Best Viewed on Large Monitor

China = 透光鏡 Tòuguāng jìng (light-penetrating mirror) Japan = 魔鏡 Makyō (magic mirror)

Overview: Beginner's Guide to Magic Mirrors

On 13 July 2022, the Cincinnati Art Museum (CAM) announced the discovery of a Buddhist-themed magic mirror in its collection. The museum's curator of East Asian Art, Hou-mei Sung, mentioned she is aware of only two other museums in possession of such a rare mirror. Bronze magic mirrors (like the one at CAM) are indeed rare, but not that rare. To date, over twenty religious-themed magic mirrors have been identified, including four featuring a Christian motif. This guide presents twelve of them, located at museums in Japan, the UK, and the USA. There are two distinct types of magic mirror: one-plated and two-plated. One-plated magic mirrors originated in ancient times. Extant examples are abundant. Two-plated magic mirrors like CAM's are very scarce and [it seems] of relatively recent origin. This guide presents both varieties, but the main focus is on two-plated magic mirrors. Magic mirror historian, Janet Leigh Foster, has studied this topic for many years, including the unique "composite" variety (her term for two-plated mirrors). She has identified twentyfour composite Japanese mirrors worldwide, and is fairly certain they originated in the Meiji period (19th century). She plans to release a book sometime soon.

Dedicated to Teachers, Students, & the Japan Art History Forum (JAHF)

Back of one-plated Japanese magic mirror

See Slide 11

for details



Shining Light on Bronze Magic Mirrors • Two Types (1) One Plate and (2) Two Plates

Unlike one-plate magic mirrors, two-plate magic mirrors consist of two quite separate plates attached by a common edging band. The back plate with ornamental design has no reflecting surface, while the front plate has a hidden design behind its reflective surface.

Magic Mirrors In This Beginner's Guide

Where • When	Туре	Location	Slide
China 2nd~1st BCE	One	Shanghai Museum	<u>7</u>
Japan 3 ^{rd~} 4 th CE	One	Kyoto Nat'l Museum	<u>9</u>
Japan 18th CE	One	Tokyo Nat'l Museum	<u>10</u>
Japan 19th CE	One	Kanazawa Univ. Museum	<u>11</u>
Japan 19th CE	One	Stanford Univ. Museum	<u>12</u>
Japan 19th CE	One	Silmanus Thompson 1893	<u>13</u>
Japan Edo Era	Two	Kamakura Museum	<u>14</u>
Japan Edo Era	Two	Kokugakuin Univ.	<u>15</u>
Japan Edo Era	Two	Kokugakuin Univ.	<u>15</u>
Japan Edo Era	Two	Nanzan University	<u>16</u>
Japan 19th CE	Two	British Museum	<u>17</u>
Japan 19th CE	Two	Victoria & Albert	<u>17</u>
Japan Edo Era	Two	Cincinnati Art Museum	<u>18</u>
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Japan Edo Era	Two	Seinan Gakuin Univ.	<u>20</u>
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Japan Edo Era	Two	Pastor Sugino Sakae	<u>22</u>
Japan Edo Era	Two	Sawada Miki Memorial	<u>22</u>
Japan Modern	Two	Yamamoto Alloy Works	<u>23</u>

The views expressed herein are those of the author, who takes full responsibility for any errors and / or omissions.

One Plate Magic Mirror

When light is projected at the reflective front, the pattern on mirror's back is cast on the wall.



IMAGE SOURCE: Grand-Illusions.com

Two Plate Magic Mirror

When light is projected at the reflective front, a hidden religious image is cast on the wall.



This back design is a replica of an ancient Han-period Chinese magic mirror. <u>See Slide 7.</u> IMAGE SOURCE: Yukawanet.com

Introducing Magic Mirrors

Magic mirrors are an ancient art that stretches back to at least China's Western Han Dynasty (206 BCE ~ 9 CE). Cast on a single plate, with decorative design on back and reflective surface on front, the secrets of the art were lost around the 9th century CE (see <u>Slide 8</u>) but "rediscovered" in the 19th century CE by Japanese artisans, who then cast their own magic to create a new breed of magic mirrors (i.e., <u>two plated</u>). The art was again lost after the widespread introduction of European-style glass mirrors to Japan in the late 19th century. Glass sounded the death knell for bronze mirrors in Japan and elsewhere.

In 1974, the late Yamamoto Shinji (3rd generation Japanese metal craftsman) revived the art of magic mirrors after a Western scholar expressed interest in their manufacture. The techniques are now maintained by 72-year-old Yamamoto Fujio (4th generation) and his 46-year-old son Akihisa. See <u>Slide 23.</u>

Despite the proximity to modernity, there is much that remains unexplained. First, it is hard to say unequivocally that both types (one-plated, two-plated) were made in Japan prior to the 19th century (see <u>Slide 25</u>). In fact, it is not clear whether ancient mirrors were made as magical mirrors -- any normal mirror can become a magic mirror when the reflecting surface is ground very thin. Hence, the magic mirror phenomenon may have happened purely by chance. Second, dating these mirrors is tricky business because of *impression replicas* of much older designs. Third, the scarcity of two-plated magic mirrors suggest that such mirrors never attained widespread use, but were instead an isolated phenomenon limited to a handful of Japanese workshops in a handful of localities. Fourth, we cannot rule out the possibility that many institutions and collectors are in possession of magic mirrors without realizing it. There are hordes of mirrors that have never been examined. Lastly, all extant two-plated magic mirrors [known to me] feature Amida Buddha (Pure Land Buddhism) or Jesus Christ (Christianity). Since certain Pure Land sects, along with Christianity, were banned during the Edo era, this peculiar feature of extant magic mirrors is suitably clarified.

With the July 2022 discovery of a Buddhist-themed two-plated magic mirror in the collection of the Cincinnati Art Museum, magic mirrors have once again sparked the enthusiasm of world-class museums, art historians, and artisans (see discussion on JAHF). This Beginner's Guide sheds light on rare extant Chinese and Japanese magic mirrors in museums in China, Japan, England, and America. It is written in the style of a museum exhibition catalog.

Back of one-plated Chinese magic mirror

See Slide 7

for details

Inscription: 見日之光,天下大明 Seeing the sun's light, the world is illuminated Western Han 206 BCE ~ 9 CE

Historical Background

In ancient China, bronze mirrors were considered magical, able to ward off evil (see Slide 7 for extant example, dated to Western Han, 206 BCE ~ 9 CE). As China's influence expanded in Asia, this belief in the magical properties of mirrors was passed along to Korea and Japan. Chinese mirrors came to Japan via China and Korea by at least the 1st century BCE. In Japan, over time, the mirror became a symbol of royal power, along with the sword and magatama (curved jewel) – the Three Shintō Regalia 三種の神器. In Japan, even today, the three regalia symbolize the legitimacy and authority of Japan's emperor.

See Slide 15

for details

Back of one-plated

Japanese magic mirror

In Japan's distant past, local elites treated imported Chinese bronze mirrors as exotic luxury goods. By the late Yavoi period (200~300 CE), bronze mirrors were esteemed as precious grave goods. Scholars think the size and number of mirrors amassed by a ruler symbolized his or her power. The largest mirror ever found in Japan (46.5 cm in diameter) was excavated from the tomb of King Hirabaru 平原遺跡. The tomb also holds the record for most bronze mirrors (40) excavated from a single tomb.

After Buddhism was introduced to Japan in the mid-6th century CE, mirrors were placed in front of Buddhist statues or buried in sutra mounds or beneath pagodas. Tens of thousands of old one-plate bronze mirrors are extant across Asia, many found in ancient tombs in China, Korea, and Japan.

What percent of them might be magic? Says Uchikawa Takashi, Kokugakuin University: "Our museum has about 1,000 mirrors. Many unexamined. Full-scale research on magic mirrors has only just begun. It is not yet clear whether these ancient mirrors were made as magical mirrors. Nor can we deny the possibility that the magic mirror phenomenon happened purely by chance, as any thinly Ouote polished mirror will reflect the same unevenness as the pattern on the back."

Two Types of Extant Magic Mirror

- 1. One-Plated Magic Mirror, 2nd ~1st century BCE onward Reflects design on mirror's back side
- 2. Two-Plated Magic Mirror, 19th century CE onward Reflects "hidden" image not found on back or front

Resources

- Mirrors and Faith Formation and Development of Japanese Mirrors (2014, J)
- Origin and types of bronze mirrors in East Asia, Heritage of Japan (2010)
- 3. Distribution System of Bronze Mirrors, Society for East Asian Archaeology (2007)

Inscription: Light from Buddha Illuminates the world, All creatures chanting sutra Are saved, no one abandoned

19th Century CE

Magic Mirrors Travel West

Magic bronze mirrors from China and Japan were introduced to the West in the 19th century CE and triggered a scientific "reflection" on their construction. <u>Click here</u> (and below resources) for an overview of the magic mirror's debut with Western audiences and academic circles. One of the earliest accounts <u>appeared</u> in 1832 in the London, Edinburgh, and Dublin Journal of Science. Joseph Needham, the famed author of Science and Civilization in China (1962), <u>devoted</u> a section (pp. 94~97) of his monumental work to magic mirrors. To view the magic mirror in action, <u>watch this video</u> (1.21 minutes).

Like normal non-magic bronze mirrors, magic mirrors have an ornamental pattern cast on the back and a polished reflective front surface. When you look in a non-magic or magic mirror, you see your face. But when you shine a bright light on a one-plated magic mirror, the pattern on the ornamental back is cast on the wall. This is amazing. But it is only "semi" magic compared to a two-plated magic mirror.

In Japan, sometime in the 19th century, artisans discovered a way to hide images inside the mirror -- images having nothing whatsoever to do with the pattern on the mirror's back. When light is cast on this "two-plated" magic mirror, an entirely unexpected religious image appears on the wall.

RESOURCES

- 1. Account of a Curious Chinese Mirror; London Journal of Science, Series 3, Vol. 1, Issue 6, 1832
- 2. Accounts of Curious Mirrors, Janet Leigh Foster, 2022 (great images & overview of intro to West)
- 3. Magic Mirror as Studied in Japan in Meiji Period, Watanabe Masao, 1964
- 4. The Japanese Magic Mirror, Watanabe Masao, 1965
- 5. <u>Recent Advances in Understanding the Mystery of Ancient Chinese Magic Mirrors, Jan. 1987</u>
- 6. <u>A Magic Mirror Trick (pp. 142~149)</u>, Lost Knowledge, Benjamin B. Olshin, 2019
- 7. Chinese "magic" mirrors, Derek B. Swinson, 1992
- 8. Oriental magic mirrors and the Laplacian image, European Journal of Physics, Nov. 2005
- 9. The Magic Mirror of Japan, Ayrton & Perry, 1878 (higher-rez version found here)
- 10. Ye Magick Mirrour of Old Japan, Silvanus P. Thompson, 1893
- 11. Magic Mirrors, Science, Vol. 2, No. 62, M. Bertin, 1881
- 12. Brief History of Magic Mirrors Introduction to West (faena.com)
- 13. Magic mirrors of the Orient, G. Saines and M. G. Tomilin, 1999
- 14. Secrets of the Chinese magic mirror replica, S. Mak and D. Yip, 2001



One-Plate Magic Mirrors · China & Japan · Casts Image of Mirror's Back Side

Chinese and Japanese magic mirrors were first studied scientifically by Western teachers visiting Japan in the early Meiji period (late 19th century CE). <u>See story</u> by Watanabe Masao (1964). In 1897, Silvanus P. Thompson from England gave a series of lectures at the Royal Institution of Great Britain (<u>Light Visible and</u> Invisible, pp. 50~54), in which he states: "For many years it was supposed that these mirrors were produced by some trick. The extraordinary fact is that in Japan the Japanese themselves were unaware of the magic property of the mirrors. It results, in fact, from an accident of manufacture." During the lectures, Professor Thompson revealed a Japanese one-plated magic mirror.



One Plate Magic Mirrors

Light projected on front of mirror casts image on back of mirror.



IMAGE SOURCE (above & below): Grand-Illusions.com





Ancient One-Plate Magic Mirror · China · Shanghai Museum · Casts Image of Mirror's Back Side

CHINA, Ancient Magic Mirror Western Han Period · 202 BCE ~ 9 CE Title: Lens of Sun's Light, National Treasure Period: Western Han (206 BCE ~ 9 CE) Medium: Bronze (copper, tin, other alloys) Dimensions: Diameter 7.4 cm Collection: Shanghai Museum (China) 上海博物馆

Description: The ancients regarded this "lens of light" as a magical mythical object. But the method for making it was lost. According to the Chinese, the art of making magic mirrors can be traced back to the Western Han dynasty. The secrets disappeared sometime around the Tang dynasty (618–907 CE). A professional catalogue of ancient mirrors in China started in the Sui 隋 dynasty (581–618 CE) with the fictional narrative The Story of an Ancient Mirror (Gujing ji 古鏡記) by Wang Du 王度. Unfortunately, most subsequent catalogues were lost – and with them any record of how to make magic mirrors. Wang Du's text is among only a few extant fictional texts from those bygone days. The Story of an Ancient Mirror is fantastical. For a brief overview, see Slide 8. Above description adapted from writings of Jue Chen.

RESOURCES

- 1. Secrets of Magic Mirrors (2017) (including this mirror)
- 2. Smithsonian Trove of Old Mirrors Found in Chinese Cemetery (2021)
- 3. Revealing Reflection: The Chinese Emperor's Mirror (2012)
- 4. Recent Advances in Understanding the Mystery of Magic Mirrors (1987)
- 5. Bronze Mirrors Social Sciences in China Press (2017)
- 6. Ancient Chinese Bronze Mirrors @ The Huntington, CA (2011)
- 7. Chinese Bronze Mirrors Australian Museum (2014)
- 8. Bronze Mirrors in Shanghai Museum (2019) · Chinese
- 9. Magic Technology of the Han Dynasty (2018) · Chinese
- 10. More about the mirror in this slide (2022) · Chinese
- 11. Chinese Magic Mirror (2022) · Wikipedia
- 12. Dating of Chinese Bronze Mirrors (1971/1972)



Story of an Ancient Mirror (Gujing Ji 古鏡記) -- Early Tang China (618~907 CE)

SOURCE:

https://muse.jhu.edu/article/785875/summary

T'ang Studies 20-21 (2002-03)

Rethinking the Authorship and Dating of "Gujing ji" 古鏡記

DING XIANG WARNER CORNELL UNIVERSITY

Everyone loves a great story, and "Gujing ji" (The Story of an Ancient Mirror) is truly one of China's great tales of the fantastic. Attributed to the early seventh-century figure Wang Du 王度 in literary histories and anthologies, "Gujing ji" relates the miraculous powers of an ancient bronze mirror that was once bestowed upon Wang Du by "a man of extraordinary talents" and which he lent for a short time to his younger brother, Wang Ji 王勤. The Yellow Lord of high antiquity fashioned this wondrous mirror: its configuration embodies the very essence of the cosmos, and its luminosity matches that of the sun and the moon. It wards off dangerous beasts and demons, stills the violent waves of the horrific tidal bore, slays a giant snake and a monstrous fish, exposes goblins and bogies disguised in human form, rescues maidens from the spells of evil spirits and even restores the health of dying plague-victims. But then, from its keeping-place inside a locked chest, the mirror disappears without a trace.1

As a work of narrative literature, furthermore, "Gujing ji" is admired as something of a miraculous item in its own right—an extraordinary landmark, at least, in the development of early Chinese fiction. Dated to the first two decades of the seventh century,

¹ For the full text of "Gujing ji," see Taiping guangji 太平廣記, comp. Li Fang 李昉 (925-996) et al. (Beijing: Zhonghua shuju, 1961), 230.1761-67. A modern collated edition is in Tangren xinoshuo 唐人小說, ed. Wang Bijiang 汪辟國 (rpt. Shanghai: Shanghai guji chubanshe, 1978), 3-10. For an annotated English translation see Pauline Bentley Koffler, "The Story of the Magic Mirror (Gujing ji) by Wang Du," in Hommage à Kwong Hing Foon: Études d'histoire culturelle de la Chine, ed. Jean-Pierre Diény (Paris: Institut des Hautes Études Chinoises, Collège de France, 1995), 165-214. All translations in this essay, however, are my own.

MIRROR RESOURCES

Jue Chen 陳玨, The Mystery of an "Ancient Mirror:" An Interpretation of Gujing ji in the Context of Medieval Chinese Cultural History, East Asian History, Number 27, June 2004.

Jue Chen 陳玨, History and Fiction in the Gujing Ji (Record of an Ancient Mirror), Monumenta Serica, 52, 2004, pp 161~197

Ding Xiang Warner, Rethinking the Authorship and Dating of "Gujing ji," T'ang Studies 20-21 (2002-03).

Lost Knowledge: The Concept Of Vanished Technologies And Other Human Histories, A Magic Mirror Trick?, pp. 142~149.

Pauline Bentley Koffler, "The Story of the Magic Mirror (Gujingji) by Wang Du, Etudes d'Histoire Culturelle de la Chine, Paris: College de France, 1995, pp. 165~214.

OTHER OLD ASIAN MYTHS ABOUT MIRROR POWER

Fazang 法藏 (643–712), third patriarch of the Huayan 華嚴 school of Chinese Buddhism, reportedly built a "Hall of Mirrors" for Empress Wu 武 (r. 684–705 CE) to illustrate the complicated tenets of Huayan philosophy – the universal interconnectedness, mutual interdependence, and mutual interpenetration of all things. According to various Chinese texts, eight mirrors were placed in the four cardinal directions and the four semi directions (NE, NW, SE, SW), and one on the top and one on the bottom. Ten mirrors facing one another. A Buddha statue was then installed in the middle of the ten mirrors, along with a lamp or a candle to illuminate each mirror. The ten mirrors, positioned and illuminated, produced an infinite number of Buddha reflections. The reflections replicated themselves infinitely, as in Indra's Net 因陀羅網, which is woven with numerous jewels. Read more here or here.

<u>Digital Dictionary of Buddhism</u> (login = guest): Indra's Net is a vast net that hangs in Indra's palace in which the strands are joined together by jewels. When light reflects onto one of the jewels, the same light is reflected and re-reflected endlessly throughout the expanse of the net. This is a metaphor used in Huayan 華嚴 Buddhism to express the concept of mutual interpenetration.



JAPANESE MIRROR MYTHOLOGY. Amaterasu Ōmikami 天照大神 and the Divine Mirror. The sacred mirror, known as the Yata no Kagami 八咫鏡 or Shinkyō 神鏡, is a symbol of the sun goddess Amaterasu. Japan's imperial family claims direct descent from her lineage. The mirror is said to reflect her image and represents wisdom and honesty. It is commonly believed that the original mirror is still located at the Grand Shrine of Ise (Mie prefecture). STORY. Amaterasu, annoyed by her brother, hides herself inside a cave and closes the cave door with a large boulder. Her absence deprives the world of light. The other deities lure her out of the cave with dance and laughter, and the first thing she sees is her own brilliant reflection in a mirror hung in a nearby tree. When she draws closer for a better look, the gods grab her and pull her out of the cave, thus restoring light to the world. Many Shintō shrines contain a sacred mirror as a symbolic treasure revering Amaterasu.

3rd~4th Century One-Plate Magic Mirror · Japan · Kyoto Nat'l Museum · Casts Image of Mirror's Back Side

JAPAN • 3^{rd~4th} Century, Aichi Prefecture

Title: Triangular-Rim Creature / Divinity Mirror 三角縁神獣鏡 Period: 3^{rd-4th} Century CE, Kofun Period Medium: Bronze (copper, tin, other alloys) Dimensions: Diameter 21 cm Collection: Kyoto National Museum 京都国立博物館 Discovered At: Higashinomiya Burial Mound, Inuyama, Aichi Prefecture 東之宮古墳、愛知県、犬山市

Description: This mirror is associated with Japanese Shaman-Queen Himiko 卑弥呼 (c. 170~248 CE). Why? Other mirrors found in the same tomb were inscribed with the year 239 CE. According to the Chinese *Book of Wei* 魏書 (dated 297 CE), Himiko sent emissaries and gifts to China in 239 CE and in return, Chinese Emperor Cao Rui 曹叡 (r. 205~239 CE) sent 100 bronze mirrors to Himiko. There are many who dispute this interpretation.

> Back of Magic Mirror

Creature

3D-Printed Recreation Creature

Divinity

RESOURCES

Magic Mirrors, Prof. Murakami Ryu 村上隆, Kyoto University of Arts and Crafts, 化学と教育, Vol. 64, #5, 2016. (Japanese)

Press Conference, Prof. Murakami Ryu presenting his 3D-printed reconstructed mirror, Jan. 29, 2014. (Japanese)

Restoration of the triangularrimmed beast/divinity mirrors, Fukushima Prefecture Cultural Properties Center Shirakawa Hall-Mahoron, 2002. (Japanese)

<u>Comprehesive Database of</u> <u>Archaeological Site Reports in</u> <u>Japan.</u> (Japanese)

Mirrors may have worked magic in ancient Japanese rituals, Asahi.com, Feb. 7, 2014. (English)

Secrets of Chinese magic mirror replica, Se-yuen Mak & Din-yan Yip, Physics Education, Vol. 36, #2, 2001. (English)

Mirrors to Japanese History, Walter Edwards, Archaeological Institute of America , Vol. 51, #3, May/June 1998. (English)

Hyogo Museum of Ancient Bronze Mirrors. (Japanese)

Mirror of Japan's Shaman Queen (English) Professor Murakami believes mirrors were used in ancient Japan for sun-worshipping rituals.

Ancient magic mirrors do not cast crisp images. They were made differently than later mirrors. Original

Back

More than 500 ancient mirrors have been unearthed in areas from the northeastern Tohoku region to the southern island of Kyushu, with many in the Kinki region. Many were discovered in tumulus from Japan's Kofun period (circa 300 to 538 CE). Like China, there are thousands of bronze mirrors in Japanese museums. Very few are identified as magic mirrors, and those few are only one-plate magic. In modern Japan, there is at least one artisan in the country who still practices the old art. See Slide 22. For more, click here.

3D-Printed Recreation 三角縁神獣鏡 Sankakubuchi Shinjūkyō Mirror Triangular Creature / Divinity Mirror

18th Century One-Plate Magic Mirror · Japan · Tokyo National Museum · Casts Image of Mirror's Back Side

- Title: Magic Mirror, Inscription to Amida Buddha
- Period: Edo Era (1615~1868), 18th Century
- Medium: Bronze
- Dimensions: Diameter 23.8 cm
- Collection: Tokyo National Museum 東京国立博物館
- Prayer · Religious Chant (Nenbutsu 念佛): Back of mirror displays six-character phrase "Namo Amida Butsu" 南无阿弥陀佛 (Hail Amida Buddha). <u>This particular spelling /</u> pronunciation is unique to the Nishi Honganji 西本願寺派 sect of New Pure Land Buddhism 浄土真宗.
- Image Sources: Agency for Cultural Affairs // Tokyo National Museum
- More Images: <u>TNM #2</u> // <u>TNM #3</u>





19th Century One-Plate Magic Mirror · Japan · Kanazawa University Museum · Casts Image of Mirror's Back

Back of

Magic Mirror

Title: Magic mirror with images of a pine, bamboo, cranes and turtle -- a traditional motif representing longevity. The two large characters 高砂 are read Takasago and refer to a very auspicious Japanese Nō 能 play involving a loving and long-married couple.

Period: Edo era (1615–1868); 19th century Medium: Bronze; mirror acquired by university in 1925 Dimensions Diameter 18 cm; handle 9.5 cm **Collection:** Kanazawa Univ. Museum 金沢大学資料館

Back Inscription

Tenka Ichi Fujiwara Yoshinobu 天下一藤原義信. Says the New York Met (click Catalogue Entry):

"Tenka Ichi" was a brazen title devised by the general Oda Nobunaga (1534 –1582) to encourage indigenous crafts. Accordingly, the finest practitioners in each of the various crafts -lacquerware, ceramics, mask carving, metalwork -were allowed to bestow the honorific upon themselves. Its indiscriminate use, however, soon made it meaningless, and in 1682 it was banned."

Images · Resources

- Virtual Museum Project, Kanazawa University Musuem
- Magic Mirrors, The UNESCO 1988
- Hattori Collection · Seven Magic Mirrors
- 下伊那地方の唐式鏡・lida City Musem・March 2007
- Buddhism in No, Flowing Traces, Royall Tyler, 1992
- Buy Online, also here and here and here. Not magic.

A photo of this mirror first appeared in a 1933 article by H. Dember in Ostasiatische Zeitschrift, Vol. 9, p. 203. Joseph Needham then used the same photo in his acclaimed Science and Civilization in China (1962).

Slides 11, 17-2, 20, 21, and 22 depict very similar back design.

back of mirror Reflection **Cast on Wall**

Front

Shining light on front of mirror casts

the two characters on

(1) 19th Century One-Plate Magic Mirror · Japan · Stanford Univ. Museum · Casts Image of Mirror's Back

- Title: Magic Mirror, Amida Buddha seated on pedestal
- Period: Edo Era (1615~1868), 19th Century
- Medium: Bronze
- Dimensions: Not provided by image source
- Collection: Stanford Univ. Museum, Gift of Jane L. Stanford
- Image Source: <u>Note on Magic Mirrors, Herbert Maryon</u> Archives of the Chinese Art Society of America, Vol. 17 (1963)



19th Century One-Plate Magic Mirror · Japan · Online Auction Site · Casts Image of Mirror's Back

- Title: Magic Mirror, Big Buddha of Kamakura <u>Amida Buddha</u> seated on pedestal
- Period: Edo Era (1615~1868), late 19th Century
- Medium: Bronze
- Dimensions: Diameter 15.2 cm, weight 421 grams
- Auction Site: Trocedero, EastWest Gallery, Honolulu, Hawaii
- Image Source: <u>Trocedero</u>



19th Century One-Plate Japanese Magic Mirrors · Silvanus P. Thompson De Magick Mirrour of Old Japan FROM: By SILVANUS P. THOMPSON. Ye Magick Mirrour of Old Japan Nº XXX By Silvanus P. Thompson, Published 1893 RIVATELY PRINTED OPUSCULA View online at Gutenberg.org or at The Internet Archive Mirror 2 Mirror 3 Mirror 1 Mirror 5 Mirror 6 Mirror 4 13

Edo Era Two-Plate Magic Mirror · Japan · Kamakura Museum of History & Culture

Plate 2

- Title: Magic Mirror with Hidden Image of Amida Buddha
- Period: Edo Era (1615~1868); 19th century ??
- Medium: Bronze, № 102~103 in Collection
- Dimensions: Back Plate 21.5 cm, Hidden Plate 20.8 cm
- Collection: Kamakura Museum of History & Culture 鎌倉歴史文化交流館
- Prayer · Religious Chant (Nenbutsu 念佛): Back of mirror displays six-character phrase "Namu Amida Butsu" 南無阿彌陀仏 (Hail Amida Buddha); this particular spelling / pronunciation is widespread.
- Hidden Image: Amida emanating 28 rays of light
- Image Source: Kamakura Museum of History & Culture (KMHC)
- More Mirror Images: 鎌倉の中世和鏡に関する一考察鎌倉の中世和鏡に関する一考 •
- Aoki Yutaka, former KMHC curator, says dating magic mirrors Front is difficult because impression-replicas were common. Plate 2

• Need to research

"南 ^m 無

。阳

* 彌

静陀

¦佛

two eyelets

for suspension





中近世和鏡の鏡背意匠はどのよう

精神観念を表していたのか

Aoki Yutaka, former KMHC curator, devotes a chapter to magic mirrors in his book Research on Medieval and **Early-Modern Japanese** Mirrors.

> Aoki-san also possesses a twoplated Christianthemed magic mirror. See Slide 22.



Amida **Buddha**

Back Plate 1

Back Plate 2 Hidden Image

Reflection Cast on Wall

Edo Era Two-Plate Magic Mirrors · Japan · Kokugakuin University Museum ・ 國學院大學博物館蔵 · 服部和彦氏コレクション





- Title: Magic Mirror with Hidden Amida Buddha
- **Period:** Edo era (1615–1868)
- Medium: Bronze // Dimensions: ????
- **Hidden Image:** When light shines on the mirror's reflective front, an image of Amida is cast on the wall (emanating 28 rays of light).

<u>Professor Uchikawa Takashi</u>内川隆志 of Kokugakuin University says: "Our university museum has around 1,000 mirrors. Many not yet researched. **Seven are magic.** The fullscale study of magic mirrors is just starting."

Image Source: <u>The Wonder of Magic Mirrors</u> 魔鏡の不思議にせまる, Special Lecture Series, Prof. Uchikawa Takashi 内川隆志, Kokugakuin University 國學院大學.

Edo Era Two-Plate Magic Mirror · Japan · Nanzan University Museum of Anthropology



Inscribed **Tenka ichi Tanaka Iga no kami 天下一田中伊賀守** (Number One Under the Sky, Lord Tanaka of Iga Province). <u>Says the New York Met (click Catalogue Entry):</u> "Tenka Ichi" was a brazen title devised by the general Oda Nobunaga (1534–1582) to encourage indigenous crafts. Accordingly, the finest practitioners in each of the various crafts -- lacquerware, ceramics, Nō masks, metalwork -- were allowed to bestow the honorific upon themselves. Its indiscriminate use, however, soon made it meaningless, and in 1682 it was banned.

JAPAN • Magic Mirror with Hidden Image of Amida Dating Unclear: Early 18th century or Mid 19th century

Title: Magic Mirror with Hidden Image of Amida Buddha

Period: Edo era (1615–1868). Hard to date. The inscription suggests a late 17th to early 18th century mirror, but one cannot rule out replica casting (踏み返し鋳造法 *fumi-gaeshi chūzō*), in which much older mirrors are replicated using a clay mold. Hence, this magic mirror may be a mid 19th century impression replica.

Medium: Bronze (copper, tin, lead, other alloys)

Dimensions: Diameter 21.5 cm

Collection: Nanzan University Museum of Anthropology (Japan) 学南山大学人類博物館

Design on Back: Miho no Matsubara 三保の松原 "Pine-covered area at Miho (Mt. Fuji)."

Hidden Image: Amida Buddha. When light shines on the mirror's reflective front surface, an image of Amida is cast on the wall (emanating twenty-eight rays of light). However, the tin plating on the mirror's front surface is badly deteriorated, so the "hidden" image of Amida is largely obscured. Thanks to X-rays, the hidden inner casting is clearly revealed as Amida. Images of Mt. Fuji were extremely popular in the Edo period, largely because of the mountain's longstanding sacred importance to Shintō, Shugendō and Buddhist schools of faith. Amida's head aligns with the summit of Mt. Fuji, suggesting that Mt. Fuji was considered a gateway to Amida's Buddhist Pure Land.

Inscription: 天下一田中伊賀守. See text box below main mirror image.



Bulletin of Nanzan Univ. Museum of Anthropology, March 2013, No. 31, pp. 1~11 Color Photo from FDG Twitter Account

19th Century Two-Plate Magic Japanese Mirror · England · British Museum



Title: Magic Mirror with Hidden Image of <u>Amida Buddha</u> Period: Edo era (1615–1868), 19th Century Medium: Bronze Dimensions: 8.25 inches (21 cm) Back: 南无阿弥陀佛, Namu Amida Butsu, Homage to Amida Buddha Collection: <u>British Museum</u> Hidden Image: Amida emanating 28 rays of light. Why 28?

Unknown, but perhaps related to the astrological <u>28 constellations</u> (the 28 moon lodges), seven each for north, south, east, and west. The 28 (4 X 7) represent the entire cosmos in early Buddhism.

Description: Other similar examples are held in the New York Metropolitan Museum of Art (see next slide) and the Cincinnati Art Museum (see next slide). For more, see <u>Masao Watanabe</u>, *The Japanese Magic Mirror: An Object of Art and of Scientific Study,* Archives of the Chinese Art Society of America, Vol. 19 (1965).

19th Century Two-Plate Magic Japanese Mirror · England · Victoria & Albert Museum



Title: Magic Mirror with Hidden Image of <u>Amida Buddha</u> Period: Edo era (1615–1868), 19th Century Medium: Bronze Dimensions: 8½ inches (21.6 cm)

Back: Pine Tree, Bamboo, Two Cranes, Turtle. Popular Japanese motif representing longevity.

Collection: Victoria & Albert Museum

Hidden Image: Sun-rayed figure (number of rays not yet announced) of Amida standing on a lotus throne.

Slides <u>11</u>, <u>17-2</u>, <u>20</u>, <u>21</u>, and <u>22</u> depict very similar back design.

17

Edo Era Two-Plate Magic Japanese Mirror · USA · Cincinnati Art Museum



Title: Magic Mirror with Hidden Image of <u>Amida Buddha</u> Period: Edo era (1615–1868) Medium: Bronze Dimensions: 8½ inches (21.6 cm) Back: 南無阿彌陀仏 (Namu Amida Butsu), Homage to Amida Collection: <u>Cincinnati Art Museum</u> // <u>CAM Instagram</u> Hidden Image: Amida emanating 28 rays of light.

Religious Chant (Nenbutsu 念佛): Mirror's back displays six-character phrase "Namu Amida Butsu" 南無阿彌陀仏 (Hail Amida Buddha); this particular spelling / pronunciation is widespread. It is the traditional Chinese spelling. Hou-mei Sung, CAM's curator of East Asian art, thinks it may have come from China (not Japan) because of its traditional spelling. But John Carpenter, curator New York Met, assumes it is Japanese and "perhaps cast in the same workshop" as the Kamakura magic mirror appearing on <u>Slide 14</u> in this guide.

Resources:

<u>Magic Mirror, A Rediscovered Treasure at CAM</u>

2 19th Century Two-Plate Magic Japanese Mirror · USA · New York Metropolitan Museum



Title: Magic Mirror with Hidden Image of <u>Amida Buddha</u> Period: Edo era (1615–1868), 19th Century Medium: Bronze /// Dimensions: 9 3/8 in. (23.8 cm) Back: 南无阿弥陀佛, Namu Amida Butsu, Homage to Amida Collection: New York Met

Hidden Image: Amida emanating 48 rays of light, one for each of <u>48 vows</u> made by Amida when still a Bodhisattva (prior to achieving Buddhahood).



Amida Buddha Magic Mirrors from Japan – Sidenotes on Spelling & Pronunciation



Writes Professor Raji C. Steineck, Japanologie, Asien-Orient-Institut, Universität Zürich: "As an addition to Lisa Kochinski's message [below], these various transliterations of **namu** also come with various pronunciations – besides **namu** I have come across **namo**, **nōmaku** and **nōbō**, for example, although not in the context of the six-character name 六字名号. Sometimes different schools have different pronunciations of the same formula, which appears to me as an expedient way to emphasize lineage in a culture of 'secret' transmissions."

Writes Professor Mark Blum (Berkeley Institute of East Asian Studies): "These variant forms of 無 or 无 or 元 are about design, not meaning, since the characters represent the sound of the Sanskrit word **namo** from **namas**, which in this case expresses a multitude of meanings, at times a personal commitment or an expression of faith, at times a call for help, at times a sort of 'hail to the chief.' Since there is no meaning to the 南 or the 無, artists felt they could redesign these things in different ways and there are many unusual forms the characters take. The **namo** pronunciation today is largely confined to the Nishi Honganji 西本願寺派 school of Jōdoshinshū 浄土真宗 (New Pure Land Buddhism), as they insist on following a holograph of Shinran in which the pronunciation **namo** is shown as a kind of **rubi**. It is quite possible that this pronunciation was transmitted from China as it fits the expected Sanskrit form after samdhi rules apply where **namo** results from **namas** + a combination, and I wouldn't be surprised to see it pronounced that way in Shingon phrases, but identifying pronunciations at different periods can be tricky because (as Professor Raji pointed out above) a lineage would often distinguish itself that way. Since this phrase ritually functions like a mantra, sound matters to some traditions but not all. The Jōdoshū and Higashi Honganji Shinshū people dropped **namo** for **namu** long ago, similar to the way in which modern Chinese Mandarin doesn't worry about the pronunciation in the Six Dynasties. It appears that once things get standardized in the Edo period, nearly everyone pronounces this as **namu** -- I assume because of the weight of the *mu* pronunciation of **m r**. The standardized in the Edo period, nearly everyone pronounces this as **namu** -- I assume because of the weight of the *mu* pronunciation of **m r**. The standardized in the Edo period, nearly everyone pronounces this as **namu** -- I assume because of the weight of the *mu* pronunciation of **m r**. The standardized in the Edo period, n

Thanks to Lisa Kochinski (PhD Candidate, University of Southern California) for the following link: <u>NAMU</u>: <u>Digital Dictionary of Buddhism</u>: Login = guest. Sanskrit *namas*; Pāli *namo*. To take refuge in; submit oneself to, from to bend, bow to, make obeisance, pay homage to; an expression of submission to command, complete commitment, reverence, devotion, trust for salvation, etc. It is used constantly in liturgy, incantations, etc. especially as in namah Amitâbha, which is the formula of faith of the Pure Land school, representing the believing heart of all beings and Amitâbha's power and will to save; repeated in the hour of death it opens the entrance to the Pure Land. Also written 南牟; 南謨; 南忙; 那謨, 那模, 那麻, 納莫, 納慕; 娜母; 曩莫, 曩莫, ৡ謨, 捺麻, 捺謨, etc.

Namu Amida Buddha なむあみだぶつ 南無阿弥陀佛 南無阿 <mark>彌</mark> 陀佛 南无阿弥陀佛 南无阿弥陀佛 南元阿弥陀佛
Traditional · Simple 彌 → 弥 無 → 无 無 → 无 無 → 元
Comments posted in <u>Pre-Modern Japanese</u> <u>Studies (PMJS) forum</u>

DIFFERENT SPELLINGS

Explanation of Different Amida Readings (Japanese)

Edo Era Two-Plate Japanese Magic Christian Mirror · Seinan Gakuin University Museum

Four Christian magic mirrors from the Edo period (1603-1867) are extant, each presented in this guide. The motif on the back of all four is the same – depicting turtle, crane, pine, and bamboo. The hidden image in all four depicts Christ on the Cross. How appropriate! Jesus on the Cross (representing everlasting life) juxtaposed to the popular Japanese motif of turtle, crane, pine, bamboo (representing eternal youth and longevity).

Christianity in Japan was banned for over two centuries in the Tokugawa Era 徳川時代 (1615~1867). It makes perfect sense for Hidden Christians to use magic mirrors for secret worship, but there is little evidence that the practice was widespread. To put it bluntly, magic Christian mirrors may be an "isolated" phenomenon – playing no significant role among the outlawed Christians. The Christians found other ways to hide their faith. They created statues of the Virgin Mary (Mother of Jesus) disguised as the Buddhist deity <u>Kannon</u> (Goddess of Mercy). These images, called <u>Maria Kannon</u> マリア観音, were made or altered to look like Kannon, but the statues were not worshipped as <u>Kannon</u>. A Christian cross was often hidden within the statue. Did magic mirrors come before or after <u>Maria Kannon</u> statues? Unknown. Title: Magic Mirror with Hidden Image of Jesus on Cross Period: Edo era (1615–1868) Medium: Bronze Dimensions: 8.25 inches (21 cm) Back: Turtle, Crane, Pine, and Bamboo Collection: Seinan Gakuin University Museum 西南学院大学博物館 Fukuoka // Museum writeup is very curious, for it mistakenly identifies this mirror as Chinese.

Hidden Image: Jesus Christ on Cross

Slides <u>11</u>, <u>17-2</u>, <u>20</u>, <u>21</u>, and <u>22</u> depict very similar back design.



Edo Era Two-Plate Magic Mirror · Japan · Kamakura Museum of History & Culture

Title: Magic Mirror with Hidden Image of Christ on Cross **Period:** Edo era (1615–1868), 19th century

Medium: Bronze

Back

Plate One

Back: Turtle, Crane, Pine, and Bamboo

Dimensions: Plate One with Outer Design, diameter 21 cm, thickness 0.6 cm **Dimensions:** Plate Two with Jesus on Cross, diameter 21 cm, thickness 0.6 cm **Hidden Image:** Jesus Christ on Cross

Collection: Private Collection of <u>Aoki Yutaka</u> 青木豊 Kamakura Museum of History & Culture 鎌倉歴史文化交流館 Is this the same mirror \dot{W} appearing on Slide 20? Documentation is unclear.

Hidden Image

Plate Two

Aoki Yutaka, former curator of the Kamakura Museum of History & Culture, devotes a chapter to magic mirrors in his book <u>Research on</u> <u>Medieval and Early-Modern</u> Japanese Mirrors.



Resources

- 1. Vita Aoki Yutaka
- 2. More about Aoki Yutaka

Slides <u>11</u>, <u>17-2</u>, <u>20</u>, <u>21</u>, & <u>22</u> depict similar back design.

Edo Era Two-Plate Japanese Magic Christian Mirror · Miki Sawada Memorial Museum · Collection of Pastor Sugino



Title: Magic Mirror with Hidden Image of Christ on Cross Period: Edo era (1615–1868), mid 19th century Medium: Bronze Dimensions: ???? Back: Turtle, Crane, Pine, and Bamboo Hidden Image: Jesus Christ on Cross Collection: Miki Sawada Memorial Museum 澤田美喜記念館 & Elizabeth Saunders Home (Kanagawa)

Says the museum: "Mid-19th century CE dating assumed. Mirror has three layers and its reflective surface has been thinned to 1 mm by using a tool called 'Yasuriyasen.' When it reflects light, an image of Jesus Christ appears clearly on the wall." The three layers, in my mind, mean the back plate, the front plate with hidden image, and the reflective surface applied to the front plate.

Title: Magic Mirror with Hidden Image of Christ on Cross **Period:** Edo era (1615–1868) Medium: Bronze Modern **Dimensions:** 8.25 inches (21 cm) Back: Turtle, Crane, Pine, and Bamboo Hidden Image: Jesus Christ on Cross Collection: Private Owner, Pastor Sugino Sakae 杉野栄牧師 Rakusei Baptist Church 洛西バプテスト教会, Kyoto

- See Slide 20 for introductory notes about magic Christian mirrors.
- Pastor Sugino Sakae says all these Christian mirrors are the same size and were likely made by the same artisan or workshop.
- Magic Mirrors Reflect Master Craftsmanship 魔鏡が映す匠の技術 Journal of Japan Society for Precision Engineering, Vol. 78, No.1, 2012
- Eye-opening Japanese site about making magic mirrors

Slides 11, 17-2, 20, 21, and 22 depict very similar back design.

Modern Japanese Maker of Magic Mirrors · Yamamoto Alloy Works Co. Ltd.

Based on extant evidence, two-plate magic mirrors were first made in Japan in the Edo era (1603-1867). The mirrors presented in this guide are largely dated to the 19th century. These mirrors were supposedly made for outlawed Christians, who used them to hide their faith. Also, certain Amida Pure Land Buddhist sects were banned during the Edo period, and they too manufactured magic mirrors to ostensibly hide their faith. It is unclear which denomination (Christian or Buddhist) was the first to discover or introduce such magic mirrors. The practice was not [it seems] widespread. The very small number of extant magic mirrors in museums today suggest it was a very "localized" phenomenon, perhaps limited to a handful of Japanese workshops. No magic Christian mirrors from the Edo era have been found outside Japan.

The skills for making magic mirrors were largely forgotten during the Meiji period (1868–1912) when religious bans were lifted and religious freedoms proclaimed. Additionally, bronze mirrors fell quickly out of use after the introduction of European-style glass mirrors in the late 19th century. Today, the skills for making magic mirrors are preserved at <u>Yamamoto Alloy Works Co.</u> <u>Ltd.</u>, a workshop founded in the late Edo period (1866). Based in Kyoto, the workshop claims to be the sole maker of magic mirrors in Japan.

The late Yamamoto Shinji (3rd generation) revived the art of magic mirrors in 1974 after a Western scholar expressed interest in manufacturing them. The techniques are currently maintained by 72-year-old Yamamoto Fujio (4th generation) and his 46-year-old son Akihisa. The father-and-son pair created a "Hidden Christian" magic mirror for Pope Francis that the late Prime Minister Abe presented to the Pope in 2014. Other magic mirrors from the Yamamoto workshop have found homes outside Japan.

Resources on Yamamoto Alloy Works & Artist Yamamoto Akihisa

- 1. Yamamoto Alloy Works Co. Ltd. Yamamoto Gokin Seisakusho 山本合金製作所
- 2. Video & Slideshow Yamamoto Alloy (J) Asahi Shimbun March 10, 2022
- 3. Magic mirror artisan works to keep a delicate craft alive, Asahi Shimbun, March 24, 2022
- 4. <u>Stories from Art Research Center, Ritsumeikan University, "Japanese Mirrors: An ancient metalwork tradition for ritual and for function"</u> (no date given, but very recent)
- 5. Making Mirrors with Yamamoto Akihisa (J), Nakagawa Masashichi, July 6, 2020
- 6. Yamamoto Fujio and Edo Period Mirrors (J), History of Copper, #187, March 2019, p. 3
- 7. Interview with Yamamoto Akihisa, Kyoto Journal, February 4, 2014
- 8. Five Generations of Mirror Makers, Kyoto Crafts Magazine, October 2017
- 9. Online Shopping for Yamamoto Alloy Works: Phoenix // Amida // Christ on Cross



Slides <u>11</u>, <u>17-2</u>, <u>20</u>, <u>21</u>, and <u>22</u> depict very similar back design.



CONCLUSIONS

Magic Mirrors -- Illuminating & Reflective Uestions and Conclusions

Why does something so "recent" mystify us? We know much more about Japanese religious statues, paintings, and other extant art created a millennium ago. Very curious. Japan's two-plate magic mirrors are not widespread nor ancient. Were they made by only a handful of workshops in a handful of locations? Who commissioned them? We know very little about the provenance of the mirrors nor can we find two-plate magic mirrors dated prior to the 19th century CE.

Says <u>Uchikawa Takashi, Kokugakuin University:</u> "Our museum has about 1,000 old mirrors. Many unexamined. Full-scale research on magic mirrors has only just begun. It is not yet clear whether these ancient mirrors were made as magical mirrors. Nor can we deny the possibility that the magic mirror phenomenon happened purely by chance, as any thinly polished mirror will reflect the same unevenness as the pattern on the back." Pure Land Buddhism and Christianity show a close affinity in their religiosity -both share the belief of salvation by "Other Power."

- I. Any normal one-plate mirror can become a magic mirror when the reflecting surface is ground very thin. (SOURCE) Were ancient one-plate mirrors made as magic? Or is it just a coincidence? We can't say with certainty.
- 2. One-plate magic mirrors are abundant and stretch back to ancient times. Two-plate magic mirrors are rare, and seemingly originated in Japan in the 19th century. Are there earlier examples of two-plate mirrors from China? Not that I know of.
- 3. Ancient one-plate Han-period (206 BCE ~ 9 CE) Chinese magic mirrors were made using a different process than newer 19th century Japanese one-plate magic mirrors. Reflections from old mirrors are less crisp at short distances, more crisp farther away. Newer mirrors are the opposite. (<u>SOURCE</u>)
- A. Museums, institutions and collectors may possess magic mirrors without realizing it.
 Most extant mirrors have not been examined for magical properties.
- 5. Dating mirrors is very difficult. Impression-replicas make dating very hard. (SOURCE) It is likewise difficult to distinguish genuine ancient mirrors from later copies, forgeries, or "made-in-the-style" of bygone days. (SOURCE)
- 6. The scarcity of two-plate magic mirrors suggests the phenomenon was not widespread but rather isolated. Indeed, magic mirrors may have played no significant role among the outlawed Christians or persecuted branches of Pure Land Buddhism. Both the Christians (<u>slide 20</u>) and Buddhists (<u>kakure nenbutsu</u>) found other ways to hide their faith.



The first time I heard about magic mirrors was July 2022 in a post from the <u>Japan Art History Forum</u> (JAHF). It provided a link to the <u>discovery of a magic mirror</u> in the collection of the Cincinnati Art Museum. Intrigued, I plunged into the research pool and have been swimming steadily ever since. I'm new to the field. I take full responsibility for any errors or omissions. My apologies in advance.

QUESTION. The magic mirrors of the outlawed Christians (slides 20, 21, 22, 23) camouflaged the hidden image of Jesus Christ. In sharp contrast, most magic mirrors of the outlawed branches of Jōdo Shinshū Buddhism (True Pure Land) openly displayed the mantra of Amida Buddha on the mirror's decorative backside (slides 10, 14, 15, 17, 18, 19). No effort was made to "camouflage" the Amida connection.

Why this glaring difference in the magic mirrors of Christians and Buddhists?

Two plausible reasons are: (1) Pure Land faith was and is one of the most widely practiced forms of Buddhism in Japan. Unlike Christianity, Pure Land faith was considered "native" and not "imported." (2) among the many branches of Pure Land Buddhism in Japan, only those in the former Satsuma 薩摩藩 and Hitoyoshi 人吉藩 domains of southern Kyūshū were banned due to their links with the lkkō-ikki uprisings 一向一揆 of the 15th and 16th centuries. These rebellions were economic and political threats to Japan's rulers, sparking the ire of samurai leaders such as Oda Nobunaga and Tokugawa leyasu. Amida faith in said domains was outlawed in 1555 CE and 1597 CE. The ban on these Amida sects and Christianity was abolished in the Meiji period (1868 ~1912). During that time, glass mirrors from Europe quickly replaced bronze mirrors. Magic mirrors were forgotten. 24

Addendum	Slide
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TO OPEN LINKS IN

right-click the link、

then select "open

PLEASE

ONGOING PROJECT

If you know of other magic

mirrors to add to this online

report, please contact Mark.

link in new tab"

control key then

click link to open

in new tab

on a Mac, hold

down command

key then click link

to open in new tab

Beginner's Guide to Magic Mirrors

The views **NEW BROWSER TABS** expressed herein are those of the author, who • on a PC, hold down takes full responsibility for any errors and / or omissions.

New Discovery.

https://www.putnam.org/magic-mirror/

In July 2024, the Putnam Museum and Science Center in Davenport Iowa "rediscovered" a two-plated magic mirror in their collection. The hidden image is of Amida Buddha. Dated to late 19th century CE (Meiji Period), or perhaps earlier (Edo Period).

One Plate Magic Mirror (Casts image of design on mirror's back)





Addendum: Optics for Two-Plate Magic Mirrors – Visual References

A two-plated Japanese magic mirror does not reflect the relief design on the mirror's back. Nor does it have any obvious irregularities on its reflecting surface. So how does a magic mirror work? The secret image is actually cast into the design on the back of the mirror's reflecting surface. The secret image areas are made to be thicker than the rest of the mirror. Then, in polishing, the thickness of the reflecting surface is typically buffed down to about 1 mm in thickness, but it can be buffed more deeply in the secret image areas because the metal there is thicker. The resulting thinner, raised non-image areas deflect light differently than the lower, thicker image areas. These differences are not easily visible to the naked eye. Although it may seem that a magic mirror has been polished uniformly, there is actually minute unevenness invisible to the eye. When light is reflected off this subtly uneven surface onto a wall, the design will reflect differently from the rest of the mirror to reveal its secret image. Text Source: Art Research Center, Ritsumeikan University. Also see Revealing Reflections.



3 鏡面仕上後:鏡面に僅かな凹凸ができる



Addendum: History of Bronze Mirrors Outside East Asia

Bronze mirrors played an important role in the ancient cultures of Egypt, Greece, Rome, and India. The craft of making bronze mirrors dates back to at least 2900~2000 BCE in Egypt, the Indus Valley, and China. Made by polishing a sheet of bronze until highly reflective, bronze mirrors were prized as luxury goods symbolizing elite status, and cherished as precious funerary objects and important divination tools. Unlike the mirrors of China, it is unknown if any of these mirrors possess the magical properties described in this guidebook. *Magic mirrors might be exclusively an East Asian phenomenon*.

In Western, Middle Eastern, and North African nations, mirrors were not widely revered as powerful religious icons or talismans able to ward off evil and bring good luck (as they were in China, Japan, and Korea). In <u>ancient Greece</u> and Rome, mirrors were reserved for the upper class, used for grooming, associated with personal vanity (excessive self-regard), and imbued with the power to reveal the future or reflect one's true soul. The use of <u>mirrors in Hindu and Jain traditions</u> (lamentably not discussed herein) is entirely different. Various examples from Greek and Roman literature include Ovid's "Metamorphoses," an epic poem containing the story of Narcissus, a beautiful youth who falls in love with his reflection in a pool of water. He neither eats nor sleeps, consumed by his reflection. He is eventually transformed into a daffodil (narcissus) while gazing in the pool.

Narcissus was overcome by a reflection that exceeded reality in its persuasiveness. Conversely, Perseus was able to kill Medusa by using his polished shield as a mirror, reflecting Medusa's own power back at her. This can be read as a foil to the Narcissus myth -- the reflected image is a weaker, less effective version of Medusa. Elsewhere, the <u>oracle of Apollo</u> at Delphi demanded of the ancient Greeks, "Know thyself," and mirrors have often been used as symbols of wisdom and self-knowledge. But Apollo also required "Nothing in excess," so the mirror can also imply vanity or self-indulgence. Another example involves Rome's six Vestal Virgins, who came from highborn families and enjoyed privileges unimaginable for other women. The six were priestesses of Vesta, goddess of the hearth and home. Their main task was to guard the sacred flame in the Temple of Vesta, keeping the fire alight. Letting the flame go out led to bad luck for Rome. If the flame did go out, it was not lit again from another fire. Instead, a <u>burning mirror</u> was used to draw a pure and unpolluted flame from the sun. Here the analogy is that mirrors reflect the pure, unadulterated truth. Interestingly, Greek mirrors are <u>often equated with goddesses and female insight</u> (e.g., the mirror is an attribute of Aphrodite).

During the Middle Ages in Europe, mirrors retained their old links to vanity – an association reinforced by the prominence of Christian theology. The Church equated mirrors with witchcraft, the devil, and the sin of pride (i.e. vanity). The Church considered anything that distracted people from religious devotion to be an act of devilry. Superstitions were widespread about witches and sorcerers who used mirrors to divine the future and cast spells. The lingering notion that mirrors reflect the soul gave rise to a belief that breaking a mirror would bring seven years of bad luck (i.e., breaking a mirror would shatter the soul's reflection). Seven has a significant meaning in Christianity -- the seven days of creation, the seven gifts of the Holy Spirit, the seven deadly sins. Committing any of these sins would lead to eternal damnation.

In modern times, the phrase "Mirror, mirror on the wall, who is the fairest of them all?" is a popular cultural reference to vanity, envy, and self-obsession. Finally, this short overview is neither comprehensive nor conclusive. It is provided as a "comparative mirror" to traditions in Asia.

BRIEF OVERVIEW OF GLASS MIRRORS

For most of recorded history, mirrors were made of polished obsidian, pyrite, marble, gold, silver, copper, and bronze. Glass mirrors did not gain a foothold until the European Renaissance (14th~17th centuries). The discovery of glassmaking is generally dated to around 4,000 BCE in Mesopotamia. The oldest extant glass objects are shards and beads from Iraq and Egypt. Glass vessels do not appear until the late 1600 BCE. Glass for windows came much later, circa 1st century CE, during the Roman Empire. The first glass mirrors were developed about the same time, but they were never widely used they were expensive to make (only the wealthy could afford them), easy to break, and about as reflective as bronze mirrors. The art of making glass mirrors was lost after the fall of the Roman Empire. Bronze mirrors ruled the roost until the 15th and 16th century, when the process of making glass mirrors was rediscovered in Germany (convex mirrors) and Italy (flat mirrors). During this period, mirrors were made using a method called "fire-gilding." This involved applying a thin layer of metal, typically mercury, to the back of a glass panel, which made the glass highly reflective. This technique was replaced in the 19th century with a new approach called "silvering," which involved depositing a thin layer of metallic silver onto the back of glass panes. "Silvering" resulted in a higher guality and more durable mirror. The technique quickly became the de facto standard for mirrors in both the West and the East. It spelled the death knell of bronze mirrors. GLASS MIRRORS - from astonishing object to ordinary trinket in just two millennium. See also Reverse Glass Art 1 & 2 & 3.



Bronze mirror, Europe, Circa 500 BC. Hercules abducting goddess Mlacuch. British Museum



27

Addendum: Additional Resources

• OPEN LINKS IN NEW BROWSER WINDOW:

-- right-click the link displayed in this Guide, then click "open link in new tab"

- -- on a PC, hold down the control key then click the link to open in new browser tab
- -- on a Mac, hold down the command key then click the link to open in new tab
- UNRESPONSIVE LINKS: This guide provides links to many other web resources. Over time, some of these links may become unresponsive, yielding the dreaded error message "404 Page Not Found." If that happens, please go to the <u>INTERNET ARCHIVE WAYBACK MACHINE</u>, enter the URL of the missing page, and click the "Browse History" button. Voila. More often than not, you'll find an archived copy.
- ONGOING PROJECT: If you know of other magic mirrors to add to this online collection, <u>please</u> <u>contact Mark</u>.

Mirrors and Relics from Ancient Japanese Tombs

- <u>Mirrors on Ancient Yamato: The Kurozuka Kofun Discovery and the Question of Yamatai</u>, Walter Edwards, Monumenta Nipponica Vol. 54, No. 1 (Spring, 1999), pp. 75-110 (36 pages)
- Tsubai Ōtsukayama: Mirrors within a Burial Mound, <u>Tanaka Migaku</u>田中琢. In Ancient Japan, by Richard Pearson. New York: George Braziller, 1992. Tsubai Ōtsukayama 椿井大塚山 kofun, just outside the Nara basin in southern Kyoto. All but four of thirty-six mirrors found were triangularrimmed. Also see <u>Tanaka Migaku</u>, *Kokyō* (Ancient Mirrors), <u>Nihon no bijutsu (Arts of Japan) 178</u> (Tokyo: Shibundō, 1981, 38~40.
- <u>Tanaka Migaku</u>, 1991, <u>Wajin Sōran</u> 倭人争乱 (Conflicts Among the Japanese People). Tokyo: Shūeisha, p. 154. Tanaka says that well over 3,000 mirrors have been discovered at protohistoric sites in Japan.
- <u>Tomb of King Hirabaru</u> 平原遺跡. The Hirabaru Site and Wajinden Research, Notes on the Archaeology of the Kings of Ito, Barbara Seyock (Munchen), Nachrichten (NOAG), 173–174 (2003). The tomb holds the record for the most bronze mirrors (40) excavated from a single tomb.
- The Suda Hachiman Shrine Mirror, David Barnett Lurie, Impressions 30, 2009, pp. 27~30.
- <u>On Japanese Mirrors</u>, Nakano Masaki 中野政樹, Nihon no bijutsu (Arts of Japan) No. 42 (Tokyo: Shibundō, 1969, 118 pages.
- <u>Ruins of Identity: Ethnogenesis in the Japanese Islands</u>, Mark James Hudson, 1999, University of Hawai'i Press, pp.188~191.
- <u>Buddhist Relics and Hidden Repositories of Hōryūji Temple</u>法隆寺, J. Edward Kidder Jr., Japanese Journal of Religious Studies, 1992, 19/2-3.
- <u>A Revealing Reflection: The Case of the Chinese Emperor's Mirror</u>, Benjamin B. Olshin, ICON, Vol. 18 (2012), pp. 122-141. Above article gives lots of citations to magic mirror research.

KOREA. The <u>Myth of Dangun</u> features the Three Seals of Heaven (Cheonbuin) as tokens of rulership, generally interpreted as the divine mirror (singyeong), which represents rulership over a people and is found in the tombs of many ancient tribe chiefs on the Korean peninsula in the form of bronze mirrors; the divine sword (singeom), which is the sword of the monarch, representing military commandership; and the divine rattle (sillyeong) or the divine drum (singo), sacred props used in rituals to draw the attention of gods when reporting about human affairs. Like the Japanese, the <u>curved jewel</u> (gogok) is also sacred to the Koreans.

- K = 마법의 거울 singyeong (divine mirror)
- K = 마술 거울 masul geoul (magic mirror)
- Creation Myths in Korea and Japan
- Encyclopedia of Korean Folk Literature

Buy Magic Mirrors Online, Various Retailers

- <u>Kamakura Big Buddha (Amida) Magic Mirror</u> (late 19th century)
- Divine Beasts Magic Mirror
- Divine Beasts and 12 Zodiac Animals Magic Mirror
- <u>Zodiac Signs Magic Mirror</u> (Science Factory)
- Zodiac Signs Magic Mirror, (Grand Illusions)
- Chinese Magic Mirror (Replica of Han-period Chinese mirror; see Slide 7 for details)
- Four Divine Beasts Magic Mirror
- <u>Female Buddhist Deity Magic Mirror</u> (back is replica of Chinese Han-period mirror, <u>see Slide 7</u>)
- <u>Female Buddhist Deity Magic Mirror</u>
- Female Buddhist Deity Magic Mirror
- <u>China Magic Mirror</u>
- Amida Buddha Magic Mirror
- Make your own magic mirror
- Various Chinese Magic Mirrors
- Miscellaneous magic mirror art
- Fun resource on how to make magic mirrors

Buy Magic Mirrors Online, Yamamoto Alloy Works Co. Ltd.

- <u>Kyoto Crafts</u>
- <u>Phoenix Magic Mirror</u>
- Amida Buddha Magic Mirror
- Christ on Cross Magic Mirror
- Christ on Cross Magic Pendant
- Pine, Bamboo, Crane, Turtle Magic Mirror
- Kyoto Artisans (Reserve time to observe father and son making magic mirrors) see Slide 19

PROGRAMMING NOTES – WORK UNDONE

- How to make links open in a new window from PowerPoint's HTML. Try this !
- <u>https://www.try67.com/tool/convert-all-links-in-a-pdf-to-open-in-new-window</u> Try this
- https://helpx.adobe.com/acrobat/using/links-attachments-pdfs.html

Mass Produced by Narika LLC 株式会社ナリカ -- Science is Just There -https://narika.jp/ Est. March 1918

Addendum: Under Investigation, Ongoing Research, Under Construction

Magic mirror, circa 1834, made by Kunitomo near the end of his life (but Prof. Uchikawa says he cannot find this mirror, even though it is recorded in various documents). Says Professor Uchikawa Takashi: 江戸末期に御用鉄砲鍛冶職の國友一貫斎が魔鏡を製作し、徳川 斉昭に献上したという記録があるものの、実物は未発見。年代が確認できている最古のものでも 1824 年 (文政 7 年)に過ぎ ず、新しいものしか解明できていないのです。Yet Curator Aoki Yutaka features the mirror in his 2021 book on Japanese mirrors.

http://www.kokugakuin.ac.jp/assets/uploads/2016/11/01.pdf http://manpokei1948.jugem.jp/?eid=142 https://manpokei1948-jugem-jp.translate.goog/?eid=142&_x_tr_sch=http&_x_tr_sl=ja&_x_tr_tl=en&_x_tr_hl=en&_x_tr_pto=wapp

- Kunitomo Ikkansai 國友一貫斎 made one in late Edo (other name was Kunitomo Tōbē Yoshimasa) 1778~1840
- Kunitomo Gun Museum 国友鉄砲資料館 國友一貫斎 魔鏡 <u>https://kunitomo-teppo.jp/ik001/</u> Museum page, which does not provide any info on this object

Two-Plate Magic Mirror

- Janet Foster knows this mirror
- Says it is from Niigata
- Now at Kamakura Museum (gotta confirm)



One-Plate Magic Mirror



https://www.dainippon-tosho.co.jp/science_cafe/100/index06.html https://www.dainippon-tosho.co.jp/science_cafe/092/index.html



Although many mirrors have been found in ancient tombs, it is not clear whether they were made as magic mirrors. At the end of the Edo period, Kunitomo Ikkansai 國友一貫斎, a government-sponsored blacksmith making guns, produced magic mirrors. Although there is a record that it was presented to Kawa Nariaki, the actual item has not been found. The oldest one whose age can be confirmed is 1824 (Bunsei 7). https://www.kokugakuin .ac.jp/assets/uploads/20 16/11/01.pdf

One-Plate Magic Mirror

- Hard to date magic mirrors. Curator Aoki Yutaka
- Magic mirrors not even a topic at Journal of Chinese Buddhist Studies or at <u>H-Net</u>
- Naming conventions for Mirrors with "Hidden" images:
- 1. Janet Foster = "composite" magic mirror
- 2. Uchikawa Takashi = 二重構造鏡 (double-structure mirror)

Addendum: World's Largest Magic Mirror – James Webb Space Telescope (JWST)

The James Webb Space Telescope (JWST) is the most complex machine ever launched into space. This new mirror of the universe (launched in July 2022) gazes back billions of years in time and space, and promises to reveal the birth of galaxies and the atmospheres of distant exoplanets. The primary mirror is 6.5 meters in diameter. It swirls round and round in a Lagrange orbit about one million miles away from Earth. Its aweinspiring images make it the most magical mirror of all.

Carina Nebula.

Photo JWST.



26 years in the making, with a price tag of \$10 billion, the James Webb Space Telescope is finally beaming home dazzling reflections of our universe. Its mission? To explore the early universe, star lifecycles, and other worlds. What magic !!!

ACCESS

OPEN (

a realm-embracing-realm ad infinitum all that exists implies all else that exists

Mark Schumacher is author of the <u>A-to-Z Photo Dictionary of Japanese Religious Statuary</u> (online since 1995) Copyright © 2023 by <u>Mark Schumacher</u>

Dedicated to Teachers & Students & Japan Art History Forum (JAHF)

THE ENID