



N P F A I L

Composer / researcher

Dimitri Voudouris

Composed

2008- 2015

Composition

NPFAI.4

Duration

10 min 30 sec

for

Xigoviya (globular flutes)
Electronic environments
Ring modulator

Origins of xigoviya and composition of NPFAI.4

Xigoviya or globular flute is a wind instrument which occupies organological and executive characteristics, a primary role in the musical patrimony in Gaza a region of Mozambique. This tubular flute is used by the Chopi people. NPFAI.4 explores globular systems, with electronic integration. I focused on blending the aesthetic with the acoustic, looking for new ways to expand traditional instrument systems.

Xigoviya are vessel flutes. They can be any shape, but still have finger holes and a blow hole, and are generally played in the same fashion as a tubular flute. But that's where the similarity ends. The physics of sound production is significantly different between tubular and globular instruments. In globular instruments, the shape of the air contained within the vessel is generally irrelevant to the pitch. It's the total volume of air contained in the vessel and the size of the opening that determines the pitch. (The system at play here is commonly called a Helmholtz resonator.) Thus globular flutes, the size of the tone-hole has a similar effect, but the location of the tone-hole has essentially no effect on the pitch, their pitch range is limited and it is not possible to play overtones on globular instruments. Xigoviya have a range of less than an octave plus a third.

Audio recordings were obtained from the Instituto de Comunicacao (Mozambique) during field research in 2006 and the instruments were acquired with advice from local Chopi musicians. With an audio recorder I also captured a variety of audio environments in the Gaza region both natural and contrasting. NPFAI.4 is an electro-acoustic work consisting of Xigoviya and electronics. The field recordings I used as a guide whilst composing the work. My aim was to produce a work of natural origin gradually introducing electronics which slowly take over, engulfing certain natural elements in the environment, resulting in a futuristic battle ground of natural and artificial synthesized flute sounds transforming the local pseudo-environment into a synthetic mine field.



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Dimitri Voudouris

Composed

2009 - 2015

Composition

NPFAI.5

Duration

13 min 52 sec

for

Computer composition

Composition of NPFAI.5

My belief is that tradition does not have to represent a revival or strict inheritance of past systems, conventions, and regulations. Neither does it intend to rely on the latest musical trends. The combination of electro-acoustic music and observations on African movement was a means of conveying the spirit of tradition. NPFI.5 (New Possibilities for African Instruments) is the 5th in a series on neo-traditional computer music studies. NPFI.5 was created not from audio samples as used in musique concrete, but by purely electronic techniques. The sounds originating in this work were inspired from two traditional instruments used by the Khoi San e.g. *nxali / nxonxoro* a mouth (friction) bow used by !Xun San people and the *dithlaka reedpipes* with tetratonic tuning was derived from the Khoi. The work was created electronically along the lines of aesthetic conception, the tone-colour spectrum offered by computer music allowed me to think how with computers producing a sound from dust is similar in relation to how traditional musicians were confronted with similar problems regarding their instruments and sound produced. Creating a “*bridge*” which allowed for cross communication.

The use of a recorded sound of music as a compositional material is similar to the act of borrowing, which Western composers have long practised. However, achieving originality through borrowing may not be as simple as it seems, after hearing such a work a few times, superficiality remains. It is more challenging and rewarding in contemporary computer music to create sounds from scratch.