The intertwining of science, art and technology:
An animated and interactive installation based on the poster
of the same title by Fritz Kahn from 1927.

Concept, interaction & animation: Henning M. Lederer
Sound-Design: David Indge

© Henning M. Lederer 2011
Explore the six cycles within the human factory:
Five different topics separately or a conglomeration of them all together.

1 | Respiration
2 | Blood Circulation
3 | Digestive Circuit
4 | Control Center
5 | Metabolism
6 | The Industrial Palace
The intertwining of science, culture, art and technology

For thousands of years, human beings have used metaphors as ways of understanding the body. We talk about our ‘ear drums’, or our ‘mind's eye’. When we are in love we say our hearts are ‘bursting’ or ‘broken’. When we are nervous we say we have ‘butterflies in our stomach’. When we are impatient we have ‘itchy feet’. These familiar images help to explain the unfamiliar and to comprehend the complexity of our bodies.

The visual crossover between industrialization and science in Fritz Kahn’s artwork demonstrates surprisingly accurately how human nature became culturally encoded by placing the knowledge in an industrial modernity of machine analogues. He produced lots of illustrations that drew a direct functional analogy between human physiology and the operation of contemporary technologies. Therefore, by illustrating the body as a factory, Kahn was able to relate the body’s complex organic interior to the industrialized space so common in society during that period of time (the poster was created in 1926).

From the moment on that Henning Lederer got to know Kahn’s poster “Man as Industrial Palace” in 2006, he had the idea to animate this complex and strange way of explaining the functions of a body. He wanted to continue Fritz Kahn’s act of replacing a biological with a technological structure by transferring this depiction with the help of motion graphics and animation. In addition to the moving images, as a framework, Henning created a cabinet for his work including a mixture of old and new technology. This new version of the “Industrial Palace” is an interactive installation for the audience to interact with - and by this to explore the different cycles of this human machinery.

Further reading:
• British Library, Bodies of Knowledge: http://www.bl.uk/learning/artimages/bodies/kahn/kahnmachines.html
• Communicating the Modern Body: Fritz Kahn’s Popular Images of Human Physiology as an Industrialized World, Cornelius Borck, McGill University

About the artist/designer

Born on November 12th, 1980, Henning M. Lederer has studied Visual Communication at the Fachhochschule Düsseldorf (University of Applied Sciences) in Germany from 2001 until 2006 – after passing the German Abitur and completing one year of civilian service with handicapped people.

While studying he already created and produced several animation- and motion-design-projects, participating in lots of media- and film-related festivals. After graduating successfully in Winter Term 2005/06 with his animated film "Little Fable" as his final project, Henning started to work as a freelance graphic designer & motion graphics artist.

From February 2006 until September 2008 he has worked in this field, e.g. participating in the media-production for the new Porsche-Museum in Stuttgart and the Watch-Museum Glashütte (responsible client of both projects: jangled nerves GmbH, Stuttgart).

Henning M. Lederer completed the MA Digital Arts course at the Norwich University College of the Arts (October 2008 - September 2009) and graduated as a Master of Arts, with distinction.

Right now, he is again working as a freelance graphic and motion designer for several international clients.

For more information about Henning M. Lederer and his projects visit: www.led-r-r.net
Der Mensch als Industriepalast [Man as Industrial Palace]

Robots – The relationship between man & machine – DASA – Working World Exhibition, Dortmund, Germany
Photo © Uwe Völknner 2016

CONNECTED – "a unique and surprising journey between real and virtual..." – CENTRALE for contemporary art, Brussels, Belgium
Photo © Philippe De Gobert 2016
Life is Flux: Visualizing Change in Art and Biology – Boyden Gallery, St. Mary's College of Maryland, USA
20th August - 25th September 2014
Der Mensch als Industriepalast [Man as Industrial Palace]

B-Seite – Festival for Visual Arts and Contemporary Culture • 15th – 23rd March 2014 • Wall projection
Photo © Christina Stihler 2014 [www.ideasformillions.com]
Der Mensch als Industriepalast [Man as Industrial Palace]

"Arbeit zeigen" ('showing work') in the Museum of Iron and Steel in the Henrichshütte Ironworks in Hattingen, Germany
24th November 2013 – 23rd March 2014

The Science Show – The body, Seoul, Korea • April 2013 – March 2014
Der Mensch als Industriepalast [Man as Industrial Palace]

Visvesvaraya Industrial and Technological Museum, Bangalore, India • Part of the permanent collection

Health for Sale, Philadelphia Museum of Art, USA • 2nd April – 31st July 2011

Henning M. Lederer – Visual communication & animation
Master of Digital Arts – Norwich University College of the Arts, United Kingdom
Diplom-Designer [FH] – University of Applied Sciences Düsseldorf, Germany
Der Mensch als Industriepalast [Man as Industrial Palace]

Deutsches Hygiene Museum Dresden, Germany • Part of the permanent collection • Photos © Oliver Killig 2012 [www.killig.com]
Der Mensch als Industriepalast [Man as Industrial Palace]

In Transit - An international and collaborative exhibition • 8th – 14th July 2009 • Stew Gallery, Norwich, UK • www.art-in-transit.org

A rotatable antique button with a USB-connection

The setup for the installation (In general the framework and setup depends a lot on the availability of the technical equipment and hardware)
Press

“It is an image begging to be animated, and the contemporary German designer Henning M. Lederer has done just that, in a short film looping alongside the actual lithograph. There is no need to travel to Philadelphia for this particular pleasure, though; Mr. Lederer’s utterly irresistible creation is online at http://www.vimeo.com/6505158.”


“The original lithograph was eventually turned into this excellent visualization by German computer artist Henning Lederer in 2009 (...)”

Peter Smith, Review in the GOOD magazine, June 21, 2011

“Lederer’s achievement is nothing short of spectacular.”


Exhibitions & Festivals

• Pauls Stradinš History of Medicine Museum, Riga, Latvia
  14th November 2014 - 5th May 2015

• Boyden Gallery, St. Mary’s College of Maryland, USA
  20th August - 25th September 2014

• Museum of Iron and Steel in the Henrichshütte Ironworks, Hattingen, Germany,
  24 November 2013 – 23 March 2014

• “The Science Show – The body”, Seoul, Korea • April 2013 – March 2014

• Art Basel | Miami Beach – Part of a video-series curated by Vimeo and Culture Shock
  December 1 – 4, 2011

• Visvesvaraya Industrial and Technological Museum, Bangalore, India
  Part of the permanent exhibition

• FILE ANIMA+ Festival 2011, Sao Paulo, Brazil

• Health for Sale, Philadelphia Museum of Art, USA
  April 2 – July 31, 2011

• Deutsches Hygiene Museum Dresden, Germany
  Part of the permanent exhibition

• Laboratory, 17th April – 8th May 2009
  Šiauliai Dailes Galerija, Šiauliai, Lithuania

• In Transit - An international and collaborative exhibition
  8th – 14th July 2009, stew gallery, Norwich, UK

Publications (TV)

• Heart Versus Mind: What Makes Us Human? – A documentary for the BBC 4 Channel
  featuring parts of the original video – scheduled to broadcast:
  9pm on Wednesday 11th July 2012 on BBC Four in the UK

• Souvenirs from Earth (www.souvenirsfromearth.tv)
  Part of the Film and Video Art TV Programme

Publications (Print)

• Fritz Kahn – Man Machine / Maschine Mensch
  By Uta von Debschitz (editor) and Thilo von Debschitz (editor)
  Publisher: Springer, Wien - New York

Awards

: output award 2010 (www.inputoutput.de)
Vimeo Staff Pick