

# Talandon

ALEXANDROS KONTOGEORGAKOPOULOS, Department of Digital Arts and Cinema of National and Kapodestrian University of Athens, Greece

Additional Key Words and Phrases: physical modelling, digital fabrication, light

## ACM Reference Format:

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## 1 PROGRAM NOTES

Talandon, is a live composition created in 2015 for a custom designed electroacoustic musical instrument, the *semantron* and light. The music is developed around a basic rhythmic pattern radiated directly from the body of the instrument and from a set of physical models simulating various vibrating structures. The interplay between the rhythmic gestures [form] of the performer and the resonance of the physical and virtual bodies [colour] is enriched, transformed and amplified by the presence of the light component of the composition. Musical sounds and sculpted light create a pure and transcendent soundscape and landscape; silence and shadows express the inner fine values of the work. The composition seeks spirituality and interprets Kandinsky's language of form and colour.

## 2 PROJECT DESCRIPTION

The novelty and the significance of the piece can be identified in the interaction and also in the interplay between the physical and the simulated sounds. Moreover the body of the instrument has been designed and developed using digital fabrication methods that reflect the rhythmical elements of the structure composition. Therefore the rhythmical patterns appear on the physical form, on the triggered light pulses and on the sonic component of the piece.

The digital musical instrument that was developed for the *talandon* composition is called *semantron*. *Semantron* is an object used in monasteries to signal sonically events in the monks life. This project transforms this object into an interactive sound sculpture and an augmented interactive musical instrument. The instrument was digitally designed and created using digital fabrication methods. The sound of the wood is convoluted in real time with the sound of simulated physical objects creating a surreal sonic result merging the real and the virtual worlds.

## 3 PERFORMANCE NOTES

The composition is performed by the composer. It is an interactive music-light performance and composition for a custom designed-made digital musical instrument. The performance lasts approximately 7 minutes and 30 seconds and it is a staged theatre piece. It is fully in accordance with the NIME2024 theme since it focuses on a custom designed instrument, *semantron* that makes a connection between the tactility of instruments (the physical digitally fabricated part) in a hybridizing environment (the virtual - physical model part). More thoughts about that tangible aspects of this

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Fig. 1. Talandon performance.

work can be found on the publication [1]. More over a talk related to digital fabrication and digital musical instruments can be found on the Media Links section.

#### 4 MEDIA LINKS

- Video: <https://alexandros-k.com/projects/talandon.html>
- Images: <https://alexandros-k.com/projects/sematron.html>
- Video: <https://zkm.de/en/person/alexandros-kontogeorgakopoulos>

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## REFERENCES

- [1] Cadoz C., Luciani A., Villeneuve J., Kontogeorgakopoulos A., and Zannos I. 2014. Presence, Materiality, Reality in Artistic Creation with Digital Technology. In *Proceedings of International Computer Music Conference - Sound and Music Computing Conference ICMC-SCM2014*.