## **Robots Love Music - Exhibition**

Speelklok Museum, Utrecht, Holland 21st Sept 2018 to 3rd March 2019

I attended the opening of this new exhibition of historical and modern day robots at Europe's largest Mechanical Music museum

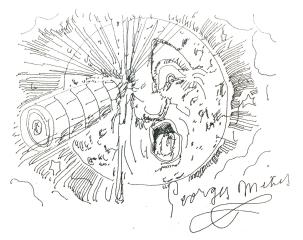


in Utrecht. The museum is housed in a cathedral sized church which could have been designed for its new purpose. The space, now filled with towering organs and orchestrions vying with a polished steel automaton hand larger than that of the Collosus. On entering the Speelklok you are faced with a 12 metre high robot head with a heart shaped mouth, this is the entrance to the new exhibition. The Speelklok is passionate about what it does and each exhibit has been carefully chosen to keep you wondering if the exhibitions central statement 'Robots Love Music' can be true?

Once inside, the exhibits are discovered in small groups as you move through the specially constructed passageways, dark and ribbed, designed to look like you are inside a mysterious machine yourself.

First is the brooding and burnt automaton writer from Scorsese's film Hugo. Something of a coup in exhibition terms, this one (there were several made for the film) was lent by the Cinemateque Francais in Paris

and is probably the only Hugo automaton on public display. The automaton draws with a dip pen the complex image of George Melies iconic Moon face with a rocket in the eye. Its qualification as 'musical' perhaps comes from the horizontal pinned drum in the torso. This component was based on the same part in the very musical Jaquet Droz Musician of 1774, although it remained mute in the film 'Hugo'.



Moon Drawn by the Hugo Automaton

Having engaged us with this automaton from popular culture we next see a pair of Jacquemart figures hammering a set of musical bells on a clock made in the 16th century. Although you cannot operate the Jacks you do

get to operate a beautiful bell playing lady from a 19th century organ, one of many interactive exhibits, both mechanical and electronic.

The Speelklok museum has its own restoration workshop and a global reputation for the work carried out on the finest organs and musical machines, so the interactive working models are exceedingly effective and beautifully made.

Modern robots abound and most are working and have their mechanisms exposed. Virtually unnoticed by most people, three large bellows in a modern robot inflate in turn and solenoids sound a trumpet almost at ear level to demand attention! While across the room a fine figure from 19th century Paris teaches the bird on his arm to copy the melodies from his finely fingered flute (The Bird Trainer c1890, lent by the Morris Museum in America).



19th Century Automaton Flautist



Bird Trainer Automaton

As well as a good selection of percussion robots there are robots whistling, playing trumpet, piano, flute, banjo and violin. There is even a self playing musical prosthetic for humans. But the real exciting question tackled head on here, is whether robots can use their processing power to actually make and play original music? This claim is made by 'Shimon' a marimba playing robot head with four arms and eight sticks which plays its own compositions. Designed at and lent by the Georgia Institute of Technology

the musical pieces are generated using AI and Big Data but the real audience pleaser is Shimon's uncanny animation of its animated head/eye as it listens and plays. Shimon is regularly demonstrated, with new original compositions each time. A feature of the exhibition is that there are



plenty of knowledgeable young assistants who will shimon demonstrate many of the rare, fragile and powerful exhibits as you approach them.

As always with Robots and automata it is the sense of the uncanny that



Life sized Clarinet Player 1838

impresses as much as the performance itself. Nowhere is that more deeply felt than when face to face with, for me the star of the show, Cornelis van Oeckelen's 1838 Clarinet player.

Van Oeckelen was from a family of Dutch Organ builders and this 6 foot tall android was his masterpiece. The unclothed figure is packed tight with handmade clockwork and his slightly startled painted face with glass eyes stares straight back at the viewer, lips pursed mid performance. He is paused, non working, missing a vital part, the original Clarinet. The Clarinet would have been specially made to meet his fingertips and lips precisely, delighting the

audience with its virtuoso playing. A contemporary description reads "the movements of head and body, of eyes and lips were so natural and charming that people watching it completely forgot it was in fact a soulless machine".

Almost inevitably he ended up in the museum of P.T. Barnum in America and somehow survived the fire there of 1865. The Clarinet Player is here on loan from the Los Angeles collection of the enigmatic John Gaughan, (known as the magicians magician) an example of the Speelklok's success in attracting loans from all over the world.



It is obvious that this is a big budget exhibition with a serious mission. The subject may be niche but you are not alone in engaging with it, indeed the whole town of Utrecht is in on it, with most of the shops in the city centre featuring large 3D yellow robot heads staring out at you with no explanation.

When you visit, don't forget to leave time for the museums permanent collections of rare musical

*Violinist, Paris 19th C.* treasures, nowhere else will explain the complexities of mechanical music so clearly and with such fun.

In this exhibition you have the gathering together of mankind's best attempts to hand over the musical baton to machines. The presentation and clarity of focus on music will entertain you enormously. You will also leave with the informed ability to question if the idea that 'Robots Love Music' is one we should encourage!

Michael Start runs The House of Automata in Scotland and was Automata consultant to Scorsese's film 'Hugo', designing the automatons mechanism, as well as teaching Jude Law how to hold a screwdriver! www.thehouseofautomata.com