

Book Review

JAPANESE AUTOMATA: *Karakuri Zui* by Murakami Kazuo

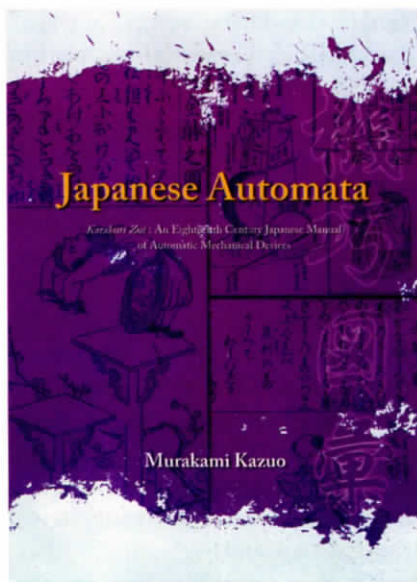
Published by the author, Sakamoto 7-28-45, Otsu-shi, Shiga prefecture, 520-0113 Japan. 256 pp 8¼ ins by 11¾ ins (210mm x 300mm). Illustrated, together with facsimiles. Price ¥12,000 plus ¥1,970 postage (total ¥13,970) to Europe and United States. Published 2012. ISBN 978-4-9906228-0-0. Paperback, in English. Via japaneseautomata@gmail.com

Sub-titled 'An Eighteenth Century Japanese Manual of Automatic Mechanical Devices', this is a work that fills a hitherto vast void in western knowledge concerning the extraordinary achievements in automata and what today we call 'robotics' that marked the Edo Period in Japanese history.

Karakuri Zui is a remarkable set of books published first in Edo (today's Tokyo) and Osaka in 1796, and then Kyoto in 1808. These were the three most important centres in cultural and commercial centres in ancient Japan. The books were written by Hosokawa Hanzō Yorino (c.1749-1796) described as 'an astronomer with a talent for making mechanical devices'. His books took the then level of knowledge from the ancient world and meticulously transcribed it in neat Japanese characters and amazingly-detailed line-drawings which were each fully annotated.

Hanzō's finished book was in three parts – a fulsome preface, itself a manual of clock-making and automata-work, a Volume One and a Volume Two. Of these, the preface is at least as long as the other two but however curious the form, they provide hitherto untold information about Japanese and Chinese automata.

There has been, though, only one problem. While most Europeans today



speak one or two other European languages and can probably read a couple more, the oriental tongue is mastered by very few. The present reviewer spent some time in Japan thirty years ago long before dual-language signage had ever been thought of – and knows only too well the personal drama of being unable to read so much as one word!

Perhaps harder, especially for the translator, Japanese is a language where one word may have several interpretations depending not just on contextual use but cultural background. This is one reason why few Japanese literary works appear in English editions.

And so when, some few years ago, Hanzō's extremely rare books appeared in a modern single-volume paperback facsimile, most accepted that even in facsimile the Japanese text would be an impenetrable barrier and thus this undoubtedly important work would have to be passed over.

Now, though, thanks to the efforts of Musical Box Society member Murakami Kazuo, this work is available in English. Where a mere

translation would be a major step forward, Kazuo has gone far beyond that goal and given us a veritable treasure-trove of Japanese history on the subject of automatic devices.

In a lucid 29-page introduction he puts the whole matter of Japanese automata (in particular its definition and application as seen by the Japanese artisans) into perspective, gives a fulsome biography of the talented Hosokawa Hanzō Yorino, and then looks at the history of mechanical systems across the centuries. Fundamental to his quest is the question of spring-manufacture for we learn that Japanese craftsmen formed their springs not from steel but from brass.

There are some illustrations of classic and contemporary automata to illustrate this section.

To the task of translating the ancient Japanese texts, Kazuo has adopted the style of placing the original page complete with text and drawings on left-hand pages with the English translation on the facing right-hander. He has, though, gone one stage further in that each block of text is marked with a reference in red so that the precise text can be identified.

On its own, this painstaking work would be valuable but Kazuo has one more trick up his sleeve: he provides a commentary and, where necessary, corrections to the original, so converting mere word-for-word translation into an analytical reference. The work ends with some pages of notes to guide those who wish to make for themselves replicas of some of the automata described such as the 'Magic Doll' and 'Tea-serving Doll' among others. A final page is a working translation of some of the specialised Japanese words used to describe parts.

There is no index to the book. In fact it would be very hard to provide an index for such a wide-ranging technical and historical work. There is, though, a valuable bibliography that includes references to some works many will never have heard of from elsewhere.

Any book that offers a translation from an original into another tongue stands or falls by the competence of the translator and, after exposure to instruction manuals for modern appliances that are seemingly written by electronic word-butchers, too often we view such missives with unbridled misgiving.

It is thus with a sense of delight that we find this book to be not merely a pleasure to read but that it is written in perfect and highly competent English. Those of us that have had the privilege of meeting the author and conversing with him will not be altogether surprised at this.

Murakami has laboured long and hard and produced a masterful work that will find a welcome place upon the working reference shelves of everybody who has any interest in oriental automata, its history, development and art. That he has funded the project and published it himself in a limited edition of just 500 copies shows his devotion and dedication to the culture of *Karakuri Zui*.

This is an expensive book at approximately £112 or \$180 including postage, but it offers a rare window on a past, access to which few Westerners have hitherto been allowed opportunity.

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This book review is reprinted from the Journal
of the Musical Box Society of Great Britain,
"The Music Box" Vol.25 No. 8 Winter 2012.