# edieval Sacred Chant: from Japan to Portugal

Canto sacro medieval: do Japão a Portugal

Manuel Pedro Ferreira (ed.)

Edições Colibri

Centro de Estudos de Sociologia e Estética Musical Universidade Nova de Lisboa

#### Biblioteca Nacional – Catalogação na Publicação

COLÓQUIO INTERNACIONAL MONODIA SACRA MEDIEVAL, Lisboa, Évora, 2005

Medieval sacred chant : from Japan to Portugal = Canto sacro medieval : do Japão a Portugal / Colóquio Internacional Monodia Sacra Medieval ; coord. Manuel Pedro Ferreira. – (Estudos musicológicos: 5) ISBN 978-972-772-789-6

I - FERREIRA, Manuel Pedro Ramalho, 1959-

CDU 783 061

**Título**: Medieval Sacred Chant: from Japan to Portugal / Canto sacro medieval: do Japão a Portugal

Coordenação: Manuel Pedro Ferreira

Autores: João Pedro d'Alvarenga, Nicolas Bell, José Maria Pedrosa Cardoso, Marie-Noël Colette, Manuel Pedro Ferreira, Estelle Joubert, Bo Lawergren, Kenneth Levy, Elizabeth Markham, Ivan Moody, Svetlana Poliakova

Edição: Edições Colibri / Centro de Estudos de Sociologia e Estética Musical

Paginação e revisão: Rui Magno Pinto, Luís Miguel Santos

Capa: Ricardo Moita

**Ilustrações da capa**: Pormenor do Ms. 25 do Mosteiro de Arouca; Hino do Introito "soorai kada" de "Shoomyoo semboo ritsu-yoo" (1980).

Depósito legal: 273 056/08

Lisboa, Dezembro de 2008

Livro publicado com o apoio da Fundação para a Ciência e Tecnologia e do Center for the Study of Early Asian and Middle Eastern Musics, University of Arkansas.

## SUMMARY / ÍNDICE

Editor's Note / Nota prévia

#### A. BUDDHIST MUSIC

Elizabeth J. MARKHAM

Chinese Hymns in Japanese Buddhist

Liturgy: Structure and Ornament

Bo LAWERGREN

Music on Japanese Raigō Images 700-1700 and Chinese Influences

45

11

5

#### **B. CHRISTIAN MUSIC**

# (I): OLD-ROMAN, BYZANTINE AND RUSSIAN CHANT

Svetlana POLIAKOVA	
Russian Liturgical Chant Books from the 11th-14th Centuries	
and Their Function in Liturgical Practice	93
Ivan MOODY	
Some Current Areas of Research in Orthodox Chant	
and Their Impact on Performance	111
Kenneth LEVY	
On Byzantine and Old-Roman Drones	117

# Music on Japanese Raigō Images 700–1700 — and Chinese Influences

### Bo Lawergren

Raigō<sup>1</sup> paintings show Buddha Amida descending from the Pure Land Paradise to a dying person, whose soul he will receive and bring back to Paradise. Twenty-five Bodhisattvas accompany him and they play a wide range of instruments. Such paintings flourished ca. 1100 to 1600 in Japan, but their roots can be traced back to the eighth century in China, a time when China was the cultural pinnacle of the world. Its art showed great subtlety and skill, and its music was rich and varied. Orchestras from India, Central Asia, and Korea flocked to the Tang court in Chang'an, but practically none of their music survived in China.<sup>2</sup> At the time Japan eagerly sought the music, and manuscripts survive there. This music, called *gagaku* (Tang dynasty music), is still performed but performance practice (such as tempo) has changed over the last twelve hundred years. Musicologists<sup>3</sup> are now attempting to restore the original sound and transcribe it to staff notation. However, ornaments and improvised passages lie beyond recovery, and rhythms were not indicated.

<sup>&</sup>lt;sup>1</sup>Japanese (J:) *raigō* translates 'coming to welcome,' but is usually take as 'welcoming descent of Amida with his 25 Bodhisattvas from the Western Pure Land,' see Fusae C. KANDA, *The Development of Amida Raigo Painting: Style, Concept, and Landscape,* Ph.D. Dissertation, Yale University, 2002, p. 7. Its two kanji characters are given in R.H. MATHEWS, *Chinese-English Dictionary,* revised American ed., Cambridge: MA, 1943, as M: 3768, 7473 and pronounced *lai ying* in Modern Standard Mandarin. In the following I spell it 'raigo.'

<sup>&</sup>lt;sup>2</sup> The exception is a lute composition of the Tang dynasty (618–907) found at Dunhuang, see Laurence PICKEN, «II. The Music of Far Eastern Asia. 1. China,» pp. 83–134, in Egon WELLESZ, ed., *New Oxford History of Music, vol. I, Ancient and Oriental Music*, London, 1957, esp. 98 and 105.

<sup>&</sup>lt;sup>3</sup> In the last thirty years work was done by a group connected to Cambridge University, England, and their transcriptions are published in the series Music from the Tang Court (London, 1981-). The earliest Chinese composition found so far is a pipa solo dated 747, see R.F. WOLPERT, «A ninth-century Sino-Japanese lute-tutor», in Musica Asiatica 1, 1977, pp. 111-165. The piece had earlier received a different transcription by Kenzō HAYASHI in «Tempyō biwa-fu "Bankasō" no kaidoku» reprinted in Gagaku – Kogaku-fu no kaidoku, Tokyo, 1969. A Japanese series (Nihon ongakushi kenkyū, Tokyo) began publication in 1996. - The Cambridge work has been summarized several times, e.g., L.E.R. PICKEN and R.F. WOLPERT, «Mouth-organ and lute parts of Togaku and their interrelationships», in Musica Asiatica 3, 1981, pp. 79-95; Alan MARETT, «Toogaku: where have the Tang melodies gone, and where have the new melodies come from?», in Ethnomusicology 29:3, 1985, pp. 409-31; Alan MARETT, «In search of the lost melodies of Tang China: an account of recent research and its implications for the history and analysis of Toogaku», in Musicology Australia 9, 1986, pp. 29-38. A video was made by Thomas KNOTT, Elizabeth MARKHAM and Rembrandt WOLPERT, «On the Road to Tang... through Cambridge», Library of Congress and Center for the Study of Early Asian and Middle Eastern Music, University of Arkansas, 2004. See also Yoshio TOZAWA, editor, Musicology and Globalization; Proceedings of the International Congress in Shizuoka 2002 in Celebration of the 50th Anniversary of the Musicological Society of Japan, Tokyo, 2004; Toru Endo , Heian-chō no gagaku: kogaku-fu ni yoru Tōgaku-kyoku no gakuriteki kenkyū, Tokyo, 2005.

Only the instrumental parts survive, and they form relatively small ensembles. In the collection 'Music from the Tang Court' the forces are no larger than quartets, duos, and solos, but it is at odds with the sizes shown on raigo paintings. There Amida keeps a large entourage of musicians, often around 15. Raigos cannot tell what was played, but they show how it was done. With nearly photographic precision, they show playing techniques, instrument design, and ensemble groupings.

Mahāyāna Buddhism was the major Buddhist school in northeast Asia,<sup>4</sup> and it developed a wide repertoire of musical images. One particular sub-branch in Japan, Jōdo Buddhism, adopted Indian and Central Asian sacred texts which vividly described Paradise (the 'Pure Land of the West') as suffused with music, flowers, trickling water, and pleasant scents. It was in that joyous place Amida found his musicians.

#### I. Seven examples of raigo images, ca. 1050 - 1610 ce

Since the present concern is music and instruments, I expand on the usual definition of raigos and include other representations of the 25 Bodhisattvas mentioned in the 'Ode to the Twentyfive Bodhisattvas,' a text of the thirteenth century.<sup>5</sup> Nakano's survey 'Art of Raigo Painting'<sup>6</sup> includes them and the precedence affirms the legitimate use here. Naturally, most work on raigos has been done by Japanese scholars, and some of it has now been reviewed by Fusae Kanda.<sup>7</sup> Her analysis concerns artistic aspects and their literary underpinning but do not touch on the music. In general, musical aspects have received little attention, but they, too, have multifaceted connections that stretch far into Central Asia and deeply into Buddhist thought.

#### 1. Kōyasan raigo triptych, mid-twelfth century ce

This raigo<sup>8</sup> was painted in 1150–80 on three large separate sheets of hanging silk— a triptych (Fig. 1, top).<sup>9</sup> Its central field shows Buddha Amida on a lotus throne and, slightly below,

<sup>&</sup>lt;sup>4</sup> Kenneth CH'EN, *Buddhism in China*, Princeton, 1972, pp. 58-60, pp. 338–364. Zenryū TSUKAMOTO, *A History of Early Chinese Buddhism; From its Introduction to the Death of Hui-yüan*, trans. Leon Hurvitz, vol 2, Tokyo, 1985, p. 657.

<sup>&</sup>lt;sup>5</sup> Section 2 has a translation and discussion of the Ode.

<sup>&</sup>lt;sup>6</sup> Genzo NAKANO, *Raigōzu no bijutsu*, Kyoto, 1985.

<sup>&</sup>lt;sup>7</sup> See note 1.

<sup>&</sup>lt;sup>8</sup> Originally kept in the treasure house of Enryakuji temple on Mt. Hiei, but was transferred to Kongōbuji (Seiganji) temple at Kōyasan in 1594 and is now in the Reihōkan museum, Kōyasan, Japan. The best illustrations are in *Kūkai to Kōyasan; Kōbō Daishi nyūtō 1200-nen kinen = Treasures of a Sacred Mountain; Kūkai and Mount Kōya; Special Exhibition*, Osaka, 2003, Fig. 105. NAKANO (note 6), no. 15, 36-43. For greater detail, see *Kokuhō Amida shōju raigōzu* [Descent of Amitābha and the heavenly multitude], Kōyasan, 1997.

<sup>&</sup>lt;sup>9</sup> Toshio FUKUYAMA, Heian Temples: Byodo-in and Chuson-ji, New York/Tokyo, 1976, pp. 142-143.

two Bodhisattvas — Seishi and Kannon. The three form the 'Amida triad.' This Buddha manifestation<sup>10</sup> became popular during the Chinese Tang dynasty,<sup>11</sup> and the worship spread to Japan where the first temple consecrated to Amida was founded in 761.<sup>12</sup> His circumstances were explained in a sūtra central to the faith.<sup>13</sup> Śākyamuni, the historical Buddha born in northern India ca. 565 BCE,<sup>14</sup> had told his pupil Ānanda of a monk called Dharmākara, who was a former reincarnation of the Buddha. Eons ago, the monk had asked for a description of the ideal Buddha and his dominion. He was told, and Dharmākara then asked to be reborn as that ideal Buddha. His wish was granted, and with the new name Amida, he now ruled over that ideal land, the Pure Land of the West. Likewise, his worshipers wished to be reborn in the Paradise of the Pure Land. When they felt the last moment approaching, they turned their faces toward the west.

Beside the principal deities in the triad, we see many lower-ranking Bodhisattvas sitting among clouds. Their ability to fly while playing an instrument relates them to *apsarāses*<sup>15</sup> of earlier Indian mythology. These were borrowed into Buddhist mythology and painted in Silk Road caves, particularly at Dunhuang.<sup>16</sup> There they were surrounded by clouds, and the feature was transferred to raigo paintings.

The Kōyasan triptych has 32 figures of which 15 are musicians, and all are drawn with great precision and flair, Figs. 2–3. It is a visual *tour de force* which complements the extant instruments in the Shōsōin collection<sup>17</sup> by showing how they were played. Except for the wind players, all musicians have parted lips and sing while playing. Other Bodhisattvas have closed lips.

Amida and his associates are slowly descending to receive the spirit of the deceased person and to bring it back for rebirth in the Pure Land. To hold it, Kannon has brought a small golden lotus throne. The primary subject of raigo paintings is the descent and the welcoming gesture. Our chief concern — the instruments — is a secondary issue, but it provides a first-hand view of Japanese music and continues to do so at least until *ca.* 1700.<sup>18</sup>

Art Historians recognize several types of raigos, and examples will be given here. The triptych from Kōyasan has the symmetrical design associated with the monk Genshin (942–1017).

<sup>&</sup>lt;sup>10</sup> Sanskrit (S): Amitābha; C: Amituofo; J: Amida; M: 1, 4459, 6447, 1982.

<sup>&</sup>lt;sup>11</sup> CH'EN (note 4), 172.

<sup>&</sup>lt;sup>12</sup> Louis Frédéric, *Buddhism*, Flammarion Iconographic Guides, Paris, 1995, note 73 on page 314.

<sup>&</sup>lt;sup>13</sup> «The Larger Sukhâvatî-vyûha,» trans. F. Max MÜLLER, in *Buddhist Mahâyâna Texts*, The Sacred Books of the East, New York, 1969, 1-85, esp. § 3, 11-12.

<sup>&</sup>lt;sup>14</sup> Bo LAWERGREN, «Buddha as a Musician; an Illustration of a Jātaka Story», in *Artibus Asiae* 54, 1994, pp. 226-240, esp. 226.

<sup>&</sup>lt;sup>15</sup> J: Hiten.

<sup>&</sup>lt;sup>16</sup> Bo LAWERGREN, «The Spread of Harps Between the Near and Far East During the First Millennium A.D.: Evidence of Buddhist Musical Cultures on the Silk Road», in *Silk Road Art and Archaeology* 4, 1995/96, pp. 233-275, Fig. 3D.
<sup>17</sup> Kenzō HAYASHI, Shigeo KISHIBE, Ryōichi TAKI & Sukehiro SHIBA, *Musical Instruments in the Shôsôin*, Tokyo, 1967.

<sup>&</sup>lt;sup>18</sup> An example from 1690 retains all the instruments that had appeared on raigos six centuries earlier, see note 57.

#### Canto Sacro Medieval: do Japão a Portugal

He was a religious reformer, painter, and writer whose *Ōjō yōshū* ('Essentials of Salvation')<sup>19</sup> deals with the rebirth in the Pure Land. The tract became immensely popular in Japan and contributed much to the rise of Pure Land Buddhism there. He advised devotees to meditate and visualize Amida at the moment of death. Indeed, paintings of death scenes show portraits of Amida mounted in front of dying devotees. The large triptych may once have filled that role. Unfortunately, few of Genshin's paintings have survived, but the triptych probably comes close to his ideal.<sup>20</sup> The tranquil pose and full face of Amida are reminiscent of early eleventh century Japanese painting, and so is the symmetrical placement of Seishi and Kannon. Although made in the twelfth century, it uses eleventh century stylistic models.

*Layout:* Since the raigo picture contains many details, the instruments may be difficult to discern. To help the reader, I have made line drawings of the 15 instruments and placed them at actual positions on an empty ground (lower part of Fig. 1). My aim was less to show details of instruments, than give positions and types. These properties will be the focus of the later analysis.

I introduce a color scheme with string instruments in red lettering, wind instruments in green, untuned percussion in blue, and tuned percussion in gold. The latter are metallophones and lithophones — always a small group. This color scheme will be retained throughout the rest of the paper.

The instruments lie on a gentle arc (drawn in brown color) which passes through Amida's head. The left part of the triptych contains three percussion instruments and the right part three strings and one percussion. The center contains three winds and a percussion instrument to the right of Amida's head, and three percussions and a wind instrument to the left. Evidently, an underlying principle is at work: one instrument group (strings, winds, or percussion) dominates in each section of the picture, but usually one 'foreign' instrument intrudes. There are three such 'nearly homogeneous' ensembles: on the right panel, and one each on the left and right of Amida's head. The left panel has a homogeneous group. However, if all 15 instruments are counted as one ensemble, a different statistic emerges, see the pie-chart in Fig. 1. The total number of percussion instruments is approximately 50% and the rest is shared nearly equally by strings and winds. Viewed that way, the orchestra is thoroughly heterogeneous. In other words, when the orchestra is analyzed spatially, there is 'lumpiness' — small regions where one group dominates and produces local near-homogeneity. But the orchestra, as a whole, is heterogeneous. So is the whole raigo with 15 musicians and 17 non-musicians.

<sup>&</sup>lt;sup>19</sup> A small part is translated in August Karl REISCHAUER, «Genshin's *Õjõ Yõshū*: Collected Essays on Birth into Paradise», in *The Transactions of the Asiatic Society of Japan*, 2<sup>nd</sup> series, 7, December 1930, pp. 16-97.

<sup>&</sup>lt;sup>20</sup> FUKUYAMA (note 9), p. 32. Kanda discusses Genshin's role in the conception of early raigo images (note 1), pp. 72-74.

#### 2. Byōdōin sculptures of Amida surrounded by musicians, dated 1053

The Byōdōin temple, situated between Kyoto and Nara, was finished in 1053. It is laid out around the central Phoenix hall which measures 10.3 by 11.8 m inside (for drawing, see Fig. 4, center-section). The doors of the hall were painted with raigos, and these were among the first examples of the genre. But they are now severely faded, and the orchestras are incomplete.<sup>21</sup> At the same time sculpted Bodhisattvas<sup>22</sup> were mounted on the interior walls (Fig. 4, top). Since these are well preserved, and many play instruments, I will analyze them rather than the door paintings. Although the Bodhisattvas and the large Amida are not shown in a formal raigo setting, most scholars identify them as Amida and his retinue traveling to earth to welcome a dying person.<sup>23</sup>

The sculptures were produced in the workshop of Jōchō, one of the foremost sculptors of his time. Today the complete set consists of 52 wooden figures,<sup>24</sup> but more may originally have been present.<sup>25</sup> It is also uncertain if the original positions were the same, but they are mounted according to the numbers written on them.<sup>26</sup> Their heights vary between 87 and 40 cm, with the majority around 70 cm. The surfaces are now bare wood, but surviving traces indicate they were once decorated with gold leaf and bright colors.

Twenty-eight play instruments<sup>27</sup> and — judging by facial expressions — have attained a state of intense enjoyment. They spread out on both sides of the 5 m high Amida who sits on a central lotus throne facing east, as if sitting in the Western Paradise looking at China and Japan. He is carved in wood, painted and covered with gold foil and mother-of-pearl. The sight is impressive even without music sounding.

The musicians are larger than on the triptych but look small next to the gigantic Amida. Sitting on clouds, they are light and airy. This impression — and their placement around Amida — is reminiscent of the raigo. In this sense the hall is a large three-dimensional raigo with nearly twice as many instruments as on the Kōyasan triptych.

*Layout*: The instruments are placed at Amida's eye level and surround him in all directions, except for the front and rear where the Phoenix hall has passage-ways. Since it is a long and low array of sculptures,

<sup>27</sup> *Byōdōin* (note 21), vols.1-2.

<sup>&</sup>lt;sup>21</sup> *Byōdōin taikan*, Tokyo, 1987-1992, vol. 3; FUKUYAMA (note 9), Figs. 26, 37, and 60; NAKANO (note 6), no.1, 2-5, where speculative reconstructions are given.

<sup>&</sup>lt;sup>22</sup> J: Bosatsu; S: Bodhisattva.

<sup>&</sup>lt;sup>23</sup> Mimi Hall YIENGPRUKSAWAN, «The Phoenix Hall at Uji and the Symmetries of Replication» in *The Art Bulletin* 77, 1995, pp. 647-672, esp. 657.

<sup>&</sup>lt;sup>24</sup> See Bosatsu on Clouds (Uji, 2003), p. 52.

<sup>&</sup>lt;sup>25</sup> However, the tight space in the hall argues against it, *Bosatsu on Clouds* (note 24), p. 54.

<sup>&</sup>lt;sup>26</sup> Most of the sculpted clouds have a short tail which, presumably, points in a direction opposite to the motion. As they are mounted now, directions seem random (Fig. 4a), but this effect may have been intended.

I have broken it into two rows in Fig. 4 (bottom). Those mounted on the west-north-east walls (marked blue on the ground plan) are put in a blue rectangle. The west-south-east walls are given red color in Fig. 4. As in the triptych, instruments are shown but not dancers and singers. Positions on the figure are roughly the same as on the wall. Since they are confined by the narrow frieze on the walls, one cannot expect the instruments to lie on a simple curve as in the triptych.

There are 14 instruments on each side of Amida. Some are identical pairs, such as the large vertical drums, the horizontal drums,<sup>28</sup> the pairs of horizontal cymbals, the sets of clappers, the zithers, and the lutes. Other pairs have similar shape but differ in size, such as the small and large vertical drums (both are played with drum-sticks), the long and short pipes,<sup>29</sup> and the small and large hourglass drums.

Some of the drums are similar to instruments still played in Japan.<sup>30</sup> The large hourglass drum is beaten by a hand at each end,<sup>31</sup> whereas the small is played with only one hand — much like the current *kotsuzumi* although it is played resting in the lap rather than on the shoulder.<sup>32</sup> Both the small horizontal drum and the large vertical one have cylindrical bodies. The former looks much like the current *taiko* drum<sup>33</sup> and, like it, is played in a tilted position. The large vertical drum lacks the flaming, but otherwise resembles the current model.<sup>34</sup>

There are also single instruments: a gong and a metallophone, both hanging in identical frames, the former played with two mallets, the latter with a single hammer. There is a single set of panpipes, a rattle drum,<sup>35</sup> a mouth organ, and a small hand-held bell struck with a mallet. There is an angular harp, a unique occurrence on raigo paintings, although common elsewhere, e.g, in China (Figs. 18–23). Normally, raigo paintings show vajra harps (Figs. 1, 3, 7, and 9), see section 5.iv.

Again, a rule seems to be operating: instruments shown in pairs remain in use today, while those shown singly have died out. The one exception is the mouth organ — still an important member of court orchestras. Byōdōin seems to foretell the later musical taste of Japan.

<sup>&</sup>lt;sup>28</sup> 'Vertical' and 'horizontal' refer to the direction of the drum skin. There seems to be another large drum in the Phoenix hall, here put near the gong in the blue rectangle. The only surviving part is a out-stretched arm with a hand holding a drum stick.

<sup>&</sup>lt;sup>29</sup> Here the term 'pipe' designates vertical wind instruments, either reed-instruments or end-blown flutes. Images cannot always distinguish the two.

<sup>&</sup>lt;sup>30</sup> For modern instruments, see William P. MALM, *Traditional Japanese Music and Musical Instruments*, New York, 2000, new ed., pp. 137-141.

<sup>&</sup>lt;sup>31</sup> MALM (note 30), Fig. 33.

<sup>&</sup>lt;sup>32</sup> MALM (note 30), Figs. 41-44.

<sup>&</sup>lt;sup>33</sup> MALM (note 30), Figs. 1, 41, and 45.

<sup>&</sup>lt;sup>34</sup> MALM (note 30), Figs. 32 and 36.

<sup>&</sup>lt;sup>35</sup> It is not used the normal way, where it is held by the left hand while the right beats a small horizontal drum. Here the small drum is missing.

The are three pie-charts, small ones for the blue (4 strings, 2 winds, 8 percussion) and red (2 strings, 3 winds, 8 untuned, and 1 tuned percussion) rectangles, and a large one for the total. Percussion dominates slightly, both in the rectangles and the total. There is a slight tendency for like instruments to cluster, e.g., a zither is placed close to a harp on the south wall and close to a lute (twice) on the north wall. A pipe and a flute are next to each other on the south wall. Percussion instruments are often clustered, but it may be an accidental effect due to their abundance.

#### 3. RAIGO OF DESCENT AND ASCENT, EARLY FOURTEENTH CENTURY

The next raigo differs from the two earlier ones in showing both the descent and ascent (Fig. 5). The lower part — the descent — shows the dying man on the front verandah of his one-story house. Amida gazes at him, ready to fetch his spirit. Near the top of the raigo Amida reappears, now in the last phase of his journey. He looks left to a two-storey mansion in the Pure Land. Two successive moments are shown in the same raigo.

The descent has survived well but shows only 11 instruments, less than at Kōyasan. The reduction may be due to the small space available. The ascent is less well preserved, and one cannot tell if all instruments have returned safely.

*Layout*: The 11 instruments of the descending party lie on gentle curves colored brown in the line drawing. There is considerable leeway in drawing the paths, but the musicians arrive on both sides of Amida. In that sense the path matches the line in raigo I. Since the instruments are confined to a narrow space one can rank them based on position. The front is taken by an hourglass drum. Two strings follow, and further back are winds and percussion instruments. A large red drum with an aureole (cf. Fig. 2) comes last.

The instruments are similar to those on the triptych, but four are missing: harp, flute, panpipes, and clapper, a heterogeneous selection which leaves the pie chart similar to that of the triptych. There is 50% is percussion and the rest is divided nearly equally between strings and winds. The ascending orchestra is difficult to discern — apart from the large red drum.

#### 4. RAPID RAIGO IN CHION'IN, FOURTEENTH CENTURY

On this famous<sup>36</sup> raigo in Kyoto the descent is diagonal and appears to be more rapid than on the symmetrical Kōyasan triptych painted two centuries earlier (Fig. 6).<sup>37</sup> It is a 'rapid raigo.'<sup>38</sup>The clouds are no longer small fluffy spots (Fig. 1) but have congealed into a steam-lined sheet.

<sup>&</sup>lt;sup>36</sup> Its fame may have inspired a 'raigo garden' on the temple grounds. This 'Nijugo Bosatsu no niwa' has 25 stones symbolizing the Bodhisattvas. Azalea bushes represent the fast-flying clouds which carry the Bodhisattvas.

#### Canto Sacro Medieval: do Japão a Portugal

*Layout*: There are 14 instruments divided into two streams on either side of Amida. They lie on two paths, both heading toward the dying person. (The forked path is marked with brown arrows in the lower half of Fig. 6.) Two small drums head the entourage, and their loud and rhythmic music cheers the man sitting on the porch of his house. As before, a large drum lumbers at the rear. The pie-chart resembles the previous ones with its emphasis on percussion.

#### 5. RAIGO WITH CARTOUCHES, THE METROPOLITAN MUSEUM OF ART, LATE FOURTEENTH CENTURY

Of the several raigo paintings in the Metropolitan Museum of Art, this is the largest (Fig. 7).<sup>39</sup> It has high artistic merit, but the most remarkable aspect is a number of cartouches which name Bodhisattvas (Fig. 8). Such labeled raigos are very rare. The utility of the names comes to the fore when we equate them to the names of the 25 Bodhisattvas mentioned in a thirteenth century Ode (section 2).<sup>40</sup> The Ode gives the instrument played by each Bodhisattva and we can compare it to the instrument actually painted.

Many of the instrument names in the Ode are well-known, but some are not, e.g., the instrument played by Bodhisattva Kegon-ō. Its Chinese graph<sup>41</sup> has two components, both currently in use as characters on their own,<sup>42</sup> but the combination into one character is unknown. The cartouches may provide a solution: we can see what instrument is drawn. Unfortunately, the method does not yield a straight-forward answer. Some instruments with known shapes and names are wrongly identified, e.g., Sammai-ō who is said to scatter flowers is, instead, shown playing a metallophone. I will return to the analysis of *ji / kei* in section 2.

The raigo shows Amida surrounded by 25 Bodhisattvas, each with a halo and garment of light golden color. But there are two additional figures, both with shaven heads and cloths of dark color. The one at the left edge near the large drum has a cartouche labeling him Ryūju.<sup>43</sup>

There is another raigo garden in the Hōzenin monastery, Kōyasan, laid out ca. 1570.

<sup>&</sup>lt;sup>37</sup>Hanging scroll, 145.1 x 154.5 cm. NAKANO (note 6), no. 7, 23-25.

<sup>&</sup>lt;sup>38</sup> J: Haya raigō.

<sup>&</sup>lt;sup>39</sup> Cf. Denise Patry LEIDY & Robert A.F. THURMAN, *Mandala, the Architecture of Enlightenment*, New York, 1997, pp. 60-63.

<sup>&</sup>lt;sup>40</sup> The Ode was once thought to have been written by Genshin, but it is now considered two centuries later, and I will call the author Pseudo-Genshin. See Jōji OKAZAKI, trans. and adapted by Elizabeth ten GROTENHUIS, *Pure Land Buddhist Painting*, Tokyo, 1977, p. 114.

<sup>&</sup>lt;sup>41</sup> The character is listed in Tetsuji MOROHASHI, *Dai Kan-Wa jiten*, Tokyo, 1984-1990, vol. 11, 12080, no. 40365. This dictionary contains most kanji characters ever used in classical Japanese, but in this case it offers no comment on the meaning, although it gives the pronunciation as C: *ji*; J: *kei*. The character is mentioned already in the Chinese dictionary *Yu pian* compiled by Gu Yenang (519–581). I am grateful for expert help by Professor Mary Anne Cartelli who energetically explored the *ji*-character.

<sup>&</sup>lt;sup>42</sup> The left side of the character is (C: *jin*; M: 1057, meaning 'metal'). The right side is (C: *gui*; M: 3609, meaning 'baton' or 'tablet').

<sup>&</sup>lt;sup>43</sup> S: Nāgārjuna.

He lived in south Indian and was considered one of the first propagators of the Mahāyāna doctrines. The other, higher up and at the center, has no cartouche but may be Jizō,<sup>4</sup> a popular cult figure in Japan. This pair of monks also appears on raigo VI. Only 17 cartouches are visible. Nine Bodhisattvas lack them, all located on the right side of the picture.

In the line drawing of Fig. 7 the instrument names derived from the cartouches have been enclosed in rectangular boxes. They are labeled with the line number of the Ode. In addition, each instrument is identified by the painted image, and its name (in appropriately colored font) is placed above the box. For four instruments the image agrees with the name in the Ode: large drum, mouth organ, flute, and *koto*. The painting shows Shishiku playing the hourglass drum, but line 7 of the Ode only says he 'taps out edification.' Evidently, the verb is understood as 'tapping a drum,' and we may consider it an agreement. But many cases disagree, see Table 1.

*Layout*: The instruments lie on a smooth path folded around Amida. There are 15 instruments, the same as on the Kōyasan triptych, and the instruments are nearly identical. The only difference is a lithophone added and a pipe subtracted, arithmetic that increases the percussion percentage. The single-element lithophone has the L-shape familiar from the ancient Zhou dynasty ritual orchestras.<sup>45</sup> The stone slab is suspended from a narrow stand with an animal head at the top — also of ancient Chinese descent.

A gong hangs in a frame surrounded by an aureole that looks like a small version of those on large drums. The introduction of the gong and the lithophones may have occurred in the fourteenth century.

#### 6. Seventeen hanging scrolls, Nisonin temple, Kyoto, 1402–1419

These scrolls depict the 25 Bodhisattvas riding on clouds (Fig. 9, top),<sup>46</sup> much in the tradition of raigos. The scrolls are divided into two sets ('north' and 'south') hanging on a wall with a sculpture in between. Here they are numbered progressively away from the central sculpture. The complete arrangement is shown in the lower part of Fig. 9.

Cartouches in the upper left and right corners of the scrolls gives the name of the represented Bodhisattva, and all but two come from Pseudo-Genshin's Ode. The additional ones, Jizō and Ryūju, flank the display. They are drawn as monks with shaven heads. As discussed above, they are important figures in Japanese Buddhism, but neither is a musician, nor mentioned in the Ode.

<sup>&</sup>lt;sup>45</sup> There it was a set of progressively tuned stones, see Chunyi LI, *Zhongguo shanggu chutu yueqi zonglun*, Beijing, 1996, pp. 50-64.

<sup>&</sup>lt;sup>46</sup> NAKANO (note 6), no. 35, 84–85.

#### Canto Sacro Medieval: do Japão a Portugal

The first scrolls (north and south) depict the sun (made of gold foil) and moon (silver foil) without cartouches. This sun-and-moon motif is most unusual and not clearly understood. Perhaps the celestial bodies represent the Buddha who the *Lotus Sūtra* repeatedly calls 'Sun Moon Light Tathāgata, Worshipful, All Wise, Perfectly Enlightened in Conduct, Well Departed, Understander of the World, Peerless Leader, Controller, Teacher of Gods and Men, Buddha, World-honored One,'<sup>4</sup> or perhaps they allude to the phrase 'Buddha of the Light that Surpasses Sun and Moon.'<sup>48</sup>

Fourteen Bodhisattvas play instruments, and these are distributed across ten scrolls (Fig. 9, middle). Rather than giving the names in the cartouches, I chose to give the line number in the Ode (section 2). Here the set of numbers are complete, unlike the case of raigo V where many cartouches were missing. I use the same scheme as for raigo V: black rectangles give the line numbers, and the names of the instruments identified in the Ode; the instruments actually drawn are named in colored letters above each rectangle. Column three of Table 1 summarizes the data.

The same five instruments (hourglass drum,<sup>49</sup> mouth organ, flute, *koto*, and large drum) found to agree with the text in raigo V, agree here too. In addition, lute and harp do. Of course, that may also have been the intention on raigo V, but there is no certainty with both cartouches missing. This gives a corpus of seven instruments named consistently by fourteenth and fifteenth century raigo painters. It includes at least two instruments from each of the three groups of strings, winds, and percussion.

*Layout*: Here all 25 of the Bodhisattvas are identified, and for the first time we can see how these correlate spatially with the Ode. The Bodhisattva on line 1 of the Ode is painted on the second scroll of the northern set, and Bodhisattva 2 on the second scroll in the southern set. The layout proceeds back and forth between north and south until Bodhisattva 13 where more complex pattern starts. Apparently, the Ode only served as a partial guide to the visual organization.

The pie diagram is similar to those above with the percussion ca. 50%.

#### 7. Two mausolea with musicians in relief, 1604 and 1607

There is a pair of mausolea in the Okunoin cemetery of Kōyasan. As seen from the main walking path, the one on the right belongs to MATSUDAIRA Hideyasu (1574–1607),<sup>50</sup> and the one

<sup>&</sup>lt;sup>47</sup> Bunnō KATO, Yoshiro TAMURA & Kōjiro MIYASAKA, with revisions by W.E. SOOTHILL, Wilhelm SCHIFFER & Pier P. del CAMPANA, *The Threefold Lotus Sutra: Innumerable Meanings, The Lotus Flower of the Wonderful Law, and Meditation on the Bodhisattva Universal Virtue*, Tokyo, 1990, pp. 42-44.

<sup>&</sup>lt;sup>48</sup> Elizabeth ten GROTENHUIS, *Japanese Mandalas; Representations of Sacred Geometry*, Honolulu, 1999, citing the Muryōjukyō Sūtra, 18.

<sup>&</sup>lt;sup>49</sup> Raigo VI has a rattle drum.

<sup>&</sup>lt;sup>50</sup> Hideyasu was the second son of TOKUGAWA Ieyasu (1543–1616), founder of the shogunate which ruled Japan until 1867. At the age of 16 Hideyasu was adopted by a feudal lord (*damyō*) with no children of his own. Ten years later

on the left to his mother († 1604). The stone structures lie on a picturesque slope between tall cedars and are surrounded by fences made of narrow chiseled stone slabs (Fig. 10, top). The walls of the mausolea display Bodhisattvas in shallow relief (Fig. 10, bottom). Including Amida, there are 25 figures. (The Ode has 25, excluding Amida.)

Figure 11 gives the complete sets of instruments. The earliest mausoleum has no reliefs on the front, but the later one has: it shows flying *gandharvas* at positions 29 and 30 (Fig. 11). Both hold a pair of drum sticks but share a large drum.

The mausolea were produced a century after the Nisonin scrolls, and the choice of instruments has undergone substantial changes. The main corpus is still intact (flute, *koto*, lute, small and large drum), but new additions have crept in (panpipes,<sup>51</sup> conch trumpet,<sup>52</sup> and leaf whistle<sup>53</sup>). There are now many more large drums but with decreased size. They are mounted on pedestals, but their aureoles are still prominent.

*Layout*: Each building has 12 instruments, but they are not identical. With the addition of the *apsaras* on the front, percussion increased on the latest mausoleum. It also has the complete Amida triad, but only Amida himself appears on the first structure.

#### 8. SUMMARY OF RAIGO DEPICTIONS

A very large number of raigo images are known from the Japanese Middle Ages (ca. eleventh to seventeenth centuries). The seven chosen here are representative and show most of the musical features characteristic of the genre. On the first raigo, an eleventh-century triptych, Amida and his entourage are a symmetric composition with static character. Later raigos show the heavenly party flying directly toward the dying person, and some also add an illustration of the return to the Pure Land. Rapid raigos give the impression of fast motion. The Ode by Pseudo-Genshin mentions 12 instruments, but early images show more, 14–28. Images on the seventeenth century mausolea have the required 12 but add new instruments not mentioned in the Ode.

At all times the percussion group dominates. The small hourglass drum often took position at the front and the large cylindrical drum at the rear. Strings followed the front drum. Winds and the rest of the percussion came next.

Hideyasu assisted in the battle of Sekigahara which brought Ieyasu to power. As a reward, Hideyasu was made the *damyō* of Echizen.

<sup>&</sup>lt;sup>51</sup> C: *xiao*; J: *shō*. M: 2619.

<sup>&</sup>lt;sup>52</sup> C: *faluo*; J: *horagai*. M: 1762, 4111, see Hajime FUKAI, «The *Hora* (Conch Trumpet) of Japan», *Galpin Society Journal* 47, 1994, pp. 47–62.

<sup>&</sup>lt;sup>53</sup> C: *xiaoye*; J: *sho*. M: 2618, 7319. The whistling leaf was a venerable Chinese instrument. It is shown in the hands of Ruan Ji on the stamped-brick image 'Seven Sages of the Bamboo Grove,' dated 380–420. James C.Y. WATT, *China, Dawn of a Golden Age, 200 – 750 AD*, New York, 2004, no. 113, pp. 206–209, and 8.

#### II. ODE TO TWENTY-FIVE BODHISATTVAS, AND THE NAMES OF THE INSTRUMENTS

Raigo images call to mind Pseudo-Genshin's Ode,<sup>54</sup> and it is now high time to examine it. It has 33 lines and the first three carry an assurance that Bodhisattvas will come with music and greet the dying. They are named in the next 25 lines (here indexed with Arabic numerals), as are the object they carry, twelve of them being musical instruments. The last five lines of the Ode express a wish that Amida will appear at the moment of death.

The translation is based on the one published in 1977,<sup>55</sup> but revises the names of the instruments.<sup>56</sup> Table 1 lists the twelve instruments in the order of the Ode. Column 1 has the name in the Ode. The next two columns have the instruments given to the Bodhisattvas in the raigos with cartouches. The forth column gives the instruments shown on a raigo from 1690.<sup>57</sup> Although not formally treated here, it offers a late example of the raigo genre.

#### Ode to the Twenty-five Bodhisattvas

A. Salutation and obeisance to the vows of the twenty-five Bodhisattvas of Paradise.

B. Who promise that they will appear at the moment of death to the folk who receive and sincerely practice *nembutsu*.

C. Proffering auspicious signs of music and unusual fragrances, the Bodhisattvas come to greet the dying. How wonderful!

1. The lotus throne of the Bodhisattva Kannon bears all of us up to Paradise.

2. The prayerful gesture of the Bodhisattva Seishi symbolizes the nonduality of wisdom and mental concentration.

<sup>&</sup>lt;sup>54</sup> The original Japanese text is given in Senshūin HIEIZAN and Gakuin EIZAN (eds.), *Eshin Sōzu zenshū* [Collected works by Eshin Sōzu], vol. 1, pp. 667-670 (Sakamoto, 1927-8, reprinted Kyoto 1971).

<sup>&</sup>lt;sup>55</sup> OKAZAKI (note 40), pp. 114–116.

<sup>&</sup>lt;sup>56</sup> Two instruments (on lines 13 and 18) are given in HIRAGANA, all others in KANJI.

<sup>&</sup>lt;sup>57</sup> This raigo carries the heading 'Twenty-five Bodhisattvas' and shows 28 figures playing 13 instruments spread over two pages. The most recent illustration is in FRÉDÉRIC (note 12), pp. 318–319, which apparently was based on Philipp Franz von Siebold's *Nippon; Archiv zur Beschreibung von Japan*, first published 1832–1852 but reprinted several times. The editors of a Japanese reprint found documents in von Siebold's archives which proved that this illustration, too, was a copy [Philipp Franz VON SIEBOLD (Akio NAKAI *et al.*, eds.), *Nippon / Firippu Furantsu fon Shīboruto cho*, Tokyo, 1978-1979, 2, note 10]. According to them, it was copied from Hidenobu TOSA, *Butsuzo-zui* (Collections of Buddha Images), first published in 1690. It was reissued in 1783, 1792, and 1796, and von Siebold probably acquired the last reissue.

3. The banner of the Bodhisattva Fugen points out the path to perpetually obedient humanity.

4. The hanging banner of the Bodhisattva Yakuō waves the message of agelessness and deathlessness.

5. The jade flag of the Bodhisattva Yakujō indicates the ranks of rebirth in that distant land.

6. The flower garlands of the Bodhisattva Hōjizai express the meritorious power of Amida's infallible salvation.

7. The boisterous cavorting of the Bodhisattva Shishiku taps out edification, reaching downward for unenlightened folk.

8. The swaying sleeves of the dancing Bodhisattva Darani exhort unenlightened folk to seek upward for spiritual awakening.<sup>58</sup>

9. The hourglass drum<sup>59</sup> of the Bodhisattva Kokūzō sounds aloud the power to fulfill merit and wisdom.

10. The sound of the mouth organ<sup>60</sup> of the Bodhisattva Tokuzō reverberates with the eighteen excellences of the Buddhas.

11. The cry of the flute<sup>61</sup> of the Bodhisattva Hōzō blows the cool breeze of the three gates to enlightenment.

12. The music of the zither<sup>62</sup> of the Bodhisattva Konzō manifests the thirty-seven deities.

<sup>&</sup>lt;sup>58</sup> On Tosa's raigo (note 57) Darani wears a shawl over his shoulders and folds it into loops held in each hand. A similar posture is seen on the Matsudaira mausoleum of 1604, Fig. 11, position 5. The arrangement had been used already at Byōdōin six centuries earlier (FUKUYAMA [note 9], Fig. 58).

<sup>&</sup>lt;sup>59</sup> C: *yaogu*; J: *yōko*. M: 7302, 3479. Literally 'waist drum.'

<sup>&</sup>lt;sup>61</sup> C: *di*; J: *teki*. M: 6217.

<sup>&</sup>lt;sup>62</sup> Literally '*zheng* of *qin*' (M: 369 of 1103) referring to two Chinese zithers of distinct shape, history, and number of strings, 14 and 7, respectively, see Bo LAWERGREN, «Strings», pp. 65-85 in Jenny F. SO, ed., *Music in the Age of Confucius*, Washington, 2000. The composite expression is rare. In Japanese both kanji characters usually refer to the *koto*. Since *koto* is spelled out in hiragana characters on line 13, another type of zither is probably meant here, possibly the ancient Japanese *wagon*. It has indigenous roots in Japan unlike the *koto* which probably developed from an imported Chinese *zheng*, MALM (note 30), 194.

13. The twanging of the strings of the *koto* of Kongōzō resounds with the oneness of the Ten Worlds.

14. The strumming of the lute<sup>63</sup> of the Bodhisattva Kōmyō-ō lightens the perplexity of oppressive nonknowledge.

15. The strings of the harp<sup>64</sup> of the Bodhisattva Sankai-e teach the principle of quiescence and Absolute Reality.

16. The sound of the *ji* (or *kei*)<sup>65</sup> of the Bodhisattva Kegon-ō fills up the whole universe as the object of mind.

17. The clanging gong<sup>66</sup> of the Bodhisattva Shuhō-ō extols the One-Buddha Vehicle.

18. The swaying rattle-drum<sup>67</sup> of the Bodhisattva Gakkō-ō causes the World of the Ten Quarters to reverberate.

19. The *jie* (or *kakko*) drum<sup>68</sup> of the Bodhisattva Nisshō-ō extols the four realms embraced in Eternally Tranquil Light.

20. The flowers scattered before Amida's image by the Bodhisattva Sammai-ō are dispersed in the realms of empty space and sea.

<sup>&</sup>lt;sup>63</sup> C: *pipa*; J: *biwa*. M: 5157.

<sup>&</sup>lt;sup>64</sup> C: konghou; J: kugo. M: 3727, 2141.

<sup>&</sup>lt;sup>65</sup> C: *ji*; J: *kei*. A *hapax legomenon*. See notes 41 and 42.

<sup>&</sup>lt;sup>66</sup> C: *nao*; J: *nyō*. M: 4641. MALM (note 30, pages 71 and 246 'Dora') shows it as a large gong hanging from strings attached to its rim. Walter KAUFMANN, *Musical References in the Chinese Classics*, Detroit Monographs in Musicology 5, Detroit, 1976, pp. 136-7 shows it as large horizontal cymbals.

<sup>&</sup>lt;sup>67</sup> The name *furi-tsuzumi*, given in hiragana characters, is a rattle-drum. It has two small drums mounted on top of each other and pierced by the 50 cm long and narrow shaft held in the player's hand. When the shaft is twisted, tiny pellets swing out and hit the drum skins.

<sup>&</sup>lt;sup>68</sup> C: *jie gu*, M: 779, 3479. There are two translations of *jie*: (i) the ancient name for a *Xiongnu* [or *Khitan*, see Edwin G. PULLEYBLANK, *T'oung Pao* 41, 1952, pp. 317–356] tribe in northern China; (ii) the 'wether' (a gelded male sheep). Edward H. SCHAFER, in *The Golden Peaches of Samarkand*, Berkeley, 1985, p. 52, n. 104, gives 'wether drum,' but '*jie*-drum' avoids the uncertain choice. The drum was introduced to the Chinese court during the reign of Emperor Ming Huang (712–756), who composed 92 pieces for it, which made the drum extremely popular. It has a lacquered cylindrical body which rests on a horizontal platform. Since each end had a deer-skin membrane of greater diameter than the body, the drum looks like a 'spool,' see L.E.R. PICKEN, «T'ang Music and Musical Instruments», *T'oung Pao* 55, 1969, pp. 74-122, esp. 103. It was beaten by two sticks, see Evangeline Dora EDWARDS, *Chinese Prose Literature of the Tang Period (618–906)*, London, 1937, vol. 1, pp. 202-3 — an account that follows the early treatise by Nan ZHOU, *Jiegu lu* (841–846) in which the drum is said to have come from Central Asia.

21. The large drum<sup>69</sup> of the Bodhisattva Jōjizai-ō sounds like a great assembly of nondiscrimination.

22. The flower banner of the Bodhisattva Daijizai-ō soars up toward absolute nonsubstantiality.

23. The jeweled flag of the Bodhisattva Hakuzō-ō flutters in the heaven of Ultimate Truth.

24. The beautiful jewel of Dai-itoku-ō is imbued with the teaching free of any taint of illusion.

25. The burning incense of the Bodhisattva Muhenshin is offered respectfully to venerate Amida Buddha.

D–F. I pray that thou, Amida, thanks to thy unsurpassed, compassionate vow, may come to receive us in person at the death hour through our single-hearted remembrance of thee... we who are embraced in thy universal vow but dwell sin-ridden in this evil world of the five defilements.

G. I desire to be reborn on hearing of the power of the Original Vow of the Buddha and his name.

H. May all people attain that land and may I myself achieve the stage of not back-sliding!

Since the Ode became popular in the thirteenth century, the two raigos with cartouches are late enough (1370–1420) to, possibly, have been influences by it. Table 1 enables a comparison of the instrument names. As mentioned earlier, there is a set of six instruments (mouth organ [line 10],

In Japan the drum was called *kakko*. By itself, the first character of the kanji pair (M: 779, 3479) is pronounced *katsu* but, when followed by *ko* (drum), the full name becomes *kakko*. According to the kanji dictionary, the drum was used by the Katsu tribe in China. The *kakko* was and is popular in Japan, and its shape is the same as the one given by Nan Zhou. But the kanji pair above was rarely used. Instead, it is given by another kanji character (plus *ko*) which, in turn, is rare in China. Mathew does not have that character, but it appears in the 13-volume *Hanyu da cidian* «Great Chinese Word Dictionary», Shanghai, 1986–93, vol. 12, p. 203, pronounced *he*. The word is mostly combined into *mohe*, the name of an ancient Manchurian tribe. (On its own *he* refers to the cord used to set ladies' hair.) Thus, in China the spool-shaped drum was called *jiegu* using a character that associated it with an ancient tribe that had lived west of Beijing, although Nan Zhou said it came from Central Asia (i.e. Kucha). In Japan the same drum was called *kakko*, using a kanji character associating it with an ancient Manchurian tribe. <sup>69</sup> C: *dagu*; J: *taiko*. M: 5943, 3479.

flute [11], *koto* [13], lute [14], harp [15], and large drum [21]) where the sources agree. In addition, line 7 ('Shishiku taps out') always has a small drum. For these lines the painters associated Bodhisattvas with the instruments given in the Ode.

But several other instruments disagree with the Ode. On line 6 the Ode does not mention rhythm or dance, but raigos V and VI have the same two drums as on line 7, although in reversed order. This might be reasonable if lines 6 and 7 had parallel construction, but it is not the case. There is no verb in line 6 that alludes to percussion.

Columns 2 and 3 agree internally on the instruments that belong to the Bodhisattvas of lines 9, 12, 18, and 20, but disagree with the instruments of the Ode. The mutual consistency and independence from the text indicate that painters ignored the Ode and copied from each other or from an unknown source.

The identity of the instrument on lines 16 is not known, and I had hoped that the raigos would show them. But line 16 is contradictory: the three sources disagree (gongs, lithophones, and metallophones). However, these instruments have one thing in common: all are struck by metal hammers. The hammers are shaped like the letter T, distinctly different from the shape of a mallet (a small ball attached at the end of a stick). The former is hard and capable of putting a hard percussion instrument into vibration. The latter is soft and mostly used on drums. The artists who drew the raigos distinguished the two. I propose that (C: *ji*; J: *kei*) stood for an implement ('hammer'), rather than an instrument. This assignment accords with the connection to 'metal' and 'baton' noticed earlier.<sup>70</sup> Therefore, I suggest that *kei*-instruments are those struck by a metal hammer.

Column 4 has excellent correlations with the Ode, e.g., line 9 has a drum in accordance with the Ode — not a dancer as in columns 2 and 3. The agreement extends to lines 12 and 20, and makes the correspondence perfect. By 1690 the Ode had finally become the blue-print for raigos.

#### III. THE POSITION OF MUSIC IN BUDDHISM

Buddhists approved of music and elevated it a central role in raigo images, but they had not always held that belief. After the death of the historical Buddha a difficult period followed. He had been the son of a king and had enjoyed the palace orchestra, both music and female musicians. They had played harps, flutes, pipes, and percussion. Eventually he rejected courtly life, left home, and gained enlightenment. Music came to be seen as one of the depravities of his youth, a corrupting force and an aid to seduction.<sup>71</sup> One of the oldest texts in the Buddhist canon,

<sup>&</sup>lt;sup>70</sup> See note 42.

<sup>&</sup>lt;sup>71</sup> LAWERGREN (note 14), pp. 233–238.

the *Brahmajāla Sūtra*, required monks to 'avoid watching dancing, singing, music, and shows.'<sup>72</sup> The Buddha also took a dim view of singing the sacred texts. It decreased comprehension.<sup>73</sup>

Centuries later when Buddhism arrived in China attitudes had changed radically. Mahāyāna *sūtras* assured Buddhists that music is one of the great pleasures of Paradise. There would be 'music, concerts, and musical instruments,' and worshipers would have access to an assortment of 'materials, beginning with flowers and ending with musical instruments.'<sup>74</sup> The *sūtras*, written in India or Central Asia during the early parts of the first millennium CE, named the instruments, and most were Western. The Lotus *sūtra* implored Buddhists to honor Buddha with orchestras that include drums, horns, conch shells, pipes, flutes, zithers, harps, lutes, cymbals, and gongs.<sup>75</sup> When the Silk Road opened during the early parts of the millennium, it became a conduit of Western instruments into China, from where they spread to Korea and Japan. Buddha's biography impressed listeners on the Silk Road and in China. His court orchestras may have been rejected by Buddha, but they now gained esteem and were imitated by rulers in converted regions.

Music was not only a mental pleasure but held symbolic value in the Pure Land. 'In that land, there are thousands of varieties of spontaneous music, which are all, without exception, sounds of the Dharma. They are clear and serene, full of depth and resonance, delicate, and harmonious; they are the most excellent sounds in all the worlds of the ten directions.'<sup>76</sup>

Genshin's *Ōjō yōshū* fits into the tradition when it promises that 'The great vow of Amida is such that he comes with twenty-five Bodhisattvas and the host of hundred thousand monks. In the western skies purple clouds will be floating, flowers will rain down and strange perfumes will fill the air in all directions. The sound of music is continually heard and golden rays of light streams forth. In brilliant rays which dazzle the eyes, he will appear. At the time of death, the merciful Kannon, with extended hands of a hundred blessings and sublimity and holding out a lotus seat of treasures, will appear before the believer.'<sup>77</sup>

#### IV. THE TAIMA MANDARA FROM CHINA: AN EIGHTH CENTURY PRECURSOR TO RAIGOS

Most of the instruments shown on raigos were not indigenous to Japan, but came from China. One piece of evidence is the Taima mandara,<sup>78</sup> which was imported from China in the eight century.

<sup>&</sup>lt;sup>73</sup> Bo LAWERGREN, «Buddhismus», in *Die Musik in Geschichte und Gegenwart*, 2, Kassel, 1995, esp. column 227.

<sup>&</sup>lt;sup>74</sup> MÜLLER (note 13), 53.

<sup>&</sup>lt;sup>75</sup> Burton WATSON (trans.), The Lotus Sutra, New York, 1993, chapter 2, p. 40; KATŌ (note 47), 69.

<sup>&</sup>lt;sup>76</sup> Hisao INAGAKI (trans.), «The Sutra on the Buddha of Infinite Life Delivered by Śākyamuni Buddha» in *The Three Pure Land Sutras*, Berkeley, 2003, rev. second ed., pp. 1–71, esp. 29.

<sup>&</sup>lt;sup>77</sup> REISCHAUER (note 19), 68–69.

<sup>&</sup>lt;sup>78</sup> S: *maņala*; J: mandara.

Art Historians consider it to be the impetus to raigo paintings.<sup>79</sup> It was placed in the Taimadera temple, Nara, and is now in fragmentary condition, but many copies were made starting in the thirteenth century,<sup>80</sup> including the large scroll in Fig. 12. It shows deities, palatial buildings, and throngs of people, and the very center has the same 'Amida triad' as seen on raigos. A border runs along the right, left, and bottom edges, and it is subdivided into many small scenes. The one in the lower right corner illustrates Amida descending to greet a dying person resting in his house (Fig 13).<sup>81</sup> The image is small and unclear, but some instruments can be discerned in Amida's entourage, in particular a large red barrel-drum at the rear, similar to the current *ōdaiko* drum. Its diameter is smaller than its length, a geometry which set it apart from the large drum (*dadaiko*) with aureoles seen on raigos. With its large size and position at the rear end of a procession, it foreshadows the use of huge drums on raigos and in the Gagaku ensemble.

But the most important musical aspect of the Taima mandara are the two orchestras shown in the black rectangle in Fig, 12. Figure 14 shows the details. The large orchestra has adult members seated in two rows, and the small one has babies who stand in a pool. Presumably, the babies are adults reborn (with red socks) in the Pure Land. The adult orchestra has eight instruments with two zithers next to each other at the left front, and a lute at the right front. Strings are prominent, but winds are also present (flute, pipe, mouth organ and conch trumpet). Percussion is absent. The baby orchestra has only two instruments, a lute and a drum. Two seated persons in the background sway in dance-like motion.

The iconography derives from sacred texts about the Pure Land. There are 'palaces of fifty to five hundred *yojanas* (each ca. 8 miles) in extent,'<sup>82</sup> built on 'seven terraces, with seven rows of palm-trees, and with strings of bells. It is enclosed on every side, beautiful, brilliant with four gems, viz. gold, silver, beryl, and crystal... with lotus lakes... full of water... with golden sand... There are heavenly musical instruments always played on'<sup>83</sup> This prospectus promises 'palaces, parks and gardens; lotus lakes with perfumed water that is either hot or cold as desired for bathing; delightful soothing sounds of birds and angelic singers.'<sup>84</sup> Indeed, the top section of the mandara shows birds and instruments aloft, the latter festooned with decorative ribbons but lacking players (Fig. 15).<sup>85</sup>

<sup>&</sup>lt;sup>79</sup> OKAZAKI (note 40), p. 53; Shinji ITO, «The Formation of *Raigô* Paintings of Amida and the Twenty-five Bodhisattvas.»' *Bijutsushi* 43, 1994, pp. 16-32 (English summary). KANDA (note , 47) questions the influence and considers the Taima mandara relatively inaccessible until the twelfth century.

<sup>&</sup>lt;sup>80</sup> Elizabeth ten GROTENHUIS, 'Rebirth of an Icon: The Taima Mandala in Medieval Japan,' *Archives of Asian Art*, 36, 1983, pp. 59-87.

<sup>&</sup>lt;sup>81</sup> Also GROTENHUIS (note 48), Pl. 5.

<sup>&</sup>lt;sup>82</sup> MÜLLER (note 13), 62.

<sup>&</sup>lt;sup>83</sup> F. Max MÜLLER (trans.), «The Smaller Sukhâvatî-vyûha», in *Buddhist Mâhayâna Texts*, The Sacred Books of the East, New York, 1969, pp. 89-107, esp 91-95.

<sup>&</sup>lt;sup>84</sup> OKAZAKI (note 40), p. 15.

<sup>&</sup>lt;sup>85</sup> They are known as '*bu gu zi ming*' (M: 5379, 3479, 6960, 4535), i.e. 'no drumming, but sounding by itself.'.

Self-playing instruments were illustrated in China too, but not on other Japanese monuments. The idea came straight from *sūtras*: 'There are also musical instruments suspended in the sky, which ... spontaneously produce tones even without a player. Each tone proclaims the virtue of Buddha's mindfulness.'<sup>86</sup> In a similar vain 'The countries through which they passed... [had] hundreds of thousands of heavenly instruments resounding by themselves.'<sup>87</sup>

Although it has long been established that the Taima mandara gave a visual impetus to raigo paintings, its musical significance has been less recognized. Now we find instruments and orchestras on this eighth century image, and the instruments will eventually increase in numbers on raigos painted centuries later.

#### V. ORCHESTRAS IN A NINTH CENTURY CAVE AT DUNHUANG, CHINA

Did *any* earlier Chinese monuments show as many instruments as raigos did in the second millennium? Did instruments in the two countries differ? There are numerous Chinese images of orchestras, but I limit the analysis to cave 85 at Mogao, Dunhuang, Gansu Province.<sup>88</sup> The cave was built 852–857 for Zhai Farong, chief of the Buddhist community in the Hexi region east of Dunhuang. The interior is nearly quadratic (Fig. 16) with walls covered from ground to top with well-preserved scenes. At eye-level each of the north and south sides have three images of the Pure Land, labeled A,<sup>89</sup> B,<sup>90</sup> (C is omitted),<sup>91</sup> D,<sup>92</sup> E,<sup>93</sup> and F<sup>94</sup> here.

Paradise B has typical musical subjects (Fig. 17). Higher up are small scenes, including flying instruments without players — similar to the Taima mandara composed a century earlier. Like the Taima mandara, each of the Pure Lands has Amida and his chief Bodhisattvas in the central area. Below them are terraces with gardens and pools. In all cases but one (C), a large orchestra sits on a terrace. Each orchestra is split evenly into two sections, one on each side of a dance floor,

<sup>&</sup>lt;sup>86</sup> 'The Sutra on Contemplation of Amitāyus', in Hisao INAGAKI, *The Three Pure Land Sutras* (Berkeley, 2003), 73–108, esp. 83.

<sup>&</sup>lt;sup>87</sup> Katō et al. (note 47), 315.

<sup>&</sup>lt;sup>88</sup> To identify the instruments, one needs comprehensive views: access to the interior and permission to photograph but both are difficult to get. Luckily, I visited cave 85 in June 2004 when it was undergoing conservation by the Getty Museum Conservation Institute, Malibu, CA, and the Dunhuang Academy. Scaffolding was in place, allowing closeup photography without parallax or other distortions.

This cave is illustrated in many places, e.g., at The Mellon International Dunhuang Archive available at the web-site 'ARTstor.'

<sup>&</sup>lt;sup>89</sup> Illustrating the *Viśeşacintabrahma-paripŗcchā sūtra*, see *Dunhuang shi ku yi shu; Mogao ku di 85 ku; fu di 196 ku (wan Tang)*, (NANJING, 1998), esp. 218, 220-1, and 223.

<sup>&</sup>lt;sup>90</sup> With scenes from the Bhaişajyaguru sūtra (The Sutra of the Buddha of Medicine).

<sup>&</sup>lt;sup>91</sup> It is badly preserved and has no orchestra on a terrace but may have instruments at a higher location.

<sup>&</sup>lt;sup>92</sup> From the Vajracchedika-prajñāpāramitā sūtra (The Diamond Sutra).

<sup>&</sup>lt;sup>93</sup> From the Sukhāvatīvyūha sūtra (The Smaller Sutra on Amitāyus).

<sup>&</sup>lt;sup>94</sup> From the Baoen sūtra (The Sutra on Requiting Kindness).

but the instruments (Fig. 18) differ from orchestra to orchestra. In each orchestra the musicians sit in neat rows and wear identical cloths and hairstyle. One or two dancers are on the dance floor.

Paradise E has a pair of dancers, one playing a drum and the other a lute. The lutenist holds the instrument behind the head and gives the performance an acrobatic air. Both dancers make tall leaps, as if descending from heaven. The adoption of instruments by dancers is unique in cave 85, but other Dunhuang caves have it.<sup>95</sup>

Since the orchestra pits are crowded, I have converted the images of the five orchestras to line drawings. This clarifies seating arrangements and choice of instruments (Figs. 19–23), but may ignore some small details of the instruments. There is a great variety of orchestra size, from the complete lack of instruments in Paradise C, to the grand ensemble of 28 instruments in Paradise B. In hindsight it is clear that cave 85 was a lucky choice. It has great variety within one room and at one time. Most of the depictions are clear enough to allow unambiguous identification the instruments. We notice that:

i. Most orchestras have 16 instruments, but the huge B-orchestra has 28 instruments.

ii. There are 22 types of instruments, namely:

a. six types of strings: angular and arched harps, 4- and 5-stringed short-necked lute, long-necked lute, and zither.

b. five types of winds: end-blown pipe, transverse flute, mouth organ, pan-pipes, and conch-trumpet.

c. ten types of untuned percussion: small vertical cymbals, large horizontal cymbals, rattle-drum, vertical frame drum, large and small vertical hourglass drums, small vertical drum on a platform (the *jie*-drum), horizontal drum, clappers, and finger-snapping.

d. one tuned percussion: metallophone.

iii. There is a pie chart under each half of the orchestra. These show that the left and right sides usually are asymmetrical: one group of instruments dominates on one side while another group

<sup>&</sup>lt;sup>95</sup> E.g., a lute held behind the dancer's back in MOGAO cave 112 (*Tonko Bakukokutsu; Tonko Bunbutsu Kenkyujo hen*, Vol. 4, Tokyo, 1980-1982, Fig. 54). Notice also an acrobatic mermaid (not dancing) carved on a stone medallion (inv. 1992.165.26a, Liang dynasty, 916–1125) in The Metropolitan Museum of Art, Department of Asian Art, New York. She holds a lute behind her head.

dominates the right side. As an example, consider Fig. 19: strings dominate the left side, winds the right side (upper level charts). Yet, with left and right sides added in the lowest pie, strings, winds, and percussion are more balanced.

iv. The orchestra in Paradise B stands out (Fig. 20). In addition to the left and right instrumental sections next to the dance floor, each has an additional percussion group seated further out on a higher platform. Both percussion groups have identical instruments, but the seating differs slightly.

#### VI. COMPARING THE JAPANESE AND CHINESE INSTRUMENTS WHICH APPEAR IN THIS STUDY

Clearly, many raigo instruments are patterned on Chinese models. But more precise statements can be made since the study involves a fairly large number of instruments, and a large sample exhibits relatively small statistical fluctuations. The amount ('population') of each type can then be measured with some confidence. The data contains 27 types of instruments and I parcel them into two groups:

- (1) Raigo instruments in seven cases (raigos i-vii)
- (2) Cave 85 instruments in five cases (A–B, D–F)

Instruments of each type are added for each group. The results should be normalized, but one could argue for several different approaches. Perhaps the simplest is to compensate for the larger number of cases in (1) and multiply its results with 5/7. Alternatively, one could divide each population in (1) with the total number of instruments in (1). This would give percentages of the totals. Rather than argue for a 'correct' way, I will adopt the first method and only look for trends large enough to persist even if the normalization was slightly different.

#### i. A three-way analysis of statistical data

Figure 24 gives the results as a histogram. The numbers along the *abscissa* identified the instrument type (with the key given in the caption), and the *ordinate* is proportional to the population. The data in groups (1) and (2) are plotted as black and gray bars.

Cave 85 contains 21 types of instruments, namely those on the left of the vertical dash-dot line. Some types have few members (e.g., arched harps, 5-stringed lute, small horizontal drum, and finger-snap), and statistical fluctuations prevent a meaningful quantitative analysis. On the other hand, pipes (no. 7) are plentiful in China, followed by clappers (no. 18) and 4-stringed short-necked lutes (no. 3).

#### Canto Sacro Medieval: do Japão a Portugal

Raigos lack some instruments present in small amounts in cave 85 (types 2, 4, 5 and 19), but show several new instruments, all placed to the right of the dash-dot line. The largest — both in physical size and popularity — is the *dadaiko* drum, which now dominate all other types. On the left side of the dash-dot line, most instruments occur in both groups but with different distributions. Pipes (no. 7) and conch trumpets (no. 11) have suffered a large decline on raigos — whereas zithers (no. 6) and *kakko*-drums (20) have been much enhanced. I believe these results are sufficiently large to survive different ways of normalizing the data.

The suppression of pipes and trumpets and the enhancement of zithers and drums can be explained as an effect of the Ode influencing the raigos. Pipes and trumpets are not mentioned in the Ode, but zithers, the *kakko*-drum and the *dadaiko*-drum are. As a result, the latter received a considerable boost in Japan.

At first sight harps seem to disobey the rule. They are mentioned in the Ode, still angular harps (no. 1) appear infrequently on raigos. However, vajra harps (25) took the place of angular harps, and if the two are added, harps lose less ground.<sup>96</sup> Still, harps faced a precarious existence in second millennium Japan — as they did in China. Back in the ninth century China had them, but thereafter their popularity dwindled in all of the Far East. The lack of angular harps in Japan is baffling since two harps survive in the Shōsōin Treasure House and probably were played for a while at the Japanese court. Most likely, the harps and other fine instruments were Chinese gifts to the Tōdaiji temple (Nara) at the eye-opening ceremony of in 752. Japanese annals<sup>97</sup> contain requests by Emperors Kammu (r. 781–806) and Saga (r. 809–823) that Shōsōin instruments ('koto and others') be temporarily lent to the court in Kyoto.<sup>98</sup> But harps seem to have been viewed as symbolic, rather than musical, instrument in Japan. This aspect came to the fore when the Japanese Buddhist monk Ennin visited China ca. 840 and claimed to have seen 'a silver harp ... made of 84,000 notes, and each of the 84,000 notes cured one of the worldly passions.'<sup>99</sup>

Considering the difference in usage noted above, there is little doubt that the Ode strongly influence the choice of instruments on Japanese raigos and other representations of the 25 Bodhisattvas.

<sup>&</sup>lt;sup>96</sup> For vajra harps, see section 6.iv.

<sup>&</sup>lt;sup>97</sup> Dai Nihon Komonjo.

<sup>&</sup>lt;sup>98</sup> Yūsuke YONEDA, Chief Researcher at the Shōsōin Treasure House, private communication kindly transmitted by Tomoko SUGAWARA and Kiyoshi CHIYONOBU. He believes that the Emperors played the instruments (including harps).

<sup>&</sup>lt;sup>99</sup> Edwin O. REISCHAUER, *Ennin's Diary; the Record of a Pilgrimage to China in Search of the Law*, New York, 1955, p. 248.

<sup>&</sup>lt;sup>100</sup> For the latter, see note 57.

#### ii. Instrument present in cave 85 but absent on raigos: Conch trumpet

All five Paradise orchestras in cave 85 have a conch trumpet. There are no conches on the raigos examined here except at the very end of the tradition, on the 1604 mausoleum (Fig. 11). Nor are they mentioned in the Ode or shown on the 1690 raigo.<sup>100</sup>

#### iii. Instrument present on raigos but absent from cave 85: Large vertical drums with aureoles

The last instrument mentioned in the Ode is the large drum (*dadaiko*, Fig. 2),<sup>101</sup> and not surprisingly, it occupied the rear-position in raigo orchestras (see raigos III – IV).<sup>102</sup> The huge size was, essentially, a Japanese innovation.<sup>103</sup> Most of the large drums shown here — starting with the triptych (Figs. 1 and 2) — have flaming aureoles, but not the Taima mandara (Fig. 13) from the eighth century. Apparently, the aureole was introduced between these dates.

Aureoles were also put behind Buddhist deities (cf. Amida, Fig. 4). Flames are thought to devour passion and consume desire. The huge drums look theatrical but are in line with Buddhist faith. The 'Drum of the Great Law' is mentioned in the Lotus sūtra.<sup>104</sup> It symbolizes the endless cycle of births and rebirths, probably because its shape resembles a wheel<sup>105</sup> — and Buddha had famously rolled the 'wheel of the Law' at Varāṇasī.

iv. Instrument present on raigos but absent from cave 85: Vajra harp

Vajra harps are hardly known outside Japan. They have a low, flat, and horizontal soundbox of nearly cylindrical shape. An S-shaped rod rises vertically from one end of the box, and has a *vajra* attached at the top.<sup>106</sup> Six to eight strings stretch between the rod and the box (Fig. 25b–c). Depictions of vajra harps are rather inconsistent. Strings are often missing, and the sound box is sometimes replaced by ribs that mark the outline (Fig. 25d). The Kōyasan triptych (twelfth century)

<sup>&</sup>lt;sup>100</sup> For the latter, see note 57.

<sup>&</sup>lt;sup>101</sup> Before the Ode, in the eighth century, the Taima mandara from China has instead a medium size barrel drum at the rear of Amida's procession (Fig. 13).

<sup>&</sup>lt;sup>102</sup> Similar to the *dadaiko* now placed at the rear of the imperial *gagaku* orchestra, see Malm (note ), pls. 32, 34, 36. Its aureole is over 3 m in height.

<sup>&</sup>lt;sup>103</sup> The large drums do not occur in cave 85 or in other Mogao caves renowned for musical splendor, such as nos. 112, 172, 220, and 285. Nor does Wang Jian's tomb have it although many smaller models were common (Anne BIRRELL, «An All-Female Band from 10th Century China Stone Sculptures from the Imperial Tomb of Wang Jian.», in *Oriental Art* N.S., 39:1, 1993, pp. 25-33). However, long before the period discussed here, China had large drums (Bo LAWERGREN, «Neolithic Drums in China», in *Studien zur Musik Archäologie V*, eds. E. HICKMANN and R. EICHMANN. Deutsches Archäologisches Institut; Orient-Abteilung; Orient-Archäologie, 2006. But they were barrelshaped and had smaller diameter than length, see LAWERGREN (note 16), Fig. 1.

<sup>&</sup>lt;sup>104</sup> KATŌ et al. (note 47), 155.

<sup>&</sup>lt;sup>105</sup> Frédéric (note 12), 22–23.

<sup>&</sup>lt;sup>106</sup> A vajra (C: *jingangshou*; J: *kongō-shu*, M: 1057, 3268, 5835), also known as a 'thunderbolt-scepter,' resembles a fork where the tines (1 to 9) curve in toward a single point. In Chinese and Japanese esoteric Buddhism it is an implement with multiple functions.

has the most functional design with a tangible sound box and C-shaped sound holes (Fig. 25b). Because of the unrealistic designs, working models may not have been available for raigo painters to copy. In contrast, instruments that existed (lutes, flutes, large drums, zithers, etc.) are well portrayed by the artists. Perhaps images of vajra harps were promulgated as 'copies of copies,' a process that eventually led to nonsensical instruments. I doubt vajra harps existed in the material world and believe they were imaginary.

When the vajra harp was painted on the Kōyasan raigo in the mid-twelfth century, it had already been known in Japan for more than three centuries. It first appeared on the mandara of the Diamond World (one half of the mandara of the Two Worlds) brought from China in 809 by the Japanese monk Kūkai (774–835). The harp can be found in three of the nine square fields ('Assemblies') of the Diamond mandara,<sup>10</sup> namely the 'Four-Seals Assembly,' the 'Gōsanze-Sammaya Assembly,' and the 'Sammaya Assembly.' The first shows Buddhist deities in anthropomorphic and symbolic forms, usually with vajras as prominent attributes. In the assembly's top right corner is a vajra harp (Fig. 25a). It represents Vajragītā Bodhisattva who has a 'subtle voice ... that never tires the hearer, being like the resonating call that brings them to an understanding of all doctrines and to the liberation of a Holy One.'<sup>10</sup> The same assembly also has a harp with strings replaced by a long vajra. The Gōsanze-Sammaya and Sammaya assemblies have a large number of vajras, some on top of harps. Clearly, this environment saturated with vajras stimulated the idea of a vajra harp. It was a religious symbol where the sound was of minor importance.<sup>109</sup>

The earliest surviving polychrome copy of the Diamond World is the Saiin mandara dated 860–880 CE and located in the Kyōōgokokuji temple,<sup>110</sup> Kyoto.<sup>111</sup> It shows the vajra harp (Fig. 25a) at the upper right corner, and its soundbox is flat with oval shape. It resembles the one drawn on the triptych raigo (Fig. 25b). The instrument is shown on a red lotus throne against a golden background, and red rays emanate from it. Vajra harps continued to be illustrated for a millennium on Japanese mandaras.<sup>112</sup>

<sup>&</sup>lt;sup>107</sup> For terminology and pictures, see Grotenhuis (note 48), 36–46, where the two assemblies are shown in Figs. 23 and 27.

 <sup>&</sup>lt;sup>108</sup> Adrian SNODGRASS, *The Matrix and Diamond World Mandalas in Shingon Buddhism*, New Delhi, 1988, p. 579.
 <sup>109</sup> For other examples of vajra harps illustrated on mandalas, see Susumu KASHIMA, «Depictions of Kugo Harps in Japanese Buddhist Paintings», in *Music in Art* 24:1–2, 1999, pp. 57-67.

<sup>&</sup>lt;sup>110</sup> Popularly known as the Tōji temple. Its western sub-temple is Saiin.

<sup>&</sup>lt;sup>111</sup> GROTENHUIS (note 48), 84. For Fig. 24a, see Masaki NAKANO, Yutaka HIRATA & Masayuki SEKIGUCHI (eds.), *Mandara to raigōzu, Heian no kaiga, kōgei I*, Tokyo, 1991, pl. 3 (top right).

<sup>&</sup>lt;sup>112</sup> Other mandaras with vajra harps are illustrated in Gensō NAKANO, ed., *Gazō Fudō Myō-ō*, Kyoto, 1981, color plate 31 (thirteenth century), monochrome plate 32 (thirteenth c.), list of Buddhist iconography 48, 49, and 51 (twelfth century), 52 (thirteenth c.), 53 (eighth c.), 54 (thirteenth c.), 57 (1381), 58 (thirteenth c.), 60, 61, and 63, (1797), and 197 (thirteenth c.).

No copy of the Diamond World mandara has survived in China and there is no illustration of the vajra harp. But there are two pictures of related harp in Chen Yang's book *Yue Shu* from 1104.<sup>113</sup> Instead of the vajra at the top, both have the head of a phoenix bird, and its scaly body forms the rod and soundbox (Fig. 25e). This head lies firmly in Chinese tradition — just as the vajra belongs to esoteric Japanese Buddhism. With the large box and many strings, the Chinese version seems more sensible than the vajra harp — and more likely to have been a real instrument.<sup>114</sup>

Raigos and Diamond World mandaras are the main sources of vajra harps, but we see them on two further types of Japanese art. One is the Taima mandara. Many copies were made and they differ slightly. The one in the Asian Art Museum of San Francisco,<sup>115</sup> has a vajra harp at the back of the adult orchestra's right side.<sup>116</sup> Since not every copy has the vajra harp, we cannot know if the original had it.

The other type of art is a Japanese screen from the fourteenth century. It is one of a set of six large screens from Hōryūji temple<sup>117</sup> that depicts 'Four Sages at *Shan-shan* and *Wen Wang* and *Lu Shang*.' Equestrian musicians play the vajra harp, the zither, the lute, the flute, the pipe, and the mouth organ. The vajra harp looks much like that on Fig. 25b, but it has seven strings and the tines of the vajra have circular shape.

#### v. Different placement of instruments on raigos and in cave 85

A large difference between orchestras on Japanese raigos and in China orchestras is the seating arrangement. Chinese musicians sit in straight and rigid rows, often in spaces defined by rectangular carpets. They are stationary. By contrast, raigos have them placed along gentle curves (colored brown in Figs. 1 and 5–7). The orchestra is moving toward the dying person. This arrangement was largely an indigenous development outside the mainstream Chinese way with orchestras. But it should be noted that the eight century Taima mandara (Fig. 13), with its lose group of musicians streaming down to Earth, has a premonition of the raigo design — and it was made in China. Japanese raigo painters developed the idea much further.

It may be inappropriate to look for outside influences, but if any were to look, Indian images come to mind. Indian orchestras avoid grid positions. Prime examples are reliefs from Amarāvatī,

<sup>&</sup>lt;sup>113</sup> LAWERGREN (note 16), Fig. 3F.

<sup>&</sup>lt;sup>114</sup> Other foreign parallels to the vajra harp are discussed in Bo LAWERGREN, «Ancient Harps Near Dunhuang», in Neville AGNEW, ed., *Conservation of Ancient Sites on the Silk Road: Second International Conference on the Conservation of Grotto Sites*, (expected early 2007).

<sup>&</sup>lt;sup>115</sup> Inv. no. B61 D11+, fourteenth or fifteenth century. It is well illustrated in Danielle and Vadime ELISSEEFF, *Art of Japan*, transl. I. Mark Paris, New York, 1985, Fig. 68.

<sup>&</sup>lt;sup>116</sup> In Fig. 14 the harp is missing, but the player has the same hand position as in the San Francisco museum.

<sup>&</sup>lt;sup>117</sup> Tõkyō Kokuritsu HAKUBUTSUKAN, *Umarekawatta Hõryūji Hõmotsukan*, Tokyo: The New Gallery of Hõryūji Treasures, 1999, pp. 226–227. The dimension is 147.7 x 231.5 cm.

a site in northern India, e.g., a tondo from the second century CE.<sup>118</sup> Co-regents Māndhātā and Śakra, who ruled over 'four quarters of the globe' and Heaven,<sup>119</sup> sit in a relaxed mode on a wide couch. They are entertained by dancing and music from an orchestra with two arched harp, with 9 and 5 strings, a trumpet, a side-blown flute, and percussion. The instruments fall approximately on semi-circles centered on the couch. Influences are a matter of speculations, but it is worth noting that Japan, China, Central Asia, and India were closely connected through exchange of Buddhist imagery during the second millennium CE.<sup>120</sup>

#### vi. Instruments present on raigos but absent from cave 85: large percussion sections

Orchestras on raigos tend to have larger percentage of percussion than in cave 85. Although such a high percentage can be found in cave 85, it is rare. But the increased percussion component may not necessarily be a Japanese phenomenon. It could also be due to the later date of Japanese raigos, at least two centuries after cave 85, and at that late date China may have developed equally high percentages. The best-known example of a late Chinese orchestra is in Wang Jian's tomb made in 920.<sup>121</sup> It has 23 instruments cut in high relief with elaborate details. Beside the usual instruments, there is also a conch trumpet and leaf whistle, instruments that reappeared seven centuries later on the Matsudaira mausoleum. Wang Jian's tomb has 62% percussion. In other words, orchestras with large percussion sections were not unique to Japan.

#### VII. COMPOSITION AND SIZE OF ENSEMBLES

Raigo paintings provide a rich source on the musical instruments of the Japanese Middle Ages. Individual instruments are shown in detail, and groupings are clear. There are 22 distinct types of instruments — not counting various sizes of each type (Figs. 1–11), and they are always combined into ensembles (or orchestras). The size varies between 11 and 28 instruments, and 14 is the most frequent number.

To put the instruments in perspective, five complete Chinese orchestras were brought into the picture. All come from cave 85, a ninth-century monument from western China. The Japanese and Chinese sets largely overlap, indicating that raigo instruments hark back to the Chinese models depicted several centuries earlier. Most likely, the Japanese instruments were part of the extensive importation of Buddhist culture which began in the sixth century. Many of the

<sup>&</sup>lt;sup>118</sup> Robert KNOX, *Amaravati; Buddhist sculpture from the Great Stūpa*, London, 1992, pp. 74-78; Walter KAUFMANN, *Altindien*, Musikgeschichte in Bildern 2:8, Leipzig, 1981, pp. 90-105.

<sup>&</sup>lt;sup>119</sup> E.B. COWELL, ed., *The Jātaka or Stories of the Buddha's Former Births, 2,* London, 1957, reprint of 1895 edition, pp. 216-218.

<sup>&</sup>lt;sup>120</sup> For example, see discussion in LEIDY and THURMAN (note 39), pp. 21-31.

<sup>&</sup>lt;sup>121</sup> Located near Chengdu, Sichuan Province, see BIRRELL (note 103), pp. 25-33.

Mahāyāna sutras originated in regions west of China and they drew attention to instruments of that region. As Buddhism spread to the Far East, it created a demand for such western instruments. In addition, secular Central Asian ensembles had been appreciated in the Chinese capital since, at least, the sixth century, and that could hardly have failed to impress Japanese visitors.

In size, too, the raigo groups resembled those in China. The five ensembles in cave 85 have 16, 16, 17, 20, and 28 instruments.

But the lay-out differed. Symmetry ruled the ensembles in cave 85 and musicians sat in rigid rows on either side of a dance floor. In raigos the placement is relaxed, and the musicians take their place along gently curving arcs. The Japanese and Chinese orchestras present two different visual impressions, and it is tempting to extend the notion to the musical sphere.

Continuing with the lay-out, we notice a more subtle aspect. In raigo paintings instruments from the same family (strings, winds, or percussion) tend to cluster together. Complete homogeneity is avoided, for a few 'foreign' instruments are allowed in the proximity. Figure 1 illustrates the effect: the right section contains all the string instruments — but also a drum. These narrow clusters are spread across the whole orchestra, rather like different condiments in a fruit-and-nut cave. Viewed as a whole, the orchestra is heterogeneous.

The same trend influences the seating arrangements in cave 85, and this is seen most clearly on the pie-diagrams. Figure 23 shows winds dominating on the left side, strings on the right side, but neither side is completely homogeneous. With both sides combined, there is thorough heterogeneity, and each of the groups (strings, winds, and percussion) has the same share.

To clarify the images, I have included 250 line drawings. The great profusion of instruments, ensemble combinations, and seating arrangements, may be analyzed in various ways. I start by comparing the populations of the four categories of instruments (strings, winds, untuned percussion, and tuned percussion) in different cases. On raigos the percussion group (combining tuned and untuned ones) is at least 50%, and the wind and string sections divide the rest equally. Cave 85 has slightly different distributions. Three of its five orchestras have equal populations of strings, winds, and percussion, but in two orchestras the percussion is around 50%. The difference may depend on date rather than place: cave 85 was painted relatively early (mid-ninth century), and three centuries later when raigos were produced in Japan, Chinese orchestras may have had equally dominant percussion sections. Whatever the case, large percussion sections are unusual by modern standards.

It is unclear if the images represent ensembles that could have existed in the physical world or if they were purely imaginary.<sup>122</sup> Considering the tendency of texts and images to place music in Paradise, one might go for the latter alternative. But instruments and ensembles look perfectly

<sup>&</sup>lt;sup>122</sup> As discussed, vajra harps were purely symbolic instruments.

real both on raigos and in cave 85, and there is cause for doubts. In fact, similar ensembles were present at the Chinese capital Chang'an — and these were both real and highly praised. Chinese annals of the Sui and Tang dynasties<sup>123</sup> document orchestras from India, Korea, Kucha (Xinjiang Autonomous Region), Bukhara, Samarkand, Kashgar, Gaochang (near Turfan, Xinjiang), Xiliang (near Wuwei, Gansu Province), and two local bands. The choice of instruments, and numbers of instruments (between 9 and 23), varies from region to region. What is characteristic of the ensembles on raigos and in cave 85 — about 15 instruments with a sizable percussion section and strings and winds sharing equally — is also found on the band from Kucha. It had 19 instruments, 52% was percussion, and strings and winds shared the remainder equally. With its harp, zither, two lutes, mouth-organ, flute, pipe, panpipe, cymbals, and 8 drums it resembles the groups in Figs. 7, 9, or 22.<sup>124</sup> Other ensembles at Chang'an do not match as well. Either they have too few instruments, or the percussion section is too small. Given the fame of Kucha musicians,<sup>125</sup> their orchestra may well have become the model to emulate on religious art. In addition, it would have been eminently suited to music-making both in China and Japan. Greatly slimmed-down versions are still played at the Taimadera temple in Kyoto.<sup>126</sup>

Many friends and colleagues helped wisely and generously and I owe them many thanks, particularly Alan Berkowitz, Mary Anne Cartelli, Ying-Chieh Chen, CHIYONOBU Yoshimasa, Barbara Ford, Kurt Kübli GENSŌ, HABUKAWA Shōdō, KASAHARA Kiyoshi, Sue Kawashima, Victor Mair, Elizabeth Markham, SUGAWARA Tomoko, SAEKI Tomoyuki, Rembrandt Wolpert, and YONEDA Yūsuke. For travel support I thank the Center for Study of Early Asian and Middle Eastern Musics (EEAM), Fulbright College of Arts and Sciences, University of Arkansas.

<sup>&</sup>lt;sup>123</sup> Suishu, Jiu Tangshu, Tang huiyao, and Tang liudian. Maurice COURANT [in 'Chine et Corée, essai historique sur la musique classique des chinoise, avec un appendice relatif à la musique coréenne,' pp. 77–211 in Albert LAVIGNAC (ed.), *Encyclopédie de la musique et dictionnaire du Conservatoire*, 1:5, Paris, 1913] discusses the texts and gives a partial French translation. A more detailed account was tabulated by Falu YIN, *Tang Song da qu zhi lai yuan ji qi zhi*, Beijing, 1948, esp. pp. 9-11. The inventory of the Kucha orchestra is translated in Mau-Tsai LIU, «Kutscha und seine Beziehungen zu China vom 2. Jh. v. bis zum 6. Jh. n. Chr.», in *Asiatische Forschungen* 27, 1969, pp. 3-307, esp. p. 206.

<sup>&</sup>lt;sup>125</sup> LIU (note 123), 99–108 and 201–209; Jane Gaston MAHLER (*The Westerners among the Figurines of the T'ang Dynasty of China*, Serie orientale Roma XX, Rome 1959, esp. 52) gives two photographs of female figurines labeled «Musicians and Dancers from Kuchā.» Plate XIII has seven musicians and four dancers; pl. XIV twelve musicians — an unusually high number for pottery figurine. However, both groups are 'unexcavated' and one cannot know if pieces are missing. This make unexcavated groups useless for our purposes.

<sup>&</sup>lt;sup>126</sup> Monica DIX, «The *Mukaekō* Ritual at Taimadera: A Living Tradition of Medieval Japanese Pure Land Buddhism», in *Illumine, The Journal of the Centre for Studies in Religion and Society Graduate Student Association* 2:1, 2003, pp. 17–24, esp. Fig. 1.

#### APPENDIX Table 1

Line (in Ode)	1 Ode of Pseudo- Genshin (cet. 1250)	2 Raigo V (ca. 1380)	3 25 Bodhisattvas (ca. 1450)	4 25 Bodhisattvas (ca. 1690) (from Tosa, note 53)
6	'garland'	rattle drum & drum"	hourglass drum <sup>b</sup>	flower garland
7	'taps out edification'	hourglass drum	rattle drum & drum	clapper
9	hourglass drum	dancer	dancer	kakko-drum
10	mouth organ	mouth organ	mouth organ	mouth organ
11	flute	flure	flure	flute
12	zither	panpipes	panpipes	zither (short)
13	koto	koto	koto	koto (long)
14	lute	(no cartouch)	lute	lute
15	harp	(no cartouch)	(vajra) harp	(vajra) harp
16	C: ji J: kei	gong	lithophone <sup>d</sup>	metallophone"
17	gong	metallophone	gong	cymbals
18	rattle-drum	shoulder drum <sup>f</sup>	shoulder drum	rattle-drum
19	C: <i>jie</i> -drum J: <i>kakko</i> -drum	(no cartouch)	kakko-drum <sup>n</sup>	gong
20	flowers	metallophone	metallophone	flowers
21	large drum	large drum <sup>h</sup>	large drum	large drum

a. The player's right hand beats on the top of a small barrel drum lashed with horizontal heads and hanging in a strap around the neck. His left hand twirls a rattle-drum.

b. A hourglass drum with narrow body. It hangs from a strap around the neck and is beaten by sticks in both hands. c. C: *zheng*; J: *shōko*. M: 354. A circular gong hangs in an aureole-like frame mounted on top of a narrow rod attached to a foot resting on a circular table. It is played with two hammers.

d. C: qing; J: kei. M: 1164.

e. C: *fangxiang*, J: *hōkyō*. M: 1802, 2559. Several rows of rectangular metal jingles rest softly on horizontal slat mounted in a frame. The tuned jingles are struck with two hammers.

f. A dual membrane cylinder drum pressed against the shoulder by the left hand and tapped by the index finger of the right hand. The *kotsuzumi* drum used in the Noh theater contains a drum held in the same manner, but it is a hourglass drum, see MALM (note 27), Figs. 41–44; also William P. MALM, *Six hidden views of Japanese music*, Berkeley, 1986, pp. 6-18.

g. A small drum with two lashed heads made of deer-skin. Its cylindrical body rests on a low stand which cradles its horizontal cylindrical body; it is played with a mallet at each end.

h. Large drum with vertical heads played with two large mallets. It is surrounded by a flaming frame.



Fig. 1: Top: Triptych raigo from Kōyasan, Japan, 1150–1180 A.D. (photo courtesy of Reihōkan Museum). Bottom: Location of instruments. The pie-chart shows fractions of string instruments (red color), winds (green), untuned percussion (blue), and tuned percussion (yellow).



Fig. 2: The large drum framed in an aureole in Fig. 1 (photo courtesy of Reihōkan Museum).



Fig. 3: Vajra harp in Fig. 1 (photo courtesy of Reihōkan Museum).





Fig. 4: Sculpted musicians in the Phoenix hall, Byōdōin temple, 1053. View of southern and western walls. b. Spatial distribution of the instruments.



Fig. 5: Raigo 'Descend and Ascend', early 14<sup>th</sup> century. Metropolitan Museum of Art, Inv. no. 1975.268.21 (photo: author). Amida receiving the soul of the warrior Kumagai Naozane, 1133-1212.


Fig. 6: Rapid raigo in Chion'in temple, Kyoto,  $14^{\mbox{\tiny th}}$  century.



Fig. 7: Raigo with cartouches, ca. 1300. Metropolitan Museum of Art 25.42.37 (photo: author).



Fig. 8: Some cartouches on the raigo in Fig. 7.



Fig. 9: Seventeen painted scrolls in the Nisonin temple, Kyoto,  $16^{th}$  century. Each scroll is 89 x 38 cm. The white numbers refer to the line in the ode which has the depicted Bodhisattva.



Fig. 10: The Matsudaira mausolea in Okunoin cemetery, Kōyasan. 1604 and 1607. Left: View from the back. Right: Wall relief at the position marked 23 and 24 in Fig. 11.



Fig. 11: Line drawing of the instruments on the mausolea. Beside the instrumentals given, there are also Bodhisattvas without instruments.



Fig. 12: Taima mandala MMA 57.156.6. Thirteenth century. See Fig. 14 for details in the black square.



Fig. 13: Lower right corner of Fig. 13. The scene is ca. 7 x 6 cm.



Fig. 14: Enlargement of the black square in Fig. 13. Adult orchestra, the re-born beings with red socks, and two sitting dancers. The scene is ca. 22 cm wide.



Fig. 15: Flying instruments shown in the upper section of Fig. 13. Lower left: cymbals; Upper middle: a pipe; Upper right: a zither. In addition, there are flowers and a party of four Bodhisattvas.



Fig. 16: Ground plan of cave 85, Dunhuang, Gansu province, China. Built 852 to 857. The walls are painted with images of the Pure Land paradise at location A–F. All but paradise C have orchestras.



Fig. 17: Scene of a Pure Land paradise at position B in Fig. 16. Width: Ca. 3 m.



Fig. 18: Left-side of ensemble A (photo: author).



Fig. 19: Ensemble A. The numbers 4 and 5 refer to the amount of lute strings. Each section of the orchestra has an individual piechart underneath. The lowest pie describes both sections added.



Fig. 20: Ensemble B. Numbers 4 and 5 at lutes refer to the number of strings.



Fig. 21: Ensemble D.





Fig. 22: Ensemble E.

Fig. 23: Ensemble F.



Fig. 24: Comparing instruments on raigos (black column) with those in cave 85 (gray column) and in the ode (arrow). The vertical axis expresses the amount of a certain type of instrument. The types are: 1: angular harp; 2: arched harp; 3: 4-stringed short-necked lute; 4: 5-stringed short-necked lute; 5: long-necked lute; 6: zither; 7: pipe; 8: flute; 9: mouth organ; 10: panpipe; 11: conch trumpet; 12: small vertical cymbals; 13: large horizontal cymbals; 14: rattle-drum with small horizontal drum; 15: round vertical frame drum; 16: hourglass drum; 17: small horizontal drum; 18: clappers; 19: finger snap; 20: small vertical drum (if resting on a stand: *kakko*); 21: metallophone; 22: lithophone; 23: gong; 24: big vertical drum (*dodaiko*); 25: vajra harp; 26: bell; 27: leaf whistle.



Fig. 25: Vajra harps. The figures give the number of illustrated strings.

- a. Diamond World mandara 860–880;b. Kōyasan raigo, 1150–1180;
- c. Nisonin raigo, 15<sup>th</sup> century;
- d. Stockholm raigo (Museum of Far Eastern Antiquities, Inv. no. ÖM 1988-27), 14–16 century;
- e. Central China (Chen Yang, Yueshu, see Lawergren 1995/96, Fig. 3F), 1104.