

web [www.leoalmanac.org](http://www.leoalmanac.org)  
email [info@leoalmanac.org](mailto:info@leoalmanac.org)  
phone +90 216 483 9292  
address Sabancı University, Orhanlı - Tuzla, 34956 Istanbul, Turkey



**LEONARDO ABSTRACT SERVICES (LABS) 2010-2011  
POTENTIALS OF DATA SONIFICATION IN VISUAL ART:  
SONIFYING THE COMPART DATABASE**

**By Tobias Hildebrandt**

Data sonification, the presentation of data using sound, is gaining more and more importance in various academic fields and disciplines. However, most sonifications so far base on quantitative data, often from the natural sciences. Therefore, this paper tries to find out which sonification techniques and methods are suitable to represent art historical data. While data that is typically being used for data sonification is often multi-dimensional and numerical, data from the domain of art history is usually non-numerical, relational and hierarchical.

An interactive GUI-based prototype has been developed on the basis of the compArt database for early computer art in order to verify the suitability of the proposed methods and techniques. This prototype bases on parameterized earcons with the outcome that, however with restrictions, the proposed methods are suitable to sonify data from the domain of art history. However it is suggested to conduct further experimentation using parameterized auditory icons to find out if they yield better results.

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University: University of Bremen  
Supervisor: Prof. Dr. Frieder Nake  
Semail: [nake@informatik.uni-bremen.de](mailto:nake@informatik.uni-bremen.de)  
Supervisor 2: Prof. Dr. Andrea Sick  
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Copyright: Tobias Hildebrandt  
Lang\_author: English, German, Spanish  
Url:  
Email: [Tobias\\_Hildebrandt@gmx.de](mailto:Tobias_Hildebrandt@gmx.de)  
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