

PERIOD INSTRUMENTS REVIVAL WITH PIANOTEQ KIVIR PROJECT

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ABSTRACT

Modartt supports the KIViR (Keyboard Instruments Virtual Restoration) cultural project which we believe ``bridges a gap" between physics based synthesis, reconstruction of period instruments and musical practice on a controller. The usual way of bringing historical keyboard instruments back to life consists in restoring them properly, by repairing structure components like soundboard, pinblock, frame, or by replacing worn parts like strings, hammers or other fragile elements made of felt or skin, which fall into disrepair along time. However safeguarding great historical valued instruments' manufacturing can be a priority. Besides, it may be risky to put ancient instruments under playing condition. Sometimes only some of the notes are restored. In both situations, it is impossible to play music on such instruments. Digital restoration is a new experimental and innovating technology which attempts to solve the above mentioned problem. By the use of the mathematical and physical model Pianoteq, a virtual copy of the period instrument is reconstructed and calibrated from a detailed physical description and from the existing notes which sound correctly, after what the missing notes are reconstructed by the model. These virtual copies can then be numerically tuned and voiced in order to correct some defects issued from recording, tuning or regulation difficulties. It is therefore now possible to bring an historical instrument back to life, while keeping the major part untouched at its original state. The collection does not only serve as a maintainable testimony of the past, with playable devices in museums available to the public, but also brings ancient sounds into the Pianoteq equipped computer of any musician or composer worldwide. In this talk we will present and play a selection of instruments hosted by the museums Schloss Kremsegg, Kremsmünster, Austria and Handelhaus, Halle, Germany, among piano predecessors (clavichord, cimbalom, harpsichord...), fortepianos and historical pianos.