## ORIGINAL ARTICLE

# What NMSAT says about sonification

Jerome Joy

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**Abstract** This article presents a sample of references issuing directly from the existing NMSAT database. The method employed—that of systematically probing the database—reveals forms of sonification, but also hypothetical premises of sonification, covering the period from ancient times to the beginning of the twentieth century. The following are some of the categories of sonification that have emerged as a result of this search: Natural phenomenon & meteorology to sound (autophones); Image to sound; Text & communication to sound; Human & machine activities to sound (auditing); Localisation to sound (sonar); Architecture & geometry & abstract proportions to sound (scalization, transcription, & spatialization); Energy to sound; Human body to sound; Distance to sound (distance listening); Movement to sound (holophony, kynophony); and Interpreted observations to sound (naturalist music, transpositions & analogies, paraphrasing). The search also uncovered other principals and practices in the vicinity of sonification including: audification, auditing, auscultation, auralization, soniculation, transduction, mapping, earcons, auditory icons, sympathy, echometry, etc. It has been decided to summarise the results of « What NMSAT Says About Sonification » in this special issue of AI&Society, access to the unabridged version of article is available here: http://www.locusonus. org/sonification/.

**Keywords** Sonification history · Distance listening · Networks · Audio art · Networked music · Timeline · Database

Locus Sonus, École Nationale Supérieure d'Art de Bourges, BP 297, 7 rue Édouard Branly, 18006 Bourges cedex, France e-mail: joy@thing.net

#### 1 Introduction

NMSAT "Networked Music & SoundArt Timeline" is simultaneously a historical documentary database and a monitor of the evolution of networked music and sound art. Jerome Joy initiated the project in 2008 as part of Locus Sonus' research program. The aim is to provide an overview of practices and techniques in the realm of networked music and sonic performance, from ancient history to the present day, through a collection of references to theoretical and critical texts, thereby offering a valuable resource available to artists and researchers.

A future version of NMSAT will be publicly accessible online, open to contributions, and collectively moderated by an international college of more than sixty artists and researchers. It will also become an editorial platform for analytical studies and other projects related to sound transmission and distance listening.

### 2 Entries

# 2.1 ca. 3500 BC: Ancient Systems of Accounting

Comment: The presence of auditing ("hearing of accounts" from the Latin "auditus") has been inferred from records of Mesopotamian civilizations going back as early as 3500 BCE. To ensure that the Pharaoh was not being cheated, auditors compared the "soundness" of strictly independently scribed accounts of commodities moving in, out and remaining in warehouses (Boyd 1905). In the alternating intoning of such lists, differences can be easily identified aurally. A faster and more secure method that eliminates any "copy-cat" syndrome in such alternation, is to have the scribes read the records simultaneously a type of modulation



J. Joy (⊠)