKONTROL2, although it can very easily be adapted to work with any other MIDI controller.

It was named after the biggest cosmic structure currently known to humanity, discovered just a few years before. Structures of those dimensions are composed of clusters of galaxies and thus are called *superclusters.* I decided to use such concept because it was originally composed as a collaboration with the Mexican String quintet “Ensamble Supercluster”, and because it helped me continue an exploration of a kind of intersemiotic translation of salient features of different phenomena (as apprehended numerically) to musical parameters. A sort of sonification. The form of the piece was determined by creating a section for each one of the four superclusters that comprise Laniakea: The southern, Pavo-Indus, Hydra-Centaurus and Virgo superclusters. Correspondingly, the number of individual elements in every repeating module within a section is loosely determined by the number, mass and location of constituent clusters of galaxies within those superclusters.

A general timbral evolution from purely pitched material to white noise is the overarching process followed by the piece. Four kinds of materials are sequentially explored by the string instruments, each one conceived as spreading the energy provided by the gestures of performers more evenly in the audible frequency spectrum: harmonics, various kinds of glissandi, distortion produced by overpressure, and noise produced by rubbing or softly and constantly striking the instrument’s body with their fingers. The score uses graphic notation to depict where the indicated gestures should be played, either as a location within the comfortable instrumental range (as in page one) or as a position in body of the instrument (as indicated by the clef on page two).

A smooth progression through the piece is achieved by requesting that every performer move from one section to another independently, as well as by the looped playback while recording the new material. The only exception is the exclusively electronic improvisation in the middle of section #3, which is reached via a crescendo and recedes with a thinning out of the texture.

Live looping not only becomes another contributor to the general sonic character of the piece, but it also takes the role of reinterpreting the previous musical discourse and influencing decisions taken by the performers. This process mirrors not only the way I conceive of effects having the potential to affect the cause to some degree, but also the way effects branch infinitely from a source, not unlike the visual representation of Laniakea.