Selections from NDL collections

Small exhibition in the Kansai-kan (20) "Robots are evolving! – from myth, mechanical dolls to the latest robots"

From August 18 to September 20, 2016, the Kansai-kan of the National Diet Library (NDL) held the 20th small exhibition entitled "Robots are evolving! – from myth, mechanical dolls to the latest robots." It holds such a small exhibition like this two or three times a year to introduce its holdings to the public.

Poster for the small exhibition

The exhibition exhibited 160 items in total related to robots including mainly humanoid robots and artificial intelligence, overviewing the history of evolving robots through library materials with the following topics, for example: a moving doll that appeared in myth; mechanical dolls in the Edo period; birth of the concept of robots; robots in comics and films; cutting-edge research; and the future when people will live together with robots.

This article introduces three books from the exhibited materials.

Robot prehistory

Shuchin otogi karakuri kinmo kagamigusa
Published in 1929 by Beisando in 3 volumes: Sho, Chiku, Bai [NDL Call No. 15-469]
*Available in the NDL Digital Collections

This pictorial reference book shows 28 kinds of "*karakuri*" (mechanical dolls made in the Edo period) described in the style of *ezoshi*, a very popular kind of illustrated story book published in the Edo period. Each of the structures of "*karakuri*" and how they work is depicted in pictures. The first edition was published in 1730. The material exhibited is the reprint published in 1929.

Illustration of *Shuchin otogi karakuri kinmo kagamigusa*

From the chapter "Birth of the concept of robot"

Robotsuto: Yonmaku (lit. Robot; four-act play)
Written by Karel Čapek, translated by Zentaro Suzuki, published by Kinseido in 1914 [NDL Call No. 特 274-350]
*Available in the NDL Digital Collections

This is the Japanese translation of "*R.U.R.* (*Rossumovi univerzální roboti*, lit. Rossum's Universal Robots)" by the Czech play writer Karel Čapek. This was the first time the word "robot" appeared in a book. This play presents artificial people called "roboti" (robots) made of synthetic organic matter. The word "roboti" is said to be a combination of "robota (enforced labor)" and "robotic (labor)" in Chech. The word "robot" became popular widely in Japan thanks to Zentaro Suzuki who translated it and put it on stage as a play.

Cover of *Robotsuto*
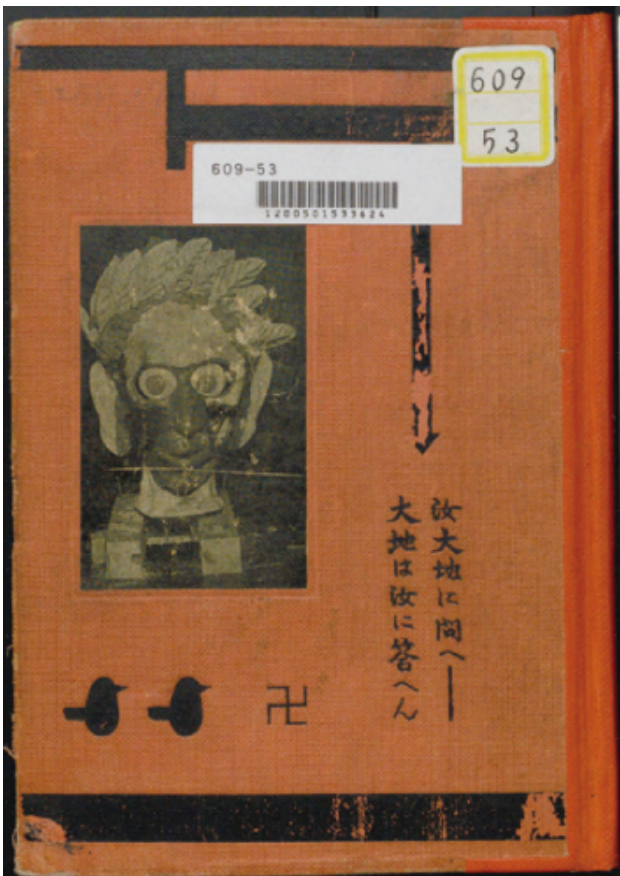
Cover of *Daichi no harawata*

Daichi no harawata
Published in 1930 by Toko Shoin [NDL Call No. 609-53]

This book was written by Makoto Nishimura, the creator of "Gakutensoku" which is said to be the first robot in the East. The robot was made in Osaka in 1928. Sprinkled with pictures, he vividly describes his motivation to come up with the production of "Gakutensoku," the ideal he put in the name and appearance, his ingenuity in the development, and so on.

On August 26, 2016, as a related event, a lecture titled "Human-Robot Interaction: aim to realize the robot that can communicate with people" by Dr. Takayuki Kanda (Group Leader / Senior Research Scientist, Intelligent Robotics and Communication Laboratories, ATR (Advanced Telecommunications Research Institute International) was held at the Kansai-kan.

Display of the exhibition

Related articles from the National Diet Library Newsletter:
- Small exhibition in the Kansai-kan (18) A collection of living creatures from all times and places: real, virtual and extinct creatures (No. 202, October 2015)
- Small exhibition in the Kansai-kan (17) Tomorrow's dinner will be a full-course meal: Find the recipe you want to cook (No. 199, April 2015)
- Small exhibition in the Kansai-kan (16) Dreams of Space, from the ancient view of the universe to the Hayabusa Project (No. 196, October 2014)
- Small exhibition in the Kansai-kan (15) Modernization of Japanese sake and domestic production of Western liquor (No. 193, April 2013)