



**Player Piano**

a project by

Pavel Matveyev

and

Ricardo Atienza, sound artist, architect and researcher

Project review, Karlholmsbruk, 2019-11-20

The starting point for this project is [Klaverens Hus](#), a collection of over 600 Swedish analogue keyboard musical instruments, of which around 60 are on display at the former community centre (Folkets Hus) in Lövstabruk, Tierp municipality, Sweden. The collection showcases the finest examples of these types of instruments, including grand and upright pianos, organs, harpsichords and clavichords.

Some of these historical instruments are still in good playing condition and are used for concerts organized in Klaverens Hus. Unfortunately, this is no longer the case for several other instruments; neither “normal” playing nor repair intervention is possible. However, there still is a fascinating collection of sounds emanating from them.

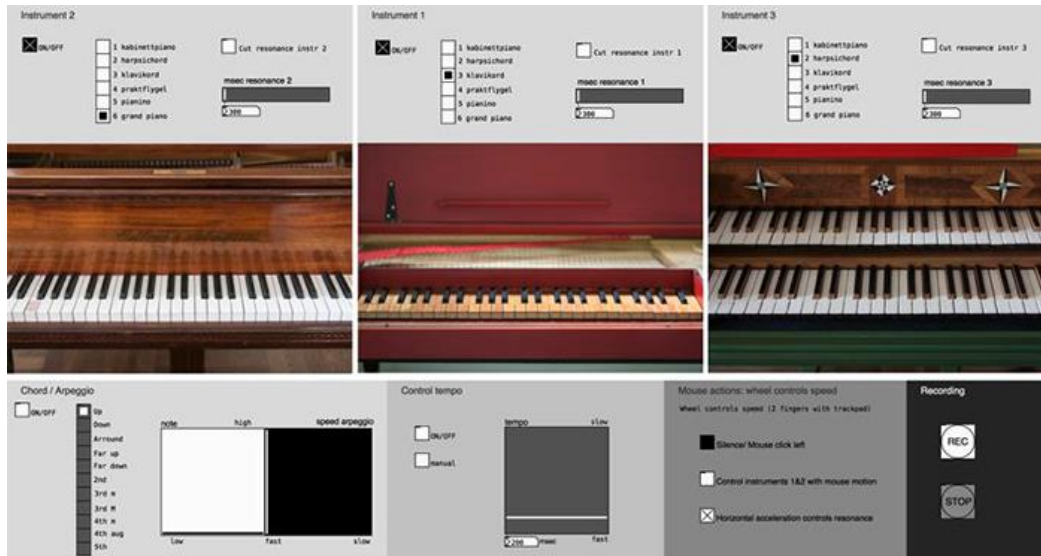
### **Collecting and activating sounds: Player piano**

As a first step, we recorded nine different instruments — sampling their entire keyboards — to make them accessible for future “playing” and listening. This selection demonstrates both instruments that are still in good playing condition and others that are not. The selected instruments are a representative ensemble of Klaverens Hus’ collection including grand and upright pianos manufactured between the 1830’s and 1920’s, and two copies of early instruments from the 18th century, a clavichord and a harpsichord; this selection was done with the guidance of the institution.



Following the sampling, an interactive environment was developed to “play” with this collection of sounds in real time. The aim was to be able to explore the sonority of these preserved instruments, and even to expand their physical playing possibilities, avoiding all judgment of the collected sounds. A self-restriction has been imposed during this stage to

preserve these sounds as they were, without manipulating them in any way; only juxtapositions of the sounds were employed, as is the case in a mechanical player piano.



The original aim of this project was to grant universal access to some instruments of the collection, irrespective of each “player’s” musical skills and knowledge. By doing that, we also wanted to question the barrier between music consumers and music producers, i.e. peoples’ musicality or ability not only to enjoy but also to create musical structures on their own when given appropriate tools. To that extent, an interactive application was developed in the graphic programming environment PureData, an open-source software specially conceived for interactive sonic applications. We searched for an intuitive interaction mode allowing the users to control the instruments without requiring long instructions or training periods; for that aim we developed a specific hand-interface, able to accurately measure in real-time the turning angle of the hand in each axis as well as its acceleration in the space. This interface was connected to the PureData application, providing all the needed data for operating the instruments and different playing modes in a performative situation by simply orienting and moving their hand in three dimensions. Such simple movements trigger arrays of sounds, expanding the traditional playing possibilities of a piano. The application was conceived for allowing to be operated at different complexity levels, from a first direct and intuitive “move and play” mode to more elaborated possibilities that can be progressively explored and accessed.



During two months (June-August 2018), a number of “players” (musicians and non-musicians) has been invited to explore this interactive system at Konstfack sound labs and provide feedback on the presented functionalities; these sessions and conversations were of

major importance, allowing us to progressively improve the application in intuitive and operational ways. By the end of each session each player was given an opportunity to record their musical fragment if desired.

The resulting pieces were shared in a one-day installation and event organized at Klaverens Hus 1 September 2018. For this occasion the recordings have been arranged in the form of collective *sonatinas*, each dedicated to one of the instruments explored. The materials were presented as produced, respecting the original contribution of each player.

The resulting sound files could be listened to individually at Klaverens Hus using headphones. The main aim was to give the visitors an on-site sonic impression of some of the historical instruments as if the players were physically triggering them. The sound files can also be downloaded and/or listened to online [here](#). To enhance such an experience and sensorial connection, the instruments have been recorded from the perspective of a pianist in action.

Video documentation of the event organised inside Klaverens Hus is available [here](#).

### **Collecting experiences: Piano player**

The secondary focus of this project was to identify a role of the piano in a contemporary context. The piano can be seen as a metaphor for the declining analogue culture in the age of Spotify, when the consumption of music has never been so easy.

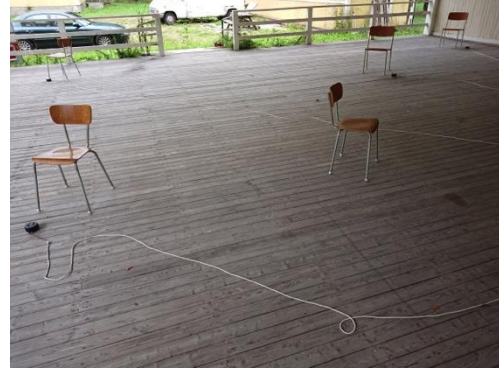
We've met and interviewed people<sup>1</sup> who own pianos and asked them to share their experiences, to reflect on the development of their relationship with the instrument, and to recall the story of the instrument's appearance in their homes. The result of this part of our research is a growing archive of personal stories, revealing the pleasures and pains of owning an instrument. The interviewees discuss challenges of owning and mastering this instrument, talk about their daily playing routines and describe "dream pieces" — something that they always wanted to play but were unable to, due to the extreme difficulties of the chosen works. When conducting the interviews and discussing the music practice of piano owners, we focused on the positive aspects of this activity, exploring the astonishing capacity of this personal relation with the instrument and its music to reactivate vital personal experiences, memories and expectations. The anonymous interviews also contain some examples of the piano players interacting with their instruments.

This archive has been presented publicly at the same event at Klaverens Hus 1 September 2018. For this purpose we decided to use the outdoor dance floor (*dansbana*), turning it into one large loudspeaker. For one day only, the normally silent dance floor has been revived with the voices — and lives — of the instruments.

---

<sup>1</sup> We selected participants based on their background, age and gender to provide a maximum variety even within this small study: the youngest participant was 16 years old, the oldest – 67 years old. We recorded 11 interviews in Swedish, English, Russian and Valencian.





Video documentation of this installation is available [here](#).

### **Sharing sounds and experiences: Player piano soir ee**

Testing the interactive environment in various situations (at Konstfack’s sound labs as one-to-one meetings, in small group meetings as well as outside the institution) made us realise a significant potential of this invention. Irrespective of their music experience and background, the users found the process of operating the “Player piano” an entertaining and captivating exercise. This feedback gave us an idea of arranging a “soir ee” where anyone could easily switch from being a member of the audience to a performer at any moment.

A one-night event has been held at Konstfack’s Studio, with the space being dressed up as a lounge. In order to create the right mood, we’ve produced a 23:36 video sequence of film fragments featuring a classic piano soir ee (from *The Legend of 1900* to *Gosford Park* and *Pride and Prejudice*). Any guest could then get a brief individual introduction to the system, so they could explore it at their pace and for as long as they wished. The feedback we received from both the “entertainers” and “entertained” was highly positive, with many mentioning innumerable opportunities offered by the software/device despite its seeming simplicity.

Video documentation of the event is available [here](#).



## **Opening a music dialogue: Player piano live**

Further development of the interactive environment made it possible to start dialogues with other analogue instruments. The player is now able to improvise based on other musicians' discourses. For that, the system was upgraded with a series of listening and analysing tools as well as improvisation modes.

For the first experiment we invited a sound artist and piano player, Robin McGinley, to improvise on one of the instruments from Klaverens Hus. McGinley played a grand piano from the collection, an instrument we had previously recorded and integrated into the system. For this occasion, the software was responding not to the hand-interface, but to the sounds produced by the instrument (pitch and intensity recorded through contact microphones). The session that took place at Klaverens Hus 25 August 2019 was an inspiring exercise and opened a whole range of new opportunities for this project.

Video documentation of the event is available [here](#) (password: playerpiano). Audio documentation can be listened to by following [this link](#).

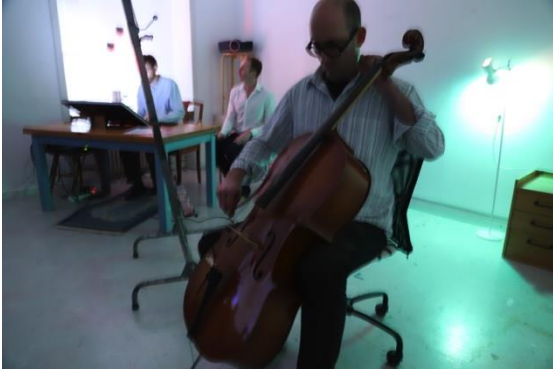
## **Making, sharing and enjoying music together: Player piano weekend**

The next step was to try extending the music dialogue format to other instruments and public situations. As a part of RISK(U) #3 residency at the Nordic Guest Studio at Malongen in Stockholm we organised an exhibition including three installations, pedagogic and public activities. During three days we had public sessions with various musicians joining us. Cello, guitar, oboe, trumpet, harmonica and even voice contributed to the rich and exhilarating music experience. It was important to us to keep the music making democratic, so, as in the case of Player Piano soirée, we kept the situation open: anyone attending the event was welcome to play with the interactive environment.

We used the studio space of the apartment for setting up an interactive installation with a large suspended projection screen and "speakers", both based on translucent vinyl panels. Prior to this presentation we had another visit to Klaverens Hus with a professional pianist Silja Levander to collect a selection of still images documenting her playing technique from various angles. An additional PureData patch was developed allowing to "toss" about a thousand images in real time in synch with the sonic interface. The result was projected on the double-face vinyl screen serving as a visual anchor for the space.

A second space, the sitting room of the apartment, was set up as a "listening station" in which an old radio was playing fragments of the interviews we collected, in a random order. The third, most peaceful and relaxing installation, was arranged in the bedroom, where visitors could lie down comfortably and listen to the collective *sonatinas* and the recording from Klaverens Hus session with McGinley.

Video documentation of this weekend is available [here](#) (password: playerpiano). See some photos on the next page.



## Player Piano at Möbeln: closer to where it all started

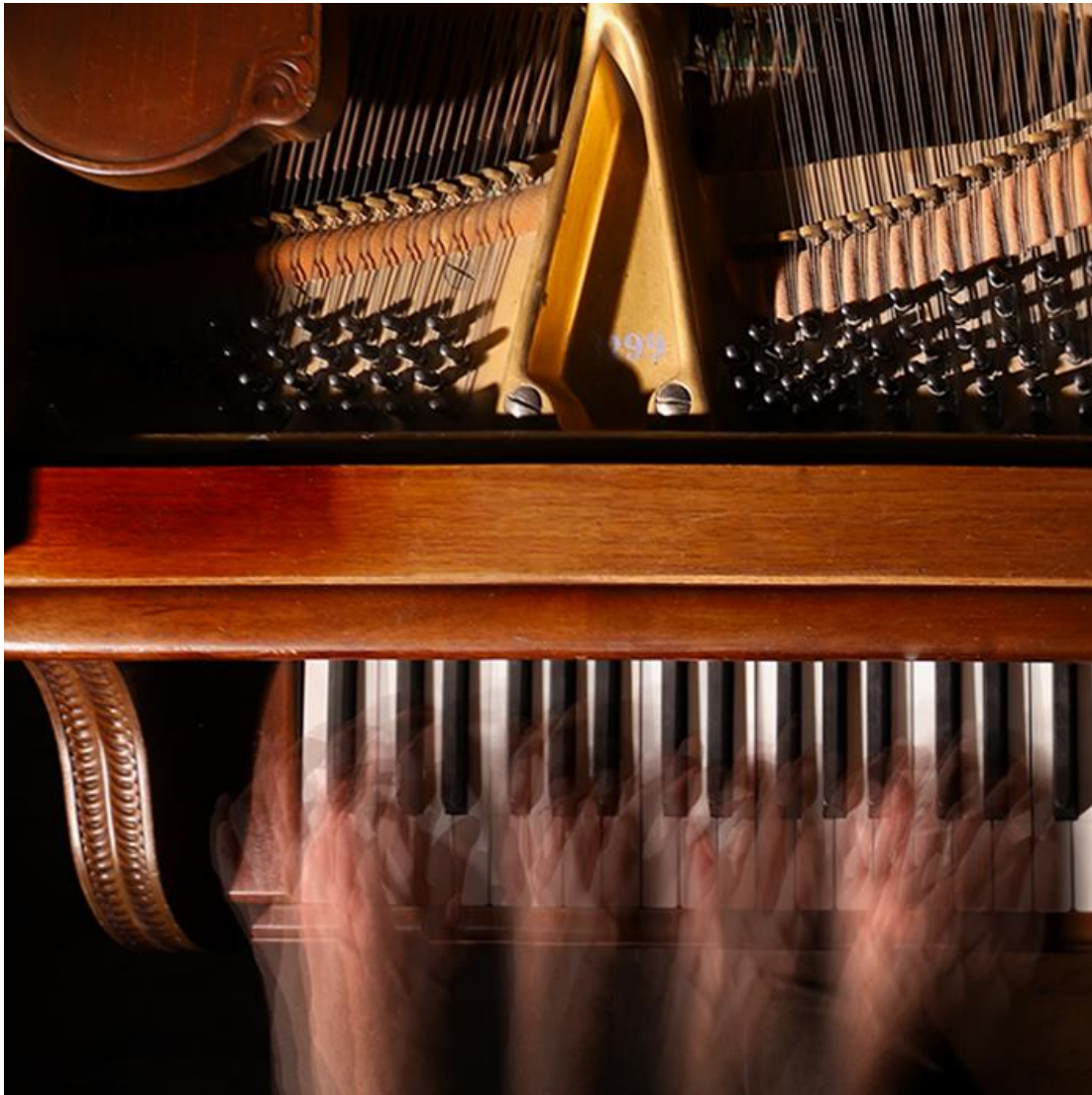
The last event we organized within this project took place at the premiere of the Culture House Möbeln in Tierp, the main town of the municipality where Klaverens Hus is located. For one day we had the installation running in one of the rehearsal rooms of the newly renovated building. The diverse audience – from children to senior citizens – was very engaged creating music, with some members of the public returning to the installation several times during the day.





The project has resulted in six public presentations over a period of 13 months (between 1 September 2018 and 26 October 2019) with events organized in Lövstabruk, Tierp, Stockholm and even in Vilnius<sup>2</sup>. Konstnärsnämnden's support has been acknowledged by placing the institution's logo on the posters, invitation cards and emailed PDFs, mentioned in the supporting information online and at the actual presentations.

The feedback we received from the participants has been very positive: even the people who claimed they couldn't play any instrument found the intuitive approach of the interface very accessible. We received a number of invitations for future collaborations and looking forward to exploring these possibilities.



---

<sup>2</sup> Pavel performed with Player Piano during his stay at DAR (Druskininkai Artists' Residence). For the concert that took place at Studium P in Vilnius 13 September 2019 he joined Austrian composer Volkmar Klien.