Instruments of Diplomacy: 19th Century Musical Instruments in the Smithsonian Collection of Thai Royal Gifts

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Abstract—This paper discusses two groups of musical instruments gifted by Thai monarchs to the United States: six instruments accompanying the Harris Treaty (1856) and nineteen instruments sent for Philadelphia's Centennial Exposition (1876). We suggest that the selection of these pieces was primarily for aesthetic quality or display, not for their acoustic properties. Though they are visually impressive, sometimes a single item was given of normally paired instruments; some pairs given are not of matching design; non-visible components required to play them were originally missing; and one cannot assemble the instruments given into most traditional ensembles. Yet they served well as symbols, in King Mongkut's words to U.S. President Pierce, of "heartful and true friendship" and to confirm the "power in manufactures" of Thailand's "workmen and artists." We conclude by briefly contrasting these with the instruments presented to the Library of Congress by King Bhumibol Adulyadej, Rama IX (a musician himself), during his 1960 visit to Washington, D.C.

The collection of Thai objects held within the anthropology department of the National Museum of Natural History, Smithsonian Institution, reflects a long history of scientific collecting and donations of many kinds in addition to the component for which this collection is most widely known, the Royal Gifts[1] from monarchs of Thailand to the United States, the earliest of which were transferred to the Smithsonian as the national museum of the United States in 1858. These are of priceless historical significance, and the gifts from King Mongkut in 1856 comprised one of two sets of objects (the other being material collected during Matthew Perry's 1854 expedition to Japan) which were cataloged together after these and other "government collections" (see Hinsley 1981: 67-8) of exotic and valuable objects were in 1858 transferred to the Smithsonian Institution from the U.S. Patent Office, where they had initially been kept and displayed in that building's Great Hall. In fact, both of these collections were intermixed as items and cataloged within the initial numbering system (beginning with catalog numbers 1,

[1] Here, as in prior publications of the Smithsonian's Asian Cultural History Program, authors may attempt to convey by capitalization in English the use in Thai of *rajasap* or a courtly form of speech when referring to actions, belongings, etc. of a monarch (King, Royal Gift, Royal Barge, etc.).

2, 3, etc.), an early record now overlain with later re-numberings of the same objects, resulting from later efforts to sort out cataloging discrepancies from the collection's founding. Densmore (1927) included some of these instruments within his "Handbook" or introduction to musical instruments in Smithsonian collections.

These Royal Gifts were the subject of a Smithsonian exhibition curated by P.M. Taylor in 1982 (see review, Bekker 1982), and inaugurated by Thailand's Supreme Patriarch during his visit to Washington, D.C., an event which also ceremonially inaugurated the subsequent major effort of study and preservation work on this collection, including its conservation, re-housing, and systematic move from overcrowded storage areas in Washington to a new, state-of-the-art storage and research facility in Suitland, Maryland, where they are currently housed. Individual objects from the collection have regularly appeared in many other exhibitions at the Smithsonian or through loans elsewhere. In 2016, *khon* masks given by King Chulalongkorn for the 1876 Centennial exhibition in Philadelphia were on view within the *Rama Epic* exhibition at the Museum of Asian Art in San Francisco (McGill et al., 2016). As part of the Smithsonian's "Heritage of Thailand" project begun in 1982, McQuail (1997) published a well-illustrated summary and overview of selected examples from this collection totaling approximately 2,000 Royal Gifts,[2] reflecting gifts given to the United States by Kings of the Chakri Dynasty ranging from lacquerware to basketry, textiles, nielloware, Buddhist art, enamelware, manuscripts, weapons, models, costumes, painted puppets, and everyday objects.

The extensive re-housing and conservation efforts of the past decades have assured the collection's continued preservation and accessibility for future studies. The registrarial and cataloging improvements undertaken and expressed in McQuail's (1997) survey have also surely set the stage for many more potential studies of this collection, including the present paper which specifically reassesses the musical instruments presented as Royal Gifts. This paper draws upon McQuail's earlier survey of selected instruments, though the identification of several instruments has been updated here based on subsequent research, and previously unpublished instruments in the collection are added and illustrated here. Considering the musical instrument collection as a whole also allows for some generalizations presented here about the likely purposes and criteria for selection of these gifts, as well as meanings that may have been ascribed to them by givers and recipients. This paper concludes with some brief observations comparing the musical instruments given as Royal Gifts in the 19th century to a very different group of

[2] This figure of "approximately" 2,000 Royal Gifts has long been used in Smithsonian Thai events, speeches, and correspondence, also published by McQuail ("over two thousand," McQuail 1997: 47). It is a reasonable approximation; there are many ways of counting, and records are often imprecise. A single catalogued item can consist of a set of many objects or even parts that can be counted separately (e.g. the xylophone and its mallet may receive the same catalog number, as might a set of dishes). More specifically, the Royal Gifts arrived in nine "accessions" (or acquisitions/collections of objects), or ten if one counts the material acquired from John Halderman, U.S. Minister in Bangkok. The online database of ethnology collections, including all those acquired but missing, transferred or removed for any reason, now lists 1,522 originally acquired catalog items from the nine accessions (not counting the 42 objects from Halderman since possibly only one of those was actually a Royal Gift).

musical instruments presented to the Library of Congress by King Bhumibol Adulyadej during his 1960 visit to Washington.

The Royal Gifts of musical instruments presented in 1856 and in 1876

The musical instruments arrived at the Smithsonian in two groups of gifts, two decades apart. The first group, presented by King Mongkut, Rama IV, along with those from his brother Phra Pin Klao, who served as *Upparat* or "Second King", accompanied the signing of the Harris Treaty of 1856. These gifts consisted of six[3] instruments, each illustrated and discussed below: a pair of *klong khaek* (long drums), a *klong yai yang Thai* ("Royal wooden drum"), and a *pi chawa* (oboe) presented by King Mongkut; along with the brass *mong* (gong) and brass *mahoratuk* (Karen drum) presented by Phra Pin Klao.

The second group of gifts accompanied a Royal Gift of over 900 objects presented by King Chulalongkorn, Rama V, for the 1876 Centennial Exposition in Philadelphia. Despite ambiguities in the records, we believe this group consisted of nineteen instruments, as follows: a *klong chana* (drum), a *ram mana* (hand drum), a *thon* (hand drum which accompanies the *ram mana*), a pair of *klong malayu* (Malay drums), a *klong* (common drum), a *song na* (elongated hand drum), a *ranat ek* (xylophone), a *ranat thum* (bass xylophone), a *khong mong yai* (gong harmonium), a *kra ngon* (Buddhist horn), a *pi chawa* (oboe), a so-called *kra farang* (translated in 1876 as "European trumpet"), a *pi nai* (oboe), a *khaen* (free-reed mouth organ), a *so sam sai* (spike fiddle), a *so u* (two-pegged fiddle), a *krachappi* (guitar), and a *chakhe* or Thai zither.

These specific presentations of Royal Gifts occurred within the larger sequence and typology of such gifts outlined by McQuail (1997: 17-23), who notes that, at least by the time of the 1856 gifts, there were three conceptually separate, well-established types of Royal Gift. First was the initial "Gift of Welcome," representing a Thai tradition of *ton rap kæk* or "welcoming of guests" and described in numerous accounts by early emissaries (cf. Turton 2016: 114-15). These included "gifts of lodging, enormous amounts of beautifully arranged provisions, and personal gifts to emissaries." The "Gifts of Mutual Respect" (*Khru'ang Ratchabannakan*) comprised a second type of gifts. These generally consisted of Thai forest or agricultural products, serving as an invitation to trade in these items. (The Royal Gifts of 1833, which were not retained, seem to have been of this type.) The third type of traditional gift was the *Phraratchathan* – the "gift of a set of insignia of rank to equal or subordinate nations" (McQuail 1997: 17). The occasion for such Royal Gifts involved gifts sent with emissaries bringing exchanges of communications (including Royal Letters) or the presentation of Royal Gifts accompanying treaties, including the Harris Treaty of 1856, which provided the occasion for the presentation of the first group of musical instruments.

Over the nearly 200 years of Thai-American relations, many aspects of the Thai Royal Gift have changed, including the purposes and recipients of the gift, the occasion

[3] A set of two drums was included in the 1856 gifts and also in the 1876 gifts. Here each set is counted as two instruments; in fact as noted below the 1856 set does not seem originally to have been a pair.

for the gift, and the expectations about how the gift would be used. As McQuail (1997: 33-9) notes, for example, the World Expositions of the late 19th century provided a new occasion for the presentation of Royal Gifts, and such exhibitions became an important part of what today would be called "cultural diplomacy," helping Siam to emerge strongly within Western consciousness while also developing the country's international trade. A Siam Pavilion consisting of Royal Gifts as exhibition objects was organized and sent by King Mongkut as early as the 1867 Exposition Universelle in Paris. These gifts were not accompanying any treaty or exchange of emissaries. By the time the Smithsonian's second group of musical instruments was sent within King

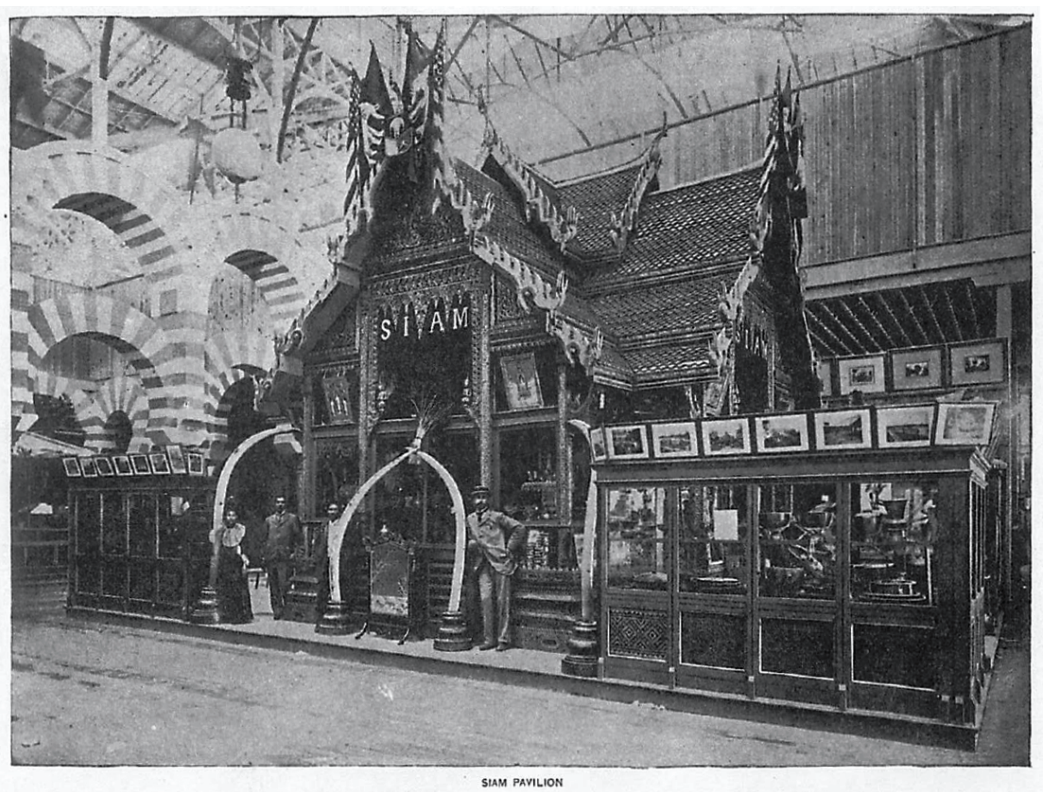

Figure 1. Siam Pavilion, 1876 Centennial Exposition, Philadelphia (Norton 1876: 221)

Chulalongkorn's Royal Gifts for the 1876 Centennial Exposition in Philadelphia, the King had already heard from John Halderman, the U.S. Minister in Bangkok, that Royal Gifts given to the President or government were going to the Smithsonian, and that the Smithsonian itself was particularly interested in ethnological materials (McQuail 1997: 42). Apparently Halderman may have been aware of the Smithsonian's special interest in collecting basketry, because as has been described by Taylor (2014), Smithsonian anthropologist Otis T. Mason developed a typological method of studying basketry worldwide, Both in 1876 and in the Royal Gifts sent for the Siam Pavilion of 1904 (the Louisiana Purchase Exposition, held in St. Louis, Missouri), Thai baskets formed a large portion of the Royal Gifts (McQuail 1997: 145; Taylor 2014: 147). Considering King

Chulalongkorn's awareness of the uses to be made of these items, it is conceivable he was also aware that these musical instruments would only be seen in displays, and were unlikely to be played after their receipt. By contrast, King Chulalongkorn later sent a large set of musical instruments, along with a Thai "orchestra" or delegation which played them, to the 1885 International Inventions Exhibition held in South Kensington (England), as cataloged in Verney's (1885) early study of Siamese musical instruments.

Nevertheless, in both the 1856 and the 1876 Royal Gifts, we do find traditional "Gifts of Mutual Respect" (*Khru'ang Rachabannakan*), including specifically some items known as *khru'ang yot* or items which bestow insignia or rank. The *khru'ang yot* gift was very specific as to its designated receiver; an example of this would be the 1856 nielloware betel set (see illustration and discussion in McQuail 1997: 60), sent by Phra Pin Klao along with his gift of musical instruments. This is a set of silver nielloware items, plated with gold, of a kind that could appropriately have been given to a person of noble rank, below the level of a King. As such it contrasted with gold nielloware sets that would have been reserved for the King's own family or other Kings of equal rank. This reflects the fact that King Mongkut, sending gifts to President Franklin Pierce accompanying the conclusion of the 1856 Harris Treaty, had decided that as a head of state (but not a King) the President should receive a Royal Letter along with the insignia of a high nobleman, rather than the higher insignia of a King's rank.

When King Chulalongkorn later sent a magnificent Royal Gift of over 900 items for the Siam Pavilion at the 1876 Centennial Exposition (Figure 1), he realized that the purpose of the gift had changed. These would be displayed to the general public, not presented to a head of state upon conclusion of a treaty; and the ultimate recipient would be the Smithsonian. Nevertheless as a gift to the United States of America, he still included the insignia of rank appropriate to a high noble, including a *kru'ang yot* gift of gold-plated silver nielloware (see illustration, McQuail 1997: 62) displayed in Philadelphia.

Finally, we may note that the musical instruments selected for this Royal Gift seem to represent Siam in 1876 as both traditional and cosmopolitan. The juxtaposition of the *kra ngon* or Buddhist horn (Figure 13) and the European-influenced Thai Palace trumpet or *kra farang* (Figure 14), parallels another far more well-known comparison that compellingly reflected Thailand's fusion of traditional and modern, the two photographs of King Chulalongkorn himself, presented by him as Royal Gifts. One, presented with these instruments in 1876, was from his Second Coronation (October 1873), in resplendent gold robes wearing the Great Crown of Victory, surrounded by regalia. The other photograph, presented in 1881, shows him wearing Western-style uniform and medals, standing by a European-style upholstered armchair (see illus., McQuail 1997: 34-5).

The purposes and meanings of musical instruments as Royal Gifts

The context of the Royal Gifts of 1856 and 1876 therefore allow us to posit some generalizations about the purposes and intent of the giver and the meaningfulness of these objects within the context of the gifts given. Most importantly and perhaps surprisingly,

it appears that many of these instruments were elaborately decorated for aesthetic purposes as presentation items. There may even be a trade-off between sound quality and visual aesthetic quality, and the latter seems to have been emphasized. We see this for example in the *so sam sai* or spike fiddle seen in Figure 15 below: a courtly instrument that is difficult to play and therefore expressive of musical virtuosity. The Smithsonian example from the 1876 exhibit is elaborately made with ivory spike, head, and pegs, a precious material seemingly chosen to increase the aesthetic quality of the instrument. In this case, this magnificent ivory-decorated piece is also without components that would normally be required to actually play it, specifically the *thuang-na* or "head weight" applied to the membrane, and the bridge, though one could argue that these parts may have been lost after the instrument was presented. Yet there is now no visible trace of the adhesive that would have held the head weight on the membrane, if it had ever been attached by the instrumentalist at the place needed to produce the desired tone. Thus the aesthetic elaboration, as well as the absence of components needed for actually playing the instrument, seem to emphasize that the purpose of the gift was to cement alliances by exchange of objects of value and symbolic meaningfulness, not to provice the recipient with the practical means of producing music.

Arguably we find some possible exceptions or counter-examples to the rule that only instruments of high courtly material quality were presented, specifically the two xylophones, and the two wooden drums with plant-fiber lacing, the *song na* (Figure 10) and the *klong khaek* (Figure 22). All these are plain or of materials that might be considered inferior, though they could well be used in court performances. One possibility is that, though seemingly not outstanding examples visually, they were chosen precisely for their outstanding acoustic properties, even though made from ordinary materials. This would be somewhat ironic because it seems to have been expected that the recipient would never actually play or hear the instruments, as indeed has historically been the case for Smithsonian ethnology collections. The choice of bamboo rather than fine wood for the *ranat ek* xylophone bars might also indicate a softening of the sound quality in these instruments (itself perhaps indirectly a reference to refined courtly music, where this sound quality is sometimes appropriate). Specifically for the xylophone, the 22-bar *ranat-ek* example presented is a type used only by the most exceptional percussionists, so its use in a display in a foreign land might indirectly reference the virtuosity of the Thai performer (though surely its viewers in Philadelphia did not understand that). Another less likely explanation might be grounded in the fact that this 1876 gift included an ethnological component intended specifically for the Smithsonian after its display in Philadelphia; therefore these instruments were perhaps meant to accompany the basketry, plant-fiber mats, and models of rural Thai houses within that component of the exhibit, rather than the courtly component including the nielloware sets and the other musical instruments. Future studies may locate archival data in Thailand about how the selection was made, to resolve such questions.

Overall, both the 1856 and the 1876 instruments present a sampling of instruments, all of which are used in a high court setting. Almost all have high aesthetic elaboration and are made with materials of exceptionally fine quality, even if many could not be played or if the visual impact of the instrument was attained at the cost of its sound quality.

Any original lists within Royal Letters that accompanied these gifts are absent within Smithsonian records. The National Archives do preserve several Royal Letters from King Mongkut and from Phra Pin Klao, including letters that list objects gifted in 1856.[4] The listed musical instruments in these letters correspond overall to the objects originally recorded as being received in the collection within the Smithsonian's first ledger catalog. For the 1876 Centennial Exposition, we do have a list of objects displayed at the Siam Pavilion by the U.S. Navy (U.S. Navy 1876).

The fact that these early lists of musical instruments within gifts presented do correspond to the objects which later arrived at the Smithsonian leads to the conclusion that the collection we have today is likely the full assemblage originally presented, despite the indirect lines of transmission via the Patent Office (1856) or the Philadelphia Centennial Exposition (1876).[5] In discussing the instruments below, we note that several instruments within the groups of gifts seem not to match, and that collectively the groups do not consist of instruments that generally form traditional ensembles—conclusions

[4] The list of gifts is on pages 3 and 4 of this handwritten letter, now in NARA (National Archives) Record Group 59, Ceremonial Letters from Siam, document 6923526.

[5] Early lists of 1876 gifts are extensive and contradictory (handwritten ledger lists, the US Navy published list mirroring the ledger, and 20th century catalog cards from which online databases derive). We find in the Navy list (U.S. Navy 1876: 14-15) a possible 20th instrument name and catalog number, "Poeng Mahng" (27319). The earliest catalog card inventory for that number references that name and states "not in collection." A note on that card states "Evidently a mistake has been made in cataloging this instrument. See 6.002" a reference to the catalog number of our *khaen* (see Figure 19). A subsequent inventory also considered that this phrase in the Navy list must be a mistaken name for the *khaen*, just by process of elimination, since that *khaen* seemed to be the only instrument received in 1876 whose name is not in the Navy list. Still, *poeng mang* is a Thai name for a drum set popular during the reign of Rama VI (NCC 1985: 137) so its appearance in the Navy list (albeit without any reliable Smithsonian record of its existence in the collection) indicates possibly this was a 20th instrument at the Exposition, perhaps never received at the Smithsonian. (Later, the prefix "E" was added to all catalog numbers in the Smithsonian's Ethnology division, so 27319 is the same as E27319 or E27319-0.)

Among other discrepancies, catalog records for the Malay drum pair no. 27317 state these were given away in exchange to "Mrs. John Crosby Brown" in 1887, yet these are definitely in the collection (see Figure 9), still having that original number written on both. The U.S. Navy's (1876: 15) inventory gives the name for the object with this number as "Ta: P'ohn"; the Smithsonian's earliest catalog card inventory already noted this name but concluded it was in error based partly on Verney 1885: 18-19. Perhaps due to such cataloging issues, the Malay drum pair was mistakenly given catalog no. 27315 in McQuail 1997: 127; we discovered that the correct drum having that number, even written on the instrument, is the *song na* illustrated here for the first time in Figure 10. One might imagine that Navy list name referred to a now-missing *taphon* (the Thai name for a barrel-shaped drum), but we find no clear record of a *taphon* among Smithsonian collections, while the number given for it definitely refers to something else; so we agree with early catalogers that this name was recorded in error and do not consider this a missing instrument.

Finally, one might suspect another instrument is missing because the Smithsonian's current catalog card inventory lists a "Kraa Gnaun" or "Trumpet Buffalo Horn Shape" with catalog number 27294, which has long been the number of a missing object. However, we believe that card had one digit incorrect and should have been 27293, and that name reflects an attempt to transliterate *kra ngon* (Buddhist horn, no. 27293, see Figure 13). Evidence for this is that the Navy list includes this catalog number 27294 as a textile "P'àh-sìn, Cloth" (missing, as noted), not a horn.

that require the tentative assumption that no well-matched instruments, and no other components of ensembles, were originally given but went missing before or after their arrival at the Smithsonian.

Similarly, our discussion below argues that many of these instruments seem to have been given as presentation pieces, whose acoustic properties were of little importance. Part of the evidence for this is that components needed to play the instrument are missing. Here we must admit that in many cases, pieces of 19th century collections have broken or fallen off objects in the past and not survived, so the argument in such cases is more tentative. An example of such evidence for missing components can be found in the original ledger books in which objects entering Smithsonian collections were recorded. For instance, the fact that the oboe given by King Chulalongkorn in 1876 (Figure 12) was recorded upon arrival at the Smithsonian as a "flute" indicates that it was already then probably missing its double reed (still absent today), which is the discerning difference between a flute and an oboe. Still, such conclusions are very tentative because we do have three clear counter-examples where components of these original instruments have been lost after arriving in the collection, all from 1876. The original catalog record for the gong circle (Figure 18) noted this had sixteen bells, though fifteen are now present; upon receipt of the very ornately sculpted *krajappi* (Figure 19), the catalog entry notes it had fourteen frets, subsequently lost; and the *so u* fiddle (Figure 23) was recorded upon receipt as having a bow, also subsequently lost.

Yet another reason for thinking that both groups of musical instruments were not intended to be played is that one cannot identify full traditional ensembles as described by Morton (1976). For example, for the smallest full *pi phat* ensemble (1976: 106), five of the six instruments are present, but the *taphon* (small bell) is missing. For a complete *klong khaek* ensemble (1976: 104), three of four instruments are present: the *khong meng* (gong) is missing. For the original *mahori* ensemble (1976: 102) of the kind depicted on a lacquerware cabinet discussed below (Figure 2), three of four instruments are in the collection: the *krap phaung* (percussive metal fan) is lacking.

The Smithsonian does have, within a later gift from Thailand, the image of such a complete courtly ensemble, on a lacquerware manuscript cabinet (Figure 2; cf. McQuail 1997: 80-3), received not from a Thai monarch but rather from the Thai government. Presented on the occasion of the 1964 centennial of the birth of James Smithson, the cabinet depicts scenes from the Jātaka tales in gold leaf on lacquer. In the Great Renunciation depicted at the lower right corner of the cabinet, when Prince Siddhartha leaves his family and his palace to pursue the ascetic's path, we see him overlooking his wife and son as they sleep. Perhaps to emphasize that this scene occurs within the inner sanctums of the palace, the artist has depicted a full *mahori* ensemble sleeping, with their instruments in a classic arrangement of this ensemble, including the *krajappi* (lute) player, *so sam si* (spike fiddle) player, *thon* drummer, a singer indicated by the *krap phuang* (metal fan) used as a percussive instrument, and a *ram mana* drummer. (See Morton 1976: 102 for an illustration of a modern ensemble with these same instruments). Though ensembles were originally composed of male musicians, female ensembles were increasingly popular from the Ayutthaya period through the middle of the 19th century (Ibid: 102), a contemporary detail the artist has included in this palace scene.

In summary, there is a very visible aesthetic elaboration of these beautiful instruments, even at the expense of sound quality. In addition, some non-visible components of the instruments that would have been needed to play them seem even originally to have been missing, normally paired instruments were sometimes given as a single item (e.g. the *khaek* drum, Figure 22), and even some paired musical instruments seem not to be of matching design (see the hand drum pair in Figures 24 and 25 respectively). Furthermore, the 1856 instruments, while individually of very high quality, will not form any particular traditional common court ensemble. The 1876 gift, containing far more instruments, is still short of instruments to form such an ensemble. Admittedly this conclusion is tentative because it partly assumes our collections and records are complete; future archival work may discover missing components.

Figure 2. 19th century manuscript cabinet from Wat Rakhang Khosittaram, Thonburi *Tu phra traipidok.* Wood and gold wash. 169.5 cm height x 97 cm width x 676.5 cm depth. Catalog no. E404341.

We may consider a final bit of evidence, specifically for the 1856 gifts, which is that the archival correspondence from King Mongkut emphasizes that the presentation was primarily to cement a friendship and to illustrate quality of manufacture or production (thus presumably visual or artistic quality), making no mention of actually using the instruments sent. In his English-language letter to President Pierce,[6] King Mongkut writes that he trusts "our letter and its accompanied presents will be kindly accepted by your gracious receipt and developed to all who are due of such vision in your country for your and our honors and kept in your government for mark of the improved friendship." The same letter describes the gifts as "presents which are entirely and wholly manufactured by Siamese blacksmiths, goldsmiths &c. worthy for your countrymen's notice of our heartful and true friendship and trifling skill and contrivance of the workmen and artists in our kingdom whose power in manufactures are very considerable." (The "&c." meaning *et cetera* is in the original.)

The illustrations provided here accompany further details on each of the instruments, beginning with the 1856 instruments from King Mongkut, then the associated gifts from Phra Pin Klao the "Second King," followed by the Royal Gifts from the 1876 Centennial Exposition. Finally we conclude with a brief comparison to the 1960 gift of

[6] NARA (National Archives) Record Group 59, Ceremonial Letters from Siam, document 6923528, dated June 10, 1856.

musical instruments to the Library of Congress by King Bhumibol Adulyadej, Rama IX. These outstanding Thai instruments continue today in their original role as instruments of diplomacy, and symbols of "heartful and true friendship" between the giver and recipient nations. They also present for historians of Thai music a unique and well-preserved, though silent, time capsule of the achievements of 19th century Thai artisans and musicians.

Gifts of King Mongkut, Rama IV, accompanying the 1856 Harris Treaty

The *klong yai yang Thai* drum (Figure 3) features a small circular wear mark on the top of the drum that could be the remnant of a removable gum paste commonly used in Southeast Asian drums to provide variations of tone for the percussionist. The gum paste providing the tone variation is often created by pulverizing soft rice and ash together until it forms into a pasty substance that is applied to the drum before playing and is removed after each performance. In bearing this circular mark, it appears this drum had been used and played as a functional musical instrument in the Thai Court (and was not newly made for this presentation).

Of the paired drum set shown in Figure 4, the *klong phu* is considered the "male" drum, and the *klong mia* the "female" drum. Collectively the set is referred to as the *klong khaek*. Also known as the *klong chawa* (Javanese drum), this instrument type is thought to have originated in Java as very similar paired drums are used in the performance of Javanese gamelan (Morton 1996: 73). Both these drums are playable and had been played, as evidenced by the wear on the outer rim.

The Thai word *pi* meaning "pipe" or "tube" represents a large group of aerophones in Thai classical music that were often the melodic lead of percussion ensembles known as *pipat* ensembles. Commonly used in non-court settings, e.g. to accompany the *klong khaek* in Thai boxing matches, the *pi chawa* (Figure 5) also has a courtly function in royal processionals and in smaller ensembles accompanying funeral ceremonies. (Morton 1976: 89). Since the *pi* instrument was primarily used with percussion instruments that were often difficult, if not impossible to tune, the *pi chawa* was constructed with an adjustable bell that would serve to tune the instrument to the demands of the accompanying ensemble (NCC 1985: 111). Sharing similarities with other oboes such as the *pi nok* and *pi nai* in Thai classical music, the *pi chawa* utilizes a small reed inserted in the thinner end of the instrument to create the vibration of the air in the instrument's internal cavity. Both *pi chawa* in the Smithsonian collection (this one and the one from 1876, Figure 11) are missing the double reed essential for playing.

Gifts of Phra Pin Klao, accompanying the 1856 Harris Treaty

The Thai court's primary cymbal, the *mong,* is a bossed (raised center) idiophone traditionally played with a wooden cloth-covered mallet. The *mong* (Figure 6) has a slightly flanged outer rim and displays the hammering technique used in its construction. Though on many gongs the indentations caused by the construction process have been smoothed out, this *mong* from 1856 maintains these markings which, while visually

Figure 3. Siam drum *klong yai yang Thai*
Gift of King Mongkut, 1856 Harris Treaty Gifts
Catalog no. 68 (3947)
44 cm diameter x 46.2 cm height

Figure 4. Pair of drums *klong khaek, klong phu;* pair called *klong mia*
Donor: Gift of King Mongkut, 1856 Harris Treaty gifts
Catalog no. 67 (3945) 69 (3946)
73 cm height x 34 cm diameter (top), 32 cm (bottom)

Figure 5. Oboe *pi chawa*
Gift of King Mongkut, 1856 Harris Treaty Gifts
Catalog no. 77 (4001)
37 cm diameter x 6 cm diameter bell x 37 cm length

decorative, will also affect the vibration, pitch, and timbre of the instrument.

The production of bronze drums (Figure 7) is one of the oldest art traditions in Southeast Asia, with advanced examples of these drums appearing in archeological records from the 6th century B.C., suggesting this art form was already well practiced by this time (Cooler 1986: 107; cf. Taylor and Aragon 1991: 63-6). An early typology of such drums was developed by Franz Heger (1902). The so-called "Heger type III" drum (within that typology), the style long associated with the Karen people of Burma and Northwest Thailand, is recognized as an integral part of both the Burmese and Thai court's repertoire, having had an important courtly role in Thailand since the Ayutthaya period (Cooler 1986: 110-11, 113; cf. Cooler 1995, 1999). These drums, often referred to as "frog drums" because of the invariable decorative use of three-dimensional frogs at the cardinal points of the drum, were used to announce the presence of the King, and his procession to and recession from the throne (Coller 1986: 114). While suspended from trees when played by the Karen (note the handles on this drum), in the Thai court they were usually played resting on the ground, using two heavily padded mallets, with the drummer's strokes moving from the center to the periphery of the drum to create different tones.

Gifts of King Chulalongkorn, Rama V, for the Siam Pavilion, 1876 Centennial Exposition

The words "*klong ch'ana* Siam Cen. Exhibit Gift of the King of Siam" can be seen written on the side of the *klong* drum shown in Figure 8. *Klong* drums are usually played in pairs, though both in 1856 and again in 1876, only one drum was sent. The *klong* drum is traditionally constructed from a single piece of hollowed-out hardwood for the cylindrical midsection and has two heads or membranes, one on each side, that are commonly made of cowhide or water buffalo hide (Morton 1976: 74). Two support poles about three feet in length were normally used to suspend the *klong* drums diagonally, facing the player, by creating an "X" frame through the metal ring on the side of the drum. In addition to support poles, the drums would have had playing sticks or mallets; none of these are part of this collection and there is no record they were received.

Similar to the *klong khaek*, the *klong Malayu* (Figure 9) is a slightly smaller pair of drums, each with two membranes, and as the name implies, believed to be of Malay origin. Like the *klong khaek*, the *klong Malayu* are normally played as a pair, and in this case a matching pair was presented. The *klong Malayu*, used in royal processions, was played with the left hand on one membrane while the other membrane was played with a curved drumstick in the right hand. This pair shows an ornate gold leaf pattern on all outer sides of the instrument including the membrane. Such a gold leaf pattern would likely wear away with even the slightest use. Alongside the absence of a drumstick, the presence of this pattern indicates that this pair may have been newly made and never played.

The *song na* (Figure 10) is a cylindrical Thai drum whose name translates as "two faces," referring to the two membranes on each end. Each membrane features an applied tuning paste commonly made of ash and rice paste used to adjust the pitch and timbre

Figure 6. Gong *mong*
Gift of Phra Pin Klao, 1856 Harris Treaty Gifts
Catalog no. 94 (3992)
51cm diameter x 7.6 cm depth

Figure 7. Karen drum with mallets *klong mahori kariang*
Gift of Phra Pin Klao, 1856 Harris Treaty Gifts
Catalog no. 70 (3991)
37 cm height x 51 cm diameter: 51 cm; 50 cm mallet length

Figure 8. Siam drum *klong chana*
Gift of King Chulalongkorn, 1876 Centennial Exposition
Catalog no. 27257
47 cm diameter x 51 cm height

Figure 9. Pair of Malay drums *klong Malayu*
Gift of King Chulalongkorn, 1876 Centennial Exposition
Catalog no. 27315
53 cm height x 18.5 cm diameter

of the instrument. The body of the drum is almost entirely covered with laced thongs running parallel to the instrument except for the few thong wraps running perpendicular in the middle section. The *song na* was introduced in Thailand during the reign of King Rama II (1809–1824) and may be used as a replacement for the *taphon* (Thai drum) in the *pi pat* ensemble as accompaniment to the *sepha*, a form of chanted epic. The *song na* produces a lighter tone and is considered more favorable than the larger *taphon* for vocal performance (Morton 1976: 71).

This *song na* has not previously been published or illustrated, perhaps partly due to cataloging discrepancies; this catalog number was originally listed (U.S. Navy 1876: 14) as "Klaung käak" or Malay drum (i.e. the name assigned to 27317, seen in Figure 9). Yet this drum's correct original catalog number 27315 is written on its tympanum, and we agree with the later modification on its catalog card, identifying this as a *song na*. Still, the absence within the earliest Royal Gift lists of any drum with a name like *song na*, like the absence there of an instrument or name like the *khaen* shown in Figure 21, introduces an element of suspicion about these two instruments. Possibly they were not part of the original 1876 Royal Gift, even though they have long been treated as such in twentieth century catalog records, which have surmised that some other names appearing in the earliest lists may have been errors, intending these. That is still the best explanation; but this is one of many issues that may be clarified if Thai archival lists of Royal Gifts given can be found.

As noted above, the *pi* (meaning "pipe" or "tube") was often the melodic lead of percussion ensembles known as *pipat* ensembles. Morton (1976: 89) notes that the *pi chawa* (Figure 11) had a function in courtly processionals and in the ensembles accompanying funeral ceremonies (see also NCC 1985: 112).

This rosewood *pi* oboe (Figure 12) was originally cataloged as a "flute with six holes; rosewood, turned"; presumably misidentified as a flute because this oboe was lacking its double reed when it arrived in the collection.

Comparable to the *dung* horn and *shanka* shell of Buddhism and Hinduism, the *kra ngon* (Figure 13, also known as the *trae-ngorn*) aerophone is used to announce the arrival or departure of royalty.

Figure 14a shows a rare and distinctive type of trumpet, which the earliest U.S. Navy list (1876: 14) called *kra farang* (roughly, "Westerner's trumpet"; translated in 1876 as "European trumpet"). This is a natural trumpet (meaning a trumpet without valves) manufactured in Thailand for court or palace use. This instrument (original catalog number 27292, thus currently written as E27292-0) has not previously been illustrated or published, and in a cataloging mistake was apparently confused with the Buddhist horn in early records; a note on the catalog card states this trumpet is illustrated in the U.S. National Museum Bulletin of 1896 (plate 68, Figure 5) but that illustration is actually of the *kra ngon*, Buddhist horn (Figure 13), there labeled "Siamese copper horn." The *kra farang* is an aerophone made of brass with a cylindrical tubing that expands into a bell. A wooden brace near the mouthpiece holding the bellpart and the mouthpipe together is covered with a textile on which the catalog number, name, and the word "Siam" were written (Figure 14b). A comparable natural trumpet originating at the Royal Court in Bangkok, and referred to as a "King's Palace Trumpet," was

Figure 10. Elongated hand drum *song na*
Gift of King Chulalongkorn, 1876 Centennial Exposition
Catalog no. E27315-0
53 cm length x 18 cm width

Figure 11. Javanese flute *pi chawa*
Gift of King Chulalongkorn, 1876
Catalog no. 27313 (54067)
37 cm length x 6 cm diameter of bell

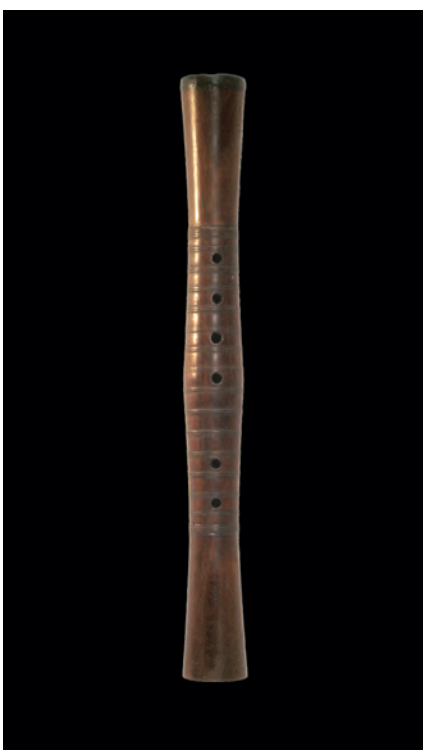

Figure 12. Oboe *pi nai*
Gift of King Chulalongkorn, 1876 Centennial Exposition
Catalog no. 27312
39 cm length

Figure 13. Horn *kra ngon*
Gift of King Chulalongkorn, 1876 Centennial Exposition
Catalog no. 27293
32 cm length x 8 cm diameter at mouth

Figure 14a (above). Thai Palace Trumpet *kra farang*
Gift of King Chulalongkorn, 1876 Centennial Exposition
Catalog no. E27292-0
75 cm length x 13 cm diameter of bell

Figure 14b (left). Detail of textile-covered wooden brace holding the bellpart and the mouthpipe together; the original name and catalog number were written on that textile.

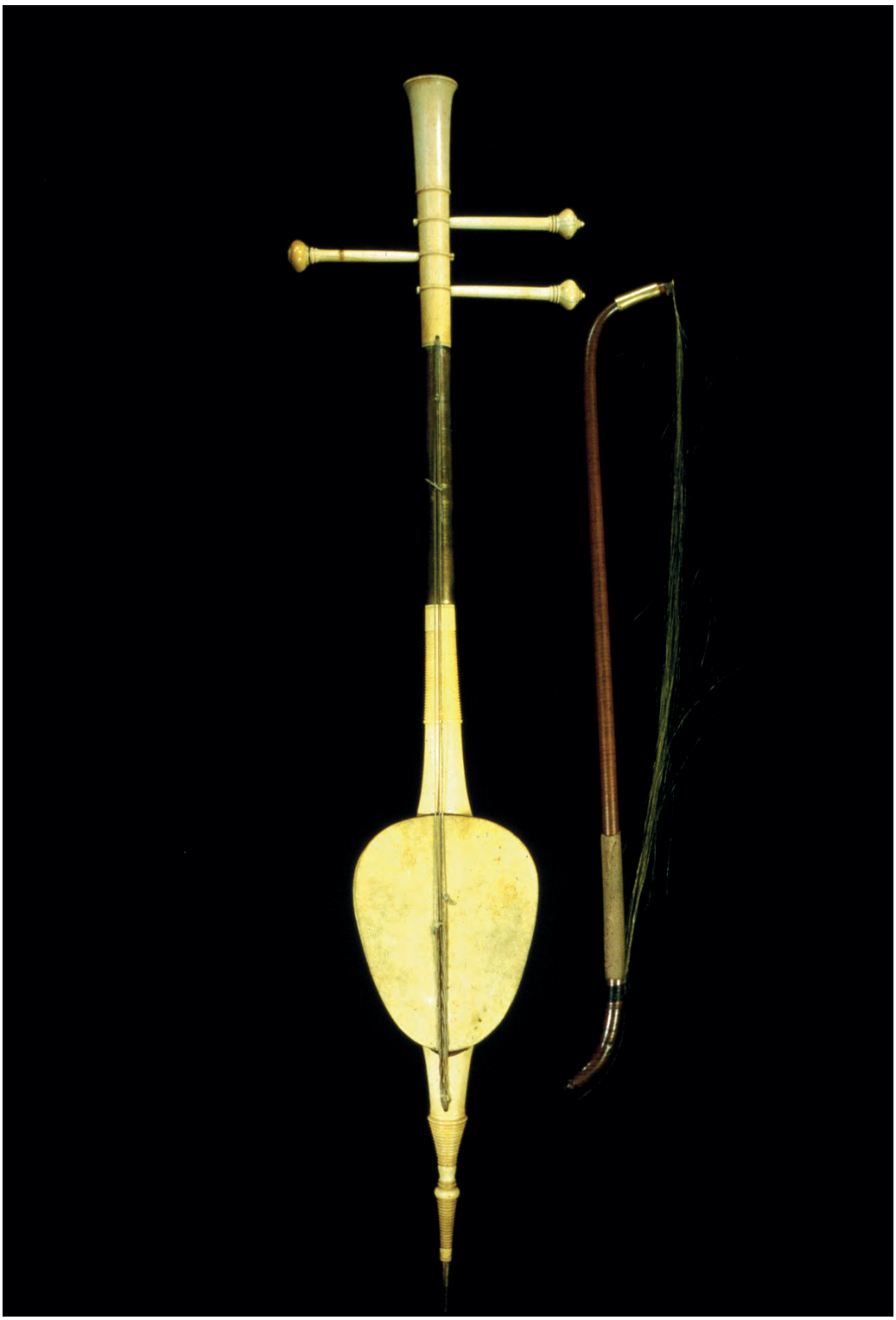

Figure 15. Siamese violin and bow (spike fiddle) *so sam sai*
Gift of King Chulalongkorn, 1876 Centennial Exposition
Catalog no. 27311 (54066)
18.5 cm width x 47 cm length

studied at a German brass company that was commissioned in 1990 to produce twenty reproductions (Thein and Thein 2015). The pipes of this instrument are comparable to European instruments of the sixteenth and seventeenth century, though notable differences from European models include the flat bell-end and the thin diameter of the mouthpiece receiver (ibid.). No mouthpiece is present now, nor mentioned in early records; but a typed twentieth-century catalog card notes "The mouth piece is missing" (perhaps only because trumpets were presumed to have one). The Thai Palace trumpet described in Thein and Thein (2015) does have a mouthpiece similar to a cornetto, and most likely this did have one also, which is now missing if it was included with the original Royal Gift.

Dating back to the Sukhothai period (c. 1279–1438) and known to be a favorite instrument of King Rama II (r. 1809–1824), the *so sam sai* (Figure 15) is widely known in Thailand for its beautiful tone and its difficult playability (Morton 1976: 96). While not a part of any major court ensemble, the spike fiddle is excellent for accompanying the human voice as it shares a similar range and timbre. It is a three-string chordophone tuned in fourths constructed of ivory and hardwoods, which would be played using a horse string bow. The strings were traditionally made using silk or gut and the membrane stretched over the resonator was usually goat or calfskin. One important component of the *so sam sai*, lacking in this example, is the *thuang-na* or jeweled "head weight" that was applied to the membrane of the instrument (see illus. in Thirakanon 2009: 80). As with the ash and rice gum mixture applied to *klong* drums, the *thuang-na* is placed on the front membrane of the *so sam sai* and moved by the instrumentalist until the desired tone is produced. The absence of the *thuang-na* and of the instrument's bridge indicate that this instrument was strictly for display; it has no sign of having been played and might never have been intended to be played.

The *ranat ek* xylophone (Figure 16) gifted by King Chulalongkorn in 1876 has previously been misidentified as a *ranat thum* (McQuail 1997: 129), though the *ranat thum* (see Figure 17 and illus. in Thirakanon 2009: 22) has seventeen bars while the *ranat ek* has twenty-one or twenty-two (Jones 1964: 96), and is considered an instrument requiring greater virtuosity for playing. The use of bamboo for the bars on this *ranat ek* xylophone is distinctive, as bamboo typically produces a softer tone while hardwood bars produce a larger dynamic range (Morton 1976: 54). The use of bamboo for this *ranat ek* indicates that it was likely not intended to accompany percussion ensembles or *pi-pat* groups, where the instrument's volume is of prime importance, but perhaps preferred for the softer sound quality to accompany string ensembles, where the instrument's lower volume would be preferable. This instrument does include the instrument stand and mallets needed for playing.

A *ranat thum* (Figure 17) was also gifted by King Chulalongkorn in 1876 and was originally catalogued as a "Siamese Bass Xylophone" in Smithsonian anthropology collection records. The *ranat thum* in Thai traditional music is widely used in *pi pat* ensembles. Generally tuned an octave lower than the *ranat ek* (Figure 16), the *ranat thum* features 17 wooden bars that are suspended by a string strung through two holes on each side of every bar, and hung stretched between two hooks on each end. In this photograph showing the now-fragile instrument as it is stored, the original strings

Figure 16. Xylophone *ranat ek*
Gift of King Chulalongkorn, 1876 Centennial Exposition
Catalog no. 27320 (54077)
117 cm length x 47 cm height x 37 cm depth

Figure 17. Xylophone *ranat thum*
Gift of King Chulalongkorn, 1876 Centennial Exposition
Catalog no. 27320 (5318)
113 cm length x 42 cm width x 41 cm depth

suspending the bars have been taken off of the hooks, thus bars rest directly on the xylophone base. (Removal from the hooks reduces stress on the strings; and since the original string has broken it can no longer support the bars in a raised or suspended state for playing.) This instrument does not include any mallets needed for playing. However it visibly displays the strike marks indicating previous heavy usage prior to its arrival in the Smithsonian collection.

The *khong wong yai* (Figure 18) is a percussive instrument that is responsible for playing the primary melody in any composition. The percussionist sits in the center of the circle surrounded by sixteen circular gongs tuned left to right in an ascending scale comparable to the Western modal scale of D dorian (Morton 1976: 43) in two complete octaves (NCC 1985: 117; see illus., Thirakanon 2009: 86). The gong circle is played with two disc shaped mallets, also shown in Figure 16. The catalog record upon arrival in 1876 mentions sixteen gong bells; one is now missing.

Popular during the Ayutthaya period (1351–1767), the *krajappi* (Figures 19a, 19b) may be played as a solo instrument or as a member of the *khruang sai* or *mahori* ensemble. Usually constructed of soft woods, this *krajappi* has exceptionally ornate woodwork on both the neck and headstock, with four ivory tuning pegs (NCC 1985: 107) (the pegs are currently removed and stored separately). The original catalog record for this instrument mentions fourteen frets, subsequently lost.

The *chakhe (*Figures 20a, 20b) is a Thai zither-like instrument that has been in use since the early Ayutthaya period. The name c*hakhe* (incorrectly written as "Ta'H Hay" in early Smithsonian records) is derived from the Thai word for crocodile *chorakhe,* which the body of this instrument is said to resemble (Morton 1976: 92). (Smithsonian catalog records referred to this as an "Alligator guitar.")

The *khaen* (Figure 21), a wind instrument consisting of small bamboo pipes bound together and placed through the *tao khaen* or mouth piece, may have been played in Thailand for over 2000 years (NCC 1985: 41). Inside the *tao khaen* are reeds made of silver or brass that give the *khaen* its distinct sound. The instrument is played by blowing into the mouthpiece and covering the finger-holes located mid-level on the instrument above the *tao khaen.* While often played as a solo instrument, the *khaen* may also be a member of several traditional ensembles. This instrument's name, like that of the *song na* drum discussed above, does not appear on the earliest lists, e.g. U.S. Navy 1876: 14-15.

Similar to the unmatched *khaek* given by King Mongkut in 1856, the finely made single *khaek* shown in Figure 22 was received in 1876; normally the drum is played as a pair.

The *so u* (Figure 23) is one of the principal string instruments in Thai traditional ensembles, often tasked with playing the primary melody of a musical work within the ensemble (see illus., Thirakanon 2009: 114). The *so u* is constructed of a single coconut shell as its resonator, contrasting with the *so sam si* (Figure 15) which utilizes multiple shells. The original catalog record for this instrument lists it having a curved bow, subsequently lost.

The *ram mana* (Figure 24) is a frame hand drum with a membrane on one side often compared to the Western tambourine. The instrument is only about seven centimeters

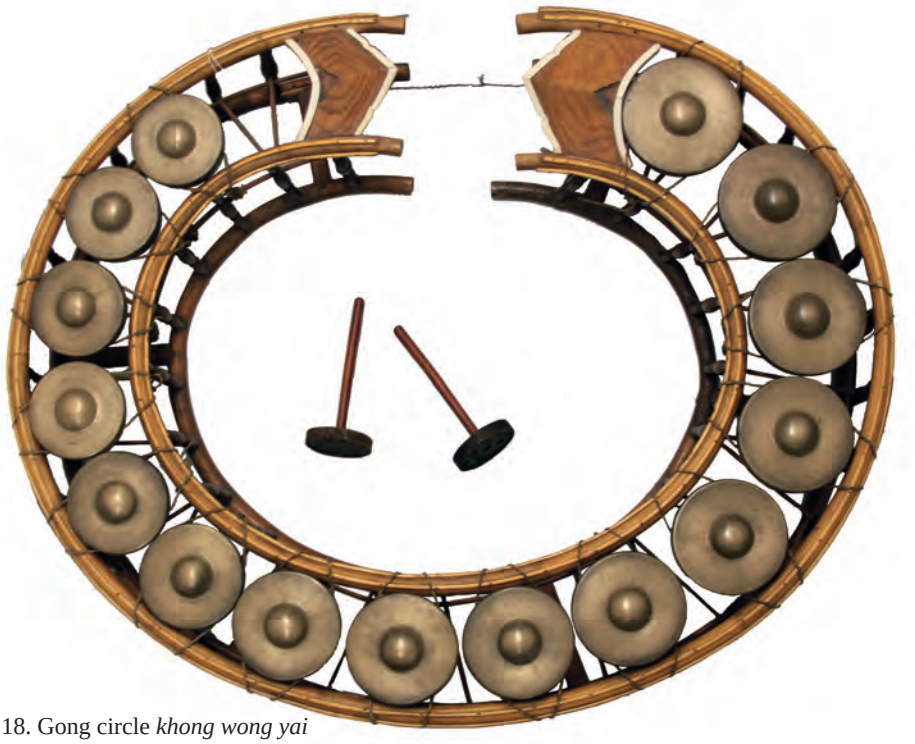

Figure 18. Gong circle *khong wong yai*
Gift of King Chulalongkorn, 1876 Centennial Exposition
Catalog no. E27316-0
25 cm height x 116 cm circumference

Figure 19a (left). Thai lute *krajappi*
Gift of King Chulalongkorn, 1876 Centennial Exposition
Catalog no. E27310-0
167 cm length x 43 cm wide x 7 cm height

Figure 19b (right). Detail of ornate woodwork on the headstock

Figure 20a, 20b. Thai zither *chakhe* (left, top; right, underside of instrument)
Gift of King Chulalongkorn, 1876 Centennial Exposition
Catalog no. E54079-0
28 cm diameter x 129 cm length

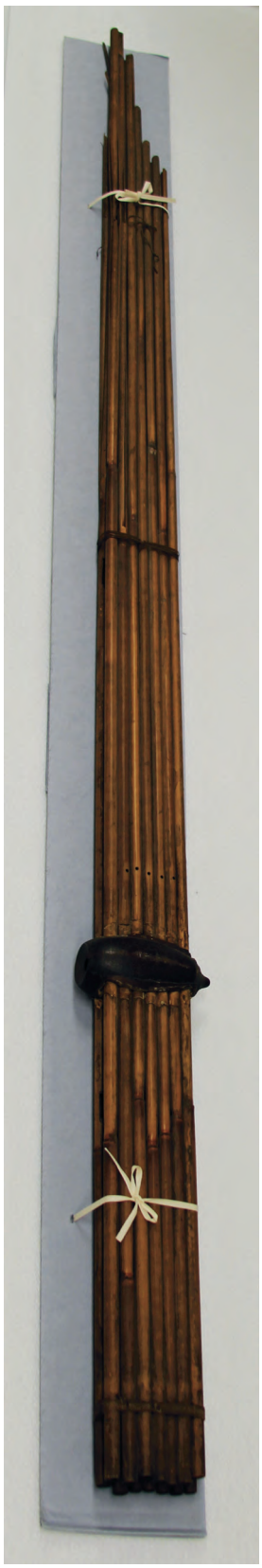

Figure 21. Mouth organ *khaen*
Gift of King Chulalongkorn, 1876 Centennial Exposition
Catalog no. E6002-0
185 cm length x 15 cm width

deep and is almost always played by the same percussionist along with its counterpart, the *thon mahori* (Figure 25). Notable on this *ram mana* is the extensive wear along the edge of the membrane. Unlike many of the Royal Gift instruments, this drum has been well used and played. The one-handed style of the percussionist who must hold the drum and play it with the extended fingers matches the wear along the outer rim of the instrument frame and membrane, so this wear was from a Thai musician's use of the drum in traditional fashion.

The *thon mahori* (Figure 25) is a one-handed drum decorated with intricate designs of colored glass, laced with a split rattan to a slender rattan hoop around the upper midsection of the instrument, and with a snake-skin membrane. It has little sign of any wear or of having been played. This exquisite and elaborately decorated instrument is almost always played with the *ram mana* hand drum (Figure 24), and though both arrived together as part of the 1876 presentation, they appear not to be a matching pair, and seem unlikely ever to have been used together. Like other instruments within these 19th century gifts, this self-standing and visually compelling example of fine craftsmanship perfectly fulfilled its intended purpose, namely to be appreciated as part of a diplomatic (not a musical) ensemble.

Though outside the scope of this paper, the generalizations made above about the 19th century Royal Gifts from the two groups presented (1856 and 1876) do seem to be in marked contrast to the Royal Gift of musical instruments presented in 1960 to the Library of Congress during the visit of King Bhumibol, Rama IX (a musician himself) (see Hobbs 1961). King Bhumibol's musical instruments were of high aesthetic quality, but clearly able to be played. The Library of Congress's Music Division uses its musical instruments in concerts, so this might have been expected. Possibly King Bhumibol recognized this difference between the Library of Congress Music Division and the Smithsonian's museum collections, in choosing the institutional recipient for the American people. An engraved silver plaque accompanying this Royal Gift states: "To the Library of Congress. This set of Thai musical instruments is presented as a token of sincere respect for a centre of knowledge and culture. Washington, DC, 1960." Like earlier Royal Gifts, their purpose was a diplomatic one, representing valued alliance and friendship. Yet contrasting markedly with the unmatched drums sent in 1876 by King Chulalongkorn (shown below in Figures 24 and 25), paired instruments presented in 1960 were clearly matching in design, as shown for example in the boxed set of drums (Figure 26), which like all the other 1960 instruments presented, can actually be played for their acoustic (not just visual or symbolic) impact.

Figure 22. Drum *khaek*
Gift of King Chulalongkorn, 1876 Centennial Exposition
Catalog no. E27318-0
66 cm length x 30 cm width x 21 cm diameter

Figure 23. Fiddle *so u*
Gift of King Chulalongkorn, 1876 Centennial Exposition
Catalog no. E54065-0
91 cm length x 12 cm width

Figure 24 (above). Hand drum *ram mana*
Gift of King Chulalongkorn, 1876 Centennial Exposition
Catalog no. 27308 (54078)
28 cm diameter x 7 cm depth

Figure 25 (right). Hand drum *thon mahori*
Gift of King Chulalongkorn, 1876 Centennial Exposition
Catalog no. 27307
34 cm height x 23 cm diameter

Figure 26 (below). Boxed set of hand drums, *ram mana* (left) and *thon mahori* (right).
Gift of King Bhumibol Adulyadej, Rama IX, to the Library of Congress, 1960.

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