

The Karakuri Organ

Ron Bopp

The German organ firm of Jäger and Brommer (Waldkirch) has had long-standing ties with Japan over the years so when the possibility of competing in a contest in Japan surfaced, Wolfgang Brommer, and his business partner, Heinz Jäger, decided to enter. This wasn't just any kind of contest but a Karakuri Contest. Between March 25 and September 25, 2005, the Nagoya Eastern Hills, Aichi (Japan) was the site of the 2005 World Exposition, whose theme was the "Wisdom of Nature." Quoting the "World Karakuri Contest 2005":

The aim of the Expo is to create a new culture and civilization through the efforts of multiple countries and international institutions in order to present people with solutions to the global-scale problems that face mankind in the 21st century, as well as a range of ideas to improve life for all of us upon the earth.

Grossly speaking Karakuri "is the combinations of ideas and technologies (i.e. mechanisms and systems) borne of unique imagination and creativity, as well as an impish sense of fun, and as such, it's movements provide viewers with endless surprises and fun."

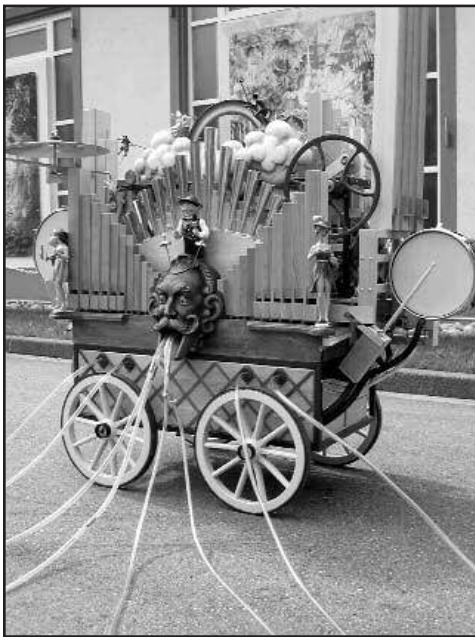


Figure 1. The completed Karakuri organ with its full arrangement of pipes and pneumatic-activated traps.

Along the same line Wolfgang related that Black Forest inventors have come up with many novel and new ideas citing that Ignaz Bruder began building street organs as early as 1806. Wolfgang feels that the firm's "Karakuri" organ is one way to bring people back to the fascination of mechanical musical instruments.

According to Kirsty Boyle's website the word "Karakuri" means a mechanical device to tease, trick, or take a person by surprise. The Karakuri tradition actually had its roots in Chinese clockwork mechanisms dating to 2600 BC (a "South Pointing Chariot" which had a figure which always pointed south, regardless of

the direction it was headed). Today, as our German COAA member realized, the tradition has broadened.



Figure 2. A close-up of the front of the organ details the "Kleien-Kotzer" whose mouth serves the purpose of being the entrance/exit of the pneumatic tubes used to activate the different functions.

Wolfgang and his associates decided to enter the contest in November 2004 and it took seven months to build the Karakuri organ (Figure 1). Only 32 entrants were allowed from over 600 who applied so it was an honor just to be granted entry to the contest. The Jäger and Brommer Karakuri organ was the only organ to be entered in the Karakuri Contest, held Sunday and Monday, September 18 and 19, 2005.



Figure 3. Wolfgang Brommer cranks the Karakuri organ while enthusiastic children from a nearby school activate the pneumatic bulbs.

The Jäger and Brommer Karakuri organ is a 31-note hand-cranked organ (five stops) with 10 special effects that are operated by the public (**Figure 3**) via air-filled (pneumatic) bulbs that relay to the organ. The organ has 111 pipes including four, large bass on the right end of the organ. The special effects include:

- Snare Drum
- Bass Drum
- Triangle
- Trumpet Fanfare (a chord of 4 trumpet notes)
- Two Women Bell-ringers
- Movement of the central figure's ("D'Waldkircher") arms
- Woodblock
- Cymbal

While rolls have been arranged to highlight the effect of the Karakuri organ any standard 31-note roll can be used.

Attention paid to the organ case will reveal that this is just not an ordinary hand organ. The center moustached-face (Kleien-Kotzer) on the façade is most unusual and serves as a focal point where the pneumatic tubes emerge from the organ (**Figure 2**). It and the rest of the façade were carved by Waldkirch native, Klaus Dieter Kienzler. Besides the bellringers and "D'Waldkircher's" moving arms there are other animated effects including an angel and devil rocking back and forth with the music (representing evil chased away by good); a carved hand beating the triangle and a battery-operated bird on top of the bass pipes.

Wolfgang has referred to his Karakuri organ as an "interactive" organ. With the little squeeze bulbs in hand one can activate any of the 10 effects mentioned previously. He notes that "the organ is fun for all—it is easy to use as the percussion instruments fall in with the music itself. There is no problem in teaching others to play—they understand immediately (**Figure 4**)."



Figure 4. The Karakuri organ onstage with 10 exposition volunteers playing the special effects. Waldkirch arranger, Adrian Oswald is at the front of the stage (black shirt) and Wolfgang Brommer is behind the organ.

Karakuri Information

Much has been written about eighteenth-century automata, and of the history, culture and language of interaction between man and machine in the West.

Japan's love of robots lies in the history of the "Karakuri Ningyo." Until now there has been little interest from outside Japan regarding the Karakuri Ningyo craft, and its influence on technology and the arts.

The word 'Karakuri' means a mechanical device to tease, trick, or take a person by surprise. It implies hidden magic, or an element of mystery. In Japanese "Ningyo" is written as two separate characters, meaning person and shape. It loosely translates as puppet, but can also be seen in the context of doll or even effigy.

The Japanese Karakuri puppets utilise subtle, abstract movements to invoke feeling and emotion. There are three main categories of Karakuri. "Butai Karakuri" are puppets used in the theatre, "Zashiki Karakuri" are small and can be played with in rooms and "Dashi Karakuri" puppets perform on wooden floats used in religious festivals. Traditionally Karakuri appeared in religious festivals, performed re enactments of traditional myths and legends and entertained the public with their sophisticated, symbolic and graceful gestures.

The Karakuri tradition of invisibly concealing technology extends beyond puppetry and robotics, and continues to manifest itself in popular culture. Karakuri influenced the Noh, Kabuki and Bunraku theatre arts and directly contributed to the industrial modernisation of Japan. During the Edo period Japan was completely isolated from the rest of the world, during which time a unique cultural heritage developed away from outside influences. Despite isolation, Western technology was uniquely adapted to produce Karakuri Ningyo puppets. Essentially, Karakuri is the realisation of the symbiotic relationship between Eastern tradition and Western technology. The history of the Karakuri Ningyo highlights anthropomorphic approaches to sociable robot development, and how they differ between the East and West. It is the starting point from which Japan's love of robots and technology has developed.

Kirsty Boyle

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He noted that the central figure, "D' Waldkircher," means *THE* person from Waldkirch (an exact translation is "This is Waldkirch"). In describing the overall functionality of the organ, Jäger and Brommer have noted:

This world-wide unique organ shifts players and listeners to astonishment and enthusiasm. Visual and acoustic attractions and spontaneous active participation for everyone gives this "Karakuri-Organ" a breath of modern trend. The more than 200 years lasting history of organ-building thus receives a continuation, which takes its course with this organ "D'Waldkircher." Have fun and joy with discovering, listening and playing!

There were 32 entries and nine prizes handed out. The Grand prize went to a Japanese entry (a small Japanese Samurai



Figure 5. The special prize award, given to the Jäger & Brommer firm.



Figure 6. The Karakuri organ is displayed in the *Mainichi Shimbun* newspaper.

on a horse shooting arrows at a target—Kazuo Murakami noted on his MMD report of September 25, 2005 that the maker of this complicated entry was a retired automobile engineer).

Wolfgang’s entry was one of 10 that won the special prize (Figure 5). Besides the pride of winning in the contest it also rewarded the Jäger and Brommer firm 100,000 yen (approximately \$875.00).

Participants came from 127 countries and 15 million visitors attended the Expo. Toshiba was the special sponsor. Wolfgang attended with Adrian Oswalt, who arranged the pieces played on the organ and accompanied Wolfgang on stage.

Wolfgang says the organs of this nature will be handcrafted in Waldkirch in 2006.

References:

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 Brommer, Wolfgang, personal communication, 2005
 Jäger & Brommer, <http://www.jaegerbrommer.de/Karakuri.html>
 Murakami, Kazuo, Mechanical Music Digest, September 25, 2005.
 World Karakuri Contest 2005, <http://www.karakuri2005.com/en/karakuri/>

The C.O.A.A. Spring Rally—Lake Winnepesquakah

Lake Winnepesquakah is hosting the 2006 spring rally on Memorial Day weekend May 25-29. The park was the sight of last year’s rally attended by many newcomers as well as some if the regulars. “Lake Winnie” is said to be one of the cleanest amusement parks in the nation and was featured on the P.B.S. special “Good Old Family Owned Amusement Parks.” Also featured on, Turner South cable “Blue Ribbon” show, last summer. The 1916 four row P.T.C. carousel is one of the largest in the nation, has become a park favorite and hopefully, if all goes well, the original carousel organ will play again. The park is located in north Georgia almost in Tennessee near Chattanooga. “Winnepesquakah” Indian, for bountiful waters, is an amusement park around a lake filled with fresh water springs. It has been in continuous operation for over 80 years by the descendants of the founding family who strive to make the park a fun filled family destination. The band organs and crank organs of C.O.A.A. are sure to transport the guest at “Lake Winnie” on a trip down memory lane. Information on reservations and details will be sent out by separate mailer. The rally coordinator is Charles Walker 404-892-0065 (work) or 770-227-2597 (home).

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out and three spectators helped to push the truck. Being raised on the farm, I felt as though I should help. On the third attempt we got the truck running again. Bob is inside the truck telling me, in no uncertain terms to “Get in!” My choices were to hang onto the door and jump into the cab, or, let go and fall to the pavement. I chose to hang on and *jump*, after all, the parade must go on!

As I made my leap of faith, my sandals slid on the running board and I fell back off, somehow turning backwards and still hanging onto the top of the door I was now being dragged down the street. Meanwhile, Bob is still trying to tell me to “Get in!” The crowd loved it—applauding with widened eyes, amazed at the spectacle I had so unwillingly become. Bob, finally noticing my predicament, stopped the truck. Trying my best to maintain my composure, I got back in the truck and promptly told Bob that my contract did not call for that level of effort! Bob felt that I should have been wearing a clown suit. After returning home,

the first thing that Bob did was to install an electric fuel pump on the truck.

We took our unit as far west as Muscatine, Iowa for the Calliope Recall/Parade, and as far east as North Tonawanda, New York for the MBSI/Wurlitzer Meet. In our travels we have met many wonderful people and made new friendships with others that share in our love of music.

After 15 years and with growing health concerns, we eventually sold our unit to a gentleman who transported it to Los Angeles, CA. We have, since then, downsized to a 42-note Alan Pell band organ and mounted it on the back of a golf cart that has been decorated in patriotic bunting with Bob dressing up as “Uncle Sam.” We still enjoy going to various rallies and meets across the Midwest region, staying in touch with so many other people who, like ourselves, understand and appreciate the importance of preserving this part of musical history.

What a thrill this has been for us. We thank the entire COAA organization for sharing their knowledge, beautiful instruments and stories—truly a treasured lifetime experience.

