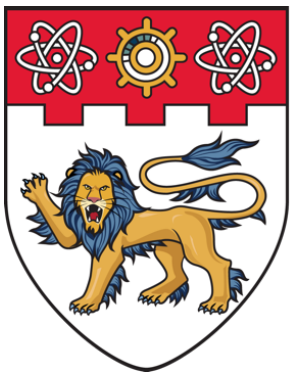

NANYANG TECHNOLOGICAL UNIVERSITY
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DISMANTLING THE NGANJUK AND SUROCOLO *MANDALAS*: SEEKING ESOTERIC BUDDHISM THROUGH A JAVANESE BRONZE TYPOLOGY

NICHOLAS LUA SWEE YANG

SCHOOL OF HUMANITIES

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NICHOLAS LUA SWEE YANG

School of Humanities

A thesis submitted to the Nanyang Technological University in partial fulfilment of the requirement for the degree of Master of Arts

2023

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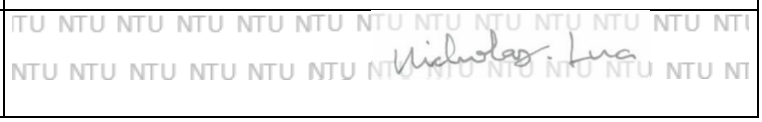
Signature of student:	

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o]ἰ μὲν ἰππήων στρότον οἰ δὲ πέσδων
οἰ δὲ νάων φαῖσ'ἐπ[ἰ] γᾶν μέλαι[ν]αν
ἔ]μμεναι κάλλιστον, // ἔγω δὲ κῆν' ὅτ-
τω τις ἔραται·

Some men say an army of horse and some men say an army on foot
and some men say an army of ships is the most beautiful thing
on the black earth. But *I* say it is
what you love.

Sappho, *Fragment 16*
Translated by Anne Carson

Doing what I love these past years has been an incredible privilege, and I incurred many debts along that journey. While, as the Malay *pantun* goes, debts of kindness are carried to the grave, I thought acknowledging those debts might be a worthy start.

First thanks go, of course, to my advisor Goh Geok Yian. She taught me scholarship requires grit and reminded me, in a difficult time, to be strong. I learnt plenty as her Teaching Assistant and will not forget the animal jokes from our directed reading classes over the holidays. She has been more patient and kind with me than I deserve, and for that and everything else I will forever be grateful.

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Amber Carpenter continued to inspire me with her *prajñā*. As she says of Socrates, I say of her: "To come into contact with a person of outstanding integrity is demanding; as Plato shows us, it demands that one put oneself and one's life on the line." For challenging me maieutically to live ethically and compassionately, not to mention keeping me sane with the Buddhist-Platonist project, I am grateful.

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For their support I also thank Alvin Chua, Eun Jung Min, Thomas Gould, Trevor Groves, Aditia Gunawan, Dudley Hawkins, Imran Bin Tajudeen, Pinna Indorf, Danielle Kleinman, Vincent Lee, Ng Yun Xuan, Sherice Ngaserin, Jarrah Sastrawan, Nurmalia Habibah, Sxuann Sim, Thu Truong and Tyassanti Kusumo Dewanti. In particular, I want to express my appreciation to Amanda Ho and Tay Jun Hao – they've borne my idiosyncrasies with patience and cheer, and I am thankful.

I couldn't have survived this journey without my family, who made everything possible. Mum, thanks for bearing everything, and with me. You're going to be just fine.

Most of all, I would like to thank Yan Lin. I don't know what possessed you to put up with me, but I am grateful for your love:

हावसूचितमदृष्टविप्रियं चाटुमत्क्षणवियोगकातरम् ।
कैश्चिदेव दिवसैस्तदा तयोः प्रेम रूढमितरेतराश्रयम् ॥

I dedicate this to you.

Hutang budi dibawa mati, indeed.

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SUMMARY

This thesis investigates what bronze figural objects found in Java can tell us about Esoteric Buddhism, a form of transregional Buddhist thought and practice in which wrathful deities featured prominently, on the island. In particular, I ask whether two bronze hoards excavated in the 20th-century, the Nganjuk and Surocolo Bronzes, constitute Esoteric Buddhist *maṇḍalas*, which are arrangements of specific Buddhist deities in fixed patterns according to known Esoteric Buddhist texts. Given that scholars who have attempted to identify both hoards with *maṇḍalas* tend to force-fit the objects to known textual descriptions, overlooking the many non-correspondences between the bronzes and text, I am sceptical of these attempts.

Aligned with the material turn, this thesis seeks a more rigorous approach to studying Java's objects. Borrowing from archaeology, it uses the typological method to create a typology of a hundred bronze objects, including the Nganjuk and Surocolo hoards, that have attributed to Ancient Southeast Asia's Middle Classic Period (10-12th centuries). According to my typology, there are 17 artefact types, and six of these are connected with two forms of Esoteric Buddhism: one more ferocious form associated with macabre demonic imagery and aggressive weapons, and a more benign form associated with weapons. These findings about Java's Esoteric Buddhist dynamics force us to reconsider the theory of Nganjuk and Surocolo being *maṇḍalas*, and this thesis also shows exactly how the iconographic and stylistic elements of both hoards fail to align with textual sources. Even as both hoards are not *maṇḍalas*, they do possess certain qualities associated with *maṇḍalas*. Nganjuk orders deities hierarchically, while Surocolo contains almost-complete sets of deities that form sub-sections of known textual *maṇḍalas*. These *maṇḍalic* principles suggest that, even as the texts describing *maṇḍalas* codified particular ways of organising deities and deity groups, these *maṇḍalic* principles continued to develop independent of the texts and manifested clearly in Java's material culture.

LIST OF KEY ABBREVIATIONS

Texts

HT	*Hevajra Tantra*
NṢP	*Niṣpannayogāvalī*
ST	*Samāyoga Tantra*
STTS	*Sarva-tathāgata-tattva-saṃgraha*

Typology-Related Terms

A	Attribute
AR	Artefact Type
B	Bronze Object
S	Sub-variant
T	Type
V	Variety

CHAPTER ONE. Introduction: (Esoteric) Buddhism and (Javanese) Bronze

The Surocolo Parable

On 4th September 1976, a farmer named Sudarnowijono unearthed an extraordinary find.[1] Digging around his backyard in Surocolo village, one of the many hamlets of Central Java's Bantul Regency, Sudarnowijono's hoe crushed an earthenware jar buried around 50cm deep in the earth.[2] In so doing, he had struck – not gold, but – bronze. For that earthenware jar contained, as the 1977 discovery report tells in Indonesian, "sejumlah besar arca dari perunggu, seluruhnya berjumlah 22 (duapuluh dua) buah": a large number of bronze statues, 22 in total.[3] Named for the village where they were found, the statues came to be known as the Surocolo Bronzes.

While the Surocolo Bronzes are indeed remarkable, their discovery entailed much loss. The hapless farmer, and others in his wake, had stripped the bronzes of crucial archaeological context. His hoe had unwittingly smashed the earthenware jar.[4] While cleaning the find, Sudarnowijono discovered a roll of silver foil, etched with lettering, inside one of the statues.[5] Upon his attempts to unroll it, the foil crumbled, leaving it only partially intact.[6] It appears that Indonesia's Archaeological Service (AS) learnt of the bronzes from regional daily *Berita Nasional*, which reported the discovery on 13th September, more than a week after Sudarnowijono's excavation.[7] By the time the AS' Yogyakarta branch arrived in Surocolo, "the

[1] Th. Aq. Soenarto, "Temuan arca-arca perunggu di daerah Bantul (sebuah pengumuman) [The discovery of bronze statues in the Bantul area (an announcement)]," in *Pertemuan ilmiah arkeologi: Cibulan, 21-25 Februari 1977* (Jakarta, Indonesia: Pusat Penelitian Purbakala dan Peninggalan Nasional, 1980), 395.
[2] Soenarto, 395; Jan Fontein, *The Sculpture of Indonesia* (New York: Harry N. Abrams, 1990), 223.
[3] Soenarto, 395.
[4] Soenarto, 395; Fontein, 223.
[5] Soenarto, 395.
[6] Soenarto, 395.
[7] Soenarto, 394–5.

children of the village [had been] allowed to play with the statuettes," in art historian of Indonesia Jan Fontein's view, "*as if these were tin soldiers*."[8]

How much better the scholars following Sudarnowijono and the Surocolo children have done remains up for debate. Many art historians and philologists assume that the Surocolo bronzes constitute three-dimensional *maṇḍalas* described in Esoteric Buddhist texts.[9] They then try to force-fit each statue's iconographic details to the Buddhist deities delineated in their desired *maṇḍalas*. In so doing, they gloss over, and at times even ignore, the deviations and outright non-correspondences between the bronze objects and textual evidence. Having found what they want to find, these scholars then conclude where their inquiry began: Esoteric Buddhist texts, and forms of Esoteric Buddhism related to said texts, were present in Southeast Asia. Numerous other claims, built atop this circular reasoning, follow.

This parable highlights the challenges involved in interpreting not just the Surocolo Bronzes, but the bronze images found in Java more broadly. When making knowledge-claims about these objects, art historians work with little proper provenance. Bronzes are inherently hard to date, note many publications: without inscriptions they cannot be dated precisely.[10] While many of these bronzes are attributed to Ancient Southeast Asia's Middle Classic Period (10–12th centuries CE),[11] their exact dates cannot be pinpointed with accuracy. While art historians settle for the "relative dating" of the bronzes, they dispute the details of one another's

[8] Fontein, 223. Emphases my own.
[9] Fontein, 223–4; Lokesh Chandra and Sudarshana Devi Singhal, "The Buddhist Bronzes of Surocolo," in *Cultural Horizons of India*, vol. 4 (New Delhi: International Academy of Indian Culture and Aditya Prakashan, 1995), 125, 133; Hiram Woodward, "Esoteric Buddhism in Southeast Asia in the Light of Recent Scholarship," *Journal of Southeast Asian Studies* 35, no. 2 (2004): 344–5; Nirmala Sharma, "Surocolo Bronzes and Their Tantric Text," *Acta Orientalia Academiae Scientiarum Hungaricae* 64, no. 2 (2011): 218–9; Jeffrey Sundberg and Rolf Giebel, "The Life of the Tang Court Monk Vajrabodhi as Chronicled by Lü Xiang (呂向): South Indian and Śrī Laṅkān Antecedents to the Arrival of the Buddhist Vajrayāna in Eighth-Century Java and China," *Pacific World: Journal of the Institute of Buddhist Studies* 13 (2011): 218–9n173.
[10] Lunsingh Scheurleer and Klokke, *Ancient Indonesian Bronzes*, 23; Lunsingh Scheurleer, "Central Javanese Group," 23; J. E. van Lohuizen-De Leeuw, *Indo-Javanese Metalwork* (Stuttgart: Linden-Museum Stuttgart, 1984), 16; Nandana Chutiwongs, *Indonesian Bronzes in the Domela Nieuwenhuis Collection* (Amsterdam: Christie's Amsterdam B.V., 1990), 13; Martin Lerner and Steven Kossak, *The Lotus Transcendent: Indian and Southeast Asian Art from the Samuel Eilenberg Collection* (New York: The Metropolitan Museum of Art, 1991), 164.
[11] In calling this period the Middle Classic, I adopt the periodisation advanced by John Miksic and Goh Geok Yian in: John N. Miksic and Goh Geok Yian, *Ancient Southeast Asia* (Abingdon, Oxon: Routledge, 2017), xiii.

dating systems.[12] We cannot easily determine the origins of bronze deity images. Given the portability of these objects, their findspots need not correspond to where they were made.[13] Findspot stratigraphies, as Surocolo shows, are often long gone. We know not the smiths who made these intricate deities,[14] the patrons who commissioned their production,[15] nor their ritual, religious or social functions.[16]

Inconsistent documentation adds to the challenge. Private collections may conceal their acquisition processes, or even contain fakes. The colonial-era Dieduksman collection mixed "well-known forgeries" with "authentic bronzes," while the 20th-century Domela Nieuwenhuis collection, studied by Nandana Chutiwongs, speaks vaguely of how it "grew and diminished due to changing circumstances."[17] Public collections may document acquisitions better, but make cataloguing mistakes. Even a collection as venerable as New York's The Metropolitan Museum of Art is guilty. In its Spring 1994 bulletin, The Met declared it owned ten bronze deity images from an Javanese important discovery called the Nganjuk Hoard,[18] which contained a total of ninety bronzes.[19] Searching "Indonesia (Java, Ngandjuk)"[20] in its online catalogue today reveals at least twelve similar bronzes had entered the Met collection by 1994 – exactly which ten were from the Nganjuk hoard, insofar as their provenance can be determined, remains unclear. When scholars discuss bronzes, in many cases all we have are

[12] Pauline Lunsingh Scheurleer and Marijke J. Klokke, *Ancient Indonesian Bronzes: A Catalogue of the Exhibition in the Rijksmuseum Amsterdam with a General Introduction* (Leiden: E. J. Brill, 1988), 23; Nandana Chutiwongs, *Indonesian Bronzes in the Domela Nieuwenhuis Collection* (Amsterdam: Christie's Amsterdam B.V., 1990), 13.
[13] Lunsingh Scheurleer and Klokke, *Ancient Indonesian Bronzes*, 49.
[14] Lunsingh Scheurleer and Klokke, *Ancient Indonesian Bronzes*, 13–14; Lunsingh Scheurleer, "Central Javanese Group," 23.
[15] Lunsingh Scheurleer and Klokke, *Ancient Indonesian Bronzes*, 15; Lunsingh Scheurleer, "Central Javanese Group," 23.
[16] Lunsingh Scheurleer and Klokke, *Ancient Indonesian Bronzes*, 17–18.
[17] Chutiwongs, 8.
[18] Steven Kossak, "The Arts of South and Southeast Asia," special issue, *The Metropolitan Museum of Art Bulletin* 51, no. 4 (Spring 1994), 15.
[19] F. D. K. Bosch, "Buddhist Data from Balinese Texts," in Selected Studies in Indonesian Archaeology, ed. F. D. K. Bosch (Dordrecht: Springer Netherlands, 1961), 121.
[20] "Ngandjuk" is the Dutch spelling of the more common romanisation today, "Nganjuk."

the bronze objects themselves, and nothing more. Making sense of these objects is challenging indeed.

To ascribe meaning to material evidence from Java, scholars turn to sources that are often from elsewhere. While this transregional approach in itself can be productive, it must be deployed with more rigour. Granted, if we accept that these objects are Hindu-Buddhist, we can also accept they participated in the same larger "milieux and networks that shaped the religious ideologies and related ritual practices" of the Sanskrit Cosmopolis.[21] This cosmopolis has been defined by Sheldon Pollock as the cultural world "from Afghanistan to Java" where Sanskrit, and later on vernacular languages like Old Javanese, served as the medium of "literary and political expression."[22] This civilisational unity, however, does not mean we can assume evidence from one part of the cosmopolis will perfectly explain Javanese examples, even if some overlaps ultimately do exist. So when scholars like Jeffrey Sundberg, on very little basis, use 9th-century Tang and Japanese texts to "explicate Javanese Buddhist temple architecture," even going so far as to polemically state "we would be foolish to ignore them"[23] – we should be cautious. I am not advocating that we only study Javanese material culture through the prism of other sources from Java. Rather, I advocate we weigh exactly how far non-Javanese sources can be applied to Java. When using such sources, we must be explicit about what they can illuminate about Javanese bronzes and their limits.

This caution must be applied in particular when connecting Esoteric Buddhism to Java's bronzes where, as if imitating children with tin soldiers at play, scholars have been particularly imaginative. Working with so little certain knowledge, scholars overread the

[21] Andrea Acri, "Imposition of the Syllabary (*Svaravyañjana-Nyāsa*) in the Old Javano-Balinese Tradition in the Light of South Asian Tantric Sources," in *The Materiality and Efficacy of Balinese Letters: Situating Scriptural Practices*, ed. Richard Fox and Annette Hornbacher (Leiden: Brill, 2016), 125.
[22] Sheldon I. Pollock, *The Language of the Gods in the World of Men: Sanskrit, Culture, and Power in Premodern India* (Berkeley, CA: University of California Press, 2006), 1.
[23] Jeffrey Roger Sundberg, "The Wilderness Monks of the Abhayagirivihāra and the Origins of Sino-Javanese Esoteric Buddhism," *Bijdragen Tot de Taal-, Land- En Volkenkunde* 160, no. 1 (2004): 117.

evidence of the bronzes, projecting into them *maṇḍalas* that are tenuously supported at best. Surocolo represents only one example in a long scholarly lineage of reading textual *maṇḍalas* that may not be into Javanese source material, then concluding on that basis something about the thought and practice of Esoteric Buddhism in Java. For this pattern we have numerous examples of evidence that could be better interpreted. Bronzes like East Java's Nganjuk hoard feature prominently,[24] but architectural evidence such as Borobudur and Candi Mendut too have fallen victim to this strategy.[25] Although scholars use the identification of *maṇḍalas* to link material culture with Java's Esoteric Buddhism, these tenuous links, much like Sudarnowijono's silver foil, crumble upon even a cursory inspection.

Wading into this interpretive minefield entails one further, exacerbating challenge: the problem of definitions. The terms "*maṇḍala*" and "Esoteric Buddhism" have been used variously in Tantric Studies and Southeast Asian Studies, as well as art history and Indology – to the point scholars slip between meanings, sometimes even unknowingly, when using these terms. This definitional confusion complicates the already complex challenge relating Esoteric Buddhism and Java's bronzes involves. To avoid this last problem, I will define what I mean by "*maṇḍala*" and "Esoteric Buddhism" later in this introduction. I will also define other terms that may be ambiguous as and when they appear in this thesis.

If we accept their attribution to Java's Middle Classic Period (10–12th centuries CE), then these bronzes were produced against a backdrop of great political and religious upheaval which they can illuminate. For Java at that time participated in the transregional "second wave" of Esoteric Buddhism throughout the region that first "picked up momentum again in the 11th

[24] Lunsingh Scheurleer and Klokke, 32.
[25] Marijke J. Klokke, "Borobudur: A Maṇḍala? A Contextual Approach to the Function and Meaning of Borobudur," in *IIAS Yearbook 1995* (Leiden: International Institute for Asian Studies, 1996), 191; Lokesh Chandra, "Chandi Mendut and Pawon: A New Interpretation," *Bijdragen Tot de Taal-, Land- En Volkenkunde* 136, no. 2/3 (1980): 314–6.

century."[26] In neighbouring Sumatra, the Padang Lawas region saw "[m]any brick temples dedicated to esoteric Buddhism" being built.[27] At the same time, the power centre in Java had shifted from Central Java to East Java following the fall of Mataram, ending forever the "tradition of building stone monuments" like Borobudur.[28] Given that "[f]ew archaeological remains from the Middle Classic Period in Java have been identified," the bronzes I study are one of the few material sources we have for the time. This archive of a hundred bronzes could help us understand the religious dynamics of Java's cultural mainstream at a time when Esoteric Buddhism was in ascent. Whether or not the Nganjuk and Surocolo hoards are *maṇḍalas* the way that scholars say they are, both sets within my hundred objects might tell us how Esoteric Buddhism manifested in material culture prior to it seeing peak ritual expression in the courts of Southeast Asian rulers like Angkor's Jayavarman VII (r. 1181-1220) and Java's own Singhasari king Kṛtanagara (r. 1268–92) a few centuries later.[29]

Research Questions, Approach and Arguments

Bearing the challenges revealed by the Surocolo parable in mind, this thesis investigates Javanese bronzes as art historical objects, and their relationship to Esoteric Buddhism in Java. In particular, this thesis interrogates the scholarly claim that the Nganjuk bronzes and Surocolo bronzes constitute Esoteric Buddhist *maṇḍalas*. The Surocolo bronzes, as discussed earlier, were found in Central Java in 1976 while the Nganjuk bronzes were discovered in the Candirejo village of Nganjuk, East Java, in 1913.[30]

Therefore, I ask the following research questions. What do Javanese bronzes tell us about the character of Esoteric Buddhism in Java? I ask this overarching question specifically

[26] Andrea Acri, "Introduction: Esoteric Buddhist Networks along the Maritime Silk Routes, 7th-13th Century AD," in *Esoteric Buddhism in Mediaeval Maritime Asia*, ed. Andrea Acri (Singapore: ISEAS, 2016), 8.
[27] Miksic and Goh, 360.
[28] Miksic and Goh, 356,
[29] Andrea Acri, "Introduction," 8.
[30] Fontein, 231.

in the context of the two bronze hoards dug out of the ground: to what extent are the Nganjuk and Surocolo bronzes *maṇḍalas* of Esoteric Buddhism? Do the art historical elements of the Nganjuk and Surocolo bronzes mark them as clearly different from bronzes that are considered non-Esoteric Buddhist, or from bronzes that are considered non-Buddhist altogether? Last and more broadly, which art historical elements, if any, distinguish non-Javanese bronzes from Javanese examples?

This thesis, then, is sited in the art history of Southeast Asia, as it deals with Java's bronze objects, and Tantric Studies, the sub-field of Religious Studies which covers the study of Esoteric Buddhism. Aligned with the material turn in the social sciences and the humanities, this thesis studies bronzes from Java as, to quote Benjamin Fleming and Richard Mann, "objects in their own right" that actively shape culture.[31] It pushes back against Religious Studies' traditional tendency to focus on texts, so much so that scholars "ignore or undermine the material data when it contradicted their interpretation of canonical sources."[32] In so doing, my thesis builds on Buddhologist Gregory Schopen's longstanding challenge that Religious Studies scholars pay as much attention to Buddhist material culture as they already do to texts.[33] Rather than go too far in the opposite direction to treat "the material aspects of Asian Religions in isolation from texts and ideas," this thesis studies these bronzes while aware of what Benjamin Fleming and Richard Mann might term their "intersections with textuality."[34] Textual sources – some from Java and its neighbouring islands, others from further afield in the Sanskrit Cosmopolis – appear here too as supporting actors. In some instances, the texts illuminate what we might be able to understand about Java's bronze objects. At other times, juxtaposing what these texts say about Esoteric Buddhism with the bronzes reveal how some

[31] Benjamin J. Fleming and Richard D. Mann, introduction to *Material Culture and Asian Religions: Text, Image, Object,* ed. Benjamin J. Fleming and Richard D. Mann (New York: Routledge, 2014), 1, 8.
[32] Fleming and Mann, introduction to *Material Culture*, 2, 5-6.
[33] Gregory Schopen, "Archaeology and Protestant Presuppositions in the Study of Indian Buddhism," *History of Religions* 31, no. 1 (1991): 15.
[34] Fleming and Mann, introduction to *Material Culture*, 2.

texts fail to account for, or fail to align with, the material objects that hold the spotlight. In all cases, I make sure to elucidate the contexts of these texts, so that their possible relevance, or lack thereof, to the bronze objects is clear. Texts show up in the thesis, but they do not steal the show.

The material-centric method I apply here is to propose a rigorous art historical typology of Buddhist bronze figurines from Middle Classic Java – a method that, to the best of my knowledge, has been under-used in Classical Java's art history. This technique of typology I borrow from a different field, archaeology. From my aforementioned research questions I build four hypotheses, which I test by classifying a hundred metal objects into 17 types of artefact. These hundred objects from Indonesia include thirty from the Nganjuk hoard and 18 from the Surocolo hoard. Testing my hypotheses reveals that objects from both hoards have their own distinct visual vocabulary that is correlated with two levels of Esoteric Buddhism differentiated by the extent of their ferocity. It is only after this typology has been constructed that I try to put other methods back into this story. By combining my typology's findings with existing art historical and textual arguments about the Nganjuk and Surocolo hoards, I show that both hoards are not Esoteric Buddhist *maṇḍalas* known in texts, especially not the *Vajradhātu maṇḍala* with which they have been repeatedly associated.

Yet both hoards nevertheless display qualities that prefigure known textual *maṇḍala* descriptions, even if their iconographic and stylistic characteristics prevent scholars from identifying them with said *maṇḍalas*. While the Nganjuk Bronzes display four hierarchical levels of importance that echo the way a *maṇḍala* orders progressively subordinate deities in relation to the supreme Buddha at its centre, the Surocolo Bronzes contain familiar deity groupings (the four musician goddesses and four ferocious animal-headed gatekeepers) known from textual *maṇḍalas*. In this way, I argue that both hoards are a form of material culture in

Java that participated in, but also reflect, the transregional currents giving rise to Esoteric Buddhist *maṇḍalas* prior to those *maṇḍalas* being codified in text.

"Esoteric Buddhism" and "*Maṇḍala*": Two Key Definitions

Given how crucial the terms "Esoteric Buddhism" and "*maṇḍala*" are throughout this thesis, it is essential I define them here. By "Esoteric Buddhism" I refer to the strain of Buddhism in which wrathful deities feature prominently.[35] My precedent for adopting this definition is art historian Rob Linrothe's *Ruthless Compassion* (1999). In that work on Indian Esoteric Buddhist art – seminal even today – Linrothe seeks a definition of Esoteric Buddhism that appropriately encapsulates material culture, rather than just text. After examining "hundreds of sculptures and paintings with Esoteric Buddhist themes preserved from South Asia between the seventh and the twelfth centuries," Linrothe states that what unites these images is *krodha-vighnântaka*: the quality of wrathfulness (*krodha*) that induces terror for the purpose of destroying obstacles (*vighnântaka*) along the Buddhist path.[36]

This definition can extend beyond South Asia, as Linrothe notes that wrathful *krodha-vighnântaka* deities appear in Southeast Asia too.[37] Furthermore Pieter Hendrik Pott, the Dutch Indologist who worked primarily on Indonesian sources, connects "demonic" mortuary elements to the esoteric,[38] going so far as to say that one outstanding feature of Esoteric Buddhist iconography is "the demonizing of its most effective figures."[39]

In the art historical record, iconographic elements suggesting a deity's potential to commit violence are what distinguish wrathful Buddhist deities from their non-wrathful

[35] Rob Linrothe, *Ruthless Compassion: Wrathful Deities in Early Indo-Tibetan Esoteric Buddhist Art* (Boston, MA: Shambhala, 1999), 3–4.
[36] Linrothe, *Ruthless Compassion*, 5, 12–13.
[37] Linrothe, *Ruthless Compassion*, 5–6.
[38] P. H. Pott, "Four Demonic Gaṇeśas from East Java," in *The Wonder of Man's Ingenuity* (Leiden: E. J. Brill, 1962), 124.
[39] P. H. Pott, "Plural Forms of Buddhist Iconography," in *India Antiqua: A Volume of Oriental Studies Presented by His Friends and Pupils to Jean Philippe Vogel, C.I.E. on the Occasion of the Fiftieth Anniversary of His Doctorate* (Leiden: E. J. Brill), 284.

counterparts. Such elements include the terrifying characteristics like fangs, skulls Pott and Lunsingh Scheurleer discuss,[40] aggressive postures like *pratyālīḍha* (right leg bent, left leg stretched) and *ālīḍha* (left leg bent, right leg stretched),[41] and weapons like the goad (*aṅkuśa*) or the *vajra*.[42]

One example of an Esoteric Buddhist deity is Trailokyavijaya, the form assumed by the historical Buddha's ferocious guardian Vajrapāṇi to subjugate the Hindu deity Śiva in the *STTS*.[43] Figures 1.1 and 1.2 are Javanese and Khmer Trailokyavijayas respectively. Both portray the deity's bulging eyes, sharp fangs and assumption of the dynamic *pratyālīḍha* posture. Figure 1.1 shows more wrathful elements, for what may be broken-off weapons appear in two of his right arms, and he tramples on Śiva and his wife Parvatī.

Figure 1.1. *Trailokyavijaya*, 9-10th century Central Java, bronze, British Museum, museum no. 1859,1228.94,

Figure 1.2. *Trailokyavijaya*, 11-12th century Prasat Hin Phimai, bronze, Bangkok National

[40] 189 – 194; Pott, "Four Demonic Gaṇeśas," 124–5.
[41] Fontein, 164.
[42] Paul Williams, Anthony Tribe, and Alexander Wynne, *Buddhist Thought: A Complete Introduction to the Indian Tradition*, 2nd ed. (Abingdon, Oxon: Routledge, 2012), 164.
[43] *The Princeton Dictionary of Buddhism* (2014), s.v. "Vajrapāṇi" and s.v. "Trailokyavijaya."

https://www.britishmuseum.org/collection/object/A_1859-1228-94.	Museum, inventory no. 2.271. Source: Pia Conti, "Tantric Buddhism at Prasat Hin Phimai: A New Reading of Its Iconographic Message," in *Before Siam: Essays in Art and Archaeology*, ed. Nicholas Revire and Stephen A. Murphy (Bangkok: River Books, 2014), p. 385, Figure 10.

Meanwhile, "*maṇḍala*" means "an icon that represents the worldview of Buddhism, or Buddhist cosmology and philosophy, by arranging Buddhist deities in accordance with a specific pattern,"[44] and that these deity arrangements must correspond to descriptions from known Esoteric Buddhist texts. I borrow the first part of my definition from Kimiaki Tanaka, who defines a *maṇḍala* as such in his magisterial work focusing on the subject (2018). I make my definition narrower than Tanaka's because scholars identify the Nganjuk and Surocolo bronzes as *maṇḍalas* by connecting them to texts across the Sanskrit Cosmopolis. Examples of *maṇḍalas* include the *Vajradhātu maṇḍala* because it is described in the *Sarva-tathāgata-tattva-saṃgraha* ("The Compendium That Is the Essence of All the Buddhas," hereafter the *STTS*; late-7th century CE), and the Garbhadhātu *maṇḍala* because it is described in the *Mahā-vairocanâbhisaṃbodhi-sūtra* ("The Sūtra on the Enlightenment of the Great Vairocana," hereafter the *Vairocanâbhisaṃbodhi*; mid-6th to 7th centuries CE).[45] Both these *maṇḍalas* have as their main deity the cosmic Buddha Vairocana, who is represented in the centre.[46] I refer the reader to figure 1.3 for an example of what *maṇḍalas* can look like. It is a 15th-century Tibetan scroll painting, or *thangka*, depicting the ferocious esoteric Buddha Cakrasaṃvara locked in sexual embrace with his consort Vajrayoginī, surrounded by the 62 assorted deities of their retinue:

[44] Kimiaki Tanaka, *An Illustrated History of the Maṇḍala: From Its Genesis to the* Kālacakratantra (Somerville, MA: Wisdom Publications, 2018), 2.
[45] Lokesh Chandra, "The Structure of the Garbhadhātu Maṇḍala," in *Bahasa – Sastra – Budaya: Ratna Manikam Untaian Persembahan Kepada Prof. Dr. P. J. Zoetmulder* (Yogyakarta: Gadjah Mada University Press, 1985), 540-1. For these probable dates for the *STTS* and the *Vairocanâbhisaṃbodhi*, see: *The Princeton Dictionary of Buddhism* (2014), s.v. "Mahāvairocanābhisaṃbodhisūtra" and s.v. "*Sarvatathāgatatattvasaṃgraha*."
[46] Lokesh Chandra, "Garbhadhātu Maṇḍala," 540.

Figure 1.3. *Maṇḍala of Cakrasaṃvara and Vajrayoginī*, 15th century, *thangka*, 47.5 × 38.0 cm, Asian Civilisations Museum, accession no. 2015-00388, Singapore, https://www.roots.gov.sg/Collection-Landing/listing/1321214.

As Esoteric Buddhism and its relationship to *maṇḍalas* form part of my literature review, a more in-depth justification for why I have adopted these particular definitions of both terms can be found in the next chapter.

Overview of Chapters

To situate within a larger methodological context this thesis' application of typology, I first review in Chapter Two the existing approaches that scholars have used to study Java's bronzes. Broadly speaking, the art historical methods adopted fall into two categories: (1) iconographic analysis, grounded in philological study of Old Javanese and Sanskrit texts, that

was favoured by pre-World War II (WWII) Dutch scholars; and (2) stylistics, the approach pioneered by French scholars following WWII that paid close attention to the stylistic elements of these bronzes and how they changed over time. I also consider other archaeological methods used to study Southeast Asian metal objects, noting particularly the recent strides archaeometallurgy has made in connecting Classical Java's bronzes to Esoteric Buddhism. In order to justify why I adopt the aforementioned definitions of "Esoteric Buddhism" and "*maṇḍala*," Chapter Two also examines the scholarly literature concerning both terms.

In Chapter Three, I create a typology out of the metal images examined in this thesis. I state my four hypotheses about the bronzes. Recognising that few have applied the typological method to Java's art historical evidence, I discuss what a typology is, how to construct one, and why this method can add value for the benefit of art historians who might consider using it. I then enumerate my typology of the hundred objects, outlining what differentiates one type from another and which attributes characterise each type. My typology comprises a total of 17 types and 93 attributes. After laying out the types, I also discuss the limitations of my typology, foremost among them how I worked with a small sample size and photographs of the metal objects, rather than the objects themselves.

Chapter Four explains which hypotheses are rejected, and which are not, by the testimony of my typology. It also considers what we learn about the Nganjuk and Surocolo Bronzes in light of art historical and textual evidence. I do not reject the hypothesis that bronzes from the Surocolo and Nganjuk hoards are manifestly distinct from bronzes not from both hoards, given that objects from both hoards form groups distinct from bronzes not from both hoards. I do not reject the hypothesis that objects labelled Esoteric Buddhist are manifestly distinct from objects that are not labelled Esoteric Buddhist, as there are six artefact types in the former category correlating to this thesis' definition of Esoteric Buddhism. These six artefact types can further be divided into two levels of Esoteric Buddhism differentiated by the

ferocity of the deities there. I also do not reject the hypothesis that objects from Java are manifestly different from objects from outside the island, as objects found off the island possess attributes not shared by objects found in Java. Meanwhile I reject the hypothesis that bronzes considered Buddhist are manifestly distinct from bronzes considered non-Buddhist, as objects in both categories also share attributes.

In Chapter Five, I show how the Nganjuk and Surocolo hoards fail to correspond to the Esoteric Buddhist *maṇḍalas* with which scholars have identified them. I examine how neither hoard matches the *Vajradhātu maṇḍala* as we know it in the *STTS*. I also examine how the Surocolo hoard does not match the 16-armed Hevajra *maṇḍala* as described in the *Niṣpannayogāvalī* (*NṢP* 5.4),[47] a compendium of Esoteric Buddhist *maṇḍala* descriptions by 11th-century Indian Buddhist master Abhayākaragupta.[48] I also consider how, although we cannot ascribe a clear textual *maṇḍala* to either hoard, both sets nevertheless contain qualities reminiscent of *maṇḍalas* in the abstract, such as hierarchical organisation and familiar deity groupings known from textual *maṇḍalas* – suggesting they participated in the broader cultural currents that gave rise to Esoteric Buddhist *maṇḍala* forms.

[47] See: Lokesh Chandra and Nirmala Sharma, *Niṣpanna-Yogāvalī: Sanskrit and Tibetan Texts with English Translation* (New Delhi: International Academy of Indian Culture and Aditya Prakashan, 2015), 63–67.
[48] *The Princeton Dictionary of Buddhism*, comp. Robert E. Buswell Jr. and Donald S. Lopez Jr. (Princeton, NJ: Princeton University Press, 2014), s.v. "Niṣpannayogāvalī."

CHAPTER TWO. "Esoteric Buddhism" and the "Bronzes of Java": A Literature Review

In the now-seminal 1991 paper, "Archaeology and Protestant Suppositions in the Study of Indian Buddhism," the Buddhologist Gregory Schopen observes that his field espouses a "curious and unargued preference for a certain kind of source material": Sanskrit and Pali texts.[49] Scriptural sources are often replete with philosophical arguments and doctrines, observed Schopen, and did not provide "adequate reflections of [Indian Buddhism's] historical reality."[50] However, scholars could historicise Buddhist thought and practice through: "a large body of archaeological and epigraphical material […] which can be reasonably well located in time and space, material that is largely 'unedited' and much of which was never intended to be 'read.'"[51] Yet these material sources remain understudied compared to Buddhist texts, so much so that for many Buddhologists, much like the Protestant missionaries before them, "real Buddhism is textual Buddhism."[52]

Since Schopen and till this day, Religious Studies has actively investigated how "a focus on material culture can contribute to a more nuanced picture of the lived realities of diverse and interconnected religious traditions across Asia."[53] In asking what the Surocolo and Nganjuk bronzes can tell us about the Esoteric Buddhism in Southeast Asia, my thesis is aligned with this material turn. By examining the preceding literature, I find justification for why the study of Classical Java's bronze figurines benefits from the typological approach. Broadly, art historians have studied Java's bronzes using two approaches: iconography and stylistic analysis. Typology could complement them both. Other archaeological approaches have been under-utilised in the study of Classical Java's art historical objects, suggesting it is timely for this thesis to apply typology. To defend the definitions of "Esoteric Buddhism" and

[49] Schopen, 1, 4.
[50] Schopen, 5.
[51] Schopen, 4.
[52] Schopen, 15.
[53] Fleming and Mann, introduction to *Material Culture*, 7.

"*maṇḍala*" employed in this thesis, I review existing uses of both terms. Other definitions of "Esoteric Buddhism" derive mostly from texts, regions and time periods elsewhere in the Sanskrit Cosmopolis – they may not apply to Classical Java's bronzes. Scholars problematically equate Java's material culture, including the Nganjuk and Surocolo bronzes, with "*maṇḍalas*" in order to ascribe Esoteric Buddhism to the region.

Why Typology I: Existing Art Historical Approaches

In this section, I survey how the methods by which scholars studied Java's bronze images as art historical objects changed over time, employing an art historical palette broadly organisable into two methodological thrusts: iconographic studies grounded in philology that were favoured by mostly pre-World War II (WWII) Dutch scholars, and the "French" stylistic analyses pioneered by Le Bonheur, later deployed to new purposes by Dutch art historians Lunsingh Scheurleer and Marijke Klokke. Scholars understandably depended on diverse methods, given the substantial unknowns that still obscure these bronze figurines. The methodological thrust scholars preferred and their interpretations of bronze figurines of deities, moreover, depended on their assumptions about "Indianisation." While the concept has many meanings, what all these "Indianisation" configurations share is the awareness that during the 6th-14th centuries, cultural exchanges between these two regions caused "profound socio-political modification" that fundamentally transformed Southeast Asian cultures.[54]

Already assuming a South-Southeast Asian synchronic cultural unity, the pre-WWII Dutch could connect – however tenuously – both regions' texts, and their respective iconographic claims, to Java's bronze images. For example Dutch scholar N. J. Krom (1883–1945), as we will see below, identifies the Nganjuk bronzes' largest statue as Mañjuśrī despite

[54] Manguin, introduction to *Early Interactions*, xx; Anthony Reid, *A History of Southeast Asia: Critical Crossroads* (Chichester, England: Wiley Blackwell, 2015), 31.

iconographical deviations. This synchronicity glosses over, at times even actively ignores, the genuine iconographic differences between Java's bronzes and the texts used to interpret them. Synchronicity also obfuscates how one bronze from Java might be related to another across time, presenting them all as singular objects without local context and chronological situation. Post-WWII stylistics remedies the iconographic approach's potential ahistoricity. Building on the connections Le Bonheur saw between stylistically similar bronze images,[55] Klokke and Lunsingh Scheurleer in *Divine Bronze* studied stylistic changes in 114 of Classical Java's bronze objects.[56] On this basis, these two doyens of Java's art history sorted the figurines into groups reflecting, *for the first time*, a "relative dating" of the objects.[57] This chronology reflected, in careful detail, what they believed to be Classical Java's growing cultural independence from India, as the region gradually stopped importing Indian bronzes and developed its own indigenous idiom.[58] Klokke and Lunsingh Scheurleer's paradigm, however, showcases how prior assumptions can structure the way one interprets the evidence – foreclosing other possible concepts of dynamics of artistic interaction.

Dutch scholarship, much of it prior to WWII, emphasised what iconographic analysis, grounded in the philological study of Old Javanese and Sanskrit texts, could reveal about Java's bronzes. Dutch scholars, although they debated how much local agency Javanese society exercised in relation to India, broadly agreed with their colleague F. D. K. Bosch (1887–1967) in seeing between both entities a substantial cultural unity.[59] In his celebrated 1946 lecture at Leiden University, Bosch portrayed the fusion of Indian and Indonesian elements using the language of fertilisation: "Indian spirit" as fecundating Indonesia's "living matter," birthing "an independent organism in which foreign and native elements were to merge into *an*

[55] Albert Le Bonheur, *La Sculpture Indonésienne Au Musée Guimet* (Paris: Presses Universitaires de France, 1971).
[56] Lunsingh Scheurleer and Klokke, *Ancient Indonesian Bronzes*, 166.
[57] Lunsingh Scheurleer and Klokke, *Ancient Indonesian Bronzes*, 23
[58] Lunsingh Scheurleer and Klokke, *Ancient Indonesian Bronzes*, 23.
[59] Kwa, introduction to *Early Southeast Asia*, xxxi.

indissoluble entity."[60] This "biological metaphor," as seminal Southeast Asian historiographer Kwa Chong Guan rightly calls it, demonstrates how in Java, Indian and Southeast Asian elements entwined inextricably to form a continuous cultural whole.[61]

Assuming a South-Southeast Asian cultural unity without disjuncts, Dutch scholars use the information gleaned from Indian and Javanese texts to interpret the iconographies of Java's bronze objects. Dutch doctoral training encouraged this seamless movement across texts. When studying oriental philology at Leiden University, luminaries like Bosch, H. H. Juynboll (1867–1945) and W. F. Stutterheim (1892–1942) studied Sanskrit and Old Javanese.[62] In so doing, they discerned the ideological and linguistic connections between both languages, which formed the cultural databank informing how they and other Dutch scholars interpreted art objects like the bronzes.

Bosch and fellow Dutch scholar Krom's interpretation of bronze objects from Java demonstrates this interplay between iconography, philology, and bronze-object. Bosch's study interprets a bronze prayer bell (*ghaṇṭā*) acquired by a Malang plantation-owner.[63] Bosch considers this *ghaṇṭā*'s handle, shaped like a hand grasping a human thighbone, iconographically unique.[64] Bosch argues the thighbone is a substitute for the *vajra* ("thunderbolt"), a common element found on Hindu-Javanese bells.[65] To substantiate this argument, Bosch cites Book Three of the Sanskrit *Mahābhārata* epic, which recounts how the sage Dadhīca immolates himself so that the gods might forge from his bones a *vajra*, the

[60] F. D. K. Bosch, "The Problem of the Hindu Colonisation of Indonesia," in *Selected Studies in Indonesian Archaeology*, ed. F. D. K. Bosch (Dordrecht: Springer Netherlands, 1961), 20. Emphases mine.
[61] Kwa, introduction to *Early Southeast Asia*, xxxi.
[62] Robert Heine-Geldern, "Obituary: H. H. Juynboll—N. J. Krom—Willem F. Stutterheim," *The Far Eastern Quarterly* 5, no. 2 (1946): 216–7; P. H. Pott, "In Memoriam F.D.K. Bosch," *Bijdragen Tot de Taal-, Land- En Volkenkunde* 123, no. 4 (1967): 411; Daud A. Tanudirjo, "Theoretical Trends in Indonesian Archaeology," in *Theory in Archaeology: A World Perspective*, ed. Peter J. Ucko (London: Routledge, 1995), 67.
[63] F. D. K. Bosch, "The God with the Horse's Head," in *Selected Studies in Indonesian Archaeology*, ed. F. D. K. Bosch (Dordrecht: Springer Netherlands, 1961), 137.
[64] Bosch, "Horse's Head," 138.
[65] Bosch, "Horse's Head," 138.

weapon by which the god Indra slays the serpent-demon Vṛtra.[66] Since India's *Mahābhārata* depicts the creation of a *vajra* from human bones, reasons Bosch, the Javanese thighbone-*vajra* substitution is plausible.

Krom, while chief of the Netherlands Indies' Archaeological Service,[67] similarly relied on texts to interpret the Nganjuk Bronzes, a hoard discovered in 1913.[68] Consider the hoard's largest statue, the iconographical attributes of which include four heads and two arms holding "a vajra in front of [its] breast."[69] Krom proposed this deity is Mañjuśrī because the Dharmadhātu Vāgīśvara form of Mañjuśrī, known from a 10th-century commentary on the Sanskrit *Mañjuśrīnāmasaṃgīti*, also has four heads.[70] This identification is imperfect however. Krom acknowledged that Dharmadhātu Vāgīśvara has eight arms, not two like the Nganjuk statue – but he made the identification anyway.

As can be seen, there are flaws in the Dutch iconographic approach. As the Mañjuśrī-identification Krom wanted to see demonstrates, scholars slip into finding what they want to find in the evidence. In the process, scholars gloss over critical iconographic differences shaped by idiosyncratic local contexts – a problem exacerbated by the Dutch *a priori* assumption of a South-Southeast Asian cultural unity. Insufficient self-reflexivity accompanies their interpretations, so much so that researchers like Krom did not realise they were not so much making identifications, as drawing productive analogies between sources. Consequently, Dutch scholars present Java's bronzes as isolated objects divorced from their local contexts. This problem persisted after WWII, as exemplified in A. J. Bernet Kempers' work to revive

[66] Bosch, "Horse's Head," 138–9; for a translation of this story, see J. A. B. van Buitenen's translation of *Mahābhārata* Book Three: J. A. B. van Buitenen, trans., *The Mahābhārata: 2. The Book of the Assembly Hall. 3. The Book of the Forest* (Chicago, IL: University of Chicago Press, 1975), 416–8.
[67] C. C. Berg, "The Work of Professor Krom," in *Historians of South East Asia*, ed. D. G. E. Hall (London: Oxford University Press, 1961), 166.
[68] N. J. Krom, "The Bronze-Find of Ṅañjuk," in *Cultural Horizons of India*, Vol. 4 (New Delhi: International Academy of Indian Culture and Aditya Prakashan, 1995), 108.
[69] Krom, "Ṅañjuk," 111.
[70] Krom, "Ṅañjuk," 112. For more on Dharmadhātu Vāgīśvara and the *Mañjuśrīnāmasaṃgīti*, see: Ronald M. Davidson, "The *Litany of Names of Mañjuśrī*," in *Tantric and Taoist Studies in Honour of R. A. Stein*, ed. Michel Strickmann, Vol. 1 (Brussels: Institut Belge des Hautes Études Chinoises, 1981), 12.

Indonesian art history: *Ancient Indonesian Art* (1959). Shaped by the Dutch approach, the work discusses numerous Java bronzes but cannot suggest their relationships to one another. Klokke and Lunsingh Scheurleer rightly criticise the volume's minimal "comparative analysis or contextual interpretation."[71] Without proposed dates, each object appears as a singular entity, without context and out of history.[72]

The post-war attention to stylistics that began with Le Bonheur combated the isolationist approach resulting from over-reliance on iconography and philology. Le Bonheur pioneered applying stylistic analysis to Indonesia's bronze images. Complete with photographs of the Musée Guimet's Indonesian metal statuary, the 1971 catalogue that was *La Sculpture Indonésienne au Musée Guimet* meticulously described each metal object's stylistic elements, then adduced stylistically similar pieces from other European collections.[73] The catalogue item "12 895," tentatively a 10-12th century Javanese Lokanātha, illustrates how Le Bonheur deploys stylistic comparison: the image's roughly cylindrical torso, elongated angular limbs, slightly right-tilted head and winding lotus stem around the left arm evoke the Nganjuk bronzes' style.[74]

Lunsingh Scheurleer recognised that Le Bonheur pioneered something novel by applying stylistics to the study of Javanese bronze deity images. With *La Sculpture Indonésienne*, Le Bonheur had broken the "long silence" that fell on the field after WWII:[75]

> Here, for the first time, a new course of investigation was taken. By discussing the *stylistic* features of every object in great detail and by *providing stylistically related bronzes from other collections,* the author made a start in forming *stylistically related groups*.[76]

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[71] Introduction to *Ancient Indonesian Sculpture*, 2.
[72] For these bronzes without possible dates, see: A. J. Bernet Kempers, *Ancient Indonesian Art* (Amsterdam: C. P. J. van der Peet, 1959), 63–65.
[73] Lunsingh Scheurleer, "Central Javanese Group," 23; Mathilde Mechling, "Buddhist and Hindu Metal Images of Indonesia: Evidence for Shared Artistic and Religious Networks across Asia (c. 6th–10th Century)," Vol. 1 (PhD Diss., Université Sorbonne Nouvelle – Paris 3; Leiden University, 2020), 21.
[74] Le Bonheur, *La Sculpture Indonésienne*, 148–9.
[75] Pauline Lunsingh Scheurleer, "A Particular Central Javanese Group of Bronzes," in *Studies in South and Southeast Asian Archaeology. No. 2. Essays Offered to Dr. R. Soekmono*, ed. H. I. R. Hinzler (Leiden: Koentji Press, 1988), 23.
[76] Lunsingh Scheurleer, "Central Javanese Group," 23. Emphases mine.

Le Bonheur might have done something innovative with stylistics, but Lunsingh Scheurleer and her colleague Klokke elaborated on his approach in their own work: *Divine Bronze*.

In *Divine Bronze*, Klokke and Lunsingh Scheurleer emphasise changes in the style of bronze figures which reflect changes over time.[77] This method was, in some sense, of French origin. Le Bonheur aside, Klokke and Lunsingh Scheurleer drew from École française d'Extrême-Orient art historian Philippe Stern (1875–1979)'s *méthode*. Per Kwa's summary, Angkor scholar Stern conducted "microscopic examinations of [Khmer] architectural and sculptural motifs."[78] To determine the Bayon temple's date, Stern ordered these motifs, "which he assumed would change in a predictable linear rather than random sequence," into a relative chronology – inventing *la méthode* stylistique which archaeologist Jean Boisselier (1912–1996) extended to Khmer statuary[79] and Mireille Bénisti to Indian art.[80] By attempting a similar "chronological survey," Lunsingh and Klokke in *Divine Bronze* made for Indonesia's bronzes *"*the first attempt at establishing a relative dating for the figurines of deities."[81]

Unlike prior Dutch scholars, Lunsingh Scheurleer and Klokke imbued *Divine Bronze*'s relative chronology with what they understood to be Java's evolving relationship with India. The two divide this progression into seven stylistic groups over the 7-11th centuries; these are *Divine Bronze*'s seminal scholarly contribution. They saw in Java no static, unchanging gestalt but a vibrant local society that first actively imported its bronzes from different parts of India (Groups One and Two), then began developing its own idiosyncratic local style (Groups Three

[77] Lunsingh Scheurleer and Klokke, *Ancient Indonesian Bronzes*, 23.
[78] Kwa Chong Guan, *William Willetts and the Practice of Asian Art History* (Singapore: NUS Museum, 2020), 24.
[79] Jean Boisselier, *Trends in Khmer Art*, ed. Natasha Eilenberg, trans. Natasha Eilenberg and Melvin Elliott (Ithaca, NY: Southeast Asia Program, Cornell University, 1989),23.
[80] Strictly speaking, Bénisti applies *la méthode to both Indian and Khmer art, but it is her work on the Indian material that develops further Stern's work. See:* Mireille Bénisti, *Stylistics of Early Khmer Art*, 2 vols. (New Delhi: Indira Gandhi National Centre for the Arts, 2003).
[81] "Pauline Lunsingh Scheurleer, "Bronze Images and Their Place in Ancient Indonesian Culture," in *Ancient Indonesian Sculpture*, ed. Marijke J. Klokke and Pauline Lunsingh Scheurleer (Leiden: KITLV Press, 1994), 76.

to Five).[82] Groups Six and Seven comprise non-Javanese bronzes and do not participate in Lunsingh Scheurleer and Klokke's chronology.[83] For our purposes, only the features of Groups One to Five matter:[84]

Group Number	Proposed Time Period (CE)	Style Name and Key Stylistic Characteristics
One	600–800+	**South India-influenced Style.** Not a unified style, as Java imported these bronzes from different parts of South India, including Amarāvatī and Kerala, and Sri Lanka.
Two	775–875+	**Pāla-influenced Style.** Not a unified style, as Java imported these bronzes from different parts of Pāla India, each with its own regional style.
Three	850–Unclear	**Central Javanese Style:** a "purely independent, Javanese style" free from Indian influence. Standing figures stand straight and "upright" with "no flexion in the body." Body and limbs are slim but not elongated. The "[n]ipples, navel and the iconographically prescribed three folds in the neck are always indicated," but detailing is otherwise cursory. Seated figures have soft, "equably moulded" facial features, and generally "seated upright with crossed legs, the right placed over the left" (*sattvaparyaṅka*).
Four	Unclear, but between Three and Five	**Intermediate style between Groups Three and Five:** characteristics are generally a mix of what we meet in Groups Three and Five.
Five	975–1050	**Early East Javanese Style/Nganjuk Style:** spiky ornamentation that is heavy and obtrusive. Figures wear three bracelets, a girdle round the upper part of the body (*udarabandha*) and at least one necklace. "All of them wear a head-dress consisting of a diadem set with five triangular ornaments, the central one and the ones at either side a little larger than the two in between."

[82] Lunsingh Scheurleer and Klokke, *Ancient Indonesian Bronzes*, 38–39; Lunsingh Scheurleer, "Central Javanese Group," 28–29.
[83] Lunsingh Scheurleer and Klokke, *Ancient Indonesian Bronzes*, 35–39.
[84] Information in the table is taken from: Lunsingh Scheurleer and Klokke, *Ancient Indonesian Bronzes*, 24–35; I have also consulted Lunsingh Scheurleer, "Central Javanese Group," 28–29, because she summarises their findings more succinctly there. Where the information is taken from elsewhere, I have included footnotes in the table.

Stylistic analysis revealed for Lunsingh Scheurleer the cultural changes taking place in Classical Java, doing what iconographic studies could not. For Lunsingh Scheurleer, the development of Group Three meant that Javanese bronzesmiths had mastered Group One and Two's Indian motifs and now sought to develop their own indigenous style. In her estimation, Javanese culture had reached maturity, forging in the mid-9th century something "purely independent" and "Javanese."[85] Some cultural changes were religious in character. Lunsingh Scheurleer and Klokke noticed that Hindu deity images vanished from Group Four onward, suggesting that their production ceased by the end-10th century – a century before Buddhist bronze production, and bronze figurine production more broadly, ended in the 11th century after Group Five.[86] This differential disappearance, Hindu before Buddhist, could indicate Hinduism's declining popularity relative to Buddhism as political power shifted from Central to East Java circa the 10th century.[87]

Lunsingh Scheurleer and Klokke's Indianisation framework, however, hampered their interpretations, underscoring the fact that stylistic analysis did not overcome all iconographic and stylistic analysis' limits. For these two scholars, Indianisation meant diametric opposition between Java and India. While their paradigm affirmed local agency, it presented both regions as caricatures. Groups One and Two reproduce notions of Indian superiority, recoding the "Greater India" paradigm in artistic terms. Java during this early period appears as the overly-passive recipient of foreign culture – a mere importer of foreign bronzes, its craftsmen struggling to learn from Indian masters and masterpieces.[88] Such a perspective risks assigning

[85] Lunsingh Scheurleer, "Central Javanese Group," 28.
[86] Lunsingh Scheurleer and Klokke, *Ancient Indonesian Bronzes*, 39; Lunsingh Scheurleer, "Bronze Images and Their Place," 77.
[87] This shift marks the transition of Indo-Javanese culture from the Central Javanese period (c. 700–930 CE) to the East Havanese period (c. 930–early 16th century). As Lunsingh Scheurleer and Klokke note, "[t]he date of 930 marks a shift of the governmental seat from Central to East Java during the reign of Siṇḍok." For more, see: Lunsingh Scheurleer and Klokke, *Ancient Indonesian Bronzes*, 23.
[88] Lunsingh Scheurleer, "Bronze Images and Their Place," 77.

too much agency to India, and over-simplifies the complex, continual dialogue between both India and Java.

All this talk of dichotomies might encourage us to see the art history of Java's two methodological thrusts as a dichotomy, too. Dutch iconography rooted in texts offered a synchronic perspective on Java's bronzes, whereas "French" stylistics suggested how Java's bronzes changed over time. If pre-WWII iconography-philology disclosed ideological connections – or at least productive analogies – between Java's bronzes and texts elsewhere in South-Southeast Asia, this approach also reveals the dangers of forcing these objects to fit their putative texts. If post-war stylistic analysis showcased diachronic change's particularities in great detail, it emphasised how the paradigms we take for granted can structure our interpretations. Traditional art historical approaches like iconography and stylistics, fortunately, are not the sum of all possible approaches for studying Java's material culture. In the next section, we turn to techniques borrowed from archaeology.

Why Typology II: Borrowing More Archaeological Techniques for Art History

Here I review the methods borrowed from Archaeology to study sources from Java. Typology, as far as my own research shows, has not been extensively applied to the art historical objects of Classical Java. Its application in this thesis could contribute productively to research on bronze objects from that region and timeframe. As Java's bronzes are metal objects, I also review applications of the archaeological method used to study them: archaeometallurgy. Like typology, archaeometallurgy could be applied more to Classical Java's bronzes. Much archaeometallurgical work focuses on prehistoric and mainland Southeast Asia, although more recent studies have remedied that oversight. New insight since the 2010s, provided by CAST:ING project in particular, reveals more about the methods, Esoteric Buddhist elements, and transregional dynamics of Classical Java's bronze production.

To the best of my knowledge, the only existing application of typology to Classical Java's art historical objects is Indonesian archaeologist and art historian Edi Sedyawati's PhD dissertation on Gaṇeśa statues, published as *Gaṇeśa Statuary of the Kaḍiri and Siṇhasāri Periods: A Study of Art History*.[89]As she acknowledges, her typological approach "does not follow the example of any prior practice in carrying out studies of statues made during the period of Hindu-Buddhist influence."[90] For Sedyawati, art history is a "branch of archaeology" from which the cultural history of Indonesia's Kadiri (broadly 12th century) and Singhasari (1221–1292 CE) periods can be constructed.[91] Sedyawati observes in a sample of 169 Gaṇeśa stone statues[92] 335 stylistic and iconographic elements she calls "variables."[93] Using these variables, Sedyawati sorts the Gaṇeśa statues into 24 "groups" (labelled A–X).[94] On the basis of these groups, she hypothesises that Kadiri sculptors "developed their own creativity in the formulation of Gaṇeśa statues, independent from the centre."[95] During the later Singhasari period however, "strong political direction by the central government" caused the emergence of a "'unified' statuary style" to replace the Kadiri-period variability in statue design.[96]

Like typology, archaeometallurgy's relationship with Classical Java's bronzes is one of missed opportunity, as encapsulated by the Australian National Gallery's 1978 publication, *Seven Bronzes from Southeast Asia and Indonesia,* part one. Conducting a comprehensive technical analysis of two Classical-period Khmer bronze images, Part One determined the

[89] Edi Sedyawati, *Gaṇeśa Statuary of the Kaḍiri and Siṇhasāri Periods: A Study of Art History* (Leiden: KITLV Press, 1994) 10. Along with my Indonesian colleagues, I note with sorrow the passing of Sedyawati in 2022: see Achmad Hanif Imaduddin, "Kabar Duka, Profesor Edi Sedyawati Maestro Tari dan Eks Dirjen Kebudayaan Meninggal," *Tempo.co*, November 12, 2022, https://seleb.tempo.co/read/1655969/kabar-duka-profesor-edi-sedyawati-maestro-tari-dan-eks-dirjen-kebudayaan-meninggal. The limited application of typology extends beyond Southeast Asia: one of the few South Asian examples worth noting is Indologist Klaus Bruhn's typological study of Jina images from Deogarh, Odisha. See: Klaus Bruhn, *The Jina-Images of Deogarh* (Leiden: E. J. Brill, 1969).
[90] Sedyawati, *Gaṇeśa Statuary*, 42.
[91] Sedyawati, *Gaṇeśa Statuary*, 1, 257. For these periodisations, see Miksic and Goh, *Ancient Southeast Asia*, 419, 463.
[92] Sedyawati, *Gaṇeśa Statuary*, 10.
[93] Sedyawati, *Gaṇeśa Statuary*, 270–84. On what she means by style and iconography, see: p. 25.
[94] Sedyawati, *Gaṇeśa Statuary*, 289.
[95] Sedyawati, *Gaṇeśa Statuary*, 257.
[96] Sedyawati, *Gaṇeśa Statuary*, 256–7.

bronzes' chemical composition and x-rayed them to determine their casting process.[97] Noel Barnard, the metallurgist helming the project, proclaimed his team's collaboration with the Gallery "would necessarily become a programme of study of ancient bronze casting and metal-working in Southeast Asia."[98] Riding the surge in archaeological publications that began in the mid-1960s, [99] Barnard's project promised *Seven Bronzes* part two, slated to cover the five bronze images from Indonesia not analysed in part one. Unfortunately, Barnard never published part two. It lingers in Barnard's 2017 obituary as a sorry "projected Part 2, not completed" – the *Seven Bronzes* that weren't.[100]

Seven Bronzes part two proved prophetic. Since Southeast Asian archaeology's productive flourishing in the mid-1960s, Classical Java's bronzework has constituted but a small and understudied part of Southeast Asia's bronze metallurgical studies. Scholars of that period, as we just saw with Le Bonheur, preferred using art historical methods. When archaeological research on the region surged after the mid-1960s, metallurgists emphasised prehistoric Mainland Southeast Asia. R. Smith and W. Watson's archaeological compilation *Early Southeast Asia* (1979) reflects this slant. All six publications dealing explicitly with metallurgy cover mainland Southeast Asian sites during the prehistoric period,[101] and half these chapters concentrate on Thailand.[102]

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[97] Noel Barnard, ed., *Seven Bronzes from Southeast Asia and Indonesia: Some Applications of Science in the Study of Objets d'art. Part One: Two Khmer Bronzes* (Canberra, Australia: Australian National Gallery, 1977), 30–36.
[98] Noel Barnard, introduction to *Seven Bronzes from Southeast Asia and Indonesia: Some Applications of Science in the Study of Objets d'art. Part One: Two Khmer Bronzes*, ed. Noel Barnard (Canberra, Australia: Australian National Gallery, 1977), 1.
[99] R. B. Smith and W. Watson, preface to *Early Southeast Asia: Essays in Archaeology, History and Historical Geography*, ed. R. B. Smith and W. Watson (Oxford: Oxford University Press, 1979), v, vii.
[100] Campbell, 217.
[101] R. B. Smith and W. Watson, eds., *Early Southeast Asia: Essays in Archaeology, History and Historical Geography* (Oxford: Oxford University Press, 1979), ix.
[102] D. T. Bayard, "The Chronology of Prehistoric Metallurgy in North-east Thailand: *Silābhūmi* or *Samrddhabhūmi*?", in *Early Southeast Asia: Essays in Archaeology, History and Historical Geography*, ed. R. B. Smith and W. Watson (Oxford: Oxford University Press, 1979), 15–32; I. R. Selimkhanov, "The Chemical Characteristics of Some Metal Finds from Non Nok Tha," in *Early Southeast Asia: Essays in Archaeology, History and Historical Geography*, ed. R. B. Smith and W. Watson (Oxford: Oxford University Press, 1979), 33–38; W. Watson, "Kok Charoen and the Early Metal Age of Central Thailand," in *Early Southeast Asia: Essays in Archaeology, History and Historical Geography*, ed. R. B. Smith and W. Watson (Oxford: Oxford University Press, 1979), 53–62.

Later publications reiterate this preference for mainland Southeast Asia, recalling how Barnard only published on Khmer bronzes. Ian Glover, Pornchai Suchitta and John Villiers' *Early Metallurgy, Trade and Urban Centres in Thailand and Southeast Asia* reminds us of metallurgy's focus on mainland Southeast Asia, Thailand again in particular. Its very title juxtaposes Thailand and the rest of Southeast Asia as if both regions share equal significance. Only one of the book's three metallurgy-centric papers[103] discusses Java at all, and even then as part of a narrative about Southeast Asia more broadly: Bennett Bronson's "Patterns in the Early Southeast Asian Metals Trade."[104] Khmer bronzes from the Classical Period, such as the two Barnard studied and the Kampong Cham pieces,[105] at least have been subjected to technical examinations.[106] This attention to Classical Mainland Southeast Asia does not extend to Classical Java.

The few studies of Java's bronzework from this early period discuss the Prehistoric and not Classical Period. As early as the 19th century, pre-WWII Dutch scholars were reporting they had discovered prehistoric kettledrums and assorted "socketed celts, rings, lance-heads, human and animal figurines, and ceremonial axes of various shapes" in Java.[107] While not archaeometallurgical studies, these early finds associated bronze artefacts with Java's

[103] Ian Glover, Pornchai Suchitta, and John Villiers, eds., *Early Metallurgy, Trade and Urban Centres in Thailand and Southeast Asia*. Bangkok: White Lotus, 1992), 5–6.
[104] Bennet Bronson, "Patterns in the Early Southeast Asian Metals Trade," in *Early Metallurgy, Trade and Urban Centres in Thailand and Southeast Asia*, ed. Ian Glover, Pornchai Suchitta, and John Villiers (Bangkok: White Lotus, 1992), 63–114.
[105] Noel Barnard, ed., *Seven Bronzes*, 18–36; Paul Jett, "A Technical Study of the Kampong Cham Figure Group," in *Gods of Angkor, Bronzes from the National Museum of Cambodia*, ed. Louise Cort and Paul Jett (Washington, D.C.: Smithsonian Institute, 2010), 78–87.
[106] David Bourgarit, Benoit Mille, Thierry Borel, Pierre Baptiste, and Thierry Zéphir, "A Millennium of Khmer Bronze Artifacts: A Technical Study of Seventy-Five Bronze Artefacts from the Musée Guimet and the Phnom Penh National Museum," in *Scientific Research in the Field of Asian Art: Proceedings of the First Forbes Symposium at the Freer Gallery of Art*, ed. Paul Jett (Washington, D.C.: Archetype Publications, 2003), 103–26; Brice Vincent, David Bourgarit, and Paul Jett, "Khmer Bronze Metallurgy during the Angkorian Period (Twelfth to Thirteenth Centuries): Technical Investigation of a New Selected Corpus of Artifacts from the National Museum of Cambodia, Phnom Penh," in *Scientific Research on Ancient Asian Metallurgy: Proceedings of the Fifth Forbes Symposium at the Freer Gallery of Art*, ed. Paul Jett, Blythe McCarthy, and Janet G. Douglas (Washington, D.C.: Archetype Publications, 2012), 124–53; Pieter Meyers, "Authenticity Testing and Dating of Bronze Sculpture Casting Cores," in *Khmer Bronzes: New Interpretations of the Past*, ed. Emma C. Bunker and Douglas Latchford (Chicago, IL: Art Media Resources, 2011), 473–80.
[107] R. P. Soejono, "The History of Prehistoric Research in Indonesia to 1950," *Asian Perspectives* 12 (1969): 71.

prehistory. Reproducing this connection, Indonesian archaeologist R. P. Soejono, the only scholar from the late-1960s to conduct metallurgical analyses, opted to study Java's prehistoric bronze cultures. As he recounted in a 1978 UNESCO publication on Asia's bronze cultures, Soejono attempted C14 carbon dating of bronzes from his two excavations: Gilimanuk in Bali (excavated 1960s) and Pasir Angin in West Java (excavated 1970s).[108] Gilimanuk's "ceremonial axes" and "various kinds of adornments" date to the turn of the common era, while Pasir Angin's "axes (generally of the swallow-tail type), stylized human figurines, a bronze stick bearing a concentric circle design, and bowls" date inconclusively to several centuries before or after the turn of the common era.[109] Neither deriving from mainland Southeast Asia nor the Prehistoric Period, Classical Java's bronzes seem like an afterthought.

Afterthought status notwithstanding, the little archaeometallurgical research that does discuss Classical Java's bronzes reveals crucial knowledge that art historical methods cannot unearth. We know the general alloy composition of, and how craftspeople made, Java's bronzes. While largely art historical, Lunsingh Scheurleer and Klokke's, Chutiwongs' and Le Bonheur's studies discuss these metallurgical findings. These objects are primarily an alloy of copper and tin.[110] Although, as Chutiwongs notes, the bronze mixture has no fixed formula, its composition usually contains "more than eight types of metals," including small amounts of lead and zinc and "negligible quantities of iron, nickel, silver, antimony and arsenic."[111] These scholars also noted the two methods for casting Java's bronzes. On one hand, bronzesmiths could employ the lost wax (*cire perdue*) method. They first shape the deity image on a wax-coated clay internal core, encase the wax image in an external clay layer, then pour molten bronze into the resultant clay mould – the bronze image taking shape as the hot bronze melts and takes the

[108] R. P. Soejono, "Ancient Bronze Culture of Indonesia," in *Bronze Culture in Asia* (Tehran: Asian Cultural Documentation Centre for UNESCO, Tehran, 1978), 36–37.
[109] R. Soejono, "Ancient Bronze Culture of Indonesia," 37.
[110] Lunsingh Scheurleer and Klokke, *Ancient Indonesian Bronzes*, 12; Chutiwongs, 11.
[111] Chutiwongs, 11.

place of the wax,[112] a method that's earlier In the second method, bronzesmiths employed stone piece-moulds for larger objects, casting each part with these reusable moulds, then welding the parts together to form the complete figure.[113] As the latter method of mechanical assembly "is more common for earlier statues" than the lost wax method, knowing how an object was cast helps scholars place them chronologically.[114]

We also know from Southeast Asia's copper and tin metal reserve distribution that regional trade enabled Classical Java to produce bronze images. Bennett Bronson's aforementioned paper tells us that "metal-poor" Java had limited copper deposits and no tin *at all*.[115] East and West Java each possess "modest amounts of copper ore," with each deposit containing 1000–100,000 tons of ore.[116] Most of this ore is low-grade, its minimal usable portions probably "mined out long before the arrival of European observers" in the 16th century.[117] In contrast, Mainland Southeast Asia and the Philippines boast most of Southeast Asia's high-grade copper, some deposits as large as 1000,000 tons.[118] Although tin is the premier economic metal Southeast Asia bulk-exported since the 17th century, most of it "is concentrated into a single belt that runs from the eastern side of central Burma down through the Kra Isthmus and the Malay Peninsula to the islands of Singkep, Bangka and Belitung."[119] Without local ores of either copper or tin – bronze's main components – Java "must have been largely or entirely dependent on imports from within or outside the region."[120] In order to produce Classical Java's bronzes, craftsmen had to acquire copper and tin from regional trade.

[112] Lunsingh Scheurleer and Klokke, *Ancient Indonesian Bronzes*, 12.
[113] Le Bonheur, 30.
[114] Mathilde Mechling, Brice Vincent, Pierre Baptiste and David Bourgarit, "The Indonesian Bronze-Casting Tradition: Technical Investigations on Thirty-Nine Indonesian Bronze Statues (7th–11th c.) from the Musée National Des Arts Asiatiques – Guimet, Paris," *Bulletin de l'École Française d'Extrême-Orient* 104 (2018): 77–79.
[115] Bronson, 66.
[116] Bronson, 78–79, 89.
[117] Bronson, 89.
[118] Bronson, 78–79.
[119] Bronson, 84.
[120] Bronson, 96.

Since the 1990s, metallurgists have intensified their commitment to Classical Java's bronzes. Javanese scholar Timbul Haryono pursued this line of enquiry from the 1990s to early 2000s, but only in Indonesian publications.[121] Owing to the challenge of acquiring Indonesian articles in Singapore, I regret I was unable to reference his works here. More technical studies in the 2010s, however, have clarified the early research's general conclusions. Foremost among these scholars are Mathilde Mechling, Brice Vincent, Pierre Baptiste and David Bourgarit, members of CAST:ING, a multi-disciplinary and international project dedicated to creating "a framework that will facilitate advances in the understanding of bronze sculpture."[122] Mechling and her collaborators' 2018 paper, "The Indonesian Bronze-Casting Tradition," conducted scientific analyses of the sort Barnard never managed, employing techniques like atomic spectrometry (ICP-AES) and X-ray fluorescence (XRF) to investigate 39 Indonesian bronzes from the Musée Guimet.[123] Some of their conclusions refined earlier scholarly understandings. ICP-AES showed 35 of the 39 bronzes are made of just two elements: copper alloyed with "relatively high amounts" of tin.[124] This result raises the possibility that, contrary to Chutiwongs' position, other alloyable elements occur less frequently in Java's bronzes than assumed. Through neutron radiography and tomography, the team learnt all 39 bronzes were solid rather than hollow inside.[125] They could then correct Lunsingh Scheurleer and Klokke's earlier assumption that Indonesian founders employed an "internal clay core" during the lost wax process – for the images to be internally all bronze, the prior core had to be wax that molten bronze could melt away.[126]

Mechling's team also made new discoveries. While neutron tomography revealed that the Guimet bronzes were solid, the technique also showed that all the bronzes contained small,

[121] I thank Goh Geok Yian for drawing my attention to Haryono's work.
[122] "Welcome to the CAST:ING Project," CAST:ING Project, accessed April 29, 2022, http://www.cast-ing.org/.
[123] Mechling et al., 65–66.
[124] Mechling et al., 88.
[125] Mechling et al., 78.
[126] Mechling et al., 78n28.

intentional cavities for consecration deposits.[127] Such deposits may relate to Esoteric Buddhist rituals for consecrating deity images.[128] Many of the Guimet bronzes have lost the consecration deposits, leaving their cavities hollow.[129] Examining the bronzes retaining their deposits through various techniques (including visual analysis), Mechling's team could determine that these deposits contained folded metal sheets, gold cubic coins, concave coins of indeterminate metal, beads and "[o]ther objects with variable shapes."[130] While the purpose of these deposits remains uncertain, awareness of their existence presages more comprehensive study to come.

Mechling's own research is equally cutting-edge, advocating a "multidisciplinary methodology" that not only pushes bronze studies' envelope, but reconfigures familiar Indianisation paradigms.[131] On top of the metallurgical methods delineated in her co-authored paper, Mechling employs in her PhD dissertation "art history for its methods of stylistic and iconographic analyses, religious studies for its comparative methods to understand the history and ritual function of religious images," and "archaeology for mapping the find-spots of metal images."[132] Her palette replete with so many methods, Mechling arrives at a textured picture of what the bronzes can reveal about India-Java relations. Reviving Le Bonheur's notion of a "common vocabulary" for artistic motif, Mathilde Mechling argues we should not see the two regions in terms of the simple "artistic influence of one region on another," but rather acknowledge that artistic influences happened contemporaneously without one side dominating the exchanges.[133]

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[127] Mechling et al., 78, 87–88, 100.
[128] Jan Gonda, "Pratiṣṭhā," in *Selected Studies, Volume II: Sanskrit Word Studies* (Leiden: E. J. Brill, 1975), 369–374; Stanley J. Connor, "Ritual Deposit Boxes in Southeast Asian Sanctuaries," *Artibus Asiae* 28, no. 1 (1966): 60; Yael Bentor, "The Content of Stūpas and Images and the Indo-Tibetan Concept of Relics," *The Tibet Journal* 28, no. 1/2 (2003): 33–35; Yael Bentor, *Consecration of Images and Stūpas in Indo-Tibetan Tantric Buddhism* (Leiden: E. J. Brill, 1996), 1–7.
[129] Mechling et al., 87.
[130] Mechling et al., 100–1.
[131] Mechling, "Buddhist and Hindu Metal Images," 33.
[132] Mechling, "Buddhist and Hindu Metal Images," 33.
[133] Mechling, "Buddhist and Hindu Metal Images," 31; as Mechling notes, Le Bonheur discusses the "common vocabulary" notion at: Albert Le Bonheur, "Un bronze d'époque préangkorienne représentant Maitreya," *Arts Asiatiques* 25 (1972): 143.

Not having access to the requisite scientific equipment, this thesis regrettably cannot employ archaeometallurgical methods. But in employing typology as method, this thesis recognises that approaches from archaeology, archaeometallurgy's larger discipline, can productively illuminate the bronzes – just as Mechling and her colleagues have.

Why Materiality: The Challenges of "Esoteric Buddhism"

To reiterate, I define "Esoteric Buddhism" as Buddhist thought and practice in which wrathful deities feature prominently.[134] As Linrothe argues, wrathful deities that are Esoteric Buddhist induce terror, so as to destroy the obstacles faced by supplicants along the Buddhist path.[135] I defend this definition here by reviewing other emic and etic conceptions of Esoteric Buddhism. We cannot assume these other conceptions, generally constructed using texts from non-Javanese parts of the Sanskrit Cosmopolis, apply automatically to Java's objects. But even so, we must be open to how they could shed light on objects from the region, if used carefully.

The emic Sanskrit terms for "Esoteric Buddhism" come from texts situated in ideological contexts, regions and time periods which may not pertain to Classical Javanese bronzes. "*Vajrayāna*" emerged during the mid- to late-7th century when Indian Buddhist texts, like the *Guhyasamāja Tantra* and the *Vajraśekhara Tantra*,[136] start equating the word *vajra* (meaning "thunderbolt" and "diamond") with "the indestructibility and power of the awakened, enlightened, state (*bodhi*)."[137] As the neologism "*vajrayāna*" gained currency, the term became the tradition's self-designator for distinguishing itself from Mahāyāna Buddhism.[138] But

[134] Linrothe, *Ruthless Compassion*, 3–4.
[135] Linrothe, *Ruthless Compassion*, 5, 12–13.
[136] Ronald M. Davidson, *Indian Esoteric Buddhism: A Social History of the Tantric Movement* (New York: Columbia University Press, 2002), 197.
[137] Williams, Tribe and Wynne, 146; David L. Snellgrove, *Indo-Tibetan Buddhism: Indian Buddhists and Their Tibetan Successors* (Boston, MA: Shambhala, 1987), 134. Acri, "Introduction," 3n8 cites the first edition of Williams, Tribe and Wynne to say that *Vajrayāna* emerged in the late 7th-century. I suspect the three co-authors have, between the first and their current edition, revised *Vajrayāna*'s origins to mid- to late-7th century, and so reflect this new dating here.
[138] Williams, Tribe and Wynne, 146; Snellgrove, *Indo-Tibetan Buddhism*, 129.

"*Vajrayāna*" is region-specific, referring only to Esoteric Buddhism in India and its Tibetan inheritors – but not Java.[139] "*Mantrayāna*" suffers the same problem: it actually reflects a late 11-12th century usage by Tibetan Buddhist authors Ratnākaraśānti and Advayavajra.[140] Meanwhile "*Mantranaya*" is too early. Appearing in mid-first millennium Indian texts like the *Acintyādvayakramopadeśa*, this text emphasises magical mantra usage within a Mahāyāna Buddhist framework. It does not cover Esoteric Buddhism's development as a distinct Buddhist path.[141] While meaningful within their respective limited contexts, these emic terms are not broad enough to designate what Esoteric Buddhism means in art history.

Scholars favour the popular etic term "Tantric Buddhism,"[142] which risks privileging Indian texts and the Tibetan tradition that succeeded it,[143] both of which are at best analogous comparisons to Javanese texts. "Tantric Buddhism" derives from *tantra*, the shared Indian Sanskrit term by which Indian Buddhist scriptures circa the 8th century, like the *Susiddhikarasūtra*, *Mahāvairocanābhisaṃbodhisūtra* and *Hevajra Tantra* (*HT*) referred to texts.[144] The *HT*'s programmatic opening, where the cosmic Buddha Vajrasattva addresses the Bodhisattva Vajragarbha, evidences this usage: "listen to <u>this *tantra*</u>, possessing the nature of

[139] Snellgrove, *Indo-Tibetan Buddhism*, 130.
[140] Acri, "Introduction," 3n8; Williams, Tribe and Wynne, 222n11; J. W. de Jong, "A New History of Tantric Literature in India." *Indo Koten Kenkyū [Acta Indologica]* 6 (1984): 92–3.
[141] Acri, "Introduction," 3n8; Matthew T. Kapstein, *Reason's Traces: Identity and Interpretation in Indian and Tibetan Buddhist Thought* (Boston, MA: Wisdom Publications, 2001), 236, 253n17.
[142] Indologists often equate "Tantric Buddhism" and the Vajrayāna tradition, as "Tantric Buddhism", a fact which captures how these sects self-identify as distinct from the Mahāyāna. For more, see: Snellgrove, *Indo-Tibetan Buddhism*, 136. "Tantric Buddhism" and "Vajrayāna" are used interchangeably by two authorities of Tantric Studies, Alexis Sanderson and Harunaga Isaacson, at: Alexis Sanderson, "Vajrayāna: Origin and Function," in *Buddhism into the Year 2000* (Bangkok: Dhammakaya Foundation, 1994), 87; Harunaga Isaacson, "Tantric Buddhism in India (From c. A.D. 800 to c. A.D. 1200)" (unpublished manuscript, n.d.), Pdf file, 1. This unpublished text is the revised version of: Harunaga Isaacson, "Tantric Buddhism in India (From c. A.D. 800 to c. A.D. 1200)." *Buddhismus in Geschichte und Gegenwart, Band II* (Hamburg: Universität Hamburg, 1998), 23–49.
[143] Acri, "Introduction," 3; Charles D. Orzech, Richard K. Payne and Henrik H. Sørensen, "Introduction: Esoteric Buddhism and the Tantras in East Asia: Some Methodological Considerations," in *Esoteric Buddhism and the Tantras in East Asia*, ed. Charles D. Orzech, Richard Karl Payne and Henrik H. Sørensen (Leiden: Brill, 2011), 7.
[144] The *Susiddhikarasūtra* is known from its 726 CE translation into Chinese; its original Sanskrit has been lost. The *Mahāvairocanābhisaṃbodhisūtra* "was probably composed sometime between the mid-sixth and seventh centuries" and was first translated into Chinese in 724–5 CE. See: *The Princeton Dictionary of Buddhism*, comp. Robert E. Buswell Jr. and Donald S. Lopez Jr. (Princeton, NJ: Princeton University Press, 2014), s.vv. "Susiddhikarasūtra," "Mahāvairocanābhisaṃbodhisūtra."

wisdom and means, which is recited here by me" (*prajñôpāyâtmakaṃ tantraṃ tan me nigaditaṃ śṛṇu*; *HT* I.i.7cd)![145]

Post-9th century Tibetan Buddhism adopts this meaning but reorganises Tantric Buddhism so completely that Tibetan categories anachronistically structure how scholars understand this earlier Indian tradition.[146] Consequently, attributing "*tantra*" or "Tantric" to the earlier Indian 8-9th century texts could be problematic. Tibetan Buddhism's fourfold classificatory scheme for Buddhist texts embodies this problem. More than 450 texts are classified as belonging to four classes of *tantras*: the Kriyā, Caryā, Yoga and Anuttarayoga *tantras*. A "common classification"[147] peddled by historical Tibetan commentators and modern scholars who accepted the divisions unquestioningly;[148] this cherished system "seems to have been tied to the rise of the Sa skya [Sakya] school" as its power eclipsed the other Tibetan Buddhist schools and their respective doxographies.[149] Indeed, the term *anuttarayoga* does not appear in Indian doxographies as recent as the late 8th-century.[150] The tetrapartite scheme first appears much later, in the 12th-century texts of Tibetan Sakya school patriarch Sa chen kun dga' snying po (1092–1158).[151] Rather than a system universally valid across Esoteric Buddhism's many strains, the fourfold Sakya doxography represents a "particular Tibetan conception of the Indian tradition" in the 12th-century that cannot be generalised across the Sanskrit Cosmopolis.[152]

"Tantric Buddhism's" situatedness underscores how existing attempts to interpret Buddhism in Java as Tantric are, at best, productive comparisons. The tendency to juxtapose Tibet and Java reflects how, as Max Nihom argues, "exaggerated emphasis [has been] given in

[145] David Snellgrove, trans., *The Hevajra Tantra: A Critical Study*, 2nd ed. (Bangkok: Orchid Press, 2010). See Snellgrove, *The Hevajra Tantra*, 14–15 for the text's dates.
[146] Ronald M. Davidson, *Tibetan Renaissance: Tantric Buddhism in the Rebirth of Tibetan Culture* (New York: Columbia University Press, 2005), ix; Williams, Tribe and Wynne, 152.
[147] Williams, Tribe and Wynne, 152.
[148] Orzech, 33.
[149] Jacob Dalton, "A Crisis of Doxography: How the Tibetans Organized Tantra during the 8th-12th Centuries," *Journal of the International Association of Buddhist Studies* 28, no. 1 (2005): 158.
[150] Yūkei Matsunaga, Introduction to *The Guhyasamāja Tantra: A New Critical Edition*, ed. Yūkei Matsunaga (Osaka: Toho Shuppan, 1978), xviii.
[151] Dalton, "Doxography," 158.
[152] Williams, Tribe and Wynne, 153.

the secondary literature to Tibetan sources" in the historiography of Tantric Studies.[153] Consider philologists A. Teeuw and Stuart Robson's 1981 translation of the *Kuñjarakarṇa Dharmakathana*, an Old Javanese Buddhist text the oldest manuscript of which "dates from the mid-14th century."[154] According to them, Canto 14's description of the ten guardians of the directions (*lokapāla*) constitutes a system "extensively known" in Old Javanese that "is also known from Nepalese Tantrism and in Tibetan Buddhist Tantrism."[155] Not being Tantric Studies experts, Teeuw and Robson cite for this comparison L. A. Waddell's dated *The Buddhism of Tibet and Lamaism* (1934).[156] Yet the comparison only reinforces the fact that a striking comparison need not imply a cultural connection.

The last term we must reckon with is "Esoteric Buddhism" itself, a particularly challenging endeavour for three reasons. First, some scholars understand it amorphously as a "diverse array of strands, orientations, and historical trends."[157] Such breadth cannot apprehend Java's region-specific configuration of Buddhism, not to mention the island's bronze objects. Second, Buddhologists like Charles Orzech who seek a "working definition"[158] calquing aspects of the other terms discussed earlier also end up with a too-broad meaning. The traits making up such a definition of Esoteric Buddhism include Tantric Buddhist elements like "ritual violence, transgressive devotional practices," the use of *maṇḍalas* and secret initiation (*abhiṣeka*) by a master.[159] Other traits include Mahāyāna elements such as using mantras for "this-worldly and other-worldly purposes," visualisation practices and analogical

[153] Max Nihom, *Studies in Indian and Indo-Indonesian Tantrism: The Kuñjarakarṇadharmakathana and the Yogatantra* (Vienna: Institut fur Indologie der Universitat Wien, 1994), 12.
[154] According to John Miksic, "[t]he oldest surviving text of the poem dates from the mid-14th century; previous versions, perhaps oral, must have existed in the 13th century." See: *Historical Dictionary of Ancient Southeast Asia*, comp. John N. Miksic (Lanham, MD: Scarecrow Press, 2007), s.v. "Kunjarakarna."
[155] A. Teeuw and Stuart Robson, introduction to *Kuñjarakarṇa Dharmakathana: Liberation through the Law of the Buddha*, trans. A. Teeuw and Stuart Robson (The Hague: Martinus Nijhoff, 1981), 2, 24.
[156] Teeuw and Robson, introduction to *Kuñjarakarṇa Dharmakathana*, 222.
[157] Acri, "Introduction," 3.
[158] Charles D. Orzech, "The 'Great Teaching of Yoga,' the Chinese Appropriation of the Tantras, and the Question of Esoteric Buddhism," *Journal of Chinese Religions* 34, no. 1 (2006): 68.
[159] Acri, "Introduction," 3–4; Williams, Tribe and Wynne, 148–9. For a broader list of Esoteric Buddhist traits, too broad for the scope of this thesis, see: Williams, Tribe and Wynne, 147–151.

correspondences between different esoteric ideas.[160] For example, a practitioner might identify particular mantras and Buddhist deities with their body parts.[161] Given how these traits privilege Buddhism's ritual and philosophical aspects, their currency when applied to art historical material is limited.

Third, "Esoteric Buddhism" may privilege the Japanese Buddhist Shingon tradition,[162] echoing the problematic and anachronistic relationship between Tibetan and Tantric Buddhism discussed earlier. The term "esoteric" originates with Shingon founder Kūkai (779–835 CE), who studied with the Buddhist master Amoghavajra's (705–774) lineage in China.[163] After returning to Japan, Kūkai created a doxography distinguishing *mikkyō* (密教, "esoteric") and non-*mikkyō* ("exoteric") Buddhist texts.[164] By identifying Shingon with the *mikkyō* texts, Kūkai presented his lineage as superior to other forms of Japanese Buddhism: the natural teleological conclusion of *mikkyō*'s development.[165] As Richard McBride astutely observes, Buddhologists are actually referring to Kūkai's invention of the *mikkyō* when they speak of a distinct Esoteric Buddhist lineage that descended unbroken through Chinese Buddhist masters Śubhakarasiṃha (637–735 CE), Vajrabodhi (671–741 CE) and Amoghavajra (705–774) – not some self-evident, universal system.[166] Geoffrey Goble is right to warn that Buddhologists impose "an anachronistic projection of Japanese norms and institutions" when they unknowingly apply Kūkai's doxography to other contexts.[167] I will cover some Javanese examples of this in the next section.

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[160] Acri, 3; Williams, Tribe and Wynne, 147, 150.
[161] Williams, Tribe and Wynne, 150.
[162] Orzech, Payne and Sørensen, 7.
[163] Robert H. Sharf, "On Esoteric Buddhism in China," in *Coming to Terms with Chinese Buddhism: A Reading of the* Treasure Store Treatise (Honolulu, HI: University of Hawai'i Press, 2002), 265.
[164] Robert H. Sharf, "On Esoteric Buddhism in China," in *Coming to Terms with Chinese Buddhism: A Reading of the* Treasure Store Treatise (Honolulu, HI: University of Hawai'i Press, 2002), 265.
[165] Sharf, 265; Richard D. McBride II, "Is There Really 'Esoteric' Buddhism?" *Journal of the International Association of Buddhist Studies* 27, no. 2 (2004): 330.
[166] Richard D. McBride II, "Is There Really 'Esoteric' Buddhism?" *Journal of the International Association of Buddhist Studies* 27, no. 2 (2004): 330.
[167] Geoffrey Goble, "The Politics of Esoteric Buddhism: Amoghavajra and the Tang State," in *Esoteric Buddhism in Mediaeval Maritime Asia*, ed. Andrea Acri (Singapore: ISEAS, 2016), 125n7.

Why "*Maṇḍala*"?: The Problem of "*Maṇḍalas*" in Java

Now recall that this thesis' definition of "*maṇḍala*" has two criteria. Borrowing from Kimiaki Tanaka, it is first "an icon that represents the worldview of Buddhism, or Buddhist cosmology and philosophy, by arranging Buddhist deities in accordance with a specific pattern."[168] Second, in order for such *maṇḍalas* to be considered Esoteric Buddhist, their deity patterns must match descriptions from known Esoteric Buddhist texts. I adopt this stringent definition because one recurrent strategy for perceiving Esoteric Buddhism in Classical Java depends on labelling the region's material culture "*maṇḍalas*" – a strategy which, as we shall see, has not always been employed with rigour.

The Nganjuk and Surocolo Bronzes appear foremost as examples of this strategy. Although an expert in Esoteric Buddhism, Tanaka's unfamiliarity with Classical Java led him to repeat a common claim in 2015:

> […] we can confirm the prevalence of yoga tantras in Java from the three[-]dimensional Vajradhātu-maṇḍala from Nganjuk. Moreover, another set of the three[-]dimensional Vajrasattva-maṇḍala from Surocolo is, as Dr. Keiji Matsunaga made clear, based on the *Samāyoga-tantra*, the ninth of the 18 yoga tantras of the Vajraśekhara cycle.[169]

Both hoards, the argument goes, are clearly identifiable with *maṇḍalas* described in the *Yoga Tantra* class of texts discussed earlier. In reading the Nganjuk Bronzes as the Shingon tradition's *Vajradhātu maṇḍala*, Tanaka repeats the 1988 claims of Lunsingh Scheurleer and Klokke,[170] who repeats the 1964 claims of K. W. Lim,[171] who repeats the 1929 claims of

[168] Kimiaki Tanaka, *An Illustrated History of the Maṇḍala: From Its Genesis to the* Kālacakratantra (Somerville, MA: Wisdom Publications, 2018), 2.
[169] Kimiaki Tanaka, "Comparing the Cross-Cultural Exchanges of Esoteric Buddhism through Overland and Maritime Silk Roads," in *Ancient Silk Trade Routes: Selected Works from Symposium on Cross Cultural Exchanges and Their Legacies in Asia*, edited by Dashu Qin and Jian Yuan (Singapore: World Scientific, 2015), 234. Italics mine, to make clear that the *Samāyoga Tantra* is a text.
[170] Lunsingh Scheurleer and Klokke, *Divine Bronzes*, 16, 35.
[171] K. W. Lim, "Studies in Later Buddhist Iconography," *Bijdragen Tot de Taal-, Land- En Volkenkunde* 120, no. 3 (1964): 327–9.

Bosch.[172] Bosch's conclusion, however, is only tentative. Ignoring most statues, he only tries to map 37 of the 90 Nganjuk statues to the Vajradhātu-maṇḍala's "central square."[173] Not able to match many minor attendant-deities of the 37 to their Japanese iconographies conclusively, he simply says these statuettes are "characterized by a distinct form of mudrā."[174] He acknowledges that "a close comparison between the original bronzes and the original Japanese pictures" is necessary before identifying them as the Vajradhātu, but this is "a comparison [he has] not been able to undertake as yet" – nor ever did.[175]

The Surocolo identification could also use more rigour. Not having Japanese, I regrettably could not consult Matsunaga's 1999 PhD thesis equating the Surocolo bronzes with the Vajrasattva-maṇḍala of the *Samāyoga Tantra* (*ST*),[176] an *Anuttarayoga Tantra* text that survives largely in Tibetan.[177] But Lokesh Chandra and Sudarshana Devi Singhal's 1995 interpretation is shaky. They identify the Surocolo Bronzes with statues from two *maṇḍalas*: of the 22, nine belong to the Vajrasattva-maṇḍala described in the Japanese Shingon tradition's *Naya-sūtra*,[178] and twelve to the *maṇḍala* of the sixteen-armed Hevajra described in the *Niṣpannayogāvalī* (*NṢP*),[179] an 11th-century Sanskrit text describing the iconographies of key Esoteric Buddhist *maṇḍalas*.[180] The duo do not account for one remaining statue, and curiously make no further mention of it. To identify both *maṇḍalas*, Chandra and Devi Singhal make iconographic claims that do not match how the statues look. For the Vajrasattva-maṇḍala, for

[172] Bosch, "Buddhist Date," 121. Bosch's 1961 chapter on this topic just cited is a translation of an article first published in 1929.
[173] Bosch, "Buddhist Data," 121.
[174] Bosch, "Buddhist Data," 122.
[175] Bosch, "Buddhist Data," 123.
[176] Keiji Matsunaga, *Indoneshia no mikkyō* [Esoteric Buddhism in Indonesia] (Kyoto: Hōzōkan, 1999). For more, see: Tanaka, *Maṇḍala*, 206, 313n630, 313n631.
[177] Tanaka, *Maṇḍala*, 199–203. The full name of the *ST* is the *Sarvabuddhasamāyogaḍākinījālasamvarakalpa*. I thank Iain Sinclair for directing me to this and other information on the *ST*. I am also thankful to Iain for sharing the information that a Sanskrit manuscript of the *ST* which he transcribed was discovered in 2018 in Nepal, but progress towards a workable edition of the text remains inchoate.
[178] Lokesh Chandra and Sudarshana Devi Singhal, "Buddhist Bronzes," 142–7.
[179] Lokesh Chandra and Sudarshana Devi Singhal, "Buddhist Bronzes," 133.
[180] Gudrun Bühnemann and Musashi Tachikawa, "Introductory Remarks," in *Niṣpannayogāvalī: Two Sanskrit Manuscripts from Nepal*, compiled by Gudrun Bühnemann and Musashi Tachikawa (Tokyo: The Centre for East Asian Cultural Studies, 1991), ix.

instance, they identify one of the Surocolo statues, labelled 66C (see figure 2.1, leftmost image), as the *Naya-sūtra*'s Rāga-vajriṇī, an accompanying goddess seated west of main deity Vajrasattva.

Figure 2.1. Lokesh Chandra and Sudarshana Devi Singhal's identification of Rāga-vajriṇī. Image source: Lokesh Chandra and Sudarshana Devi Singhal, "Buddhist Bronzes," 128.

Figure 2.2 Rāga-vajriṇī as depicted in the Japanese Shingon tradition's *Naya-sūtra*. Image source: Lokesh Chandra and Sudarshana Devi Singhal, "Buddhist Bronzes," 125.

Although 66C holds a *viśvavajra* (four-pointed *vajra*) in her right hand and a *khaṭvāṅga* (a skull-staff) in her left, the duo say she is "identical" to her *Naya-sūtra* depiction, which they provide (see figure 2.2).[181] Yet this Rāga-vajriṇī clearly wields a different implement, the fly-whisk, with both hands. Even more curiously, Chandra and Devi Singhal juxtapose 66C with "Rāgavajra, the male consort of Rāgavajriṇī" who "holds a makara-pennant" in both hands (see figure 2.1, rightmost image).[182] But we cannot assume that a male deity's iconography transfers to his female counterpart. Even if we could, Rāgavajra's staff is clearly topped with the fish-like *makara*, and not 66C's row of skulls.

As for the sixteen-armed Hevajra *maṇḍala*, the duo ignores the differences between the Surocolo statuette labelled 66N (see figure 2.3) and the *NṢP*.

[181] Lokesh Chandra and Sudarshana Devi Singhal, "Buddhist Bronzes," 133.
[182] Lokesh Chandra and Sudarshana Devi Singhal, "Buddhist Bronzes," 133.

Figure 2.3. Lokesh Chandra and Sudarshana Devi Singhal's identification of Caurī. Image source: Lokesh Chandra and Sudarshana Devi Singhal, "Buddhist Bronzes," 136.

They consider 66N to be the accompanying goddess Caurī,[183] who sits south of main deity Hevajra in the *NṢP*.[184] The *NṢP*'s Caurī has four arms which hold the "vajra, ḍamaru, hook and cranium";[185] 66N indeed holds a *vajra* in her right hand, but she only has two hands. To make the Caurī-identification more plausible, they assert that 66N's left hand, which holds a now-broken off implement, "must have held a hook".[186] Even if true, the fact remains that 66N is not a four-armed deity. Chandra and Devi Singhal use similarly creative strategies to argue that other statuettes correspond with deities from the two *maṇḍalas*, undercutting their arguments' persuasiveness.

We must, then, treat with caution interpretations of Javanese evidence through Japanese lenses, an approach that Sudarshana Devi Singhal has deployed. She interprets Borobudur and Caṇḍi Mĕndut, two 9th-century Javanese Buddhist temples, as physical representations of the

[183] Lokesh Chandra and Sudarshana Devi Singhal, "Buddhist Bronzes," 134.
[184] For this positioning, see: Lokesh Chandra and Nirmala Sharma, *Niṣpanna-Yogāvalī: Sanskrit and Tibetan Texts with English Translation* (New Delhi: International Academy of Indian Culture and Aditya Prakashan, 2015), 65.
[185] Lokesh Chandra and Sudarshana Devi Singhal, "Buddhist Bronzes," 134.
[186] Lokesh Chandra and Sudarshana Devi Singhal, "Buddhist Bronzes," 134.

Vajradhātu and Garbhadhātu *maṇḍalas* respectively by beginning with Kūkai's Shingon framework, in which these two *maṇḍalas* assume central importance.[187]

Many imperfect attempts to ascribe Esoteric Buddhist *maṇḍalas* to Java's evidence show how difficult it is to make this connection. Generally speaking, the pattern of misinterpreting *maṇḍalas* in Java's evidence runs something like this: a scholar reads a Javanese source as a *maṇḍala* in order to ascribe some Esoteric Buddhist character to that source. The source is a *maṇḍala*, the logic goes, and *maṇḍalas* are a feature of Esoteric Buddhism. Therefore the source reveals the presence of some system of Esoteric Buddhism in Java. In some cases, such as the Surocolo bronzes discussed in my introduction, scholars take things one step further. They conjecture, on the basis of the Esoteric Buddhist system ascribed, that texts known from other parts of the Sanskrit Cosmopolis which describe the corresponding Esoteric Buddhist system were present in Java. This misreading has taken place for multiple Javanese evidence types across the Classical Period (7-15th centuries CE):[188] texts, architecture, and indeed bronzes.

It is precisely these challenges, however, that crucially emphasise why scholars *must* centre material approaches when connecting Esoteric Buddhism to Java: so that the island's objects might speak on their own terms, while being illuminated – but not dominated – by evidence, textual or otherwise, from other parts of the Sanskrit Cosmopolis. To this end, scholars should be cautious of being overly dependent on textual sources when thinking about Esoteric Buddhist material culture. As we have seen, such texts include primary Buddhist texts like the Sanskrit *Hevajra Tantra* and the Old Javanese *Kuñjarakarṇa Dharmakathana*. They also include ideas from these texts, like regional doxographies including the Tibetan fourfold system, the Kangyur's section containing *tantras*, or the Shingon's mikkyō/non- mikkyō

[187] Sudarshana Devi Singhal, "Caṇḍi Mĕndut and the Mahāvairocana-Sūtra," in *Bahasa – Sastra – Budaya: Ratna Manikam Untaian Persembahan Kepada Prof. Dr. P. J. Zoetmulder* (Yogyakarta: Gadjah Mada University Press, 1985), 703.
[188] For this periodisation of the Classical Period, see: Miksic and Goh, x–xvii.

distinction. Rather than focus too much on texts, scholars should be open to taking material objects as their starting point, then seeing where texts can – and cannot – illuminate those objects.

Part of this problem stems from how scholars often do not define what they mean by an Esoteric Buddhist *maṇḍala*. Admittedly, the Sanskrit word is slippery, for the word "*maṇḍala*" has developed multiple meanings over time.[189] Furthermore, as Hiram Woodward observes in his review of Esoteric Buddhism in Southeast Asia, *maṇḍala* "has become so overworked in Southeast Asian historiography and […] so imprecise in meaning that it might best be avoided."[190]

One example of this misreading resulting from imprecise definitions can be seen in independent scholar Kate O'Brien's publication. In multiple papers, she argues that 13th-century Caṇḍi Jago and the 14th-century Old Javanese text *Sutasoma* contain Esoteric Buddhist *maṇḍalas*.[191] At times her definition of *maṇḍala* is too vague, calling it "a geometric diagram employing iconographic images within its symbolic design," a characterisation that could apply to many kinds of religious figural art.[192] At other times she comes closer to how Esoteric Buddhist *maṇḍalas* are understood, calling them "a meditational aid […] for the invoking and worshipping of a given deity."[193] While O'Brien is right that *maṇḍalas* involve deities, the

[189] For a range of these meanings in Indian mythology, see: Laurie L. Patton and David L. Haberman, introduction to *Notes from a Maṇḍala: Essays in the History of Indian Religions in Honor of Wendy Doniger*, ed. Laurie L. Patton and David L. Haberman (Newark, DE: University of Delaware Press, 2010), 9.
[190] Hiram W. Woodward Jr., "Esoteric Buddhism in Southeast Asia in the Light of Recent Scholarship," *Journal of Southeast Asian Studies* 35, no. 2 (2004): 353. John Miksic reiterates Woodward's statement on the challenge of discussing *maṇḍalas* in: John N. Miksic, "Archaeological Evidence for Esoteric Buddhism in Sumatra, 7th to 13th Century," in *Esoteric Buddhism in Mediaeval Maritime Asia*, ed, Andrea Acri (Singapore: ISEAS, 2016), 265–6.
[191] Kate O'Brien, "Candi Jago as a Mandala: Symbolism of Its Narratives (Part I)." *Review of Indonesian and Malayan Affairs* 22, no. 2 (1988): 1–61; Kate O'Brien, "The Maṇḍalas of the Sutasoma Kekawin," *Journal of the Oriental Society of Australia* 20/21 (1988–89): 153–87; Kate O'Brien, "The Maṇḍalas of the Sutasoma Kekawin, Part II," *Journal of the Oriental Society of Australia* 22/23 (1990–91): 92–132.
[192] O'Brien, "Candi Jago," 3.
[193] O'Brien, "Candi Jago," 4. She repeats this definition, but in different words, in her paper on the *Sutasoma*. See: O'Brien, "Sutasoma Kekawin," 156.

notion that *maṇḍalas* are meditation tools catalysing enlightenment is a modern misconception.[194]

Scholars who misinterpret *maṇḍalas* often end up force-fitting the material evidence to their speculations. Recall for example how Sudarshana Devi Singhal reads the two central Shingon *maṇḍalas* into Borobudur and Caṇḍi Mĕndut. O'Brien engages in similar circular reasoning. When interpreting Caṇḍi Jago, she maps the monument on a Nepali example of bodhisattva Amoghapāśa Lokeśvara's *maṇḍala*, but reaching this conclusion involves overlooking critical iconographic elements of the deities in the *maṇḍala*.[195] Discerning one Śiva and seven Vairocana Buddha figures on Jago's terraces, O'Brien proposes that they correspond to the eight bodhisattvas surrounding the Nepali Amoghapāśa – notwithstanding the fact that the eight Nepali bodhisattvas have distinct identities and iconographies![196] Her reading of the *Sutasoma* as *maṇḍala* also leaves much to be desired. She thinks the *Sutasoma*'s plot lays out the Sanskrit *Sarva-tathāgata-tattva-saṃgraha* (*STTS*) and *Guhyasamāja Tantra*'s main *maṇḍalas*[197] in narrative form.[198] As we have learnt however, Esoteric Buddhist *maṇḍalas* are visualised for esoteric initiations, not told as stories.

One last example of this mis-interpretive process can be seen in how scholars have tried to map Borobudur onto various textual *maṇḍalas*, in particular the *STTS*' Vajradhātu-maṇḍala.[199] Borobudur certainly possesses the Vajradhātu-maṇḍala's five *jina*-buddha statues positioned in the right directions: Akṣobhya facing east, Ratnasambhava facing south, Amitābha facing west, Amoghasiddhi facing North and Vairocana in the centre.[200] But

[194] Gudrun Bühnemann, "On 'Meditational Art' and *Maṇḍalas* as Objects of Meditation," in *Routledge Handbook of Yoga and Meditation Studies*, ed. Suzanne Newcombe and Karen O'Brien-Kop (London: Routledge, 2021), 423, 426.
[195] O'Brien, "Candi Jago," 4.
[196] O'Brien, "Candi Jago," 14–15.
[197] O'Brien, "Sutasoma Kekawin," 159; O'Brien, "Sutasoma Kekawin Part II," 101.
[198] O'Brien, "Sutasoma Kekawin," 153.
[199] For a history of these misinterpretations, see: Marijke J. Klokke, "Borobudur: A Maṇḍala? A Contextual Approach to the Function and Meaning of Borobudur," in *IIAS Yearbook 1995* (Leiden: International Institute for Asian Studies, 1996), 196–8.
[200] Klokke, "Borobudur," 195.

Borobudur has multiple copies of each *jina*-buddha: 92 Akṣobhyas, Ratnasambhavas, Amitābhas and Amoghasiddhis face each cardinal direction, and 72 Vairocanas sit on the central terraces.[201] "No *maṇḍala*," argues art historian Marijke Klokke, "multiplies its images" – certainly not the Vajradhātu-maṇḍala, where the centre and each cardinal direction possess only one *jina*-buddha as leader.[202] Klokke's careful deconstruction of Borobudur offers a model for discerning Esoteric Buddhist elements in Java: by all means consider evidence from non-Southeast Asian regions like the *STTS*, examining how the juxtaposition might shed some light on Java. But do not overstretch that evidence, as O'Brien does, to see in Java Esoteric Buddhist forms that do not exist.

[201] Klokke, "Borobudur," 194.
[202] Klokke, "Borobudur," 194.

CHAPTER THREE. A Typology of Bronze Images from Java

Initial Hypotheses: An Invitation to Typology[203]

This chapter applies typology, an approach borrowed from archaeology to produce a more rigorous art historical classification of Classical Java's bronze images. Typology is "one of the basic methods by which archaeologists organize data and test hypotheses."[204] Building on my research questions in Chapter One, here are four hypotheses I would like to test:

1. Bronzes from the Surocolo and Nganjuk hoards possess a number of attributes marking them as clearly different from bronzes that are not found in both hoards.
2. Bronzes that scholars have labelled Esoteric Buddhist possess a number of attributes marking them as clearly different from bronzes that are considered non-Esoteric Buddhist.
3. Bronzes called Buddhist possess a number of attributes marking them as clearly different from bronzes that are considered non-Buddhist.
4. Metal objects discovered outside Java possess attributes marking them as clearly different from metal objects that are found in Java.

As I will explain in Chapter Four, the third hypothesis ends up rejected, while the first, second and fourth are not rejected. Contrary to hypothesis three, bronzes labelled Buddhist and non-Buddhist share overlapping attributes, challenging attempts to categorise Javanese objects by religion. Per Hypothesis One, there are artefacts among the Surocolo and Nganjuk bronzes that are distinguishable from objects not from either hoard. According to Hypothesis Two, six artefact types correlate with my definition of Esoteric Buddhism: Artefact Type 7 (AR7), Artefact Type 9 (AR9), Artefact Type 11 (AR11), Artefact Type 13 (AR13), Artefact Type 15 (AR15), and Artefact Type 16 (AR16). Some bronzes from Nganjuk and Surocolo belong to

[203] This header title was inspired by the title of James Deetz's classic book, *Invitation to Archaeology*. See: James Deetz, *Invitation to Archaeology* (Garden City, NY: Natural History Press, 1967).
[204] Miksic and Goh, 7.

these types, but not all of them do. Per Hypothesis Four, the attribute of a figure in an object's crown (A71) appears in half of the non-Javanese objects, whereas this attribute does not appear at all – not even once – among the Javanese objects.

While archaeologists may consider typology formation to be one of their field's basic methods, the process of creating one should be outlined to demonstrate the rigour of the method. In this chapter, I first define *what* a typology is, drawing on the seminal work of the processual archaeologist, David Clarke. I then outline the process of creating a typology. The archaeologist must disassemble each artefact into its logically irreducible properties, called "attributes," then sort all artefacts into types. Each type's artefacts share more attribute clusters in common with one another than artefacts outside that type. After discussing the *how*, I discuss *why* applying typological methods to Java's bronze images can be productive. After addressing these matters, I describe the typology I created, laying out the 93 attributes discerned in the hundred bronzes I examined and how the bronzes can be categorised into 17 types. For a list of these types and their attributes, the reader should refer to Appendix 3. Last, I conclude this chapter with a brief discussion of my typology's limitations.

Typology: The What, How and Why

Typology is the classification of artefacts, which are primary sources like pottery sherds or bronze images studied by archaeologists, into types. Every artefact, as David Clarke has it, is "modified by a set of humanly imposed attributes."[205] "Attribute" is "any logically irreducible character or property" of an artefact "assumed by the observer to be of significance with reference to the frame of his study."[206] Attributes are independent variables, and generally have one of two possible states in an artefact: present or absent.[207] For instance, a bronze image

[205] David L. Clarke, *Analytical Archaeology*, 2nd ed. (London: Methuen & Co, 1978), 489.
[206] Clarke, 156, 489.
[207] Clarke, 156–7, 489.

either displays, or does not display, the attribute of *abhaya mudrā*, the open palm gesture facing the viewer connoting they need not feel fearful. The hand on such a statue, however, might have broken off prior to being examined. In this situation, the archaeologist must mark the *abhaya mudrā* attribute as "having a state of No Comparison (NC)."[208] So while Clarke rightly tells us that attributes generally have two states (present/absent), they can sometimes have more (NC) depending on the artefact's state of preservation.[209]

A "type," and in Clarke's terminology, an "artefact-type," is "an homogeneous population of artefacts which share a consistently recurrent range of attribute states within a given polythetic set."[210] Much must be unpacked as we move up in complexity from "attribute," to "artefact," and then "type." Within a given set of artefacts, certain artefacts possess a cluster of similar attributes. Other artefacts in the set might have at most one or two of these attributes, or lack them altogether. For example, certain bronze images might show four attributes not repeated to the same extent in the set's other bronze images: *tarjanī mudrā*, fierce eyes, fangs, and skulls (images of these attributes appear later in figure 3.28, when discussing Artefact 13). Given the recurrence of these attributes, bronzes with these attributes form a type. Worth remembering, however, is Clarke's reminder that "[v]ariation is inevitable, even amongst the most uniform artefact-types and their attributes."[211] He attributes such variation to "human whim" and the "human inability to reproduce repeatedly and exactly a given set of conditions."[212] So we should not expect every artefact within the same type to have an identical list of attributes. Being aware of this variation, I adopt a polythetic definition of type rather than monothetic one. I use here Edi Sedyawati's definition of a polythetic class: members of a type "resemble each other in that they are similar in most of their traits [Sedyawati's word for

[208] Clarke, 157.
[209] Clarke, 489.
[210] Clarke, 209.
[211] Clarke, 178.
[212] Clarke, 178.

"attribute"], but no single trait [attribute] need be possessed by all members."[213] I also use her definition of a monothetic class, where "one of a number of traits must be possessed by all members."[214]

The *what* of typology, additionally, illustrates the *how* of typology. When considering a set of artefacts, archaeologists should first disassemble each artefact into a series of attributes. As independent variables, the attributes collected within or on an artifact are not dependent on the research question asked by the archaeologist. After identifying the attributes a set of artefacts possesses, the archaeologist must then identify recurrent clusters of attributes that certain artefact subsets share, which the other artefacts do not possess. These subsets, as "non-random clusters of attributes," are the types that comprise the typology.[215] As each type is polythetic, the archaeologist should expect the artefacts within a type to vary in how exactly they conform to the said type.[216]

And now, to the *why*: why is typology advantageous for the study of Java's bronze images? Typology favours empirical principles, enabling scholars to examine objects without imposing on these objects any initial preconceptions they may have. This emphasis on observable phenomena, as Clarke underscores, reflects archaeology's turn away from being an "intuitively acquired craft towards that of an explicit discipline."[217] When creating a typology, the archaeologist searches for non-random attribute clusters in their archaeological materials.[218]

At first glance, this search might appear directionless. As culturally complex objects, bronze objects possess so many attributes that the archaeologist could count them *ad infinitum*.

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[213] Edi Sedyawati, *Gaṇeṣa Statuary of the Kadiri and Siṅhasāri Periods: A Study of Art History* (Leiden: KITLV Press, 1994), 13.
[214] Sedyawati, *Gaṇeṣa Statuary*, 13.
[215] J. N. Hill and R. K. Evans, "A Model for Classification and Typology," in *Models in Archaeology*, edited by David L. Clarke (London: Methuen & Co, 1972), 278.
[216] Clarke, 178, 207.
[217] Clarke, 149.
[218] Hill and Evans, 262.

To accomplish his or her research aim, the archaeologist should obey J. N. Hill and R. K. Evans' principle of selecting only "the variables or attributes he wants to consider as important in the clustering process."[219] In my case, I pay particular attention to attributes which are Esoteric Buddhist, per my definition of the term in the introduction. Some Esoteric attributes, for example, are the *vajra*-weapon (A24) and skulls (A86). I do not form types based on every attribute in my material. Typology can disclose the bronzes' esoteric elements – but without the overweening baggage Tantric Studies and art history bring to the interpretive process.

The application of typology in my thesis enables me to test the conclusions from Tantric Studies and art history. The typology can call into question, complicate, or even add credibility to existing research. I will discuss how my bronze typology conforms to these more-established approaches in later chapters.

Methodology

I analysed a hundred metal deity images, 95 of them produced primarily in bronze and five produced in gold, silver, or a mixture of both precious metals. In order that my archive be as broad-ranging as possible, I intentionally selected deity images from multiple art books and museum catalogues. I made sure to include images from art books and catalogues that, per my literature review, demonstrated historiographical significance. For example, images from Pauline Lunsingh Scheurleer and Marijke Klokke's *Divine Bronze* appear in my archive, and I make sure to include images from each of the work's seven stylistic groups. Given I am studying bronze images in Java, I chose objects listed in their provenance as being from Java. I also included a few non-bronze objects, and objects from other Indonesian islands like Sulawesi. I intentionally included these outlier objects, so that they might serve as controls to determine how Java's images might be substantially different.

[219] Hill and Evans, 262.

While I aimed for representativeness in my archive, I also factored in image quality and prioritized my research question when selecting objects. Unsurprisingly, different photographs of the same metal image may appear in multiple publications, reflecting the object's popularity. In this situation, I added to my archive the best-quality photograph, as that displays the image's attributes most clearly. Bearing in mind Hill and Evans' injunction that typology creation should centre my research, I made sure to include images that prior scholars have considered Esoteric Buddhist. Consequently, my archive contains images from the Nganjuk and Surocolo bronze hoards, as the objects within these collections have been labelled as belonging to Esoteric Buddhist *maṇḍalas*.

Although I am aware of existing categorisations, I take especial care not to be influenced by them. To maintain my typological approach's empirical quality, I anonymised my objects by assigning them letter-number tags (B1, B2, etc.), which I used to label all images of the objects I consulted. When sorting the objects into types, I consulted only these images. Existing art historical and religious claims about the objects, such as which object is an Esoteric Buddhist deity or which bronze came from the Surocolo *maṇḍala*, I filed separately in Appendix 1. I only looked at this information after I had constructed the typology, because that was when I had to test these claims. While I only properly discuss how my typology undermines or supports existing claims in the next chapter, I can preliminarily say here that there are crucial deviations. Lunsingh Scheurleer and Klokke, for instance, identify the bronze I call B23 as a Vajrasattva characteristic of the Nganjuk *maṇḍala*.[220] They note Vajrasattva is an "Ādi-Buddha,"[221] who can be the main deity of the Vajradhātu *maṇḍala*, of which the Nganjuk bronzes have been called a three-dimensional representation.[222] If B23 is indeed a main deity, we might expect him to belong in artefact type AR6, "Ornamented Seated Major

[220] Lunsingh Scheurleer and Klokke, *Ancient Indonesian Bronzes*, 103.
[221] Lunsingh Scheurleer and Klokke, *Ancient Indonesian Bronzes*, 103.
[222] Lunsingh Scheurleer and Klokke, *Ancient Indonesian Bronzes*, 16.

Peaceful Deities," as my typology's major deities possess two or more attributes suggesting they are at the top of some hierarchy. Yet B23 belongs to artefact type 9 (AR9), the "Ornamented, Seated, Minor, Martial Deities," who lack any attributes suggesting hierarchical importance. In this way, I try as much as possible to exercise independent evaluation.

I identified each image's attributes, compiling as I went along a list of all attributes I discerned. In total, I identified in the hundred images a total of 93 possible attributes. After assessing whether all hundred images possessed each of the 93 attributes, I then observed which attributes clustered together in the "non-random" fashion mentioned earlier, and so organised these images into their types. I then created a table which lists the hundred images and their attributes according to their type (included as Appendix 3). In total, I discerned 17 types of artefacts. The standard archaeological categories in a typology, from the highest order to lowest order, are: types, varieties, artefacts, and attributes. I modify this scheme slightly by adding between varieties and artefacts the category "sub-variety," to account for another hierarchical category I saw in my materials. As figure 3.1 below shows, there are 17 types of artefact (AR1–17):

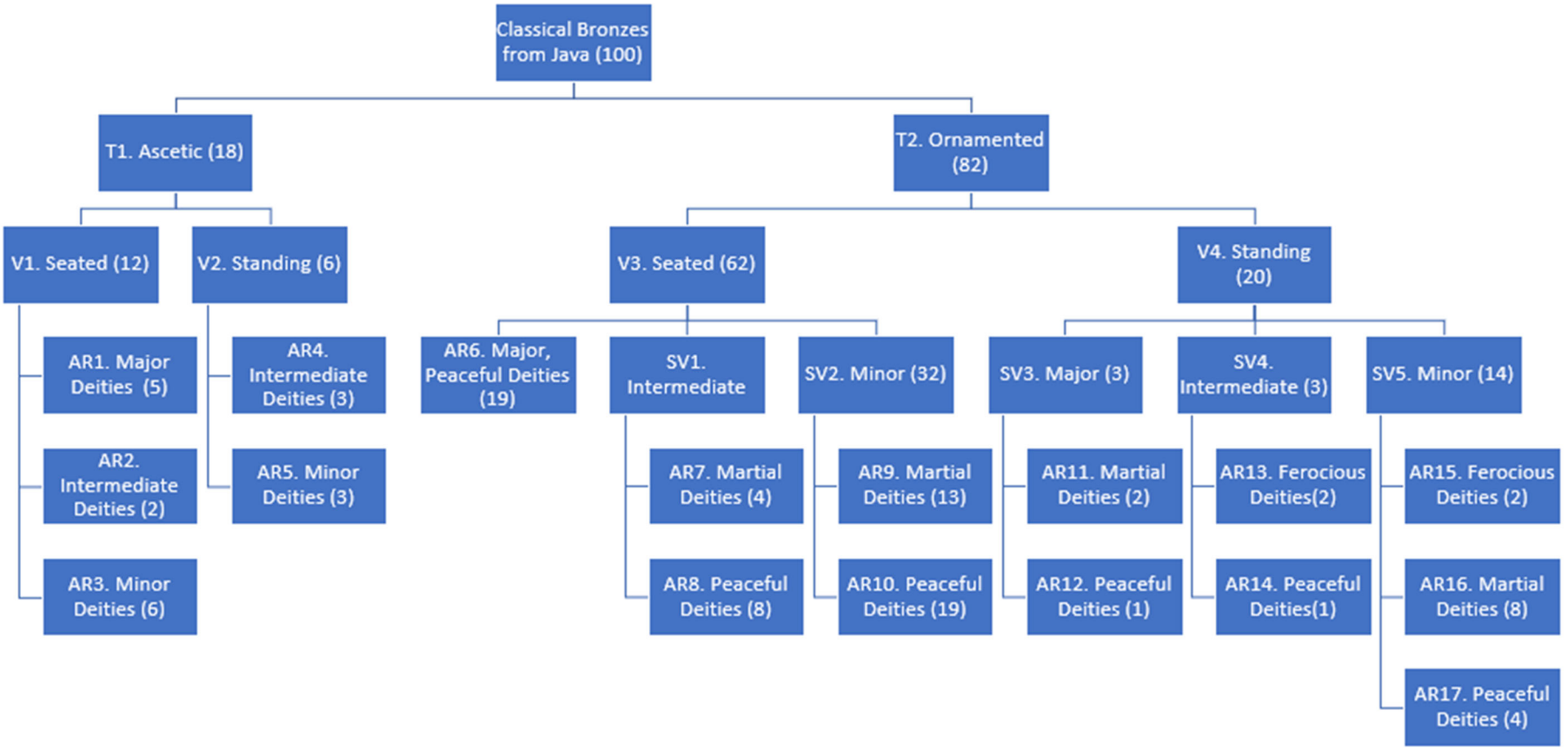

Figure 3.1. Proposed Typology of the Classical Bronzes of Java.

When laying out my typology's different types, I first delineate the overarching types to which the artefacts belong, then discuss the attributes that mark out each type. For ease of reference, especially when consulting the appendices, I have assigned a serial number to each object (beginning with B1). I have also done the same for the categories of my typology. So Types begin with T1, Varieties with V1, Sub-varieties with SV1, Artefact Types with AR1 and Attributes with A1. As I proceed down this hierarchy, I define the relevant attributes. Furthermore, I provide representative images for each of the seventeen categories that show the differences between Types, Varieties, Sub-varieties, and Artefact Types.

THE TYPES

T1 vs. T2: Ascetic Type (18 images) vs. Ornamented Type (82 images)

The 100 metal images can be divided into two major categories, the Ascetic Type (T1) and the Ornamented Type (T2). There are 18 images belonging to the Ascetic Type, and 82 images belonging to the Ornamented Type. T1 is distinguished by the possession of the following cluster of four attributes: the *uṣṇīṣa* (A1), monk's robes (A2), long ears (A3) and snail-curl hair (A4). Meanwhile T2 generally do not possess A1–4 but are instead distinguished by the attribute cluster containing a conical crown (A5), a *sarong* (A6), girdles (A7), necklaces (A8), a sacred thread (A9), armbands (A10), bracelets (A11), and anklets (A12).

Figure 3.2. B1 is the representative object of T1.

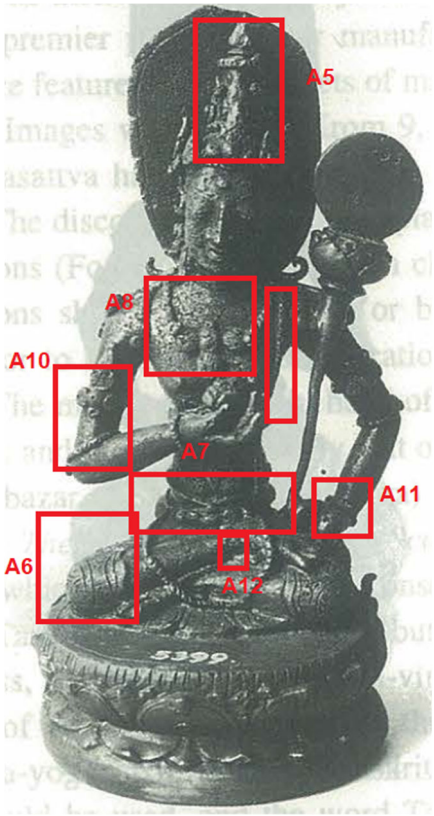

Figure 3.3. B35 is the representative object of T2.

THE ASCETIC TYPE (T1)

As mentioned, the 19 images belonging to the Ascetic Type all have the attributes A1, A2, A3, and A4. The iconic image of T1 is B1 (see figure 3.2).

A1 refers to the protuberance sticking out from an image's cranium, sometimes round (e.g. B91) in shape but also ovoid (e.g. B46), or even tapering off to a point like a concave mountain's peak (e.g. B45). Sanskrit sources call this element the *uṣṇīṣa*, and I have adopted the term so that art historians and philologists know to what I refer.[223]

A2 pinpoints the simple, unelaborate robes an image might wear. This robe generally covers the image's left shoulder and arm, crossing over to under the image's right armpit (e.g. B71). In some cases, the monk's robe is stylised, evident only from a line across the image's chest marking the cloth's boundary (e.g. B91). The fabric may also be perceivable from the

[223] Y. Krishan, "The Hair on the Buddha's Head and Uṣṇīṣa," *East and West* 16, no. 3/4 (1966): 275–6.

image's left arm, which being covered by cloth will be slightly thicker than the right arm (e.g. B72) or show the cloth extended to cover the left leg (e.g. B21). In other cases, the ripples of the fabric will be perceivable – both on the left arm and in the striped etches across the image's chest (e.g. B1).

A3 means that the image has ears that are disproportionately longer than would be expected for a head of that size. These ears are long either because elongated earlobes are connected to regular-sized ears (e.g. B91), or because the entire auricle stretches away from the head in both the top and bottom directions (e.g. B52, B54).

A4 refers to the presence of small, round lumps where we would expect the image's hair. These lumps may be very flat, and only slightly thicker than the image's forehead (e.g. B64, B72). Conversely, these lumps may be protuberant, so much so that the image looks like it is wearing a helmet (e.g. B21, B41, B91). In calling these lumps "snail-curl hair," I follow in the lead of J. E. van Lohuizen-De Leeuw, author of *Indo-Javanese Metalwork* whose earlier research describes this hairstyle as such.[224]

THE ORNAMENTED TYPE (T2)

In contrast to the Ascetic Type, the 82 images composing the Ornamented Type generally do not possess attributes A1–4. Twelve of T2, such as B47, B48 and B65, do possess long ears (A3) however. T2's attribute cluster is A5, A6, A7, A8, A9, A10, A11 and A12. The representative object of T2 is B35 (see figure 3.3). As my naming it "the Ornamented Type" might suggest, many of these attributes are indeed elaborate and ornate jewellery. Images in the Ornamented Type possess at least three of these attributes, although only one image has that few (B26). Most of the images have five to seven of these attributes (e.g. B61, B63, B83). Some images even have all eight (e.g. B24, B31, B32, B35).

[224] Krishan, 276–7.

A5 refers to the high, decorated crowns tapering off to a point worn on images' heads. These crowns tend to be richly embellished and layered. Some have "spiky" points beneath the apex point (e.g. B66); the ornamental details on others have rubbed away (e.g. B5). Some crowns are less conical, looking more like a cylinder capped with a half-sphere (e.g. B44) or a beehive (e.g. B45, B49, B62).

A6 refers to a tube of cloth worn by images, covering the lower half of the body from the torso to at least the knees, but often down to the ankles. "*Sarong*" is the Malay term for this tube, which I adopt as a shorthand. The images' *sarongs* are generally plain and simple, detectable from the cloth's edge around the waist and ankles (e.g. B96, B99). When the images pose dynamically, the sarong can be seen to occupy the space between both legs as well (e.g. B18). Some *sarongs* display elaborate patterning, such as stars (e.g. B44), flowers and checks (e.g. B13), and alternative bands of circles and stripes (B53).

A7, the girdle, refers to the band cinched around an image's waist, sometimes beneath the *sarong*'s line (e.g. B59) but sometimes far above it, right around the bellybutton (e.g. B74). Some images even have multiple girdles, worn in both positions (e.g. B99). While some girdles display little decoration (e.g. B74, B78), others are highly elaborate, such as this patterned example ending in a fishtail motif (B15).

A8 designates the necklaces worn by images around their necks. These necklaces can be simple (e.g. B57) or elaborate (e.g. B51). While many images wear only one necklace (e.g. B68), others can wear multiple (e.g. B24).

A9, the sacred thread known in Sanskrit as the *upavīta*, refers to a cord crossing from an image's left shoulder to the corner of its right-side waist. As with the attributes discussed, the sacred thread can vary in level of ornamentation. Some are indicated simply by a thin band crossing the chest (e.g. B56, B57), others have elaborate bands (e.g. B47), stripes (e.g. B51) or even a skull pattern (e.g. B100).

A10 meanwhile designates the armbands the images wear around both their upper arms. These armbands can be simple (B16) or elaborate (e.g. B60) in decorative quality. An image may wear more than one armband per arm (e.g. B19).

A11 refers to the anklets the statues wear around both their wrists. They can also be simple (e.g. B65) or elaborate (e.g. B93). Some images wear more than one bracelet per arm (e.g. B96).

A12 refers to the anklets the statues wear around both their ankles. They can also be simple (e.g. B84) or elaborate (e.g. B62).

V1 vs. V2: Ascetic Seated (12) vs. Ascetic Standing Varieties (6)

The Ascetic Seated Variety (V1) and Ascetic Standing Variety (V2) are subsets of the Ascetic Type, T1. What distinguishes these two varieties is whether an image possesses one – and never more than one – of the following attributes: seated on a chair with thighs spread apart (A13, see figure 3.4), seated with legs crossed (A14, see figure 3.5), or standing with their feet together (A16, see figure 3.6).

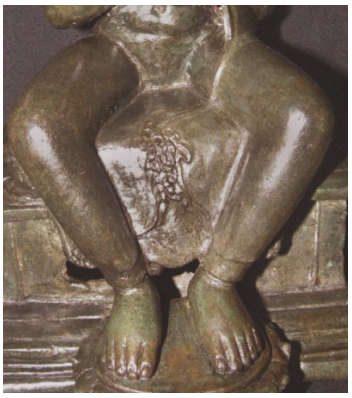

Figure 3.4. A13, a possible attribute of V1, means seated on a chair with thighs spread apart. The object shown is B2.

Figure 3.5. A14, a possible attribute of V1, means seated with legs crossed. The object shown is B21.

Figure 3.6. A16, the attribute for V2, means standing with feet together. The object shown is B22.

V1 comprises images that are seated, and so either have attribute A13 or A14. There are thirteen such images. Of these twelve, there is only one A13 image, and it indeed sits on a

throne, thighs pointed away from each other in a pose Sanskrit calls *bhadrāsana*.[225] This image is B2. As for A14, all twelve images cross their legs such that their "right leg is placed on the left thigh," in a pose the Sanskrit calls *sattvaparyaṅka*.[226] Examples of A14 include B55 and B91. V1 breaks down into Artefacts one to three, treated in the next section: the Ascetic, Seated, Major Deity Artefact (AR1); the Ascetic, Seated, Intermediate Deity Type (AR2); and the Ascetic, Seated, Minor Deity Type (AR3).

V2 comprises images in A16. There are six such images. They generally stand upright, feet side by side (e.g. B22). In one case (B97), the image's waist bends slightly to the right, and its shoulders to the left in the opposite direction. V2 splits into Artefacts four and five: the Ascetic, Standing, Intermediate Deity Artefacts (AR4); and the Ascetic, Standing, Minor Deity Artefacts (AR5).

AR1, AR2, AR3: Seated Major (3), Seated Intermediate (3), Seated Minor (14)

What differentiates artefact types AR1, AR2 and AR3 is how many attributes from the A20–23 cluster they possess. I define "major" as the possession of two or more of these attributes, "intermediate" as the possession of just one of these attributes, and "minor" as the possession of none of these attributes. Hence AR1 contains "Seated Major" artefacts, AR2 "Seated Intermediate" artefacts, and AR3 "Seated Minor" artefacts. For representative examples of AR1, consult figures 3.7, 3.8 and 3.9 in the next three sections.

The possession of attributes A20–23 appear to suggest hierarchical importance. I term these categories "major," "intermediate" and "minor" to test whether these artefact categories could correlate to the distinction in Esoteric Buddhist *maṇḍalas* between central deities, their

[225] Arlo Griffiths, Nicolas Revire, and Rajat Sanyal. "An Inscribed Bronze Sculpture of a Buddha in *Bhadrāsana* at Museum Ranggawarsita in Semarang (Central Java, Indonesia)." *Arts Asiatiques* 68 (2013): 6.
[226] Fontein, 223.

subordinate bodhisattvas and the even more subsidiary attendant deities surrounding them both.[227]

This same distinction between major, intermediate, and minor deities will hold also for the following trios discussed later: Artefact Type 6 (AR6), Sub-variant 1 (SV1) and Sub-variant 2 (SV2) subsumed under Variant 3 (V3); as well as Sub-variant 3 (SV3), Sub-variant 4 (SV4) and Sub-variant 5 (SV5) subsumed under Variant 4 (V4). Although there are no major deities filed under Variant 2 (V2), a similar distinction holds between the intermediate deities that form Artefact Type 4 (AR4) and the minor deities constituting Artefact Type 5 (AR5).

Artefact Type 1: The Ascetic, Seated, Major Deity Artefact Type (5)

Artefact Type One (AR1) is the Ascetic, Seated, Major Deity Artefact Type. Three attribute clusters mark out AR1. T1's A1–4, V1's A13 or A14, and the possession of at least two of the following four attributes: a halo (A20), throne (A21), parasol (A22), and socle (A23). Five images count as AR1. None of them have all four attributes. Two images have three attributes (B43, B91), and three have two attributes (B52, B54, B55). The representative object for AR1 is B91 (see figure 3.7).

[227] Linrothe, *Ruthless Compassion*, 13–14.

Figure 3.7. B91 is the representative object for AR1.

A20, the halo, refers to a circular structure encircling only the image's head, and nothing else. These halos can be as simple as the metal loop around B43's head, or filled-in like the plate right behind B46's head.

Meanwhile A21, the throne, indicates the structure of variable shape that frames an image's back and head. These thrones are generally highly decorative, although their ornamentation style and shape may differ. B54's throne comprises a rectangular frame topped by an elaborate three-point structure ringed by what look like flames, or cloud nimbuses. Meanwhile, B91's throne is a large filled-in circle within which numerous patterned rings reside and beyond which licks of flame sprout at regular intervals.

A22, the parasol, refers to the umbrella-looking structure sitting at the image's apex. The parasol sits directly above the image's head. The parasol can be elaborately ornamented, as B91 demonstrates with its leaf motifs, or functional as we see in B52 and B54.

A23, the socle, refers to the base, plinth-like structure supporting the whole image. This socle supports the lotus pad (A91) on which the deity sits. This structure is usually layered and plain (e.g. B91), but can have incised hollows which double as decorations (B52, B55).

Artefact Type 2: The Ascetic, Seated, Intermediate Deity Artefact Type (2)

Artefact Type Two (AR2) refers to the Ascetic, Seated, Intermediate Deity Type. Three attribute clusters mark AR2. Like AR1, AR2 has V1's A1–4 and V2's A13 or A14. Its third attribute cluster is also AR1's but where AR1 requires at least two of A20–23, AR2 only requires one of the four attributes. There are only two images in AR2: B2 possessing a socle (A23), and B42 possessing a halo (A20). The representative object for AR2 is B42 (see figure 3.8).

Figure 3.8. B42 is the representative object for AR2.

Artefact Type 3: The Ascetic, Seated, Minor Deity Artefact Type (5)

Artefact Type Three (AR3) refers to the Ascetic, Seated, Minor Deity Type. Like AR1 and AR2, AR3 has AR1's A1–4 attribute cluster and V1's A13 or A14. What differentiates it from AR1 and AR2 is its *lack* of the third attribute cluster, A20–23. None of the five images

belonging to AR3 have even a single of the attributes between A20–23. The representative object for AR3 is B21 (see figure 3.9).

Figure 3.9. B21 is the representative object for AR3.

Artefact Type 4: The Ascetic, Standing, Intermediate Deity Artefact Type (3)

Artefact Type Four (AR4) refers to the Ascetic, Standing, Intermediate Deity Type. It has three attribute clusters: T1's A1–4 attribute cluster, V2's A16 and, like AR2, at least one of attributes A20–23. Only three images belong to AR4: B40, B41 and B97. The representative object for AR4 is B97 (see figure 3.10), whose one attribute from A20–23 is the halo (A20). The representative object for AR4 is B97 (see figure 3.10).

Figure 3.10. B97 is the representative object for AR4.

Artefact Type 5: The Ascetic, Standing, Minor Deity Artefact Type (3)

Artefact Type 5 (AR5) refers to the Ascetic, Standing, Minor Deity Artefact Type. AR5 is defined in terms of the same three clusters as AR4, except that where AR4 is defined by the presence of at least one of the attributes A20–23, AR5 is defined by the complete absence of any attributes A20–23. Three images belong to AR5: B22, B73 and B99. The representative object for AR5 is B22 (see figure 3.11).

Figure 3.11. B22 is the representative object for AR4.

V3 vs. V4: Ornamented Seated (62) vs. Ornamented Standing (20)

Having discussed all the Ascetic Type (T1) images, I turn to the Ornamented Type images that are T2. T2 can be further segmented into two Variants: Ornamented Seated (V3) and Ornamented Standing (V4). Although we might expect the attributes distinguishing V3 from V4 to be exactly the same as the ones distinguishing V1 from V2, this is not the case. There are two attributes marking an object as V3. The first is A14, the right leg over left thigh pose (*sattvaparyaṅka*) that indeed also marks out V1. The second is not A13's *bhadrāsana* pose but A15, the pose of royal ease. Known as *lalitāsana*, A15 entails an image sitting with one leg tucked in towards the thigh, resting flat on the object atop which the image sits (see figure 3.12). The other leg is either similarly tucked in but held at an angle in the air (e.g. B69), or casually hangs off the object on which the image sits (e.g. B68). Hence V3 entails one of two sitting poses – the familiar A14, or A15.

Figure 3.12. A15, a possible attribute of V3, means *lalitāsana*. The object shown is B21.

In contrast, V4 images maintain one of four possible standing poses: standing with their feet together, as we have encountered (A16, see figure 3.13), standing with one knee bent and the other leg straight (A17, see figure 3.14), standing in a half-squat pose (A18, see figure 3.15), or standing with one foot kicking high up in the air (A19, see figure 3.16). A16 we have

discussed in V2. A17 generally involves one knee bent at a 45-degree angle, while the other leg is held out straight and pointing away from the leg with the bent knee. Which leg is bent and which is straight can vary. Although the Sanskrit sources distinguish between *ālīḍha*, where the left leg is bent and the right leg stretched (e.g. B14), and *pratyālīḍha*, where the right leg is bent and the left leg is stretched (e.g. B15), the two poses do not differ in symbolism – nor do I think this is a meaningful distinction from a typological perspective.[228] Nevertheless, the shorthand I use for A17, *(praty)ālīḍha*, attempts to reflect these different possibilities. The pose, furthermore, can be adopted by figures with more than two legs, as we encounter with B50 and B100.

A18 refers to images in a half-squat pose, which hold their legs at a 90-degree angle facing away from each other. Only one image in my hundred adopts A18: B17 (see figure 3.15).

A19 images bend one leg slightly at around a 30-degree angle, and kick their other leg high up in the air. Only one image in my archive adopts A19: B18 (see figure 3.16).

[228] Fontein, 164.

Figure 3.13. A16, a possible attribute of V3, means standing straight with feet together. The object shown is B65.

Figure 3.14. A17, a possible attribute of V3, means standing with one knee bent and the other leg straight. The object shown is B14.

Figure 3.15. A18, a possible attribute of V3, means a half-squat pose. The object shown is B17, the only image of my hundred to adopt this attribute.

Figure 3.16. A19, a possible attribute of V4, means one slightly bent leg and the other kicking high up in the air. The object shown is B18, the only image of my hundred to adopt this attribute.

Artefact Type 6: Ornamented, Seated, Major, Peaceful Artefact Type (18)

Artefact Type 6 (AR6) refers to the Ornamented, Seated, Major, Peaceful Artefact Type. There are 18 images in AR6. The presence of three attribute clusters, and the absence of one cluster, define AR6. AR6 entails having T2's A5–12 cluster, V3's A14 or A15, and the same cluster that marked AR1 out as "major": at least two of the attributes A20–23. As the next section will show, AR6 also requires the absence of a cluster of "martial" attributes. The representative object for AR6 is B20 (see figure 3.17).

Figure 3.17. B20 is the representative object for AR6. It has two attributes from the A20–23 cluster, and so is "major."

These martial attributes are weapons or iconographical aspects implying wrathfulness and violence. The following 15 attributes are the martial attributes: the *vajra* (A24), the skull-staff (*khaṭvāṅga*; A25), the bow (A26), the corpse (A27), the goad (*aṅkuśa*; A28), the noose (*pāśa*, A29), the club (*gadā*; A30), decapitated forearms (A31), the axe (A32), the cuirass (A33), the trident (A34), the wheel (*cakra*, A35) the chain (A47), the stick (A64), and the decapitated pig's head (A92). Figures 3.18 and 3.19 show two of these wrathful attributes, the vajra (A24) and decapitated forearms (A31) respectively.

Figure 3.18. A24, the attribute of the *vajra*. The object shown is B5.

Figure 3.19. A31, the attribute of decapitated forearms. The object shown is B81.

SV1 vs. SV2: Seated Intermediate (12) vs. Seated Minor Sub-Variants (32)

Two sub-variants differ from AR6, but are also subsumed under V3: the Seated Intermediate Sub-variant (SV1) and the Seated Minor sub-variant (SV2). AR6, AR7 and SV1 differ from one another much like how AR1, AR2 and AR3 do – in terms of cluster A20–23. Where AR6 requires at least two or more of A20–23 (see figure 3.17 for example), SV1 requires only one attribute from A20–23 (see figure 3.20), while SV2 has to have none of the attributes A20–23 (see figure 3.21). This difference aside, SV1 and SV2 are like AR6 in having two other attribute clusters: T2's A5–12 cluster, and V3's A14 or A15. There are 12 images belonging to SV1 and 32 images belonging to SV2.

Figure 3.20. B88 is the representative object for SV1. It has one attribute from the A20–23 cluster, the socle (A23).

Figure 3.21. B6 is the representative object for SV2. It has no attributes from the A20–23 cluster.

Artefact Type 7: Ornamented, Seated, Intermediate, Martial Artefact Type (4)

Artefact Type 7 (AR7) is the Ornamented, Seated, Intermediate, Martial Artefact Type. There are four images in AR7. It has four attribute clusters. These are T2's A5–12 cluster and V3's A14 or A15. It also has only one attribute from the A20–23 cluster, and so is classified as "intermediate," and at least one of the attributes from the martial cluster (A24–35, A47, A64, A92). The four images differ in which martial attribute they wield. The representative object for AR7 is B66 (see figure 3.22), holding the *vajra*-weapon (A24).

Figure 3.22. B66 is the representative object for AR7.

B85 also wields the *vajra* (A24). The *vajra*, which according to Sanskrit sources is the weapon of Hindu-Buddhist deity Indra, appears in our images as a structure with multiple prongs in opposite directions, loosely reminiscent of a tiger's claws.[229] Both B66 and B85 hold the *vajra* flat with their right hand.

B70 wields the axe (A32) and wheel (A35). A32 appears in B70's middle right arm, as a pointed stick joined to a small axe-head. A35, called a *cakra* in Sanskrit, appears in B70's uppermost left arm as a flat disc with four holes.

B87 holds the cuirass (A33), which appears as a small metal shirt complete with sleeves and a space for a miniature head. B87 holds A33 with both hands.

Artefact Type 8: Ornamented, Seated, Intermediate, Peaceful Artefact Type (8)

Artefact Type 8 (AR8) is the Ornamented, Seated, Intermediate, Peaceful Artefact Type. There are eight images in AR8. AR8 is characterised by three attribute clusters, and the absence

[229] Van Lohuizen-De Leeuw, 11, 23.

of one cluster. These are T2's A5–12 cluster, V5's A14 or A15, only one attribute from the A20–23 cluster, but *no* attributes from the martial cluster (A24–35, A47, A64, A92) that is crucial to AR7. The representative object for AR8 is B32 (see figure 3.23), holding a non-violent lotus flower (A80).

The eight images show little consistency in terms of what they wield instead of martial attributes. B45, for instance, has multiple attributes not shared by AR8's other images, such as a human figure in its crown (A71), a book (*pustaka*; A72), rosary (*akṣamālā*; A73) and *varada mudrā* (A38). Other images in AR8 are similarly idiosyncratic. B96, for example, is the type's only image that makes *dhyāna mudrā* (A41), while B88 is the only one with a thick stem (A63) by its foot.

Figure 3.23. B32 is the representative object for AR8.

Artefact Type 9: Ornamented, Seated, Minor, Martial Artefact Type (10)

Artefact Type 9 (AR9) is the Ornamented, Seated, Minor, Martial Artefact Type. There are ten images in AR9. AR9 has three attribute clusters present, and one attribute cluster absent. The first two clusters necessary for AR9 are V2's A5–12 cluster, and V3's A14 or A15. AR9 images must also have *no* attributes from the A20–23 cluster, unlike AR6, AR7 and AR8. The

last cluster defining AR9 is the same as AR7's: at least one of the attributes from the martial cluster (A24–35, A47, A64, A92). And as with AR7, the martial attributes wielded by AR9's images vary. The representative object for AR9 is B26 (see figure 3.24), holding the goad-weapon.

The weapon wielded by seven of the images is A24, the *vajra*. These images are B5, B23, B26, B37, B39, B78 and B79. Two of these seven wield other weapons in addition to the *vajra*: B5 also wields a skull-staff (A25). Only B26, seen above, has the goad (A28). As for the other three non-*vajra*-wielding images: B3 wields a bow (A26), B27 a chain (A47), and B81 a pair of decapitated forearms (A31).

Figure 3.24. B26 is the representative object for AR9.

Artefact Type 10: Ornamented, Seated, Minor, Peaceful Artefact Type (22)

Artefact Type 10 (AR10) is the Ornamented, Seated, Minor, Peaceful Artefact Type. There are 22 images in AR10. AR10 images have two attribute clusters present, and two attribute clusters absent. The two clusters necessary for AR10 are T2's A5–12 cluster, and V3's A14 or A15. The two clusters that must be absent for AR10 are the A20–23 cluster, and the

martial cluster (A24–35, A47, A64, A92). Much like AR9, the attributes wielded by AR10's images vary. The representative object for AR10 is B9 (see figure 3.25), holding the musical instrument that is the flute (A54).

Some images have musical instruments: B9, B10 and B11 wield the aforementioned flute (A54), lap drums (*mukunda*; A55) and floor drums (*muraja*; A56) respectively. Others hold objects connected with perfume: B7 and B29 both hold long-stemmed incense holders (A52), while B30 holds a fragrance container (A51). Yet other images are singular: B8 is the only image with a lamp (A53), and B25 is the only one with a flag (A57).

Figure 3.25. B9 is the representative object for AR10.

SV3, SV4, SV5: Standing Major (3), Standing Intermediate (3), Standing Minor Sub-Variants (14)

Having discussed the 62 ornamented seated images that constitute V3, I turn now to V4 and its ornamented standing images. V4 can be segmented into three sub-variants: Ornamented Standing Major (SV3), Ornamented Standing Intermediate (SV4), and Ornamented Standing Minor (SV5). As with the distinction between AR1–3, SV3–5 differ in terms of attribute cluster A20–23. While SV3 requires at least two or more of A20–23 to be considered "major," SV4

requires only one attribute from A20–23 to be considered "intermediate" and SV5 has to have none of the attributes A20–23 to be considered "minor." These three sub-variants, however, share two attribute clusters in common: T2's A5–12 cluster, and V4's A16–19. Three images belong to SV3, three to SV4, and 14 to SV5.

Artefact Type 11: Ornamented, Standing, Major, Martial Artefact Type (2)

Artefact Type 11 (AR11) is the Ornamental, Standing, Major, Martial Artefact Type. There are two images, B61 and B65, in this type. The presence of four attribute clusters characterises AR11. These are T2's A5–12 cluster, V4's A16–19, at least two attributes from the A20–23 cluster, and at least one attribute from the martial cluster (A24–35, A47, A64, A92). B61's attribute from the martial cluster is the long, sculpted stick (A64) the deity wields in his left hand. B65's attribute, in contrast, is the trident (A34) the deity wields in its lower right hand. The representative object for AR11 is B61 (see figure 3.26).

Figure 3.26. B61 is the representative object for AR11.

Artefact Type 12: Ornamented, Standing, Major, Peaceful Artefact Type (1)

Artefact Type 12 (AR12) is the Ornamented, Standing, Major, Peaceful Artefact Type. There is only one image here: B48 (see figure 3.27). The presence of three attribute clusters, and the absence of one attribute cluster, characterises AR12. The three required clusters are T2's A5–12 cluster, V4's A16–19, at least two attributes from the A20–23 cluster. But AR12 images must have *no* attributes from the martial cluster (A24–35, A47, A64, A92). And so B48 with its four hands holding a book (A72), rosary (A73), a lotus flower (A80) and making *varada mudrā* (A39), with no weapons in sight, belongs to AR12.

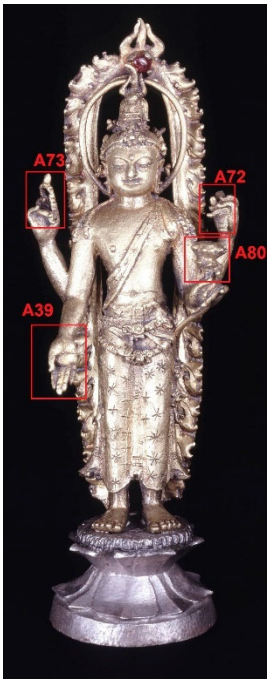

Figure 3.27. B48 is the only object in AR12.

Artefact Type 13: Ornamented, Standing, Intermediate, Ferocious Artefact Type (2)

Artefact Type 13 (AR13) is the Ornamented, Standing, Intermediate, Ferocious Artefact Type. There are two images, B50 and B100, in this type. AR13 is defined by the presence of five attribute clusters. These required clusters are T2's A5–12 cluster, V3's A16–19, one attribute from the A20–23 cluster, at least one attribute from the martial cluster (A24–35, A47, A64, A92), and at least two attributes of the ferocious cluster (A37, A82, A84–86).

I term this last cluster the ferocious cluster, as the five attributes within suggest their deities possess a vicious character. These attributes are: *tarjanī mudrā* (A37), which is the gesture of warning;[230] boar/sow heads (A82); fierce eyes (A84), which generally take the form of large or bulging eyes; fangs (A85), bared wide in the deity's mouth; and skulls present on the deity image (A86).

Now, B50 and B100 both have the same attribute in the A20–23 cluster: they both stand atop socles. B50's socle is large, squarish and multi-tiered, while B100 stands atop a thin, ovoid plinth that follows the outline of the image's lotus pad (A91).

We now turn to B50 and B100's attributes from the martial cluster. The more intact image, B50 retains more of its multiple arms than B100, and so can be seen to possess more martial attributes. B50 has five such attributes. It holds the skull-staff (A25), noose (A29), club (A30), stick (A64) and stands atop a corpse (A27). B100 meanwhile only can be seen to stand atop a corpse (A27) – if its hands wielded weapons at a previous time, these weapons have long been lost.

Last, both B50 and B100 have four attributes from the ferocious cluster: both have fierce eyes (A84) and fangs (A85) in at least three of their many heads, make *tarjanī mudrā* (A37) with one of their hands, and across their bodies and bases are surrounded by skull imagery (A86).

The representative object for AR13 is B50, shown in figure 3.28. There, B50's ferocious cluster attributes are highlighted in red, while its martial cluster attributes are highlighted in orange.

[230] Lunsingh Scheurleer and Klokke, *Ancient Indonesian Bronzes*, 176.

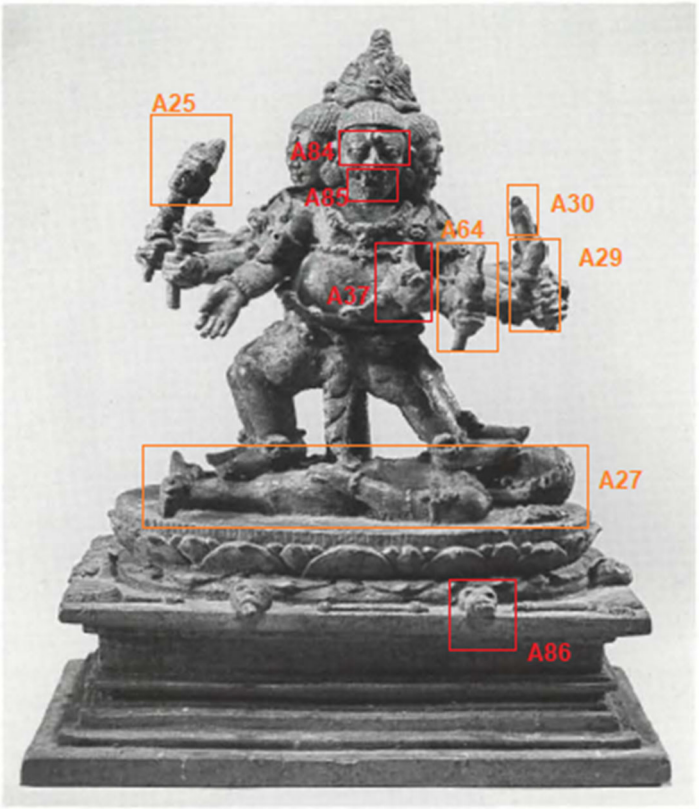

Figure 3.28. B50 is the representative object for AR13. Ferocious cluster attributes are in red, while martial cluster attributes are in orange.

Artefact Type 14: Ornamented, Standing, Intermediate, Peaceful Artefact Type (1)

Artefact Type 14 (AR14) is the Ornamented, Standing, Intermediate, Peaceful Artefact Type. Only one artefact is like this, namely B47 (see figure 3.29). AR14 is defined by the presence of three attribute clusters, and the absence of two. These required clusters are T2's A5–12 cluster, V4's A16–19, and one attribute from the A20–23 cluster, marking it as "intermediate." Unlike AR13, AR14 must have *no* attributes from the martial cluster (A24–35, A47, A64, A92), nor any from the ferocious cluster (A37, A82, A84–86).

B47 consequently looks pacific, with neither weapons nor fierce features. Its four arms, besides making a few *mudrās*, hold nothing more violent than a lotus (A80), book (A72) and rosary (A73).

Figure 3.29. B47 is the only object in AR14.

Artefact Type 15: Ornamented, Standing, Minor, Ferocious Artefact Type (2)

Artefact Type 15 (AR15) is the Ornamented, Standing, Minor, Ferocious Artefact Type. There are only two images, B13 and B14, in this category. AR15 is defined by the presence of four attribute clusters, and the absence of one attribute cluster. Attributes from the A20–23 cluster must be absent. The four required clusters meanwhile are T2's A5–12 cluster, V3's A16–19, at least one attribute from the martial cluster (A24–35, A47, A64, A92), and at least two attributes from the ferocious cluster (A37, A82, A84–86).

B13 and B14 both possess at least one martial attribute: B13 wields a *vajra* (A24) in its left hand, while B14 holds a decapitated pig's head (A92) in its left hand and a goad (A28) in its right.

As for attributes from the ferocious cluster, B13 and B14 both have the same three. Both images have the head of a boar or sow (A82). They also have fierce round eyes (A84) and fangs (A85) protruding from their porcine snouts.

The representative object of AR15 is B14 (see figure 3.30). There, B14's ferocious cluster attributes are highlighted in red, while its martial cluster attributes are highlighted in orange.

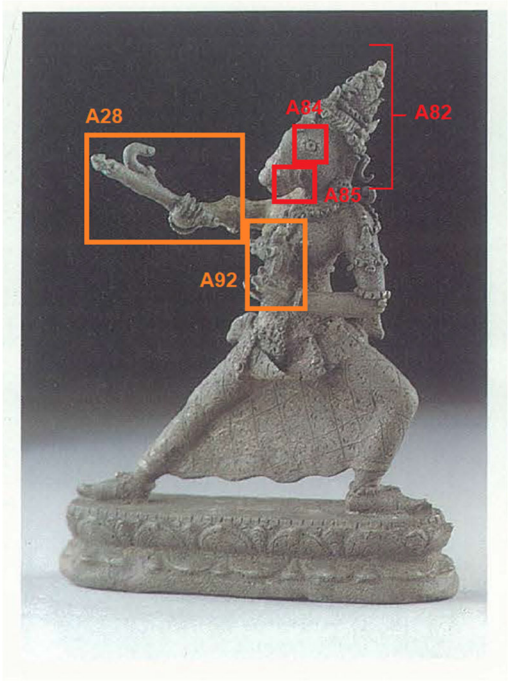

Figure 3.30. B14 is the representative object for AR15. Ferocious cluster attributes are in red, while martial cluster attributes are in orange.

Artefact Type 16: Ornamented, Standing, Minor, Martial Artefact Type (8)

Artefact Type 16 (AR16) is the Ornamented, Standing, Minor, Martial Artefact Type. There are seven images in this type: B15, B16, B17, B19, B46, B59, B95 and B98. AR16 is defined by the presence of three attribute clusters, and the absence of two. Attributes from the A20–23 cluster must be absent. Attributes from the ferocious cluster (A82, A84–86) must also be absent. The three requires clusters however are: V2's A5–12 cluster, V4's A16–19, and at least one attribute from the martial cluster (A24–35, A47, A64, A92). The representative object of AR16 is B16 (see figure 3.31).

As with other types labelled “minor,” AR16’s seven images vary in their martial attributes. B15 has a *vajra* (A24) in its right hand. B16 holds a bow (A26) in its left hand. B17 holds four links of chain (A47) in its left hand. B19 holds a club in its left hand, by its left leg. B46 holds a noose (A29) in its upper left hand. B59 does the same as B19 with its club (A30) while holding a wheel (A35) in its other (and upper) left hand. B95 holds a stick in its third-lowest right hand, and B98 holds a stick in its uppermost right hand.

Figure 3.31. B16 is the representative object for AR16.

Artefact Type 17: Ornamented, Standing, Minor, Peaceful Artefact Type (4)

Artefact Type 17 (AR17) is the Ornamented, Standing, Minor, Peaceful Artefact Type. There are four images in this type: B18, B44, B60 and B74. AR17 is defined by the presence of two attribute clusters, and the absence of three. The two clusters that must be present are: V2’s A5–12 cluster, and V4’s A16–19. The three clusters whose attributes must be absent are: the A20–23 cluster, the martial cluster (A24–35, A47, A64, A92) and the ferocious cluster (A37, A82, A84–86). The representative object of AR17 is B74 (see figure 3.32).

The attributes AR17 images possess also vary. B18, for instance, makes dance hand gestures, while B44 has holds a lotus bud (A80) in its left hand, makes *varada mudrā* (A38) with its right hand and has a figure in its crown (A71). B60 holds a rosary (A73) and possesses a floral motif (A81), while B74 holds a lotus bud (A80) in its right hand and also possesses a floral motif (A81).

Figure 3.32. B74 is the representative object for AR17.

Limitations

Having explicated my typology, I turn to its limitations. First among the limitations is my small sample size. I was only able to study a hundred metal images in my study. Ceramic archaeological studies, meanwhile, routinely work with much larger sample sizes. In their 2020 study of the Colombo Court site in Singapore, Miksic and Goh analysed 3964 ceramic sherds in total: 1757 sherds from Square I and 2207 sherds from Square II, with each square being an excavation unit.[231] Miksic's 2003 excavation at Singapore's Cricket Club recovered,

[231] Goh Geok Yian and John N. Miksic, "Statistical Analysis of the Artifacts by Excavation Units," in *Southeast Asian Archaeological Site Reports. The Colombo Court Site Report* (Singapore: NUS Press, 2020), https://epress.nus.edu.sg/sitereports/colombo/text/statisticalanalysisunits/.

in total, 37060 ceramics.[232] A hundred metal images pales when juxtaposed against ceramic studies' vast numbers. As the 93 attributes I detected illustrate, metal images display considerable complexity – for reasons of finitude, working with a larger sample size would have been challenging. Precedence also exists for working with relatively small numbers of metal images. Mechling and her collaborators' paper "The Indonesian Bronze-Casting Tradition," already discussed in the previous chapter, studied 37 images in total.[233] Other typologies of Hindu-Buddhist figural images from Java are similarly modest. Edi Sedyawati's magisterial study of Central and Eastern Javanese Gaṇeśa statues examined 169 statues.[234]

Another limitation is that I worked with photographs of the metal images, rather than the physical metal images. The quality of the photographs available for these images varied considerably, affecting how easily I could perceive their respective images' attributes. Unsurprisingly, images taken from established museums with considerable funding displayed their attributes more clearly. B76 from New York's The Metropolitan Museum of Art and B53 from London's British Museum are examples of such images. Other images were of poorer quality, making it harder to perceive their attributes. The age, colour quality and original size of some photos contributed to this deficiency. Some photos of the Nganjuk bronzes are old: B26 and B38, among others, appear as black-and-white photos from a chapter by Lokesh Chandra and Sudarshana Devi Singhal dating back to 1995.[235] While earlier coloured photos of B26 exist in Fontein's book, they are too small to reveal their attributes in great detail. In situations where I cannot see an attribute for myself, even when the secondary literature may claim its presence, I have obeyed typology's principle of parsimony and marked the attribute

[232] John N. Miksic, "Part Four: Statistics," in *Southeast Asian Archaeological Site Reports. Singapore No 1: The Singapore Cricket Club Excavation* (Singapore: NUS Press, 2020), https://epress.nus.edu.sg/sitereports/scc/text/statistics/.
[233] Mechling et al., 70.
[234] Sedyawati, *Gaṇeśa Statuary*, 38.
[235] For these photos, see: Lokesh Chandra and Sudarshana Devi Singhal, "Identification of the Ṅañjuk Bronzes," in *Cultural Horizons of India*, vol. 4 (New Delhi: International Academy of Indian Culture and Aditya Prakashan, 1995), 105–9.

absent. Furthermore, not all museums or art books provide front, back and side photos. In situations where existing photographs, such as of B50 or B100, do not provide a 360-degree view of the image, I have similarly applied the parsimony principle so as to be consistent.

Despite these limitations, it is still possible for me to derive sufficient comparison among these objects and types to reject my first and third initial hypotheses, but not reject my second and fourth hypotheses. The use of typology has allowed me to posit six artefact types that correlate with Esoteric Buddhism, and that attribute A71 distinguishes non-Javanese metal objects from Javanese ones. Even as we build on this knowledge, typology reminds us to tread cautiously: the distinction between Buddhist and Hindu objects is more porous than we might believe at first glance. Furthermore, little evidence supports the argument that the Nganjuk and Surocolo hoards are *maṇḍalas*. It is to these matters and more that we turn in the next chapter.

CHAPTER FOUR. Art History Meets Typology: Material Dynamics in Pre-Modern Java[236]

This chapter examines what we learn when we put the typology of bronze objects created in the last chapter in conversation with existing art historical knowledge about bronze objects from pre-modern Java. In this way, I examine the *dynamics* between bronze material objects in and beyond pre-modern Java. The notion of "dynamics" I adapt from Christian Lammerts' edited volume, *Buddhist Dynamics in Premodern and Early Modern Southeast Asia*.[237] Lammerts uses the word there in two senses. He uses it first of Buddhism, drawing attention to that religion's plurality in Southeast Asia, "marked by a dynamism and difference that varies across geography and time."[238] Per my emphasis on material approaches discussed in Chapter Two, the spatial and temporal "dynamism and difference" I engage with pertain first to my Javanese bronze objects, and then their religious characteristics. Another sense connoted by "dynamics," according to Lammerts, is the "variable angles of analytical view available to scholarship" when studying a phenomenon as diverse as Buddhism.[239] By engaging with bronze objects via these two methods of studying material culture, I adopt the second sense too. Putting typological and art historical findings together allows us to see which conclusions suggested by one method might be supported, challenged – or even invalidated – by the other.

Each section of this chapter takes up one of my four hypotheses in conjunction with existing art historical findings. As we will see in the "Hypothesis One" section, the Nganjuk and Surocolo hoards possess a distinct artistic idiom that parallels Lunsingh Scheurleer and Klokke's art historical argument for a "Nganjuk style," but this idiom is not so unique that other bronze objects do not share attributes from it. There are two degrees of Esoteric Buddhism

[236] This title was inspired by the title of the volume edited by Christian Lammerts. See: D. Christian Lammerts (ed.), *Buddhist Dynamics in Premodern and Early Modern Southeast Asia* (Singapore: ISEAS, 2015).
[237] Lammerts, *Buddhist Dynamics*.
[238] D. Christian Lammerts, introduction to *Buddhist Dynamics in Premodern and Early Modern Southeast Asia*, ed. D. Christian Lammerts (Singapore: ISEAS, 2015), 1–2.
[239] Lammerts, introduction to *Buddhist Dynamics*, 3.

present in the bronzes, as the "Hypothesis Two" section highlights: a more fearsome level correlated with two artefact types (AR13, AR15), and a less fearsome level correlated with four artefact types (AR7, AR9, AR11 and AR16). Bronzes from Nganjuk and Surocolo are correlated with both levels, consistent with arguments for their Esoteric Buddhist character. However, existing scholarly identifications of deities from the Nganjuk and Surocolo hoards only align in a limited way with claims that these deities form *maṇḍalas* of some sort – in particular the *Vajradhātu maṇḍala* (see illustration in figure 4.1), as it is described in the Sanskrit text, the *Sarva-tathāgata-tattva-saṃgraha* (*STTS*).

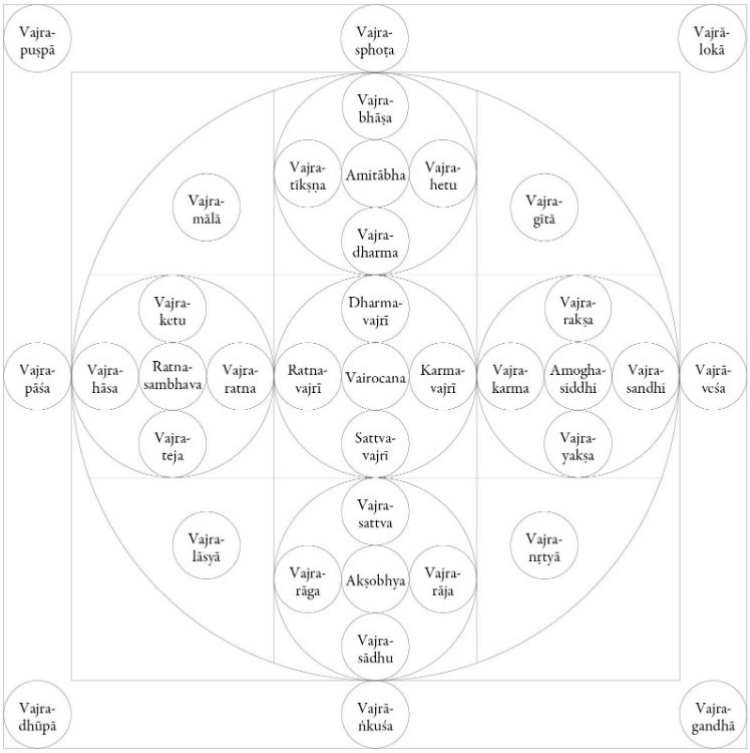

FIG. 4.10. THE THIRTY-SEVEN DEITIES OF THE VAJRADHĀTU-MAṆḌALA

Figure 4.1. The *Vajradhātu maṇḍala* according to the *Sarva-tathāgata-tattva-saṃgraha*. Source: Tanaka, 131.

The "Hypothesis Three" section points out how bronzes considered Buddhist overlap with bronzes that art historians consider non-Buddhist, suggesting there is iconographic overlap between Buddhist and Hindu objects. In the "Hypothesis Four" section, as some of the control objects I have included were not discovered in Java, I also will be able to discuss how

certain attributes – A71 in particular – correlate with objects being from other parts of Island Southeast Asia.

Hypothesis One, Not Rejected: Overlaps Between Nganjuk, Surocolo and Other Bronzes

The Nganjuk and Surocolo hoards possess a distinct artistic idiom, but this visual vocabulary is not so unique that bronzes not from those hoards do not share attributes associated with them. According to my typology, objects from the Nganjuk and Surocolo hoards possess attribute clusters that distinguish them from other bronzes not from those two hoards. Hypothesis one, *bronzes from the Surocolo and Nganjuk hoards possess a number of attributes marking them as clearly different from bronzes that are not from both hoards*, was consequently not rejected. Now from a stylistic perspective, Lunsingh Scheurleer and Klokke have spoken of a "Nganjuk style" (Group Five of their list of style groups, as discussed in Chapter Two), one characterised by "spiky ornamentation bedecking the figures" that they argue is also shared by the Surocolo bronzes.[240] A typological standpoint aligns with this stylistic perspective, because it finds that the bronzes from both hoards can be categorized under artefact types to which bronzes not from those hoards do not belong.

At this juncture I identify which objects in my typology are from the two hoards, for ease of reference. The objects known to be from the Nganjuk and Surocolo hoards in my typology are 47 in total. 29 objects come from the Nganjuk hoard: B23, B25–39, B66, B76–B87, and 18 come from the Surocolo hoard: B3–B20.

Bronzes from both hoards appear in eight artefact types: AR6, AR7, AR8, AR9 and AR15, AR16 and AR17. Fifty percent of these artefact types contain objects essentially only from Nganjuk and Surocolo, consistent with Hypothesis One. These four artefact types are: AR7, AR9, AR10 and AR15.

[240] Lunsingh Scheurleer and Klokke, 32–33.

One hundred percent of the objects in two of these artefact types contain only objects from Nganjuk and Surocolo. The first artefact type like this is AR9, the "Ornamented, Seated, Minor, Martial Artefact Type." It contains two objects from Surocolo (B3 and B5), and 8 artefacts from Nganjuk (B23, B26, B27, B37, B39, B78, B79 and B81). The other artefact type only contains objects from Surocolo. This is AR15, the "Ornamented, Standing, Minor, Ferocious Artefact Type," to which B13 and B14 belong.

The other two artefact types, AR7 and AR10, basically contain only objects from the two hoards, except for one object each. These exceptions can be left out as outliers to the artefact types more broadly. AR7, the "Ornamented, Seated, Intermediate, Martial Artefact Type" contains four objects: three are from the Nganjuk hoard (B66, B8, and B87), but one is not (B70). The same is true of AR10 type, the "Ornamented, Seated, Minor, Peaceful Artefact Type." In this case there are 21 objects that are from the hoards: 13 from Nganjuk (B25, B28, B29, B30, B33, B34, B36, B38, B76, B77, B80, B82 and B86) and eight from Surocolo (B4, B6, B7, B8, B9, B10, B11 and B12). The one sole exception not from either hoard is B58 (see Figure 4.2).

We have additional grounds for reading object B58 as an outlier, in addition to the fact that it is in the minority at only 4.55% of the artefact type. Southeast Asian art historian Nandana Chutiwongs suspects B58 is a fake: "[i]t [is] merely an imitation of the style of" the Nganjuk objects, even if "[i]n comparison with the average modern products, the quality and finish of this image stand out."[241] She adds that "[t]here actually exists a strong stylistic similarity between this bronze" and an object "from the notorious Dieduksman collection."[242] While Chutiwongs does not explicitly state what is controversial about that collection,

[241] Chutiwongs, 28–29.
[242] Chutiwongs, 28–29.

Lunsingh Scheurleer and Arlo Griffiths tell us in a 2014 publication that the collection Dieduksman contained "early, well-known forgeries mixed with authentic bronzes."[243]

Figure 4.2. B58 is probably a forgery.

Even as the aforementioned four artefact types demonstrate how the Nganjuk and Surocolo hoards possess their own distinct idiom, some objects known to be the hoards share attributes with non-hoard objects. Four more artefact types comprise objects from Nganjuk and Surocolo, but these all also contain objects not found in either cache: AR6, AR8, AR16 and AR17.

In the case of AR6, the "Ornamented, Seated, Major, Peaceful Artefact Type," only two objects out of a total of 18 come from the hoards: B20 is from the Surocolo hoard, while B31 is from the Nganjuk hoard. Both objects have been identified as cosmic Buddhas known to head up their own "Buddha families" in the *Vajradhātu maṇḍala*, or attendant deities close to them according to the key Esoteric Buddhist text, the *Sarva-tathāgata-tattva-saṃgraha*

[243] Pauline Lunsingh Scheurleer and Arlo Griffiths, "Ancient Indonesian Ritual Utensils and Their Inscriptions: Bells and Slitdrums," *Arts Asiatiques* 69 (2014): 129n2.

(*STTS*).[244] Jan Fontein tentatively suggests B20 may be Vajrasattva, one of the attendant deities (*vajrabodhisattva*) of a cosmic Buddha in the *Vajradhātu maṇḍala*: although Vajrasattva's "customary attributes, the *vajra* and the bell […] can no longer be recognized," the image does assume that deity's posture with "left hand resting on the thigh and the right hand raised before the chest." [245] Lokesh Chandra and Sudarshana Devi Singhal meanwhile read B31 as Ratnasambhava, the deity who leads the *ratna*- (jewel) family in the south of the *Vajradhātu maṇḍala*, on the basis of his horse-mount (A66) and *varada mudrā* (A38).[246]

In this case, it makes sense that B20 and B31 share attributes with non-hoard objects; possessing two or more attributes of the attribute cluster, A20–23, suggests hierarchical importance and singles them out in the typology. Others in AR6 also appear to be cosmic Buddhas. B51 and B53 (see figures 4.3 and 4.4), for instance, have been identified by the British Museum as Vairocana and Amitābha respectively.[247] Vairocana is the central deity of the *Vajradhātu maṇḍala* while Amitābha is head of its *padma* (lotus) family in the west.[248] As the British Museum gives no indication that B51 and B53 were found in hoards along with other images that seem hierarchically less important, as the Nganjuk and Surocolo hoards were, it is possible to assume that such cosmic deities can be found singly in Java. It would then be plausible that hoard deities like B20 and B31 share some attributes with non-hoard deities.

[244] Christian Luczanits, "From Tabo to Alchi: Revisiting Early Western Himalayan Art," *Orientations* 51, no. 5 (2020): 34; Tanaka, *An Illustrated History of the Maṇḍala*, 129–131.
[245] Fontein, 230.
[246] Lokesh Chandra and Sudarshana Devi Singhal, "Identification of the Ṅañjuk Bronzes," 100, 105.
[247] British Museum "Vairocana," British Museum. Reg. no. 1859,1228.77, so0urce: "Figure," The British Museum, accessed March 8, 2022, https://www.britishmuseum.org/collection/object/A_1859-1228-77; British Museum "Amitābha," British Museum. Reg. no. 1859, 1228.1, source: "Figure," The British Museum, accessed March 6, 2022, https://www.britishmuseum.org/collection/object/A_1859-1228-1.
[248] Tanaka, *An Illustrated History of the Maṇḍala*, 131.

Figure 4.3. B51, identified by the British Museum as Vairocana. It belongs to AR6.

Figure 4.4. B53, identified by the British Museum as Amitābha. It belongs to AR6.

AR8, the "Ornamented, Seated, Intermediate, Peaceful Artefact Type," meanwhile contains four objects from the hoards, and four non-hoard objects. All four objects are from the Nganjuk cache (B32, B35, B83, B84; none are from Surocolo), leaving the other four (B24, B45, B88, B96). Having assumed the Nganjuk cache is the *Vajradhātu maṇḍala*, Lokesh Chandra and Sudarshana Devi Singhal consider B32 to be Vajradharma,[249] an attendant deity of Amitābha in the *padma* family,[250] and B35 to be Candraprabha, which appears in a Japanese Buddhist version of the *Vajradhātu maṇḍala*.[251] The Metropolitan Museum of Art did not attempt to assign an identity to B83 and B84, calling B83 a "Seated Female Deity" and B84 a Seated Deity from an Esoteric Buddhist Mandala [*sic*.]" while identifying them as coming from the Nganjuk hoard.[252]

[249] Lokesh Chandra and Sudarshana Devi Singhal, "Identification of the Ṅañjuk Bronzes," 100.
[250] Tanaka, *An Illustrated History of the Maṇḍala*, 131.
[251] Lokesh Chandra and Sudarshana Devi Singhal, "Identification of the Ṅañjuk Bronzes," 103.
[252] Met Nganjuk Female Deity, Arms Broken, Metropolitan Museum of Art, Accession no. 1987.142.164, source: "Seated Female Deity," The Met, accessed March 6, 2022, https://www.metmuseum.org/art/collection/search/39051; Met Nganjuk Conch Deity. Metropolitan Museum of Art. Accession no. 1987.142.164. Source: "Seated Deity from an Esoteric Buddhist Mandala," The Met, accessed March 6, 2022, https://www.metmuseum.org/art/collection/search/39050.

What clinches the overlap in AR8 between deities from and beyond the hoards is B24, which Lunsingh Scheurleer and Klokke identify as Vajrasattva.[253] But unlike Fontein's Vajrasattva (B20) which was an attendant bodhisattva, B24 they consider to be a cosmic Buddha (*Ādi-Buddha*) owing to his richly embellished presentation.[254] More importantly, even though this figure is not part of the Nganjuk hoard, "[s]tylistically this figure is very close to the Nganjuk *maṇḍala* statuettes, especially the Buddhas, not only in the emphasis on the decorative elements but also in the very shape of the ornaments, the body and the socle."[255] Although the two scholars adopt a stylistic approach, their findings corroborated those reached by my typological method.

AR16, the "Ornamented, Standing, Minor, Martial Artefact Type," also contains objects both from the hoards and from elsewhere. Given these deities – from the hoard and not – possess a protective character, that they wield in common weapons from the martial cluster (A24–35, A47, A64, A92), is arguably expected. The four objects in AR16 from Surocolo (B15, B16, B17 and B19; none are from Nganjuk) appear to be minor guardian deities. Fontein does not identify B15 beyond calling it an "unidentified guardian figure,"[256] but considers B16 a minor guardian deity named Vināyaka known from a Japanese *maṇḍala* on the basis of his bow and arrow (A26).[257] Fontein tentatively considers B17 to be *Vajrasphoṭā*, a guardian goddess protecting the western gate of the *Vajradhātu maṇḍala*,[258] on the basis of the chain she holds in her hands (A47).[259] B19 he tentatively identifies as Vajralāśī, another guardian goddess in the southeastern part of the *Vajradhātu maṇḍala*'s circle[260] which I noted in my typology wields a club (A30).

[253] Lunsingh Scheurleer and Klokke, 105.
[254] Lunsingh Scheurleer and Klokke, 105.
[255] Lunsingh Scheurleer and Klokke, 105.
[256] Fontein, 228.
[257] Fontein 229.
[258] Tanaka, *An Illustrated History of the Maṇḍala*, 131.
[259] Fontein, 229.
[260] Fontein, 230; Tanaka, *An Illustrated History of the Maṇḍala*, 131. Tanaka uses a slight variant of the name in his discussion, "Vajralāśyā."

The remaining four in AR16 not from the hoards (B46, B59, B95, B98) have been identified from an art historical perspective as guardian figures who rightly wield weapons, too. Scholars consider B46, B95 and B98 forms of Avalokiteśvara,[261] the "most widely worshipped of the Mahāyāna bodhisattvas" who, as a protective compassionate deity sometimes uses weapons to protect supplicants from harm.[262]

This leaves only artefact type AR17, the "Ornamented, Standing, Minor, Peaceful Artefact Type," which contains four statues in total but only one from Surocolo and none from Nganjuk: B18. I treat B18 as an exception to the others in its artefact type: B44, B60 and B74. While they are indeed all standing, B18 alone is standing with one foot kicking up into the air (A19), while the rest of the artefact's objects display more homogeneity in all standing with their feet together (A16).

Hypothesis Two, Not Rejected: Overlaps Between Buddhist and Non-Esoteric Buddhist Bronzes

There are two degrees of Esoteric Buddhism present in the bronzes: a more fearsome and less fearsome level. Bronzes from Surocolo are represented among the more fearsome level, while bronzes from both Nganjuk and Surocolo are represented among the less fearsome level. Hypothesis Two, *bronzes that scholars have labelled Esoteric Buddhist possess a number of attributes marking them as clearly different from bronzes that are considered non-Esoteric Buddhist*, was not rejected. My typology shows that six artefact types correlate with this thesis' definition of Esoteric Buddhism, Buddhist thought and practice in which wrathful deities

[261] For B46, see: Tan Yeok Seong, *Preliminary Report on the Discovery of the Hoard of Hindu Religious Objects, near Sambas, West Borneo* (Singapore: Nanyang Book Co., Ltd., 1948), 8. For B95 and B98, see: Lunsingh Scheurleer and Klokke, 87 and 111 respectively.
[262] *The Princeton Dictionary of Buddhism*, comp. Robert E. Buswell Jr. and Donald S. Lopez Jr. (Princeton, NJ: Princeton University Press, 2014), s.v. "Avalokiteśvara."

feature prominently (see Chapter Two).[263] These six artefact types are AR7, AR9, AR11, AR13, AR15, and AR16.

A more fearsome form consists of two artefact types: AR13, the "Ornamented, Standing, Intermediate, Ferocious Artefact Type," and AR15, the "Ornamented, Standing, Minor, Ferocious Artefact Type." The less fearsome form correlates to the remaining four artefact types of AR7, AR9, AR11 and AR16. Interestingly, bronzes from the Surocolo hoard comprise entirely one of the more fearsome artefact types (AR15), but not the other (AR13). Of the four less fearsome artefact types, three contain bronzes from the two hoards. Nganjuk bronzes comprise mostly AR7, Surocolo and Nganjuk bronzes comprise all of AR9, and Surocolo bronzes comprise half of AR16.

If we accept existing art historical interpretations of B50 and B100, the two objects that make up AR13, they both represent Mahākāla, the wrathful Buddhist protector deity, or *dharmapala*,[264] whom Iain Sinclair rightly notes is "present in all phase of Buddhist Tantrism," or Esoteric Buddhism, "from proto-tantra up to the *yoginītantras* [such as the *Hevajra-tantra*] of the late first and early second millennia."[265] Lunsingh Scheurleer and Klokke identify B50 as Mahākāla in *Divine Bronze*,[266] while Martin Lerner does the same for B100 which belongs to the Metropolitan Museum of Art's Kronos Collection.[267] Both objects wield weapons and are bedecked in macabre imagery – they possess at least one attribute from the martial cluster (A24–35, A47, A64, A92) and at least two attributes of the ferocious cluster (A37, A82, A84–86), as mentioned in the last chapter. According to Linrothe, wrathful deities like Mahākāla

[263] Linrothe, *Ruthless Compassion*, 3–4.
[264] Marylin M. Rhie, "Mahakala: Some *Tangkas* and Sculptures from the Rubin Museum of Art," in *Demonic Divine: Himalayan Art and Beyond*, by Rob Linrothe and Jeff Watt (New York: Rubin Museum of Art, 2004), 44–45.
[265] Iain Sinclair, "Vajramahākāla and the *Śaivasaugata* Rulers of Dharmāśraya and Siṅhasāri," *Entangled Religions* 13, no. 7 (2022): 2, https://doi.org/10.46586/er.13.2022.9678. This issue of *Entangled Religions* does not use page numbers but paragraph numbering, so the aforementioned number refers to the paragraph numbering running alongside the paper.
[266] Lunsingh Scheurleer and Klokke, 97.
[267] Martin Lerner, *The Flame and the Lotus: Indian and Southeast Asian Art from the Kronos Collections* (New York: The Metropolitan Museum of Art, 1984), 126.

appear so vicious because they must "adopt the forms of what they are engaged in destroying. In the process they exaggerate the hyperbole of defiance, power and intimidation displayed by the obstacles."[268]

AR15, the other group of more fearsome artefacts, only contains objects from the Surocolo hoard, and from an art historical perspective appear to be *maṇḍala* gate guardians. Like AR13, they possess at least one attribute from the martial cluster (A24–35, A47, A64, A92) and at least two attributes of the ferocious cluster (A37, A82, A84–86).

Fontein tentatively identifies the two objects in AR15, B13 and B14, as Śūkarāsyā, the divine sow, and Hayāsyā, the divine mare, respectively.[269] He appears to reach these identifications by starting with how these objects have feminine figures and fearsome animal heads, then noting that there is "a group of female guardian who guard the four gates of the mandala."[270] He does not say from which particular *maṇḍala* text or image he derives these identifications, only that in the *Vajradhātu maṇḍala* male deities – definitely not these two – guard the gates.[271] I note here that the *Niṣpannayogāvalī* (*NṢP*) names both Hayāsyā and Śūkarāsyā as gate-guardians of the 23-goddess *maṇḍala* of Nairātmyā:[272]

> pūrva-dvāre hayāsyā sita-nīlā |
> dakṣiṇe śūkarāsyā pīta-nīlā |
> paścime śvānāsyā rakta-nīlā |
> uttare siṃhāsyā syāma-nīlā |
>
> The eastern gate is guarded by white-blue Hayāsyā.
> The southern gate is guarded by yellow-blue Śūkarāsyā.
> The western gate is guarded by red-blue Śvānāsyā.
> The northern gate is guarded by dark-blue Siṃhāsyā. (*NṢP* 6.1)

[268] Linrothe, "Protection, Benefaction and Transformation," 7.
[269] Fontein, 228.
[270] Fontein, 228.
[271] Fontein, 228.
[272] Lokesh Chandra and Nirmala Sharma, *Niṣpanna-Yogāvalī*, 69–71.

However, the implements that the two guardians wield in *NṢP* 6.1, the shears (*kartri*) and cranium (*kapāla*), definitely do not match up with the *vajra* (A24) and goad (A28) that B13 and B14 bear respectively.

AR7, the "Ornamented, Seated, Intermediate, Martial Artefact Type," is the first of the four less fearsome artefact types. It has been briefly discussed in the previous section about Hypothesis One. As mentioned in the last chapter, AR7's objects all display at least one of the attributes from the martial cluster (A24–35, A47, A64, A92), enabling them to perform their protective function as Esoteric Buddhist deities.[273] Of AR7's four objects, three are from the Nganjuk hoard. Two of these – B66 and B85 – wield *vajra*-weapons (A24), an object associated with Esoteric Buddhism,[274] even if their exact identities as deities is unclear. The last, B85, carries a cuirass (A33) conveying a protective function. The last object which is not from Nganjuk, B70, carries multiple weapons: an axe (A32) and a *cakra*-wheel (A35).

AR9, the "Ornamented, Seated, Minor, Martial Artefact Type," has also been discussed in the last section. Fontein identifies B3 and B5 from Surocolo as Vajrarāga and Vajrakarma because of their bow (A26) and double *vajra* (*viśvavajra*; which my typology considers a kind of *vajra*, A24) respectively. In the *Vajradhātu maṇḍala*, Vajrarāga resides in cosmic Buddha Akṣobhya's *vajra* family in the east, sitting south of Akṣobhya,[275] while Vajrakarma resides in cosmic Buddha Amoghasiddhi's *karma* family in the north, sitting south of Amoghasiddhi.[276] As for the eight Nganjuk objects in AR9, B23 is Vajrasattva according to Lunsingh Scheurleer and Klokke because of the characteristic configuration of *vajra* (A24) in his right hand and bell (*ghaṇṭā*; A83) by his left thigh.[277] Fontein identifies B26 and B27 as Vajrāṅkuśa and Vajrasphoṭā because of their elephant-goad (A28) and chain (A47) respectively. In the

[273] Linrothe, "Protection, Benefaction and Transformation," 5–8.
[274] Acri, "Introduction," 7.
[275] Fontein, 224; Tanaka, 131.
[276] Fontein, 225; Tanaka, 131.
[277] Lunsingh Scheurleer and Klokke, 103.

Vajradhātu maṇḍala, Vajrāṅkuśa and Vajrasphoṭā sit outside the *maṇḍala*'s palace, guarding the eastern and western gates respectively.[278] B37 and B39 meanwhile Lokesh Chandra and Sudarshana Devi Singhal identify as Bhadrapāla and Jālinīprabha, although they do not clearly from which *maṇḍala* they derive this identification from nor the iconography on which they reach their conclusions.[279] B78, B79 and B81 from the Metropolitan Museum of Art's collection have not been identified: what is clear is the former two wield *vajras* (A24),[280] while the last wields a pair of dismembered forearms.[281]

The third artefact type containing less fearsome objects is AR16, which contains four objects from Surocolo. I have discussed all eight objects in this artefact type in the previous section.

While the last artefact type, AR11, contains objects not from either hoard that should belong to the less aggressive form of Esoteric Buddhism, their art historical identities suggest they may not be Esoteric Buddhist deities at all. The artefact type's two objects are B61 and B65. As Chutiwongs notes, B61's iconography has "no parallels in either Indonesia or elsewhere," making its identity hard to determine.[282] J. G. de Casparis identifies B61 as one of the nine Sanskritic planets, Rāhu, for an inscription on the upper plane of B61's throne names him as such: "Saṅ Hyaṅ Rāhu."[283] From my research, Rāhu appears across Sanskritic literature without particular association with Esoteric Buddhism,[284] making it unlikely that B61 is an

[278] Tanaka, 131.
[279] Lokesh Chandra and Sudarshana Devi Singhal, "Identification of the Ṅañjuk Bronzes," 103.
[280] Met Nganjuk Flower Deity. Metropolitan Museum of Art, accession no. 1987.142.5, source: "Seated Male Deity Supporting a Vajra on His Finger," The Met, accessed March 6, 2022, https://www.metmuseum.org/art/collection/search/39046; Met Nganjuk Viśvavajra Deity 1, Metropolitan Museum of Art, accession no. 1987.142.6, source: "Seated Deity Holding a Double Vajra," The Met, accessed March 6, 2022, https://www.metmuseum.org/art/collection/search/39049.
[281] Met Nganjuk Deity with Two Forearms. Metropolitan Museum of Art, accession no. 1987.142.8, source: "Seated Male Deity Holding Two Ritual Objects," The Met, accessed March 6, 2022, https://www.metmuseum.org/art/collection/search/39048.
[282] Chutiwongs, 36.
[283] Chutiwongs, 36.
[284] Rāhu appears frequently in the Sanskrit *Purāṇas*, mythological compendia texts dating to the 4–6th centuries CE that transcend Buddhist and Hindu boundaries. For references in these texts to Rāhu, see: Cornelia Dimmitt and J. A. B. van Buitenen (trans.), *Classical Hindu Mythology: A Reader in the Sanskrit Purāṇas* (Philadelphia, PA: Temple University Press, 1978), 46, 75, 317, 347–8.

Esoteric Buddhist deity even if, from a typological standpoint, it possesses the attributes of one. The Brooklyn Museum considers B65 to be Ardhanārīśvara, the union of Hindu deities Śiva and Pārvatī in one body.[285] I agree with this assessment as the object's right male chest is flat and the left side indicates a female breast, consistent with other Ardhanārīśvara images found in South and Southeast Asia.[286] To the best of my knowledge, no Esoteric Buddhist deity ever appears in a composite form combining both sexes – making it unlikely this is one.[287]

Hypothesis Three, Rejected: Overlaps Between Buddhist and Non-Buddhist Objects

The typology also highlights that there are overlaps between the iconographies of Buddhist and deities that scholars might label "Hindu."[288] Hypothesis three, *bronzes called Buddhist will possess a number of attributes marking them as clearly different from bronzes that are considered non-Buddhist*, was rejected. There are eight objects in my typology that art historians do not consider Buddhist: B59, B60, B61, B62, B63, B65, B68 and B75. The fact that six of these objects, or 75%, belong to artefact types which contain objects considered Buddhist, and so share attribute clusters in common with them, mean that non-Buddhist objects have overlapping iconographies with Buddhist ones. The two exceptions are B61 and B65, both of which I just discussed, that belong to one artefact type, AR11.

The most numerous of the typology's non-Buddhist objects is the deity Kubera, whom art historians identify to be B62, B63, B68 and B75 – half the non-Buddhist objects. Unsurprisingly, these four objects share similar iconographies and so belong to the same artefact type: AR6. All four objects share ten attributes in common (A5, A6, A8, A10, A21,

[285] Brooklyn Museum "Ardhanārīśvara," Brooklyn Museum, accession no. 1991.178.1, source: "Standing Ardhanarisvara," Brooklyn Museum, accessed March 6, 2022, https://www.brooklynmuseum.org/opencollection/objects/147099.
[286] Ellen Goldberg, *The Lord Who Is Half Woman: Ardhanārīśvara in Indian and Feminist Perspective* (Albany, NY: State University of New York Press, 2002), 20, 26–52.
[287] In a personal communication, Gavin Flood agreed that it is intriguing that Esoteric Buddhist deities never appear in a form combining both sexes, even though in the later *yoginītantras* they appear in sexual union.
[288] Hinduism is a challenging category that, as Gavin Flood notes, is hard to define. For more on these issues, see: Flood, *Introduction to Hinduism*, 5–19.

A23, A77, A88, A89 and A91) demonstrating they represent the same deity, while the number of attributes all objects in AR6 share is only half that at five (A5, A6, A23, A88 and A89). Now Kubera is an appropriate deity to underscore that Buddhist versus non-Buddhist distinctions are porous in material culture: Buddhists and Hindus alike regard him as the God of Wealth.[289] As B75 (see figure 4.5), the representative object for Kubera, shows, he has multiple iconographic attributes suggesting wealth: a mongoose purse (A67), a ball in his hand (A74) that may be a fruit connoting prosperity, a pot belly (A77) and a pot of wealth (*pūrṇaghaṭa*; A78). All Kubera images in my typology have at least three of these attributes, and B75 has all four. Medieval Buddhist texts refer to Kubera by another name, Jambhala.[290] As Chutiwongs notes, he "functions as one of the Buddhist *Lokapālas* (Guardians of the World) and as a member of the Hindu *Dikpālas* (Guardians of the Directions).[291]

Figure 4.5. B75, identified by the Ashmolean Museum as Kubera. It belongs to AR6.

Figure 4.6. B90, identified by Lunsingh Scheurleer and Klokke as Śyāmatārā, or Green Tārā. It belongs to AR6.

In addition to the two objects (B20, B31) from Nganjuk and Surocolo that art historians consider Buddhist deities, numerous other deities in this artefact type are also Buddhist. For

[289] Chutiwongs, 40.
[290] Chutiwongs, 41.
[291] Chutiwongs, 40.

instance B90 (see figure 4.6), whom Lunsingh Scheurleer and Klokke label a "Seated Śyāmatārā," or the Buddhist goddess Green Tārā.[292] As they note, this object "holds the stem of a blue lotus" (A80) in her left hand, her right foot rests on "another smaller lotus," while she makes the *varada mudrā* (A38), all iconographic traits consistent with known images of Green Tārā, a goddess strongly associated with nature.[293] Given that she and other Buddhist deities share enough attribute clusters with Kubera to belong to the same artefact type, there are clear overlaps in Buddhist and non-Buddhist iconography.

Other important Hindu deities are represented among artefact type groups containing Buddhist objects, also supporting the notions of porous iconographic boundaries. Art historians have identified Viṣṇu and Śiva, two deities that are "particularly important in Hindu self-representation," in the typology,[294] with the former as B59 and the latter as B60 and B65.

Now B59 (see figure 4.7) belongs to AR16, which as mentioned contains four Esoteric Buddhist guardian figures from Surocolo as well as three Avalokiteśvara images. What distinguishes B59 as Viṣṇu are his conch in his upper right hand (*saṅkha*; A75), lotus in his lower right hand (A80), wheel in his upper left hand (*cakra*; A35), and club in his lower left hand (*gadā*; A30),[295] the four attributes associated with Viṣṇu's iconographic portrayal as a "dark blue youth" by the time of the Purāṇas circa the 4–6th centuries CE.[296] In addition to sharing with the Buddhist Avalokiteśvara the lotus as an iconographic element, B59 like the Esoteric Buddhist guardian figures has an item from the martial cluster (A24–35, A47, A64, A92), in his case the club.

[292] Lunsingh Scheurleer and Klokke, 70.
[293] Miranda Shaw, *The Buddhist Goddesses of India* (Princeton, NJ: Princeton University Press, 200), 324–5.
[294] Flood, *Introduction to Hinduism*, 17.
[295] Chutiwongs, 29.
[296] Flood, *Introduction to Hinduism*, 114.

Figure 4.7. B59, identified by Nandana Chutiwongs as Viṣṇu. It belongs to AR16.

Figure 4.8. B60, identified by Nandana Chutiwongs as Śiva. It belongs to AR17.

Chutiwongs identifies B60 (see figure 4.8) as Śiva,[297] while B65 as Ardhanārīśvara is a form of Śiva too.[298] I will only discuss B60, the object from AR17, in this paragraph as B65 belongs to a different artefact type and will be discussed shortly. The object's two lower arms have broken off, and it has lost the lower part of its legs.[299] But B60's identity is clear, according to Chutiwongs, for two reasons. First, B60 possesses a third eye on its forehead, which could be the dot on B60's forehead that is A90. Second, B60 holds a rosary in its right hand (*akṣamālā*, A73) and a fly-whisk in its left hand (*cāmara*), although I did not detect the latter as an attribute as it has been somewhat deformed.[300] These two items, when present with a trident (*triśūla*) and water-pot (*kamaṇḍalu*) held in two other hands, are the "'standard' Indonesian formula for the depictions of Śiva" that is simultaneously "unknown in India."[301] Given that the lost arms could have contained this trident and water-pot, Chutiwongs considers this image Śiva.

[297] Chutiwongs, 33.
[298] Goldberg, 1.
[299] Chutiwongs, 33.
[300] Chutiwongs, 33.
[301] Chutiwongs, 34. For more on Indonesian and Indian images of Śiva differ iconographically, see: Chutiwongs, 33–34.

And there are Buddhist objects in B60's artefact type. Fontein tentatively identifies B18, on the basis of her exuberant dance gestures (B61), as Buddhist goddess Vajranṛtya of the *Vajradhātu maṇḍala*, one of the four goddesses of the inner circle sitting in the northeastern segment.[302] If B18's Buddhist identity is too inconclusive, B44 can be identified as Padmapāṇi,[303] another name for Avalokiteśvara,[304] as

This leaves B61, the unique Rāhu, and B65, Ardhanārīśvara, which I discussed in the last section – both belong to AR11. However, AR11 belongs to the larger category, Sub-variant 3 (SV3), and the other artefact type (AR12) in SV3 contains one Buddhist image (B48) identified with Avalokiteśvara.[305] B48's *varada mudrā* (A38) of the lower right hand, lotus in the lower left hand (A80), and long tresses of hair (A87) are all consistent with known descriptions of Avalokiteśvara.[306] Belonging to SV3 means AR11 and AR12 differ only in one attribute cluster (AR20–23), and so again there are sufficient overlaps between B61 and B65, and Buddhist objects.

Hypothesis Four, Not Rejected: Regional Variation

This typology shows that there are iconographic traits that distinguish metal objects from one region of Island Southeast Asia from another. Hypothesis Four, *metal objects discovered outside Java possess attributes marking them as clearly different from metal objects that are found in Java*, was not rejected.

Twelve objects in my typology were not discovered in Java: B40, B41, B42, B43, B44, B45, B46, B47, B48, B97, B98 and B99. Of these twelve, 50% possess attribute A71, a figure

[302] Fontein, 229.
[303] Sambas Hoard "Padmapāṇi," British Museum. Reg. no. 1956, 0725.6, source: "Figure," The British Museum, accessed March 6, 2022, https://www.britishmuseum.org/collection/object/A_1956-0725-6.
[304] Benoytosh Bhattacharyya, *The Indian Buddhist Iconography*, 2nd ed. (Calcutta: Firma K. L. Mukhopadhyay, 1958), 88.
[305] Tan, *Preliminary Report*, 3.
[306] Tan, 3–4; for Avalokiteśvara's known iconography and attendant variations, see: Benoytosh Bhattacharyya, 124–144.

appearing in the object's crown. Of the 88 remaining objects that originate in Java, not a single one possesses attribute A71. Given that objects not from Java possess certain attributes not seen in objects from Java, and do so to a startling extent, there exist regional variations among the objects found in Island Southeast Asia. As the non-Javanese objects in the typology were discovered in Borneo and Sulawesi, we can speculate that objects from both regions possess attributes not seen in Java.

Objects B40-48 were discovered in Borneo in 1939,[307] an island around 1,038.1 kilometres north from Java,[308] across the Java Sea.[309] These nine objects are what remain of the discovery now known as the Sambas Hoard.[310] According to Tan Yeok Seong's 1948 preliminary report on their discovery, these nine objects were excavated by Chinese workmen "while excavating a mound by the bank of a small stream, on the outskirts of a village named Palangai Sabong, near the town of Sambas in the west of Borneo:[311]

> They dug out an earthen jar about two feet in height. It was covered with a bronze cymbal-shaped disc and was standing on a bronze plate of considerable size which was badly decayed. Accidentally they broke the jar and were dumbfounded at the sight of the treasure. The jar also contained some black sands. Thus these sacred images, after the lapse of centuries […] once again beheld the blue sky.[312]

The broken jar contained, along with one bronze vessel described by the report as a bronze "incense burner," the "nine gold and silver images" that I have included in my typology as objects B40-48. Tan does not mention that the jar originally contained 18 statues and that half

[307] Arlo Griffiths, "Written Traces of the Buddhist Past: *Mantras* and *Dhāraṇīs* in Indonesian Inscriptions," *Bulletin of the School of Oriental and African Studies* 77, no. 1 (2014): 137–94.
[308] Distances are measured via Google Maps using the "Measure Distance" function. I take Nganjuk Regency where the Nganjuk Bronzes were found as my reference point for "Java," and for "Borneo" my reference point is Sambas Regency where the Sambas Hoard was found.
[309] For more on the Java Sea, described by V. J. H. Houben and H. M. J. Maier as the middle of three sea basins comprising what's identified today as the nation of Indonesia, see: V. J. H. Houben and H. M. J. Maier, introduction to *Looking in Odd Mirrors: The Java Sea*, ed. V. J. H. Houben, H. M. J. Maier and W. van der Molen (Leiden: Rijksuniversiteit te Leiden, 1992), vii–x.
[310] E. Edwards McKinnon, "The Sambas Hoard: Bronze Drums, and Gold Ornaments Found in Kalimantan in 1991," *Journal of the Malaysian Branch of the Royal Asiatic Society* 67, no. 1 (1994): 1s2.
[311] Tan, *Preliminary Report*, 1.
[312] Tan, *Preliminary Report*, 1.

had been lost in unspecified circumstances by the time the hoard came into his possession, a fact remarked on in the Archaeological Service in the Dutch East Indies' (*Oudheidkundig Verslag*) 1948 annual report.[313]

Five, or 55.6% of the Sambas Hoard's nine images possess attribute A71, strongly suggesting that the possession of a little figure in the crown worn by an object is an attribute differentiating objects found outside Java from objects inside it. These five objects are B44, B45, B46, B47 and B48. As Jan Fontein notes, while scholars cannot assume hoards "contain only relics of the same age, especially since the reasons for burying these hoards remain unclear,"[314] the Sambas Hoard's objects share so much stylistic similarity that they must have come from the same workshop. Consequently, I will describe how A71 appears on one such object, B47, for it is sufficiently representative of the other objects possessing the same attribute.

Figure 4.9. A71 as it appears in B47.

A71 appears in the centre of B47's elaborately ornamented crown, slightly above where the rim of that crown rests on the object's head (see figure 4.9). The figure in the crown is around half the size of the crown as a whole. In B44 and B45, however, A71 takes up two-

[313] Griffiths, "Written Traces," 141–142. This article of Griffiths translates the 1948 *Oudheidkundig Verslag* annual report's entry at: Griffiths, "Written Traces," 142. Mathilde Mechling draws attention to Griffiths' translation in: Mathilde Mechling, "Buddhist and Hindu Metal Images of Indonesia: Evidence for Shared Artistic and Religious Networks across Asia (c. 6th–10th Century)," Vol. 1 (PhD Diss., Université Sorbonne Nouvelle – Paris 3; Leiden University, 2020), 164n366.
[314] Fontein, 37.

thirds or basically most of the crown's area. A71's facial and bodily features are portrayed in sparse detail. Not much more is apparent than that this figure has some sort of triangular hair, its hands appear to come together in the figure's lap, and the figure is seated atop a lotus. None of the objects discovered in Java possess this attribute in my typology.

The remaining three objects not discovered in Java – B97, B98 and B99 – are from Pauline Lunsingh Scheurleer and Marijke Klokke's *Divine Bronze* catalogue. According to Lunsingh Scheurleer and Klokke's categorisation, B97 belongs to their Group Six, objects from Sumatra;[315] while B98 and B99 belong to Group Seven, referring to objects from the "other islands of the Indonesian archipelago."[316] While *Divine Bronze* can only specify B97's findspot as South Sumatra,[317] approximately 998.7 kilometres Northwest of Java and across the Java Sea,[318] it can offer more detail for B98 and B99. Both objects were found together, along with two other bronze Buddhas in that catalogue, in Bontonompo Village, Bonthain District, in Southwest Sulawesi.[319] This area is approximately 863.13 kilometres to the Northeast of Java, also across the Java Sea.[320]

Figure 4.TK. A71 as it appears in B98.

[315] Lunsingh Scheurleer and Klokke, *Ancient Indonesian Bronzes*, 35–37.
[316] Lunsingh Scheurleer and Klokke, *Ancient Indonesian Bronzes*, 37–38.
[317] Lunsingh Scheurleer and Klokke, *Ancient Indonesian Bronzes*, 107.
[318] Distances are measured via Google Maps using the "Measure Distance" function. I take Nganjuk Regency where the Nganjuk Bronzes were found as my reference point for "Java," and for "Sumatra" my reference point is the region labelled "South Sumatra," the general area where B97 was found.
[319] Lunsingh Scheurleer and Klokke, *Ancient Indonesian Bronzes*, 111–2.
[320] Distances are measured via Google Maps using the "Measure Distance" function. I take Nganjuk Regency where the Nganjuk Bronzes were found as my reference point for "Java," and as "Bontonompo" appears on Google Maps, it serves as the reference point for the place it designates.

Only one of these objects, B98, possesses A71 (see figure 4.10), contributing to the overall 50% of non-Javanese objects with that attribute. Much like B47, the figure appears in an elaborate crown, and sits in the middle of the crown directly above the part where the crown edge meets B98's head. But here the figure is smaller and more nondescript. A71 only constitutes less than a third of the crown's total height, and it is even more basic in detail than the iteration that appears on B47. While Lunsingh Scheurleer and Klokke describe the figure as "an image of the Buddha Amitābha,"[321] from the photograph of the object I consult all that is clear is an outline of a small, seated human figure with its arms touching each other, and not much more detail otherwise. Unless it is clear that the arms come together with one hand above the other in the figure's lap as *dhyāna mudrā*, the characteristic *mudrā* of Amitābha, I would be cautious about assuming that deity's presence in B98's crown. Nevertheless, whatever the deity's identity might be, its appearance on an object from South Sulawesi, but not objects from Java, reinforces that there are regional differences between bronze objects found around the Java Sea. These differences could manifest themselves as other attributes which my typology did not assess, but in typologies prepared by other scholars in future.

[321] Lunsingh Scheurleer and Klokke, *Ancient Indonesian Bronzes*, 111.

CHAPTER FIVE. Dismantling the *Maṇḍala*, Reclaiming the Maṇḍalic: Revisiting the Surocolo and Nganjuk Bronzes

Given what we have learnt about the Nganjuk and Surocolo Bronzes from both art historical and typological methods, what can we then say about the status of both hoards as *maṇḍalas*? Much suggests they form their own distinct sets of objects different from other objects. And they possess an Esoteric Buddhist character, given that statues from both sets are represented among the six artefact types correlated with Esoteric Buddhist attributes. However, many objects in both hoards do not clearly match the iconography of the deities they supposedly represent in the *Vajradhātu maṇḍala* as it is presented in the *Sarva-tathāgata-tattva-saṃgraha* (*STTS*)[322] – suggesting that they do not constitute this *maṇḍala*. Existing scholarly claims that they form a *Vajradhātu maṇḍala* are shakier than they appear.

Does Nganjuk and Surocolo not forming the *STTS*' *Vajradhātu maṇḍala* mean, however, that arguments for both hoards as *maṇḍalas* have no validity altogether? What can we reclaim from those arguments even as we discard their final identifications? I argue that in both hoards there are *maṇḍalic* elements, that is to say qualities common across Esoteric Buddhist *maṇḍalas* that in themselves do not signify specific *maṇḍalas* known from texts but resemble *maṇḍalas* in the abstract.[323] The Nganjuk hoard demonstrate a hierarchical ordering, where deities can be divided into different tiers based on the extent of their iconographic elaboration and their level of ferocity. The Surocolo hoard highlights how certain deity groups partially present within it, such as the four musician goddesses and four ferocious animal-headed gatekeepers, could have been standard elements within a broader cultural milieu that were included into *maṇḍala*-like material configurations such as bronze hoards.[324] Therefore,

[322] Tanaka, *An Illustrated History of the Maṇḍala*, 129–131.
[323] These *maṇḍalic* elements differ from Julie Gifford's discussion of the "maṇḍala principle" at Borobudur. The maṇḍala principle is much closer to Mahāyāna Buddhist thinking, as she shows at: Julie Gifford, *Buddhist Practice and Visual Culture: The Visual Rhetoric of Borobudur* (Abingdon, Oxon: Routledge, 2011), 35–36.
[324] This point applies to material culture an argument for texts previously made by Acri in: Acri, "Imposition of the Syllabary," 125.

inchoate forms of the organisational principles at work in known Esoteric Buddhist *maṇḍalas* are also present in the Surocolo and Nganjuk hoards.

Dealing first with the Nganjuk Bronzes and then with the Surocolo Bronzes, this chapter will first dismantle the claim that both boards represent the *Vajradhātu maṇḍala* as it is presented in the *STTS*. It will show how the attributes of many objects in both hoards deviate from descriptions of the deities in the *STTS*, suggesting that each hoard's identification with the *STTS*' *Vajradhātu maṇḍala* needs to be reconsidered. Even as I push back against the *Vajradhātu maṇḍala* interpretation, I also try to see which elements of both hoards parallel characteristics of *maṇḍalas* more broadly, so that we might establish a basis for seeing *maṇḍalas* in either hoard – just that said *maṇḍalas*' identities cannot be discerned based on the existing textual corpus available to scholars.[325] Having established what exactly we cannot say about *maṇḍalas* and their connection to the bronzes, but also the few things that we can say, I then discuss what we can save from previous attempts to make that connection.

The Nganjuk Bronzes

Although numerous scholars from Lim down to Lunsingh Scheurleer and Klokke see the *Vajradhātu maṇḍala* in the Nganjuk Bronzes, only a limited number of objects from that hoard support this identification. For most objects in it to be identified as part of the *Vajradhātu maṇḍala*, many iconographic deviations have to be overlooked, or rationalised in unconvincing ways. Given the mental gymnastics required to make this identification, we should be sceptical that a real match between the text of the *STTS* and the Nganjuk Bronzes can be established. That said, the four hierarchical levels of importance that we can detect among the Nganjuk Bronzes, tied to how many attributes from the A20–23 cluster they possess and the

[325] I direct readers to the following online textual corpus for Esoteric Buddhist and Śaiva texts, with texts in both Sanskrit and Old Javanese: GRETIL, "Göttingen Register of Electronic Texts in Indian Languages and related Indological materials from Central and Southeast Asia," *GRETIL*, July 14, 2022, https://gretil.sub.uni-goettingen.de/gretil.html#top.

elaborateness of their decoration, is consistent with how *maṇḍalas* operate according to what Ronald Davidson terms the "imperial metaphor."[326]

As Davidson explains, "the central and defining metaphor for mature esoteric Buddhism is that of an individual assuming kingship and exercising dominion."[327] In this five-Buddha (*pañcajina*) system, there are four levels of hierarchy.[328] The central Buddha of the *maṇḍala*, who is first in importance, lords over four other Buddhas in the four cardinal directions, located in squares adjacent to his.[329] These four other Buddhas are second in importance. Each of these Buddhas, however, is nevertheless lord in his own right, and so – like the central deity – each leads his own retinue of bodhisattvas and is seated adjacent to a *pāramitā* goddess representing the Buddhist perfections.[330] These bodhisattvas and goddesses are third in importance. The aforementioned Buddhas, bodhisattvas and goddesses belong within the *maṇḍala*'s palace. They are guarded by four gatekeepers, one at each gate facing the four cardinal directions, and four offering goddesses[331] – these constitute the fourth level of importance.

Only partial correspondence could be established between the Nganjuk hoard and the *STTS*' *Vajradhātu maṇḍala*, undermining claims that the two are identical. Creating an archive of the *entire* Nganjuk hoard is challenging, because since its 1913 discovery the 90 statues have been divided, lost and reassembled in part – and so their provenance inconsistently traced.[332] To the 29 statues assembled in my typology I will add one more object from Nganjuk, figure 5.1 (see below).[333] Yet even this partial archive of 30 only corresponds inadequately to the *STTS*, suggesting that the whole hoard probably would not match either.

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[326] Ronald M. Davidson, *Indian Esoteric Buddhism: A Social History of the Tantric Movement* (New York: Columbia University Press, 2002), 113.
[327] Davidson, *Indian Esoteric Buddhism*, 121.
[328] Gifford, 31.
[329] Luczanits, 34; Gifford, 31; Tanaka, *An Illustrated History of the Maṇḍala*, 131.
[330] Tanaka, *An Illustrated History of the Maṇḍala*, 131.
[331] Tanaka, *An Illustrated History of the Maṇḍala*, 131.
[332] Fontein, 223; Lunsingh Scheurleer and Klokke, 16.
[333] Lunsingh Scheurleer and Klokke, 33.

Figure 5.1. The nine matches between the *STTS*' *Vajradhātu maṇḍala* and the Nganjuk bronzes in my archive. Eight of the bronzes appear once (highlighted in red) while one bronze appears twice (highlighted in green). Source for original *Vajradhātu maṇḍala* image: Tanaka, *An Illustrated History of the Maṇḍala*, 131.

Even if we assume the best-case scenario – which is that existing identifications of the Nganjuk bronzes by Fontein, Lunsingh Scheurleer and Klokke are correct – only eight matches can be established between the 30 objects and the 37 deities of the *STTS*' *Vajradhātu maṇḍala* (see figure 5.2). Figure 5.1 would constitute Vairocana, the standard central deity of the *Vajradhātu maṇḍala*.[334] As the *STTS* says, Vairocana makes the "*mudrā* of supreme

[334] Williams, Tribe and Wynne, 157; Luczanits, 26.

enlightenment,"[335] or *bodhyagrī mudrā* – evident clearly in figure 5.2's right hand clenching over his left hand's finger. Vairocana "sits cross-legged on a lion-seat which is positioned on top of a lotus," adds the *STTS*, and figure 5.2 indeed sits on a seat with a lion to its front (in the middle of the socle, facing the viewer) and atop a lotus.

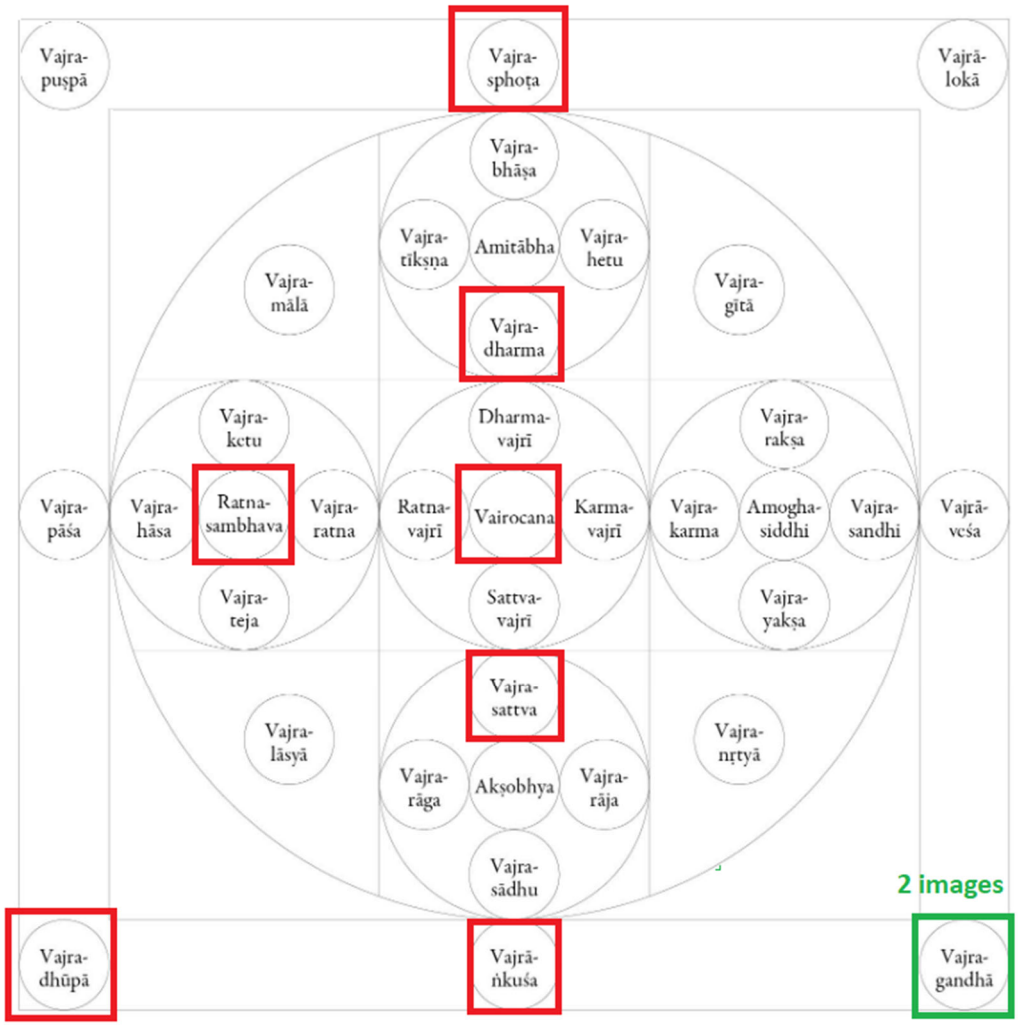


Figure 5.2. The eight matches between the *STTS*' *Vajradhātu maṇḍala* and the Nganjuk bronzes in my archive. Eight of the bronzes appear once (highlighted in red) while one bronze appears twice (highlighted in green). Source for original *Vajradhātu maṇḍala* image: Tanaka, *An Illustrated History of the Maṇḍala*, 131.

[335] *STTS*, 68. This and subsequent references to the *STTS* use Do-Kyun Kwon's edition of, and translations from, the text: Do-Kyun Kwon, trans. Sarva Tathāgata Tattva Saṃgraha*: A Compendium of all the Tathāgatas*. *A Study of Its Origins, Structure and Teachings* (PhD Diss., School of Oriental and African Studies, 2002). Given the complexity of numbering lines of the *STTS*, I have used Kwon's pagination for ease of reference. Where possible, I check his translations against the Sanskrit in Isshi Yamada's critical edition of the *STTS*: Isshi Yamada (ed.), *Sarva-tathāgata-tattva-saṃgraha Nāma Mahāyāna-sūtra: A Critical Edition Based on a Sanskrit Manuscript and Chinese and Tibetan Translations* (New Delhi: Jayyed Press, 1981).

The remaining seven deities correspond to their textual descriptions in similar iconographic ways. Ratnasambhava is B31, and he sits "cross-legged on a lotus" and "on a horse-seat" (*STTS*, 68). He forms the "*mudrā* of supreme giving," or *varada mudrā*, evident from his right hand resting on his right knee facing outward and his left hand in his lap (*STTS*, 68). Vajrasattva's (B23) "right hand holds a five-pronged *vajra*" while his left hand "holds a bell […] positioned next to his body (*STTS*, 69), while Vajradharma (B32) holds a "lotus against his ribs and he opens its petals at his heart with his right hand" (*STTS*, 70). Vajrāṅkuśa (B26) holds a "hook" while Vajrasphoṭa (B27) holds a "chain" (both *STTS*, 71). Vajradhūpā (B29) holds an "incense-vessel" (*STTS*, 71). The two Vajragandhās (B28 and B30) do indeed hold in their left hand "the *dharma*-shell of scent," in B28's case a scent tray and in B30's case a scent-burner; and a "scent-cloud" in their right, in B28's case a horizontal cloud pointing forward and in B30's case a vertical cloud floating upward (*STTS*, 71).

However, given that the other 21 deities do not conform to their descriptions in the *STTS*, we cannot say the Nganjuk hoard is the *Vajradhātu maṇḍala*. For reasons of finitude I will not cover every single deity and how they do not match their *STTS* descriptions, but I will provide two examples here. The first is B38, which Lokesh Chandra and Sudarshana Devi Singhal call Vajrapuṣpā, the offering goddess sitting in the southwestern corner of the *Vajradhātu maṇḍala*. In the *STTS*, Vajrapuṣpā is not described in great detail, except for her distinguishing iconographic traits which are the "flower-vessel in her left hand" and how she "scatters particles of flowers with her right hand" (*STTS*, 71). B38 does hold a flower vessel, but in both hands – and so does not conform to the *STTS* iconography, leaving her identity in doubt. Despite arguing that the Nganjuk bronzes' "basic model is the first Vajradhātu-mahāmaṇḍala the STTS," Lokesh Chandra and Sudarshana Devi Singhal switch that *maṇḍala* out for the *Rita-sōgyara-gobu-shingan* (hereafter *Gobu Shingan*), an 855 CE illustration of the Japanese Buddhist version of the *Vajradhātu maṇḍala*, to make their Vajrapuṣpā

identification.[336] For it is in the *Gobu Shingan* that Vajrapuṣpā "holds a tray of flowers in both hands," not the *STTS*' *Vajradhātu maṇḍala*.[337]

The other example I raise is that B36 and B37, both of which Lokesh Chandra and Sudarshana Devi Singhal identify with Bhadrapāla, a bodhisattva known from the *maṇḍala* of Vairocana Mañjuvajra in the *Niṣpannayogāvalī* (*NṢP* 20).[338] There is no iconographic element described in the *STTS*' *Vajradhātu maṇḍala* to suggest Bhadrapāla was present in that *maṇḍala*. As previously, the two scholars turn to Japanese illustrations in order to make these identifications, arguing that the object both deities hold in their right hand is a "vase of intelligence."[339] This further leaves unsolved the problem that *maṇḍalas* incredibly rarely repeat deities[340] – and so there cannot have been two Bhadrapālas.

This issue of repeated deities recurs with B28 and B30, both of which Fontein identifies as Vajragandhā, the Buddhist offering goddess that occupies the northeastern corner of the *STTS*' *Vajradhātu maṇḍala*.[341] In this case, the identification is more likely to be correct on an iconographic basis. As recently mentioned, both objects hold the right elements described in the text: a scent-producer in the left hand, and a scent-cloud in the right. Even if the Nganjuk bronzes were the *STTS*' *Vajradhātu maṇḍala*, the fact means that some other overarching logic was also connecting these objects.

Even in this best-case scenario, we find multiple problems with the Nganjuk bronzes being identified as the *STTS*' *Vajradhātu maṇḍala*. The majority of objects do not match the description in the text's iconography, and when they do match there are cases when multiple objects have similar enough iconography that they can be considered the same object. But the *STTS*' *Vajradhātu maṇḍala* does not repeat objects. Having elucidated the multiple problems,

[336] Lokesh Chandra and Sudarshana Devi Singhal, "Identification of the Ṅañjuk Bronzes," 98.
[337] Lokesh Chandra and Sudarshana Devi Singhal, "Identification of the Ṅañjuk Bronzes," 103.
[338] Lokesh Chandra, *Niṣpanna-Yogāvalī*, 172.
[339] Lokesh Chandra and Sudarshana Devi Singhal, "Identification of the Ṅañjuk Bronzes," 103.
[340] Tanaka, *An Illustrated History of the Maṇḍala*, 212.
[341] Fontein, 232–3.

I want to consider which elements of the Nganjuk hoard are *maṇḍalic*, and so suggest organisational principles we know from existing Esoteric Buddhist *maṇḍalas*.

The logic of hierarchy – signalled by an object's ornamental and iconographic elaborateness – is evident in the 30 Nganjuk Bronzes discussed. This indicates how even if no actual identification can be made with a text, elements of the hoard are consistent with the basic structure of a *maṇḍala*. Just as the five-Buddha system of the *STTS* demonstrates four levels of hierarchy, so too there are four levels discernible among the Nganjuk Bronzes (see figure 5.3). The Vairocana that is figure 5.1 is at the top of the hierarchy. Befitting his status at the centre of a *maṇḍala*, Vairocana here is lushly decorated, with the object's symmetric throne finials carved in such intricate detail that these ornate flowers and clouds make the object's width more than triple that of its head. Notice also the spokes, some of which have broken off, lining the edges of the socle – a few are intact on the right side of the object, and they are long and ribbed. Had I had the foresight to include it in my typology, figure 5.1 would have had three attributes from the cluster suggesting hierarchy (A20–23). In addition to the elaborate throne (A21) just described, he has a parasol above that throne covering his head (A22) and his lotus pad rests atop a socle (A23).

Figure 5.3. Objects representing the four levels of hierarchy present in the Nganjuk Bronzes. The top left object (figure 5.2) is top of that hierarchy, the top-right object (B31) is right below it, followed by the bottom left object (B66) and finally, at the lowest level, the bottom right object (B26).

The second level of the hierarchy is represented by B31, the Ratnasambhava that belongs to AR6, the "Ornamented, Seated, Major, Peaceful Artefact Type." There is just one Nganjuk Bronze at this level: B31 itself. From a typological perspective, B31 resembles figure 5.2 in how many attributes it has from the A20–23. It has two: the halo (A20) behind his head that is now broken off at its left corner, and the socle atop which it sits (A23). Now what puts B31 at one level of importance lower than figure 5.2 is its less elaborate ornamentation. It does not possess decorative elements to the same degree, evidenced by how it only has a simple ovoid halo around its head instead of the exquisite throne back that frames figure 5.2's head.

The next lower rung of the hierarchy contains all the Nganjuk objects in AR7 and AR8, the "Ornamented, Seated, Intermediate, Martial Artefact Type" and "Ornamented, Seated, Intermediate, Peaceful Artefact Type" respectively. There are seven objects at this level: three from AR7 (B66, B85 and B87) and four from AR8 (B24, B32, B84 and B84). These objects may differ in their weapon-bearing character (martial versus peaceful) but they share one attribute from the A20–23 cluster, usually the halo (A20). In terms of style, ornamentation at this level is less elaborate, with the floral and jewellery motifs limited to appearing on statue's body and not much elsewhere.

At the bottom of the hierarchy are the remaining Nganjuk objects, which all belong to AR9 and AR10, the "Ornamented, Seated, Minor, Martial Artefact Type" and "Ornamented, Seated, Minor, Peaceful Artefact Type" respectively. There are a total of 21 objects at this level: eight from AR9 (B23, B26, B27, B37, B39, B78, B79 and B81) and 13 from AR10 (B25, B28, B29, B30, B33, B34, B36, B38, B76, B77, B80, B82 and B86). At this level the objects have minimal ornamentation, and they no longer have any attributes from the hierarchy-indicating A20–23 cluster.

In his 1913 delineation of the Nganjuk Bronzes' discovery, N. J. Krom notes that the Nganjuk Bronzes constitute one entity:

> the collection belongs together as a whole: this becomes clear from all kinds of small things in the technique, workmanship, etc., the uniform size of the various categories, the complete concurrence of the different categories, covering of the head and such things, the uniformity of the lotus-cushions and so on.[342]

I agree with Krom's assessment, but that entity is certainly not the *Vajradhātu maṇḍala* as it is discussed in the *STTS*. Given the levels of hierarchy present, however, it could be some form of Buddhist *maṇḍala* for which we yet have no known text, or perhaps an organisation of deities prior to that echoes – but does not constitute – a *maṇḍala*.

The Surocolo Bronzes

Having dismantled the claim that the Nganjuk Bronzes constitute the *STTS*' *Vajradhātu maṇḍala*, I now do the same for the Surocolo Bronzes. The challenge with Surocolo is they have been argued to belong to two *maṇḍalas*: the aforementioned *Vajradhātu*, but also a *maṇḍala* of Hevajra.[343] This looks like a tall order: the *Vajradhātu* alone contains 37 deities, more than the mere 22 discovered in the Surocolo alone. Additionally, scholars like Nirmala

[342] Krom, "Ṅañjuk," 111.
[343] Woodward, "Esoteric Buddhism," 344; Miksic, "Archaeological Evidence," 265; Sharma, "Surocolo Bronzes," 210; Lokesh Chandra and Sudarshana Devi Singhal, "Buddhist Bronzes of Surocolo," 133.

Sharma engage in some mental gymnastics in order to demonstrate that two *maṇḍalas* can be squeezed into the limited number of deities. I nevertheless show it is unlikely for both *maṇḍalas* to have been present. However, the impulse to seek multiple *maṇḍalas* at Surocolo is not completely misguided. Careful examination shows that some statues in the hoard appear to form groups similar to those known in other *maṇḍalas*, even if they do not form the whole of said *maṇḍalas*. This last quality suggests that there are proto-*maṇḍala* elements within the Surocolo hoard, possibly prior to these deities' reification within larger Esoteric *maṇḍala* systems.

This thesis only works with a partial archive of the Surocolo hoard for, as discussed in the Introduction, it too has endured similar challenges to those faced by the Nganjuk bronzes. Of the 22 statues excavated from Surocolo, I could only include the 18 which Fontein discusses in *The Sculpture of Indonesia*.[344] But much like Nganjuk, the limited correspondence between the Surocolo hoard and the *maṇḍalas* they putatively represent suggests that prior scholars have been too eager to see what they want to see.

Here too, assuming the best-case scenario in which Fontein's identifications of the deities with the objects are correct, only the minority of statues matches their iconographic descriptions in the *Vajradhātu* of the *STTS*. A total of seven deities in the hoard out of the 18 included in my archive match the descriptions in the *STTS* (see figure 5.4).

[344] Fontein, 223–230.

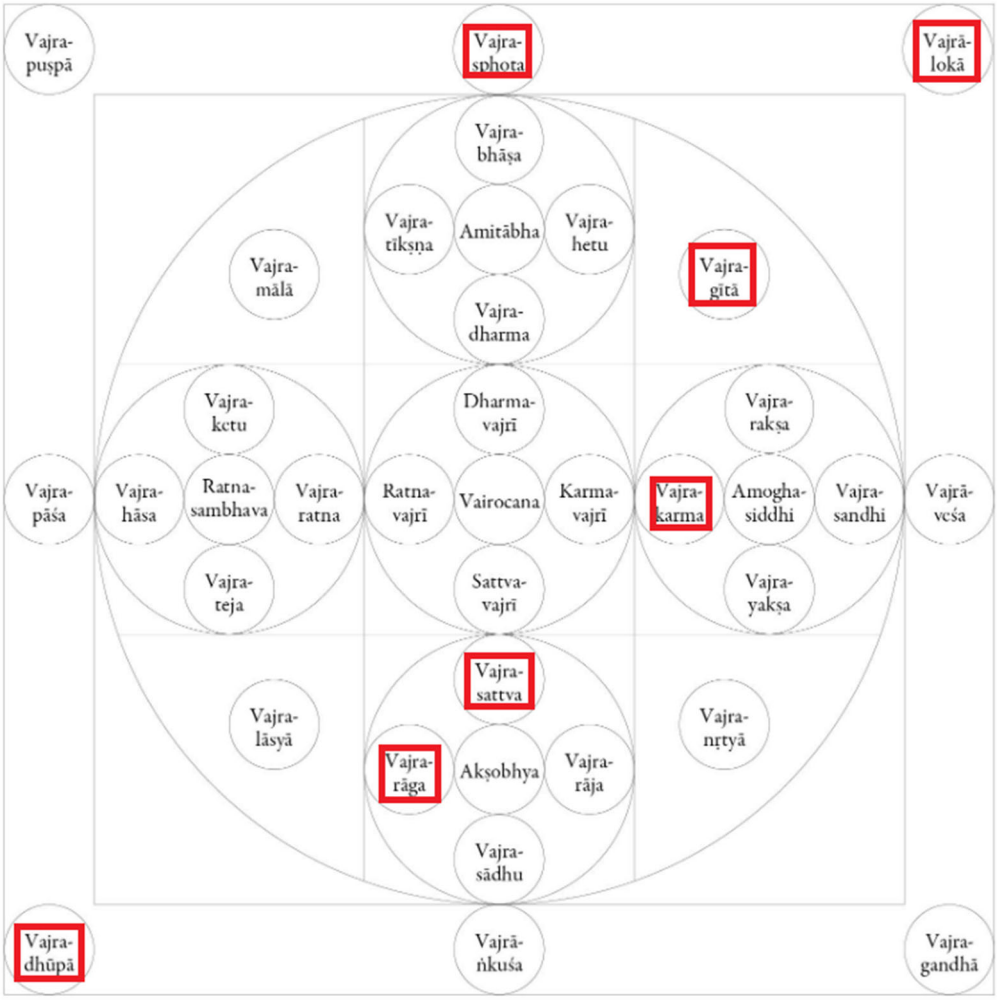


Figure 5.4. The seven matches between the *STTS*' *Vajradhātu maṇḍala* and the Surocolo bronzes in my archive. All matching bronzes appear once (highlighted in red). Source for original *Vajradhātu maṇḍala* image: Tanaka, *An Illustrated History of the Maṇḍala*, 131.

These seven objects are: B3, B5, B7, B8, B12, B17 and B20. B3 is Vajrarāga, the bodhisattva described as carrying a "bow and arrow" (*STTS*, 69) who sits in the *Vajradhātu*'s eastern chapel to the south of the Buddha Akṣobhya.[345] B3 indeed holds a bow, its lower half mostly broken off now but the nocked arrow still present, in his left hand, while his right hand is pulled back as if stretching an invisible bowstring. B20 is Vajrasattva according to the *STTS* for this deity, as we saw in the Nganjuk section, holds a *vajra* with his right hand and a bell by his side in his left. Vajrasattva sits in Akṣobhya's eastern chapel too, but to the deity's west.

[345] Tanaka, *An Illustrated History of the Maṇḍala*, 131; Fontein, 224.

Neither *vajra* (A24) nor bell (A83) are evident now in B20's right and left hands. However, Fontein notes that the hand positions are characteristic of Vajrasattva,[346] and from close impression I see a faint imprint of a *vajra*-shaped structure on B20's chest, suggesting this is indeed Vajrasattva.

B5 is Vajrakarma, the deity who appears in the northern chapel of the *Vajradhātu maṇḍala*, sitting to the south of that chapel's Buddha, Amoghasiddhi. Vajrakarma's left hand "holds the universal-*vajra*-bell" and "his right hand holds the universal-*vajra* over his heart" (*STTS*, 70). This textual description corresponds closely to what we see in B5. B5 indeed holds a double *vajra* (A24), known as a *viśvavajra*, in his right hand above his chest's centre. *Viśva* here is a Sanskrit compound element meaning "universal" or "eternal," and is the exact term that appears in the *STTS*. B5 indeed holds the *khaṭvāṅga*, or skull-staff, in his left hand, which may seem like a deviation at first glance. But *khaṭvāṅgas* do appear topped by a bell in Buddhist iconography and as Fontein notes, "a bell has been attached" to the one wielded by B5.[347]

B12 is Vajragītā, who can be identified from how she "plucks a *vīṇā*" (*STTS*, 70), the Sanskrit word for "harp." Vajragītā is the accompanying Buddhist goddess seated in the northwest, between the western and northern chapels. And B12 indeed wields a harp with seven bells, as Fontein observes.[348] Fontein calls the deity "Vajragītī," which is actually the same name as Vajragītā, for the feminine long-*ī* and long-*ā* endings in Sanskrit are essentially exchangeable.[349]

B17 is Vajrasphoṭa, one of the guardians of the gates into the *Vajradhātu maṇḍala* who as mentioned in the Nganjuk section holds a "chain" (both *STTS*, 71). And B17 indeed holds a chain. It is worth noting that B17 deviates from the Nganjuk Vajrasphoṭa B27 in portrayal: whereas B27 shows the deity sitting, B17 is standing in a half-squat. Since the *STTS* does not

[346] Fontein, 230.
[347] Fontein, 225.
[348] Fontein, 227.
[349] Joseph LaRose, personal communication.

specify how the deity should appear except for the chain, both can be considered Vajrasphoṭa without due concern.

The last two objects that match are B7 and B8, which are Vajradhūpā and Vajralokā respectively. Both deities are offering goddesses outside the *maṇḍala* gates serving the *Vajradhātu maṇḍala*, with Vajradhūpā sited at the Southeast and Vajralokā at the Northwest.[350] Consistent with the textual description, B7 wields an "incense burner with a long handle" in both hands,[351] just as the *STTS* describes Vajradhūpā to satisfy the Buddhas with an "incense-vessel" (*STTS*, 71). B8 meanwhile wields a stubby, stick-like object in her left hand resting on her lap, towards which her right hand gestures. The stubby object could be the "wick of a lamp" that the *STTS* describes Vajralokā to hold as she "worships the [Buddhas] delighted by the lamp's brightness" (*STTS*, 71).

Aside from these seven objects, the remaining eleven do not match known iconographies described in the *STTS*' *Vajradhātu maṇḍala*. As with Nganjuk, reasons of finitude dictate I cannot enumerate how exactly each object deviates from its possible textual identifications, but I will flag two examples that are representative of these deviations. The first is B18, whom Fontein tries to identify with Vajranṛtya, the dancing goddess (the Sanskrit verbal root √*nṛt*, from which *nṛtya* derives, means "to dance") in the northeast section of the *Vajradhātu*, between Akṣobhya's eastern chapel and Amoghasiddhi's northern chapel.[352] According to the *STTS*, Vajranṛtya appears "hold[ing] a three-pronged *vajra* while making it dance with both her hands" (*STTS*, 71). This *vajra* (A24) does not appear in B18's attributes at all. It cannot be denied though that B18 is dancing, with one foot kicked dynamically into the air (A19) and her hands making gestures suggesting dance moves (A61). But without even a

[350] Tanaka, *An Illustrated History of the Maṇḍala*, 131.
[351] Fontein, 225.
[352] Tanaka, *An Illustrated History of the Maṇḍala*, 131.

hint of where a *vajra* could have broken off this object, identifying it with the *STTS*' Vajranṛtya is a stretch.

The other programmatic object is B19, which Fontein identifies as "Vajralāśī," the "goddess of the slow dance" who appears in the southeast section of the *maṇḍala*, between Akṣobhya's eastern chapel and Ratnasambhava's southern chapel.[353] Note that Lokesh Chandra and Sudarshana Devi Singhal are right to be suspicious of Fontein's spelling of "Vajralāśī": the word is a misspelling for the deity's actual name, Vajralāsyā, with the dental *s*-sound having been mistakenly replaced by the palatal *ś*-sound and the omission of the long-*ā* causing the "y" to revert back to the long-*ī*.[354] Now the *STTS* tells us that Vajralāsyā holds "holds two five-pronged *vajras*" and "points both *vajras* slightly towards the left" (*STTS*, 70). In actuality, B19 holds no *vajra* (A24) but a different weapon, the club resting along the length of her leg (A30). Her hand gestures do not in any way point to the left: her left hand firmly holds the club by her waist, and her right hand is held up close to her face.

Now that we have established the fact that the Surocolo Bronzes are unlikely to be the *STTS*' *Vajradhātu maṇḍala*, we must consider how they are unlikely to be a *Hevajra maṇḍala*. Given the fewer deities found in the Surocolo hoard, existing attempts to impute the *Hevajra* here assume that certain deities belonging to one *maṇḍala*, such as the *Vajradhātu*, can double as deities in another *maṇḍala*. Nirmala Sharma offers us one such programmatic attempt in her recent attempt to attribute particular texts to the Surocolo bronzes.[355] She claims that Vajrasattva (B20) performs a "dual function" in the hoard – he is both the bodhisattva we have discussed in the *Vajradhātu*, but also a central Buddha (*Ādibuddha*) in his own right at the centre of the *Hevajra maṇḍala*, as the subtle form of the ferocious Esoteric Buddhist Buddha

[353] Fontein, 230; Tanaka, *An Illustrated History of the Maṇḍala*, 131.
[354] Lokesh Chandra and Sudarshana Devi Singhal, "Buddhist Bronzes of Surocolo," 132. For more on the rules of euphonic combination in Sanskrit, called *sandhi*, please see: Robert P. Goldman and Sally J. Sutherland Goldman, *Devavāṇīpraveśika: An Introduction to the Sanskrit Language,* 3rd ed. (Berkeley, CA: University of California, Berkeley, 1999), 23–44.
[355] Sharma, "Surocolo Bronzes," 213.

Hevajra.[356] Now there are textual grounds for connecting Hevajra and Vajrasattva: in the critical opening verses of the *Hevajra Tantra*, the deity Hevajra is said to be the essence of Vajrasattva (*vajrasattvasya* […] *hṛdayaṃ hevajra-saṃkhyaṃ*).[357] But given how no known Hevajra *maṇḍalas* from Tibet to Java ever represent Vajrasattva substituting for the central deity, reading *Hevajra* into the Surocolo seems like wishful thinking.[358]

What motivates scholars to look for a *Hevajra maṇḍala* at Surocolo in the first place? In Chapter Two, we have already discussed Lokesh Chandra and Sudarshana Devi Singhal's attempt to identify some of the Surocolo Bronzes with the 17-deity *maṇḍala* of the 16-armed Hevajra as described in the *Niṣpannayogāvalī* (*NṢP* 5.4),[359] and how there were some clear deviations between the *NṢP* deities and the Surocolo Bronzes. A closer look at their attempt also reveals that making Surocolo the 16-armed *Hevajra maṇḍala* means Lokesh Chandra and Sudarshana Devi Singhal can integrate two groups of statues at Surocolo that otherwise would not fit anywhere.

These two groups are: the two ferocious gatekeepers (B13 and B14) and four musician goddesses (B9–12).[360] That the two ferocious gatekeepers belong to a set is clear from the typology – they are in the same artefact type (AR15) that correlates with the more ferocious level of Esoteric Buddhism among my objects. Fontein's interpretation of B13 and B14 as Śūkarāsyā and Hayāsyā is backed up by the corresponding *NṢP maṇḍala*. Śūkarāsyā there has a "pig face" (*śūkarāsyaṃ raktam*) while Hayāsyā has a "horse face" (*aśva-mukhaṃ*).[361] This does not change the fact that according to the *NṢP*, two other gate guardians – Śvānāsyā (the dog-faced deity) and Siṃhāsyā (the lion-faced deity) – should be present in the hoard. But these are conspicuously absent – no dog- or lion-faced entities are present in the hoard.

[356] Sharma, "Surocolo Bronzes," 213.
[357] *HT* i.a.2.
[358] Tanaka, *An Illustrated History of the Maṇḍala*, 210–213.
[359] See: Lokesh Chandra and Nirmala Sharma, *Niṣpanna-Yogāvalī*, 63–67.
[360] Lokesh Chandra and Sudarshana Devi Singhal, "Buddhist Bronzes of Surocolo," 135.
[361] *NṢP* 5.4, pp. 65–66.

The other group that Lokesh Chandra and Sudarshana Devi Singhal are trying to integrate are the four musician goddesses: Vaṃśā, Mukundā, Murajā and Vīṇā, who appear in the outer circle of the 16-armed *Hevajra maṇḍala*.[362] While B9–12 look like they can be these goddesses, for they wield the flute (A54), lap drums (A55), floor drums (A56) and harp (A49) called for in the text respectively,[363] B12 as discussed has already been identified as Vajragītā and cannot simultaneously function as Vīṇā, given objects cannot be two deities simultaneously in a *maṇḍala*. The four-musician set, at best, is only three.

That said, the way the two ferocious gatekeepers and three musician goddesses not-quite correspond to the texts is suggestive, pushing to us to consider what other reasons could explain the imperfect correlations. The Nganjuk bronzes' levels of hierarchy, after all, echo the pyramidal ordering of deities in known textual *maṇḍalas*, from the central Buddha lording over all from the centre to the humble gatekeepers guarding the entrances into the *maṇḍala*. Now this particular set of four gatekeepers (Śūkarāsyā, Hayāsyā, Śvānāsyā, and Siṃhāsyā) and four musician goddesses (Vaṃśā, Mukundā, Murajā and Vīṇā) are hardly unique to the 16-armed *Hevajra maṇḍala*, and in fact appear in multiple textual *maṇḍalas*. The four musician goddesses were already present in the *Samāyoga Tantra*,[364] the "forerunner" of the texts that describe *Hevajra maṇḍalas*.[365] The four fierce, animal-headed gatekeepers meanwhile appear in multiple *maṇḍalas* across multiple texts connected to Hevajra, such as the *Nairātmyā maṇḍala*,[366] reflecting how they were part of the broader art historical milieu.

I suggest here that the aforementioned groups, which but for a few missing deities would form standardised components of later textual *maṇḍalas*, found expression as material objects here in Classical Java and were integrated into *maṇḍala*-like structures like the

[362] *NṢP* 5.4, pp. 66.
[363] *NṢP* 5.4, pp. 66.
[364] Tanaka, *An Illustrated History of the Maṇḍala*, 213.
[365] Tanaka, *An Illustrated History of the Maṇḍala*, 94.
[366] Benoytosh Bhattacharyya, *Indian Buddhist Iconography*, 319.

Surocolo and Nganjuk hoards. This pattern of deity groups appearing in multiple traditions can be seen from a textual Indological example. Tumburu, a male deity regularly associated with four demonic female counterparts, appears in both Esoteric Buddhist and Śaiva texts from South Asia, Kashmir in particular, and Indonesia.[367] As Indologist Teun Goudriaan notes, Tumburu appears as a bodhisattva with "his four female companions as his sisters" in the *Mañjuśrīmūlakalpa*,[368] an early Esoteric Buddhist scripture probably dating to the late-6th and early-7th centuries CE.[369] Tumburu also appears in esoteric Śaiva scriptures, such as the Kashmiri *Vīṇāśikhatantra*, where Tumburu appears as a form of Śiva presiding over his four ferocious sisters.[370] Goudriaan notes other attested examples of Tumburu in Balinese Śaiva hymns and 11th-century Angkor as well.[371] Tumburu and his sisters as a unit clearly appear across South and Southeast Asia, transcending religious boundaries. Perhaps the ferocious gatekeepers and musician goddesses moved across both regions in similar ways, and found expression in material culture too.

[367] Teun Goudriaan, "Tumburu and His Sisters," *Wiener Zeitschrift Für Die Kunde Südasiens* 17 (1973): 51, 57.
[368] Goudriaan, "Tumburu and His Sisters," 76.
[369] Tanaka, *An Illustrated History of the Maṇḍala*, 50; *The Princeton Dictionary of Buddhism*, comp. Robert E. Buswell Jr. and Donald S. Lopez Jr. (Princeton, NJ: Princeton University Press, 2014), s.v. "Mañjuśrīmūlakalpa."
[370] Teun Goudriaan, *The Vīṇāśikhatantra: A Śaiva Tantra of the Left Current* (Delhi: Motilal Banarsidass, 1985), 18, 30.
[371] Goudriaan, "Tumburu and His Sisters," 49–56.

CHAPTER SIX. Conclusion

In their volume that asks what archaeology can do for the study of ancient Southeast Asia, John Miksic and Goh Geok Yian point out how some archaeologists contend that

> although perfect knowledge of the past is impossible, we can calculate objectively the degree of confidence that we can assign to our conclusions. The more data we have which has been collected in a systematic manner, the greater the level of confidence we can have that our conclusions are accurate.[372]

This thesis about Southeast Asian art may borrow the typological method from archaeology, but it remains far from archaeological. Unlike archaeologists working with bags of sherds, I cannot "calculate objectively" or assign "degree[s] of confidence" to conclusions about a set of one hundred objects that ultimately were not chosen in a non-random manner.

But like archaeologists, I have tried to work with material objects: the two hoards that are the Nganjuk and Surocolo Bronzes excavated in Java during the course of the 20th century. I asked what relationship both hoards, and Java's material culture more broadly, shared with the larger Esoteric Buddhist world in which their region "played an important, Asia-wide role as both a crossroads and terminus of Buddhist contacts."[373] Having built a typology of 100 metal objects categorising objects into 17 artefact types to answer these questions, I found that Nganjuk and Surocolo formed distinct sets of objects different from other metal objects in Java, and that there are two levels of Esoteric Buddhism present in them: a more ferocious form characterised by macabre, "demonic"[374] imagery and weapons, and a less ferocious form characterised by the presence of martial weapons.

By considering these typological findings in conjunction with those from art history and philology, I can say with more certainty that both hoards indeed possessed their own

[372] Miksic and Goh, 6–7.
[373] Acri, "Introduction," 10–11.
[374] Pauline Lunsingh Scheurleer discusses a turn to demonic imagery in the East Javanese period. See: Pauline Lunsingh Scheurleer, "Skulls, Fangs and Serpents: A New Development in East Javanese Iconography," in *Southeast Asian Archaeology 1998*, ed. Wibke Lobo and Stefanie Reimann (Hull, UK: Centre for South-East Asian Studies, University of Hull, 2000), 189–190.

distinct idiom not shared by other bronze objects, even though some basic elements remain shared – a pattern reflected in how Esoteric Buddhist thought and practice emerged from, even as they developed beyond, broader Mahāyāna Buddhism.[375] Nevertheless, despite repeated scholarly claims to the contrary, my analysis of a partial archive of bronzes from Nganjuk and Surocolo finds that neither hoard forms any *maṇḍala* we know from Esoteric Buddhist texts. Only a minority of objects in either hoard can be mapped iconographically onto the *Vajradhātu maṇḍala* from the *STTS*, and the 16-armed *Hevajra maṇḍala* described in the *NṢP*.

What does recur however is how the objects in both hoards echo – but only imperfectly – principles demonstrated clearly in textual *maṇḍalas*. Nganjuk displays a hierarchical structuring of deities into four levels, from the central Buddha that is the *axis mundi* of the hoard's figures down to the lowly gatekeepers on the outside. Surocolo contains almost-complete sets of deities that form sub-sections of known textual *maṇḍalas*, namely the four musician goddesses and the four fierce, animal-headed gatekeepers. This suggests that, even as the texts describing *maṇḍalas* codified particular ways of organising deities and deity groups, these *maṇḍalic* principles continued to develop independent of the texts – manifesting clearly in the material culture of Java.

To return to the archaeologists that Miksic and Goh cite, this thesis and further research on Java's bronzes can benefit from "more data," especially if it is collected in a "systematic manner." The advantage of more and systematic data holds even if studies of Java's art history can never reach the objective, perfect knowledge sought by Miksic and Goh's interlocutors. In some cases, the data is already available: the Sambas Hoard from Borneo discovered near the end of World War II, which I have discussed here, warrants more attention. With more rigorous study, it could serve as a critical counterpoint, but also regional complement, to metal objects discovered in Java. More hoards are being discovered, too. Eko Bastiawan, recently told me

[375] Acri, "Introduction," 3–4.

about the discovery of a bronze hoard in Kuti, Java, now known as the Kuti Bronzes.[376] From the images I have seen of this hoard, they resemble both Nganjuk and Surocolo in iconography, size and style. Kuti is new data, and more discoveries like it could create bigger art historical archives on which Southeast Asian art historians and philologists of Esoteric Buddhism can ask better questions.

[376] Personal communication, April 2022.

BIBLIOGRAPHY

Primary Sources

To avoid excessive reduplication, for the sources of my typology's hundred objects I refer the reader to Appendix 1, where each image's source is listed below a photograph of the object. Listed here are the other primary sources that I reference:

Guhyasamāja Tantra. Yūkei Matsunaga, ed. *The Guhyasamāja Tantra: A New Critical Edition*. Osaka: Toho Shuppan, 1978.

Hevajra Tantra. David Snellgrove. *The Hevajra Tantra: A Critical Study*. 2nd ed. Bangkok: Orchid Press, 2010.

Niṣpannayogāvalī. Lokesh Chandra and Nirmala Sharma. *Niṣpanna-Yogāvalī: Sanskrit and Tibetan Texts with English Translation*. New Delhi: International Academy of Indian Culture and Aditya Prakashan, 2015.

Sarvatathāgatatattvasaṃgraha. Do-Kyun Kwon, trans. *Sarva Tathāgata Tattva Saṃgraha: A Compendium of all the Tathāgatas*. *A Study of Its Origins, Structure and Teachings*. PhD Diss., School of Oriental and African Studies, 2002.

Sarvatathāgatatattvasaṃgraha. Isshi Yamada, ed. *Sarva-tathāgata-tattva-saṃgraha Nāma Mahāyāna-sūtra: A Critical Edition Based on a Sanskrit Manuscript and Chinese and Tibetan Translations*. New Delhi: Jayyed Press, 1981.

Secondary Sources

Achmad Hanif Imaduddin. "Kabar Duka, Profesor Edi Sedyawati Maestro Tari dan Eks Dirjen Kebudayaan Meninggal." *Tempo.co*, November 12, 2022. https://seleb.tempo.co/read/1655969/kabar-duka-profesor-edi-sedyawati-maestro-tari-dan-eks-dirjen-kebudayaan-meninggal.

Acri, Andrea, ed. *Esoteric Buddhism in Mediaeval Maritime Asia*. Singapore: ISEAS, 2016.

Acri, Andrea. "Imagining 'Maritime Asia.'" In *Imagining Asia(s): Networks, Actors, Sites*, edited by Andrea Acri, Kashshaf Ghani, Murari K. Jha, and Sraman Mukherjee, 36–59. Singapore: ISEAS, 2019.

Acri, Andrea. "Imposition of the Syllabary (*Svaravyañjana-Nyāsa*) in the Old Javano-Balinese Tradition in the Light of South Asian Tantric Sources." In *The Materiality and Efficacy of Balinese Letters: Situating Scriptural Practices*, edited by Richard Fox and Annette Hornbacher, 123–65. Leiden: Brill, 2016.

Acri, Andrea. "Introduction: Esoteric Buddhist Networks along the Maritime Silk Routes, 7th-13th Century AD." In *Esoteric Buddhism in Mediaeval Maritime Asia*, edited by Andrea Acri. Singapore: ISEAS, 2016.

Artelius, Tore. “Introduction – A Small Comment on the Projection of Meaning in Material Culture.” In *Fishbones and Glittering Emblems: Southeast Asian Archaeology 2002*, edited by Anna Karlström and Anna Källén, 297–304. Stockholm: Östasiatiska Museet, Museum of Far Eastern Antiquities, 2003.

Barnard, Noel, ed. *Seven Bronzes from Southeast Asia and Indonesia: Some Applications of Science in the Study of Objets d’art. Part One: Two Khmer Bronzes*. Vol. 1. Canberra, Australia: Australian National Gallery, 1977.

Barnard, Noel. Introduction to *Seven Bronzes from Southeast Asia and Indonesia: Some Applications of Science in the Study of Objets d’art. Part One: Two Khmer Bronzes*. Edited by Noel Barnard, 1–7. Canberra, Australia: Australian National Gallery, 1977.

Bayard, D. T. “The Chronology of Prehistoric Metallurgy in North-east Thailand: *Silābhūmi* or *Samrddhabhūmi*?”. In *Early Southeast Asia: Essays in Archaeology, History and Historical Geography*, edited by R. B. Smith and W. Watson, 15–32. Oxford: Oxford University Press, 1979.

Bayly, Susan. “Imagining ‘Greater India’: French and Indian Visions of Colonialism in the Indic Mode.” *Modern Asian Studies* 38, no. 3 (2004): 703–44.

Bénisti, Mireille. *Stylistics of Early Khmer Art*. 2 vols. New Delhi: Indira Gandhi National Centre for the Arts, 2003.

Benoytosh Bhattacharyya. *The Indian Buddhist Iconography*. 2nd ed. Calcutta: Firma K. L. Mukhopadhyay, 1958.

Bentor, Yael. *Consecration of Images and Stūpas in Indo-Tibetan Tantric Buddhism*. Leiden: E. J. Brill, 1996.

Bentor, Yael. “The Content of Stūpas and Images and the Indo-Tibetan Concept of Relics.” *The Tibet Journal* 28, no. 1/2 (2003): 21–48.

Berg, C. C. “The Work of Professor Krom.” In *Historians of South East Asia*, edited by D. G. E. Hall, 164–71. London: Oxford University Press, 1961.

Bernet Kempers, A. J. *Ancient Indonesian Art*. Amsterdam: C. P. J. van der Peet, 1959.

Bühnemann, Gudrun, and Musashi Tachikawa. “Introductory Remarks.” In *Niṣpannayogāvalī: Two Sanskrit Manuscripts from Nepal*, compiled by Gudrun Bühnemann and Musashi Tachikawa, ix–xi. Tokyo: The Centre for East Asian Cultural Studies, 1991.

Boisselier, Jean. *Trends in Khmer Art*. Edited by Natasha Eilenberg. Translated by Natasha Eilenberg and Melvin Elliott. Ithaca, NY: Southeast Asia Program, Cornell University, 1989.

Bosch, F. D. K. “Buddhist Data from Balinese Texts.” In *Selected Studies in Indonesian Archaeology*, edited by F. D. K. Bosch, 110–133. Dordrecht: Springer Netherlands, 1961.

Bosch, F. D. K. “The God with the Horse’s Head.” In *Selected Studies in Indonesian Archaeology*, edited by F. D. K. Bosch, 135–152. Dordrecht: Springer Netherlands, 1961.

Bosch, F. D. K. “The Problem of the Hindu Colonisation of Indonesia.” In *Selected Studies in Indonesian Archaeology*, edited by F. D. K. Bosch, 1–22. Dordrecht: Springer Netherlands, 1961.

Bronson, Bennet. “Patterns in the Early Southeast Asian Metals Trade.” In *Early Metallurgy, Trade and Urban Centres in Thailand and Southeast Asia*, edited by Ian Glover, Pornchai Suchitta, and John Villiers, 63–114. Bangkok: White Lotus, 1992.

Bruhn, Klaus. *The Jina-Images of Deogarh*. Leiden: E. J. Brill, 1969.

Bourgarit, David, Benoit Mille, Thierry Borel, Pierre Baptiste, and Thierry Zéphir. “A Millennium of Khmer Bronze Artifacts: A Technical Study of Seventy-Five Bronze Artefacts from the Musée Guimet and the Phnom Penh National Museum.” In *Scientific Research in the Field of Asian Art: Proceedings of the First Forbes Symposium at the Freer Gallery of Art*, edited by Paul Jett, 103–26. Washington, D.C.: Archetype Publications, 2003.

Bühnemann, Gudrun. “On ‘Meditational Art’ and *Maṇḍalas* as Objects of Meditation.” In *Routledge Handbook of Yoga and Meditation Studies*, edited by Suzanne Newcombe and Karen O’Brien-Kop, 423–39. London: Routledge, 2021.

Buswell, Robert E., Jr., and Donald S. Lopez Jr., eds. *The Princeton Dictionary of Buddhism*. Princeton, NJ: Princeton University Press, 2014.

Campbell, Duncan. “*In Memoriam* Noel Barnard (23 February 1922 – 14 February 2016).” *Monumenta Serica* 65, no. 1 (2017): 211–21.

Chutiwongs, Nandana. *Indonesian Bronzes in the Domela Nieuwenhuis Collection*. Amsterdam: Christie’s Amsterdam B.V., 1990.

Clarke, David L. *Analytical Archaeology*. 2nd ed. London: Methuen & Co, 1978.

Conti, Pia. “Tantric Buddhism at Prasat Hin Phimai: A New Reading of Its Iconographic Message.” In *Before Siam: Essays in Art and Archaeology*, edited by Nicholas Revire and Stephen A. Murphy, 374–395. Bangkok: River Books, 2014.

Daud A. Tanudirjo. “Theoretical Trends in Indonesian Archaeology.” In *Theory in Archaeology: A World Perspective*, edited by Peter J. Ucko, 62–76. London: Routledge, 1995.

Davidson, Ronald M. *Indian Esoteric Buddhism: A Social History of the Tantric Movement*. New York: Columbia University Press, 2002.

Davidson, Ronald M. *Tibetan Renaissance: Tantric Buddhism in the Rebirth of Tibetan Culture*. New York: Columbia University Press, 2005.

Davidson, Ronald M. "The *Litany of Names of Mañjuśrī*." In *Tantric and Taoist Studies in Honour of R. A. Stein*, edited by Michel Strickmann, Vol. 1, 1–69. Brussels: Institut Belge des Hautes Études Chinoises, 1981.

Dalton, Jacob. "A Crisis of Doxography: How the Tibetans Organized Tantra during the 8th-12th Centuries." *Journal of the International Association of Buddhist Studies* 28, no. 1 (2005): 115–81.

Deetz, James. *Invitation to Archaeology*. Garden City, NY: Natural History Press, 1967.

de Jong, J. W. "A New History of Tantric Literature in India." *Indo Koten Kenkyū [Acta Indologica]* 6 (1984): 91–113.

Dimmitt, Cornelia, and J. A. B. van Buitenen, trans. *Classical Hindu Mythology: A Reader in the Sanskrit Purāṇas*. Philadelphia, PA: Temple University Press, 1978.

Fleming, Benjamin J., and Richard D. Mann. Introduction to *Material Culture and Asian Religions: Text, Image, Object,* edited by Benjamin J. Fleming and Richard D. Mann, 1–17. New York: Routledge, 2014.

Flood, Gavin. *An Introduction to Hinduism*. Cambridge, UK: Cambridge University Press, 1996.

Fontein, Jan. *The Sculpture of Indonesia*. New York: Harry N. Abrams, 1990.

Gellner, David N. *Monk, Householder, and Tantric Priest: Newar Buddhism and Its Hierarchy of Ritual*. Cambridge, UK: Cambridge University Press, 1992.

Gifford, Julie. *Buddhist Practice and Visual Culture: The Visual Rhetoric of Borobudur.* Abingdon, Oxon: Routledge, 2011.

Goble, Geoffrey. "The Politics of Esoteric Buddhism: Amoghavajra and the Tang State." In *Esoteric Buddhism in Mediaeval Maritime Asia*, ed. Andrea Acri, 123–139. Singapore: ISEAS, 2016.

Goldberg, Ellen. *The Lord Who Is Half Woman:* Ardhanārīśvara in Indian and Feminist Perspective. Albany, NY: State University of New York Press, 2002.

Goldman, Robert P., and Sally J. Sutherland Goldman. *Devavāṇīpraveśika: An Introduction to the Sanskrit Language*. 3rd ed. Berkeley, CA: University of California, Berkeley, 1999.

Goh, Geok Yian, and John N. Miksic. "Statistical Analysis of the Artifacts by Excavation Units." In *Southeast Asian Archaeological Site Reports. The Colombo Court Site Report*. Singapore: NUS Press, 2020. https://epress.nus.edu.sg/sitereports/colombo/text/statisticalanalysisunits/

Gonda, Jan. "Pratiṣṭhā." In *Selected Studies, Volume II: Sanskrit Word Studies*, 338–74. Leiden: E. J. Brill, 1975.

Goodall, Dominic, and Harunaga Isaacson. “Tantric Traditions.” In *The Continuum Companion to Hindu Studies*, edited by Jessica Frazier, 122–37. London: Continuum, 2011.

Goudriaan, Teun, ed. *The Vīṇāśikhatantra: A Śaiva Tantra of the Left Current*. Delhi: Motilal Banarsidass, 1985.

Goudriaan, Teun. “Tumburu and His Sisters.” *Wiener Zeitschrift Für Die Kunde Südasiens* 17 (1973): 49–95.

Granoff, Phyllis. “Mahākāla’s Journey: From Gaṇa to God.” *Rivista Degli Studi Orientali* 77, no. 1 (2003): 95–114.

Gray, David B. “On the Very Idea of a Tantric Canon: Myth, Politics, and the Formation of the Bka’ ’gyur.” *Journal of the International Association of Tibetan Studies* 5 (2009): 1–37.

GRETIL. “Göttingen Register of Electronic Texts in Indian Languages and related Indological materials from Central and Southeast Asia.” *GRETIL*, July 14, 2022. https://gretil.sub.uni-goettingen.de/gretil.html#top

Griffiths, Arlo, Nicolas Revire, and Rajat Sanyal. “An Inscribed Bronze Sculpture of a Buddha in *Bhadrāsana* at Museum Ranggawarsita in Semarang (Central Java, Indonesia).” *Arts Asiatiques* 68 (2013): 3–26.

Griffiths, Arlo, and Andrea Acri. “The Romanisation of Indic Script Used in Ancient Indonesia.” *Bijdragen Tot de Taal-, Land- En Volkenkunde* 170 (2014): 365–78.

Griffiths, Arlo. “Written Traces of the Buddhist Past: *Mantras* and *Dhāraṇīs* in Indonesian Inscriptions.” *Bulletin of the School of Oriental and African Studies* 77, no. 1 (2014): 137–94.

Harrison, Paul. “Early Mahāyāna: Laying out the Field.” In *Setting Out on the Great Way: Essays on Early Mahāyāna Buddhism*, edited by Paul Harrison, 7–31. Bristol, CT: Equinox, 2018.

Harvey, Peter. *An Introduction to Buddhism: Teachings, History, and Practices*. 2nd ed. Cambridge: Cambridge University Press, 2013.

Haryono, Timbul. “A Sketch of Metal-Working in Early Java.” In *Recent Studies in Indonesian Archaeology*, edited by Edi Sedywati and I Wayan Ardika, 165–73. New Delhi: Indira Gandhi National Centre for the Arts, 2012.

Heine-Geldern, Robert. “Obituary: H. H. Juynboll—N. J. Krom—Willem F. Stutterheim.” *The Far Eastern Quarterly* 5, no. 2 (1946): 216–18.

Hill, J. N., and R. K. Evans. “A Model for Classification and Typology.” In *Models in Archaeology*, edited by David L. Clarke, 231–73. London: Methuen & Co, 1972.

Houben, V. J. H., and H. M. J. Maier. Introduction to *Looking in Odd Mirrors: The Java Sea*, edited by V. J. H. Houben, H. M. J. Maier and W. van der Molen, vii–x. Leiden: Rijksuniversiteit te Leiden, 1992.

Hudaya Kandahjaya. "*Saṅ Hyaṅ Kamahāyānikan*, Borobudur, and the Origins of Esoteric Buddhism in Indonesia." In *Esoteric Buddhism in Mediaeval Maritime Asia*, edited by Andrea Acri, 67–112. Singapore: ISEAS, 2016.

Huntington, Susan L., and John C. Huntington. *Leaves from the Bodhi Tree: The Art of Pāla India (8th-12th Centuries) and Its International Legacy*. Seattle, WA: The Dayton Art Institute, in association with the University of Washington Press, 1990.

Indorf, Pinna. "Lore and Artefact: Towards a Method." In *Southeast Asian Archaeology 1996: Proceedings of the 6th International Conference of the European Association of Southeast Asian Archaeologists; Leiden 2-6 September 1996*, edited by Marijke J. Klokke and Thomas de Bruijn, 175–92. Hull, UK: Centre for South-East Asian Studies, University of Hull, 1998.

Isaacson, Harunaga. "Tantric Buddhism in India (From c. A.D. 800 to c. A.D. 1200)." Unpublished manuscript, n.d. Pdf file, 1–26. Revised version of Harunaga Isaacson, "Tantric Buddhism in India (From c. A.D. 800 to c. A.D. 1200)." *Buddhismus in Geschichte und Gegenwart, Band II*, 23–49. Hamburg: Universität Hamburg, 1998.

Jett, Paul. "A Technical Study of the Kampong Cham Figure Group." In *Gods of Angkor, Bronzes from the National Museum of Cambodia*, edited by Louise Cort and Paul Jett, 78–87. Washington, D.C.: Smithsonian Institute, 2010.

Kapstein, Matthew T. *Reason's Traces: Identity and Interpretation in Indian and Tibetan Buddhist Thought*. Boston, MA: Wisdom Publications, 2001.

Killick, David, and Thomas Fenn. "Archaeometallurgy: The Study of Preindustrial Mining and Metallurgy." *Annual Review of Anthropology* 41, no. 1 (2012): 559–75.

Klokke, Marijke J. "Borobudur: A Maṇḍala? A Contextual Approach to the Function and Meaning of Borobudur." In *IIAS Yearbook 1995*, 191–219. Leiden: International Institute for Asian Studies, 1996.

Kossak, Steven. "The Arts of South and Southeast Asia." Special issue, *The Metropolitan Museum of Art Bulletin* 51, no. 4 (Spring 1994).

Krieger, Alex D. "The Typological Concept." *American Antiquity* 9, no. 3 (1944): 271–88.

Krishan, Y. "The Hair on the Buddha's Head and Uṣṇīṣa." *East and West* 16, no. 3/4 (1966): 275–89.

Krom, N. J. "The Bronze-Find of Ṅañjuk." In *Cultural Horizons of India*, Vol. 4, 108–20. New Delhi: International Academy of Indian Culture and Aditya Prakashan, 1995. Translation of "De bronsvondst van Ngandjoek." In *Rapporten van de Oudheidkundige Dienst in Nederlandsch - Indië 1913*, 59–72.

Kwa, Chong Guan. *William Willetts and the Practice of Asian Art History*. Singapore: NUS Museum, 2020.

Kwa, Chong Guan. Introduction to *Early Southeast Asia Viewed from India: An Anthology of Articles from the Journal of the Greater India Society*. Edited by Kwa Chong-Guan, xv–xlvii. New Delhi: Manohar, 2013.

Lamb, Alastair. "A Note on the Tiger Symbol in Some Representations of Avalokitesvara." In *Miscellaneous Papers on Early Hindu and Buddhist Settlement in Northern Malaya and Southern Thailand*, 89–90. Kuala Lumpur: Museums Department, Federation of Malaya, 1961.

Lammerts, D. Christian, ed. *Buddhist Dynamics in Premodern and Early Modern Southeast Asia*. Singapore: ISEAS, 2015.

Lammerts, D. Christian. Introduction to *Buddhist Dynamics in Premodern and Early Modern Southeast Asia*, edited by D. Christian Lammerts, 1–17. Singapore: ISEAS, 2015.

Lape, Peter. "On the Use of Archaeology and History in Island Southeast Asia." *Journal of the Economic and Social History of the Orient* 45, no. 4 (2002): 468–91.

Le Bonheur, Albert. "Un bronze d'époque préangkorienne représentant Maitreya." *Arts Asiatiques* 25 (1972): 129–54.

Le Bonheur, Albert. *La Sculpture Indonésienne Au Musée Guimet*. Paris: Presses Universitaires de France, 1971.

Leidy, Denise Patry. *The Art of Buddhism: An Introduction to Its History and Meaning*. Boston, MA: Shambhala, 2008.

Lerner, Martin, and Steven Kossak. *The Lotus Transcendent: Indian and Southeast Asian Art from the Samuel Eilenberg Collection*. New York: The Metropolitan Museum of Art, 1991.

Lerner, Martin. *The Flame and the Lotus: Indian and Southeast Asian Art from the Kronos Collections*. New York: The Metropolitan Museum of Art, 1984.

Lim, K. W. "Studies in Later Buddhist Iconography." *Bijdragen Tot de Taal-, Land- En Volkenkunde* 120, no. 3 (1964): 327–41.

Linrothe, Rob. *Ruthless Compassion: Wrathful Deities in Early Indo-Tibetan Esoteric Buddhist Art*. Boston, MA: Shambhala, 1999.

Linrothe, Rob. "Protection, Benefaction, and Transformation: Wrathful Deities in Himalayan Art." In *Demonic Divine: Himalayan Art and Beyond*, edited by Rob Linrothe and Jeff Watt, 2–43. New York: Rubin Museum of Art, 2004.

Lokesh Chandra and Nirmala Sharma. *Niṣpanna-Yogāvalī: Sanskrit and Tibetan Texts with English Translation*. New Delhi: International Academy of Indian Culture and Aditya Prakashan, 2015.

Lokesh Chandra, and Sudarshana Devi Singhal. “The Buddhist Bronzes of Surocolo.” In *Cultural Horizons of India*, vol. 4: 121–47. New Delhi: International Academy of Indian Culture and Aditya Prakashan, 1995.

Lokesh Chandra, and Sudarshana Devi Singhal. “Identification of the Ṅañjuk Bronzes.” In *Cultural Horizons of India*, vol. 4: 97–107. New Delhi: International Academy of Indian Culture and Aditya Prakashan, 1995.

Lokesh Chandra. “Chandi Mendut and Pawon: A New Interpretation.” *Bijdragen Tot de Taal-, Land- En Volkenkunde* 136, no. 2/3 (1980): 313–20.

Lokesh Chandra. “The Structure of the Garbhadhātu Maṇḍala.” In *Bahasa – Sastra – Budaya: Ratna Manikam Untaian Persembahan Kepada Prof. Dr. P. J. Zoetmulder*, 540–54. Yogyakarta: Gadjah Mada University Press, 1985.

Lua, Nicholas Swee Yang. “Tantra Below the Winds: The Transgressive King and His Precursors.” BA Thesis, Yale-NUS College, 2019.

Luczanits, Christian. “From Tabo to Alchi: Revisiting Early Western Himalayan Art.” *Orientations* 51, no. 5 (2020): 34–45.

Lunsingh Scheurleer, Pauline, and Arlo Griffiths. “Ancient Indonesian Ritual Utensils and Their Inscriptions: Bells and Slitdrums.” *Arts Asiatiques* 69 (2014): 129–150.

Lunsingh Scheurleer, Pauline, and Marijke J. Klokke. *Ancient Indonesian Bronzes: A Catalogue of the Exhibition in the Rijksmuseum Amsterdam with a General Introduction*. Leiden: E. J. Brill, 1988.

Lunsingh Scheurleer, Pauline. “Bronze Images and Their Place in Ancient Indonesian Culture.” In *Ancient Indonesian Sculpture*, edited by Marijke J. Klokke and Pauline Lunsingh Scheurleer, 76–97. Leiden: KITLV Press, 1994.

Lunsingh Scheurleer, Pauline. “A Particular Central Javanese Group of Bronzes.” In *Studies in South and Southeast Asian Archaeology. No. 2. Essays Offered to Dr. R. Soekmono*, edited by H. I. R. Hinzler, 23–38. Leiden: Koentji Press, 1988.

Lunsingh Scheurleer, Pauline. “Skulls, Fangs and Serpents: A New Development in East Javanese Iconography.” In *Southeast Asian Archaeology 1998*, edited by Wibke Lobo and Stefanie Reimann, 189–204. Hull, UK: Centre for South-East Asian Studies, University of Hull, 2000.

Mabbett, I. W. “The ‘Indianization’ of Southeast Asia: Reflections on the Historical Sources.” *Journal of Southeast Asian Studies* 8, no. 2 (1977): 143–61.

Manguin, Pierre-Yves. Introduction to *Early Interactions between South and Southeast Asia*. Edited by Pierre-Yves Manguin, A. Mani and Geoff Wade, xiii–xxxi. Singapore: ISEAS, 2011.

Matsunaga, Keiji. *Indoneshia no mikkyō* [Esoteric Buddhism in Indonesia]. Kyoto: Hōzōkan, 1999.

Matsunaga, Yūkei. Introduction to *The Guhyasamāja Tantra: A New Critical Edition*, edited by Yūkei Matsunaga, vii–xxxi. Osaka: Toho Shuppan, 1978.

McBride, Richard D., II. "Is There Really 'Esoteric' Buddhism?" *Journal of the International Association of Buddhist Studies* 27, no. 2 (2004): 329–56.

McKinnon, E. Edwards. "The Sambas Hoard: Bronze Drums, and Gold Ornaments Found in Kalimantan in 1991." *Journal of the Malaysian Branch of the Royal Asiatic Society* 67, no. 1 (1994): 9–28.

Mechling, Mathilde, Brice Vincent, Pierre Baptiste, and David Bourgarit. "The Indonesian Bronze-Casting Tradition: Technical Investigations on Thirty-Nine Indonesian Bronze Statues (7th–11th c.) from the Musée National Des Arts Asiatiques – Guimet, Paris." *Bulletin de l'École Française d'Extrême-Orient* 104 (2018): 63–139.

Mechling, Mathilde. "Buddhist and Hindu Metal Images of Indonesia: Evidence for Shared Artistic and Religious Networks across Asia (c. 6th–10th Century)." 2 Vols. PhD Diss., Université Sorbonne Nouvelle – Paris 3; Leiden University, 2020.

Meyers, Pieter. "Authenticity Testing and Dating of Bronze Sculpture Casting Cores." In *Khmer Bronzes: New Interpretations of the Past*, edited by Emma C. Bunker and Douglas Latchford, 473–80. Chicago, IL: Art Media Resources, 2011.

Miksic, John N., and Geok Yian Goh. *Ancient Southeast Asia*. Abingdon, Oxon: Routledge, 2017.

Miksic, John N. "Archaeological Evidence for Esoteric Buddhism in Sumatra, 7th to 13th Century." In *Esoteric Buddhism in Mediaeval Maritime Asia*, edited by Andrea Acri, 253–73. Singapore: ISEAS, 2016.

Miksic, John N. *Historical Dictionary of Ancient Southeast Asia*. Lanham, MD: Scarecrow Press, 2007.

Miksic, John N. "Part Four: Statistics." In *Southeast Asian Archaeological Site Reports. Singapore No 1: The Singapore Cricket Club Excavation*. Singapore: NUS Press, 2020. https://epress.nus.edu.sg/sitereports/scc/text/statistics/.

Miksic, John N. "The Buddhist-Hindu Divide in Premodern Southeast Asia." Nalanda-Sriwijaya Working Paper No. 1 (March 2010): 1–37. http://nsc.iseas.edu.sg/documents/working_papers/nscwps001.pdf

Mollison, James. Preface to *Seven Bronzes from Southeast Asia and Indonesia: Some Applications of Science in the Study of Objets d'art. Part One: Two Khmer Bronzes*. Edited by Noel Barnard, v–vi. Canberra, Australia: Australian National Gallery, 1977.

Nattier, Jan. *A Few Good Men: The Bodhisattva Path According to the* Inquiry of Ugra (Ugraparipṛcchā). Honolulu, HI: University of Hawai'i Press, 2003.

Nihom, Max. *Studies in Indian and Indo-Indonesian Tantrism: The Kuñjarakarṇadharmakathana and the Yogatantra*. Vienna: Institut fur Indologie der Universitat Wien, 1994.

O'Brien, Kate. "The Maṇḍalas of the Sutasoma Kekawin, Part II." *Journal of the Oriental Society of Australia* 22/23 (1990–91): 92–132.

O'Brien, Kate. "The Maṇḍalas of the Sutasoma Kekawin." *Journal of the Oriental Society of Australia* 20/21 (1988–89): 153–87.

O'Brien, Kate. "Candi Jago as a Mandala: Symbolism of Its Narratives (Part I)." *Review of Indonesian and Malayan Affairs* 22, no. 2 (1988): 1–61.

O'Connor, Stanley J. "Ritual Deposit Boxes in Southeast Asian Sanctuaries." *Artibus Asiae* 28, no. 1 (1966): 53–60.

O'Flaherty, Wendy Doniger. *Śiva: The Erotic Ascetic*. Oxford: Oxford University Press, 1973.

Orzech, Charles D., Richard K. Payne, and Henrik H. Sørensen. "Introduction: Esoteric Buddhism and the Tantras in East Asia: Some Methodological Considerations." In *Esoteric Buddhism and the Tantras in East Asia*, edited by Charles D. Orzech, Richard Karl Payne, and Henrik H. Sørensen, 3–18. Leiden: Brill, 2011.

Orzech, Charles D. "The 'Great Teaching of Yoga,' the Chinese Appropriation of the Tantras, and the Question of Esoteric Buddhism." *Journal of Chinese Religions* 34, no. 1 (2006): 29–78.

Patton, Laurie L., and David L. Haberman. Introduction to *Notes from a Maṇḍala: Essays in the History of Indian Religions in Honor of Wendy Doniger*, edited by Laurie L. Patton and David L. Haberman, 9–19. Newark, DE: University of Delaware Press, 2010.

Pollock, Sheldon I. *The Language of the Gods in the World of Men: Sanskrit, Culture, and Power in Premodern India*. Berkeley, CA: University of California Press, 2006.

Pott, P. H. "Four Demonic Gaṇeśas from East Java." In *The Wonder of Man's Ingenuity*, 123–31. Leiden: E. J. Brill, 1962.

Pott, P. H. "In Memoriam F.D.K. Bosch." *Bijdragen Tot de Taal-, Land- En Volkenkunde* 123, no. 4 (1967): 409–26.

Pott, P. H. "Plural Forms of Buddhist Iconography." In *India Antiqua: A Volume of Oriental Studies Presented by His Friends and Pupils to Jean Philippe Vogel, C.I.E. on the Occasion of the Fiftieth Anniversary of His Doctorate*, 284–290. Leiden: E. J. Brill.

R. P. Soejono. "Ancient Bronze Culture of Indonesia." In *Bronze Culture in Asia*. Tehran: Asian Cultural Documentation Centre for UNESCO, Tehran, 1978.

R. P. Soejono, "The History of Prehistoric Research in Indonesia to 1950." *Asian Perspectives* 12 (1969): 69–91.

Reid, Anthony. *A History of Southeast Asia: Critical Crossroads*. Chichester, England: Wiley Blackwell, 2015.

Rhie, Marylin M. "Mahakala: Some *Tangkas* and Sculptures from the Rubin Museum of Art." In *Demonic Divine: Himalayan Art and Beyond*, by Rob Linrothe and Jeff Watt, 44–98. New York: Rubin Museum of Art, 2004.

Sanderson, Alexis. "Vajrayāna: Origin and Function." In *Buddhism into the Year 2000*, 87–102. Bangkok: Dhammakaya Foundation, 1994.

Schopen, Gregory. "Archaeology and Protestant Presuppositions in the Study of Indian Buddhism." *History of Religions* 31, no. 1 (1991): 1–23.

Selimkhanov, I. R. "The Chemical Characteristics of Some Metal Finds from Non Nok Tha." In *Early Southeast Asia: Essays in Archaeology, History and Historical Geography*, edited by R. B. Smith and W. Watson, 33–38. Oxford: Oxford University Press, 1979.

Sen, Tansen. "Buddhism and the Maritime Crossings." In *China and Beyond in the Mediaeval Period: Cultural Crossings and Inter-Regional Connections*, edited by Dorothy C. Wong and Gustav Heldt, 39–62. New Delhi: Manohar, 2014.

Shah Alam, Zaini. "Metal Production and Social Organisation in Fourteenth-Century Singapore." *Journal of Southeast Asian Studies* 50, no. 4 (2019): 489–506.

Sharf, Robert H. "On Esoteric Buddhism in China." In *Coming to Terms with Chinese Buddhism: A Reading of the* Treasure Store Treatise, 263–78. Honolulu, HI: University of Hawai'i Press, 2002.

Sharma, Nirmala. "Surocolo Bronzes and Their Tantric Text." *Acta Orientalia Academiae Scientiarum Hungaricae* 64, no. 2 (2011): 209–19.

Shaw, Miranda. *The Buddhist Goddesses of India*. Princeton, NJ: Princeton University Press, 2006.

Silk, Jonathan. "What, If Anything, Is Mahāyāna Buddhism? Problems of Definitions and Classifications." *Numen* 49, no. 4 (2002): 355–405.

Sinclair, Iain. "Vajramahākāla and the *Śaivasaugata* Rulers of Dharmāśraya and Siṅhasāri." *Entangled Religions* 13, no. 7 (2022): https://doi.org/10.46586/er.13.2022.9678.

Skilling, Peter. "How the Unborn Was Born: The Riddle of Mahāyāna Origins." In *Setting Out on the Great Way: Essays on Early Mahāyāna Buddhism*, edited by Paul Harrison, 33–71. Bristol, CT: Equinox, 2018.

Skilling, Peter. Review of *Tracing Thought through Things: The Oldest Pali Texts and the Early Buddhist Archaeology of India and Burma*, by Janice Stargardt. *Asian Perspectives* 44, no. 2 (2005): 386–390.

Smith, R. B., and W. Watson, eds. *Early Southeast Asia: Essays in Archaeology, History and Historical Geography*. Oxford: Oxford University Press, 1979.

Smith, R. B., and W. Watson. Preface to *Early Southeast Asia: Essays in Archaeology, History and Historical Geography*, edited by R. B. Smith and W. Watson, v–viii. Oxford: Oxford University Press, 1979.

Smith, David. *The Dance of Śiva: Religion, Art and Poetry in South India*. Cambridge, UK: Cambridge University Press, 1996.

Snellgrove, David L. *Indo-Tibetan Buddhism: Indian Buddhists and Their Tibetan Successors*. Boston, MA: Shambhala, 1987.

Soenarto, Th. Aq. "Temuan arca-arca perunggu di daerah Bantul (sebuah pengumuman) [The discovery of bronze statues in the Bantul area (an announcement)]." In *Pertemuan ilmiah arkeologi: Cibulan, 21-25 Februari 1977*, 392–423. Jakarta, Indonesia: Pusat Penelitian Purbakala dan Peninggalan Nasional, 1980.

Sundberg, Jeffrey, and Rolf Giebel. "The Life of the Tang Court Monk Vajrabodhi as Chronicled by Lü Xiang (呂向): South Indian and Śrī Laṅkān Antecedents to the Arrival of the Buddhist Vajrayāna in Eighth-Century Java and China." *Pacific World: Journal of the Institute of Buddhist Studies* 13 (2011): 129–222.

Sundberg, Jeffrey Roger. "The Wilderness Monks of the Abhayagirivihāra and the Origins of Sino-Javanese Esoteric Buddhism." *Bijdragen Tot de Taal-, Land- En Volkenkunde* 160, no. 1 (2004): 95-123.

Syed Ahmad bin Jamal and Othman bin Mohd. Yatim. "Śrīvijaya Art in Peninsular Malaysia." In *The Art of Śrīvijaya*, edited by M. C. Subhadradis Diskul, 45–49. Oxford; Paris: Oxford University Press and UNESCO, 1980.

Tan, Yeok Seong. *Preliminary Report on the Discovery of the Hoard of Hindu Religious Objects, near Sambas, West Borneo*. Singapore: Nanyang Book Co., Ltd., 1948.

Tanaka, Kimiaki. *An Illustrated History of the Maṇḍala: From Its Genesis to the* Kālacakratantra. Somerville, MA: Wisdom Publications, 2018.

Tanaka, Kimiaki. "Comparing the Cross-Cultural Exchanges of Esoteric Buddhism through Overland and Maritime Silk Roads." In *Ancient Silk Trade Routes: Selected Works from Symposium on Cross Cultural Exchanges and Their Legacies in Asia*, edited by Dashu Qin and Jian Yuan, 223–35. Singapore: World Scientific, 2015.

Teeuw, A., and Stuart Robson. Introduction to *Kuñjarakarṇa Dharmakathana: Liberation through the Law of the Buddha*, trans. A. Teeuw and Stuart Robson, 1–68. The Hague: Martinus Nijhoff, 1981.

Van Buitenen, J. A. B., trans. *The Mahābhārata: 2. The Book of the Assembly Hall. 3. The Book of the Forest*. Chicago, IL: University of Chicago Press, 1975.

Van Lohuizen-De Leeuw, J. E. *Indo-Javanese Metalwork*. Stuttgart: Linden-Museum Stuttgart, 1984.

Vettam Mani. *Purāṇic Encyclopaedia: A Comprehensive Dictionary with Special Reference to the Epic and Purāṇic Literature*. Delhi: Motilal Banarsidass, 1975.

Vincent, Brice, David Bourgarit, and Paul Jett. "Khmer Bronze Metallurgy during the Angkorian Period (Twelfth to Thirteenth Centuries): Technical Investigation of a New Selected Corpus of Artifacts from the National Museum of Cambodia, Phnom Penh." In *Scientific Research on Ancient Asian Metallurgy: Proceedings of the Fifth Forbes Symposium at the Freer Gallery of Art*, edited by Paul Jett, Blythe McCarthy, and Janet G. Douglas, 124–53. Washington, D.C.: Archetype Publications, 2012.

Watson, W. "Kok Charoen and the Early Metal Age of Central Thailand." In *Early Southeast Asia: Essays in Archaeology, History and Historical Geography*, edited by R. B. Smith and W. Watson, 53–62. Oxford: Oxford University Press, 1979.

Wayman, Alex. *Untying the Knots in Buddhism: Selected Essays*. Delhi: Motilal Banarsidass, 1997.

Williams, Paul, Anthony Tribe, and Alexander Wynne. *Buddhist Thought: A Complete Introduction to the Indian Tradition*. 2nd ed. Abingdon, Oxon: Routledge, 2012.

Williams, Paul. *Mahāyāna Buddhism: The Doctrinal Foundations*. 2nd ed. London: Routledge, 2009.

Wolters, Oliver W. *History, Culture and Region in Southeast Asian Perspectives*. Revised ed. Ithaca, NY: Southeast Asia Program, Cornell University, 1999.

Woodward, Hiram W. Jr. "Esoteric Buddhism in Southeast Asia in the Light of Recent Scholarship." *Journal of Southeast Asian Studies* 35, no. 2 (2004): 329–54.

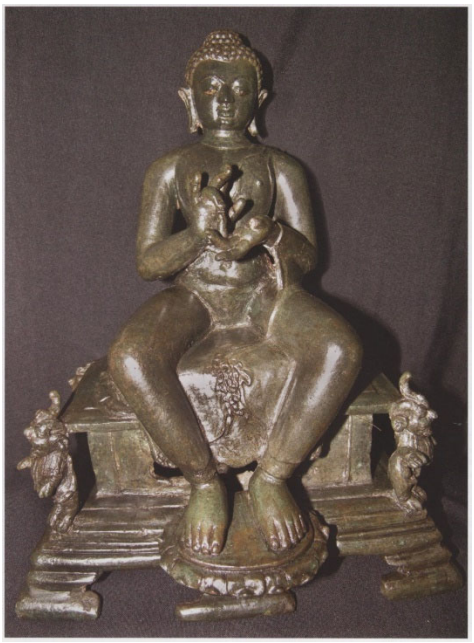
Wright, Henry T. "Developing Complex Societies in Southeast Asia: Using Archaeological and Historical Evidence." *International Journal of Historical Archaeology* 2, no. 4 (1998): 343–48.

APPENDICES

APPENDIX ONE: Object Images

This appendix includes for each object: an image and the image source, the name I have used for the object and where available, their last known location and museum catalogue number.

B1. RMV ECJ Buddha. Rijksmuseum voor Volkenkunde, Leiden. RMV 1403-1717. Source: Pauline Lunsingh Scheurleer and Marijke J. Klokke, *Ancient Indonesian Bronzes: A Catalogue of the Exhibition in the Rijksmuseum Amsterdam with a General Introduction* (Leiden: E. J. Brill, 1988), 54.



B2. Rejoso Buddha. Museum Ranggawarsita, Semarang. Reg. no. 04.2321, acc. no. R. 1578. Source: Arlo Griffiths, Nicolas Revire, and Rajat Sanyal, "An Inscribed Bronze Sculpture of a Buddha in Bhadrāsana at Museum Ranggawarsita in Semarang (Central Java, Indonesia)," *Arts Asiatiques* 68 (2013): 5.

B3. Surocolo "Vajrarāga." Suaka Peninggalan Sejarah dan Purbakala, DIY, Bogem, Kalasan. Inv. no. BG 132. Source: Jan Fontein, *The Sculpture of Indonesia (*New York: Harry N. Abrams, Inc., 1990), 224.

B4. Surocolo "Vajrarakṣa." Suaka Peninggalan Sejarah dan Purbakala, DIY, Bogem, Kalasan. Inv. no. BG 124. Source: Jan Fontein, *The Sculpture of Indonesia (*New York: Harry N. Abrams, Inc., 1990), 224.

B5. Surocolo "Vajrakarma." Suaka Peninggalan Sejarah dan Purbakala, DIY, Bogem, Kalasan. Inv. no. BG 136. Source: Jan Fontein, The Sculpture of Indonesia (New York: Harry N. Abrams, Inc., 1990), 225.

B6. Surocolo "Vajrabhāsa." Suaka Peninggalan Sejarah dan Purbakala, DIY, Bogem, Kalasan. Inv. no. BG 140. Source: Jan Fontein, The Sculpture of Indonesia (New York: Harry N. Abrams, Inc., 1990), 225.

B7. Surocolo "Vajradhūpā." Suaka Peninggalan Sejarah dan Purbakala, DIY, Bogem, Kalasan. Inv. no. BG 139. Source: Jan Fontein, The Sculpture of Indonesia (New York: Harry N. Abrams, Inc., 1990), 225.

B8. Surocolo "Vajralokā." Suaka Peninggalan Sejarah dan Purbakala, DIY, Bogem, Kalasan. Inv. no. BG 126. Source: Jan Fontein, The Sculpture of Indonesia (New York: Harry N. Abrams, Inc., 1990), 226.

B9. Surocolo "Vaṃśā." Suaka Peninggalan Sejarah dan Purbakala, DIY, Bogem, Kalasan. Inv. no. BG 137. Source: Jan Fontein, The Sculpture of Indonesia (New York: Harry N. Abrams, Inc., 1990), 226.

B10. Surocolo "Mukundā." Suaka Peninggalan Sejarah dan Purbakala, DIY, Bogem, Kalasan. Inv. no. BG 133. Source: Jan Fontein, The Sculpture of Indonesia (New York: Harry N. Abrams, Inc., 1990), 226.

B11. Surocolo "Murajā." Suaka Peninggalan Sejarah dan Purbakala, DIY, Bogem, Kalasan. Inv. no. BG 135. Source: Jan Fontein, The Sculpture of Indonesia (New York: Harry N. Abrams, Inc., 1990), 227.

B12. Surocolo "Vajragītī." Suaka Peninggalan Sejarah dan Purbakala, DIY, Bogem, Kalasan. Inv. no. BG 138. Source: Jan Fontein, The Sculpture of Indonesia (New York: Harry N. Abrams, Inc., 1990), 227.

B13. Surocolo "Śūkarāsyā." Suaka Peninggalan Sejarah dan Purbakala, DIY, Bogem, Kalasan. Inv. no. BG 130. Source: Jan Fontein, The Sculpture of Indonesia (New York: Harry N. Abrams, Inc., 1990), 228.

B14. Surocolo "Hayāsyā." Suaka Peninggalan Sejarah dan Purbakala, DIY, Bogem, Kalasan. Inv. no. BG 128. Source: Jan Fontein, The Sculpture of Indonesia (New York: Harry N. Abrams, Inc., 1990), 228.

B15. Surocolo Unknown. Suaka Peninggalan Sejarah dan Purbakala, DIY, Bogem, Kalasan. Inv. no. BG 127. Source: Jan Fontein, The Sculpture of Indonesia (New York: Harry N. Abrams, Inc., 1990), 228.

B16. Surocolo "Vināyaka." Suaka Peninggalan Sejarah dan Purbakala, DIY, Bogem, Kalasan. Inv. no. BG 144. Source: Jan Fontein, The Sculpture of Indonesia (New York: Harry N. Abrams, Inc., 1990), 229.

B17. Surocolo "Vajrasphoṭā." Suaka Peninggalan Sejarah dan Purbakala, DIY, Bogem, Kalasan. Inv. no. BG 129. Source: Jan Fontein, The Sculpture of Indonesia (New York: Harry N. Abrams, Inc., 1990), 229.

B18. Surocolo "Vajranṛtya." Suaka Peninggalan Sejarah dan Purbakala, DIY, Bogem, Kalasan. Inv. no. BG 131. Source: Jan Fontein, The Sculpture of Indonesia (New York: Harry N. Abrams, Inc., 1990), 229.

B19. Surocolo "Vajralāśī." Suaka Peninggalan Sejarah dan Purbakala, DIY, Bogem, Kalasan. Inv. no. BG 134. Source: Jan Fontein, The Sculpture of Indonesia (New York: Harry N. Abrams, Inc., 1990), 230.

B20. Surocolo "Vajrasattva." Suaka Peninggalan Sejarah dan Purbakala, DIY, Bogem, Kalasan. Inv. no. BG 122. Source: Jan Fontein, The Sculpture of Indonesia (New York: Harry N. Abrams, Inc., 1990), 230.

B21. PC ECJ Buddha. Private collection. Source: Pauline Lunsingh Scheurleer and Marijke J. Klokke, *Ancient Indonesian Bronzes: A Catalogue of the Exhibition in the Rijksmuseum Amsterdam with a General Introduction* (Leiden: E. J. Brill, 1988), 55.

B22. KB "Amarāvatī" Buddha. Vereniging van Vrienden der Aziatische Kunst, in bruikleen aan het Rijksmuseum, Amsterdam (Society of Friends of Asiatic Art, on loan to the Rijksmuseum). MAK 193, 1940. Source: Pauline Lunsingh Scheurleer and Marijke J. Klokke, *Ancient Indonesian Bronzes: A Catalogue of the Exhibition in the Rijksmuseum Amsterdam with a General Introduction* (Leiden: E. J. Brill, 1988), 53.

B23. Nganjuk "Vajrasattva 1." Rijksmuseum Amsterdam. Vereniging van Vrienden der Aziatische Kunst, in bruikleen aan het Rijksmuseum, Amsterdam (Society of Friends of Asiatic Art, on loan to the Rijksmuseum). Object no. AK-MAK-1168. Source: Pauline Lunsingh Scheurleer and Marijke J. Klokke, *Ancient Indonesian Bronzes: A Catalogue of the Exhibition in the Rijksmuseum Amsterdam with a General Introduction* (Leiden: E. J. Brill, 1988), 103.

B24. Nganjuk "Vajrasattva 2." Rijksmuseum Amsterdam. Object no. AK-RAK-1970-2. Source: Pauline Lunsingh Scheurleer and Marijke J. Klokke, *Ancient Indonesian Bronzes: A Catalogue of the Exhibition in the Rijksmuseum Amsterdam with a General Introduction* (Leiden: E. J. Brill, 1988), 105.

B25. Nganjuk Flag-Bearer. Tropenmuseum Amsterdam. Inv. no. TM-2960-154. Source: Pauline Lunsingh Scheurleer and Marijke J. Klokke, *Ancient Indonesian Bronzes: A Catalogue of the Exhibition in the Rijksmuseum Amsterdam with a General Introduction* (Leiden: E. J. Brill, 1988), 104.

B26. Nganjuk "Vajrāṅkuśa." National Museum of Indonesia. Inv. no. 5931. Source: Jan Fontein, *The Sculpture of Indonesia* (New York: Harry N. Abrams, Inc., 1990), 231.

B27. Nganjuk "Vajrasphoṭā." National Museum of Indonesia. Inv. no. 5406. Source: Jan Fontein, *The Sculpture of Indonesia* (New York: Harry N. Abrams, Inc., 1990), 231.

B28. Nganjuk "Vajragandhā 1." National Museum of Indonesia. Inv. no. 5502. Source: Jan Fontein, *The Sculpture of Indonesia* (New York: Harry N. Abrams, Inc., 1990), 232.

B29. Nganjuk "Vajradhūpā." National Museum of Indonesia. Inv. no. 5408. Source: Jan Fontein, *The Sculpture of Indonesia* (New York: Harry N. Abrams, Inc., 1990), 232.

B30. Nganjuk "Vajragandhā 2." Tropenmuseum Amsterdam. Inv. no. TM-1770-284. Source: Jan Fontein, The Sculpture of Indonesia (New York: Harry N. Abrams, Inc., 1990), 233.

B31. Nganjuk "Ratnasambhava." National Museum of Indonesia. Inv. no. 5494. Source: Lokesh Chandra and Sudarshana Devi Singhal, "Identification of the Ṅañjuk Bronzes," in *Cultural Horizons of India*, vol. 4 (New Delhi: International Academy of Indian Culture and Aditya Prakashan, 1995), 105, item 11.

B32. Nganjuk "Vajradharma." National Museum of Indonesia. Inv. no. 5402. Source: Lokesh Chandra and Sudarshana Devi Singhal, "Identification of the Ṅañjuk Bronzes," in *Cultural Horizons of India*, vol. 4 (New Delhi: International Academy of Indian Culture and Aditya Prakashan, 1995), 105 , item 17.

B33. Nganjuk "Vajrayakṣa." National Museum of Indonesia. Inv. no. 5416. Source: Lokesh Chandra and Sudarshana Devi Singhal, "Identification of the Ṅañjuk Bronzes," in *Cultural Horizons of India*, vol. 4 (New Delhi: International Academy of Indian Culture and Aditya Prakashan, 1995), 106, item 24.

B34. Nganjuk "Candraprabha 1." National Museum of Indonesia. Inv. no. 5916. Source: Lokesh Chandra and Sudarshana Devi Singhal, "Identification of the Ṅañjuk Bronzes," in *Cultural Horizons of India*, vol. 4 (New Delhi: International Academy of Indian Culture and Aditya Prakashan, 1995), 106, item 39.

B35. Nganjuk "Candraprabha 2." National Museum of Indonesia. Inv. no. 5399. Source: Lokesh Chandra and Sudarshana Devi Singhal, "Identification of the Ṅañjuk Bronzes," in *Cultural Horizons of India*, vol. 4 (New Delhi: International Academy of Indian Culture and Aditya Prakashan, 1995), 106, item 39.

B36. Nganjuk "Bhadrapāla 1." National Museum of Indonesia. Inv. no. 5910. Source: Lokesh Chandra and Sudarshana Devi Singhal, "Identification of the Ṅañjuk Bronzes," in *Cultural Horizons of India*, vol. 4 (New Delhi: International Academy of Indian Culture and Aditya Prakashan, 1995), 106, item 40.

N.B. The image source for B34 and B35 rightly recognises them as two different objects, yet idiosyncratically gives them the same item number.

B37. Nganjuk "Bhadrapāla 2." National Museum of Indonesia. Inv. no. 5930. Source: Lokesh Chandra and Sudarshana Devi Singhal, "Identification of the Ṅañjuk Bronzes," in *Cultural Horizons of India*, vol. 4 (New Delhi: International Academy of Indian Culture and Aditya Prakashan, 1995), 107, item 40.

B38. Nganjuk "Vajrapuṣpā." Location unknown. Source: Lokesh Chandra and Sudarshana Devi Singhal, "Identification of the Ṅañjuk Bronzes," in *Cultural Horizons of India*, vol. 4 (New Delhi: International Academy of Indian Culture and Aditya Prakashan, 1995), 107, item 47.

N.B. The image source for B36 and B37 rightly recognises them as two different objects, yet idiosyncratically gives them the same item number.

B39. Nganjuk "Jālinīprabha." National Museum of Indonesia. Inv. no. 5912. Source: Lokesh Chandra and Sudarshana Devi Singhal, "Identification of the Ṅañjuk Bronzes," in *Cultural Horizons of India*, vol. 4 (New Delhi: International Academy of Indian Culture and Aditya Prakashan, 1995), 107, item 41.

B40. Sambas Hoard Standing Silver Buddha. British Museum. Reg. no. 1956,0725.8.a. Source: Tan Yeok Seong, *Preliminary Report on the Discovery of the Hoard of Hindu Religious Objects, near Sambas, West Borneo* (Singapore: Nanyang Book Co., Ltd., 1948), Plate 1, Fig. 2.

B41. Sambas Hoard Standing Gold Buddha. British Museum. Reg. no. 1956, 0725.1. Source: "Figure," The British Museum, accessed March 6, 2022, https://www.britishmuseum.org/collection/object/A_1956-0725-1.

B42. Sambas Hoard Gold Sitting Buddha 1. British Museum. Reg. no. 1956,0725.2. Source: "Figure," The British Museum, accessed March 6, 2022, https://www.britishmuseum.org/collection/object/A_1956-0725-2.

B43. Sambas Hoard Gold Sitting Buddha 2. British Museum. Reg. no. 1956, 0725.3. Source: "Figure," The British Museum, accessed March 6, 2022, https://www.britishmuseum.org/collection/object/A_1956-0725-3.

B44. Sambas Hoard "Padmapāṇi." British Museum. Reg. no. 1956, 0725.6. Source: "Figure," The British Museum, accessed March 6, 2022, https://www.britishmuseum.org/collection/object/A_1956-0725-6.

B45. Sambas Hoard Six-armed Deity. British Museum. Reg. no. 1956, 0725.7. Source: "Figure," The British Museum, accessed March 6, 2022, https://www.britishmuseum.org/collection/object/A_1956-0725-7.

B46. Sambas Hoard Four-armed Silver "Avalokiteśvara." British Museum. Reg. no. 1956, 0725.9. Source: "Figure," The British Museum, accessed March 6, 2022, https://www.britishmuseum.org/collection/object/A_1956-0725-9.

B47. Sambas Hoard Four-armed Gold "Avalokiteśvara 1." British Museum. Reg. no. 1956, 0725.4. Source: "Figure," The British Museum, accessed March 6, 2022, https://www.britishmuseum.org/collection/object/A_1956-0725-4.

B48. Sambas Hoard Four-armed Gold "Avalokiteśvara 2." British Museum. Reg. no. 1956, 0725.5. Source: "Figure," The British Museum, accessed March 6, 2022, https://www.britishmuseum.org/collection/object/A_1956-0725-5.

B49. Brooklyn Museum "Vajrasattva." Brooklyn Museum. Accession no. 84.184.1. Source: "Seated Vajrasattva," Brooklyn Museum, accessed March 6. 2022, https://www.brooklynmuseum.org/opencollection/objects/111839.

B50. Tropenmuseum "Mahākāla." Tropenmuseum Amsterdam. Inv. no. TM-2960-160. Source: Pauline Lunsingh Scheurleer and Marijke J. Klokke, *Ancient Indonesian Bronzes: A Catalogue of the Exhibition in the Rijksmuseum Amsterdam with a General Introduction* (Leiden: E. J. Brill, 1988), 97.

B51. British Museum "Vairocana." British Museum. Reg. no. 1859,1228.77. Source: "Figure," The British Museum, accessed March 8, 2022, https://www.britishmuseum.org/collection/object/A_1859-1228-77.

B52. British Museum "Akṣobhya." British Museum. Reg. no. 1859,1228.13. Source: "Figure," The British Museum, accessed March 8, 2022, https://www.britishmuseum.org/collection/object/A_1859-1228-13.

B53. British Museum "Amitābha." British Museum. Reg. no. 1859, 1228.1. Source: "Figure," The British Museum, accessed March 6, 2022, https://www.britishmuseum.org/collection/object/A_1859-1228-1.

B54. Domela Nieuwenhuis Collection "Vairocana 1." Source: Domela Nieuwenhuis Collection. Source: Nandana Chutiwongs, *Indonesian Bronzes in the Domela Nieuwenhuis Collection* (Amsterdam: Christie's Amsterdam B.V., 1990), p. 124, cat. 1.

B55. Domela Nieuwenhuis Collection "Vairocana 2." Domela Nieuwenhuis Collection. Source: Nandana Chutiwongs, *Indonesian Bronzes in the Domela Nieuwenhuis Collection* (Amsterdam: Christie's Amsterdam B.V., 1990), p. 124, cat. 2.

B56. Domela Nieuwenhuis Collection "Avalokiteśvara." Domela Nieuwenhuis Collection. Source: Nandana Chutiwongs, *Indonesian Bronzes in the Domela Nieuwenhuis Collection* (Amsterdam: Christie's Amsterdam B.V., 1990), p. 124, cat. 3.

B57. Domela Nieuwenhuis Vasudhārā. Domela Nieuwenhuis Collection. Source: Nandana Chutiwongs, *Indonesian Bronzes in the Domela Nieuwenhuis Collection* (Amsterdam: Christie's Amsterdam B.V., 1990), p. 124, cat. 4.

B58. Domela Nieuwenhuis Tārā. Domela Nieuwenhuis Collection. Source: Nandana Chutiwongs, *Indonesian Bronzes in the Domela Nieuwenhuis Collection* (Amsterdam: Christie's Amsterdam B.V., 1990), p. 125, cat. 5.

B59. Domela Nieuwenhuis "Viṣṇu." Domela Nieuwenhuis Collection. Source: Nandana Chutiwongs, *Indonesian Bronzes in the Domela Nieuwenhuis Collection* (Amsterdam: Christie's Amsterdam B.V., 1990), p. 124, cat. 2.

B60. Domela Nieuwenhuis "Śiva." Domela Nieuwenhuis Collection. Source: Nandana Chutiwongs, *Indonesian Bronzes in the Domela Nieuwenhuis Collection* (Amsterdam: Christie's Amsterdam B.V., 1990), p. 125, cat. 7.

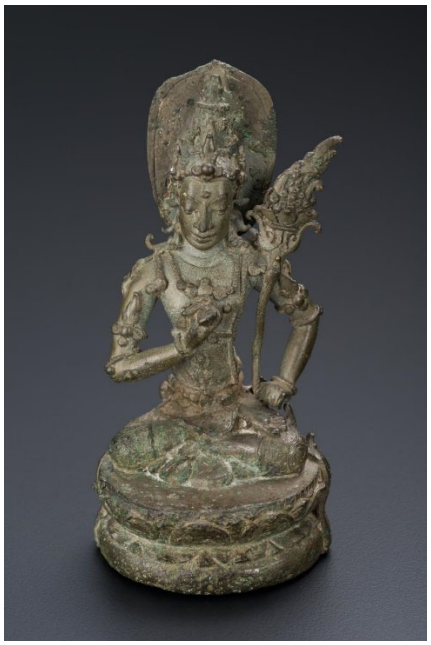
B61. Domela Nieuwenhuis "Rāhu. Domela Nieuwenhuis Collection. Source: Nandana Chutiwongs, *Indonesian Bronzes in the Domela Nieuwenhuis Collection* (Amsterdam: Christie's Amsterdam B.V., 1990), p. 125, cat. 7.

B62. Domela Nieuwenhuis "Kubera 1." Domela Nieuwenhuis Collection. Source: Nandana Chutiwongs, *Indonesian Bronzes in the Domela Nieuwenhuis Collection* (Amsterdam: Christie's Amsterdam B.V., 1990), p. 127, cat. 9.

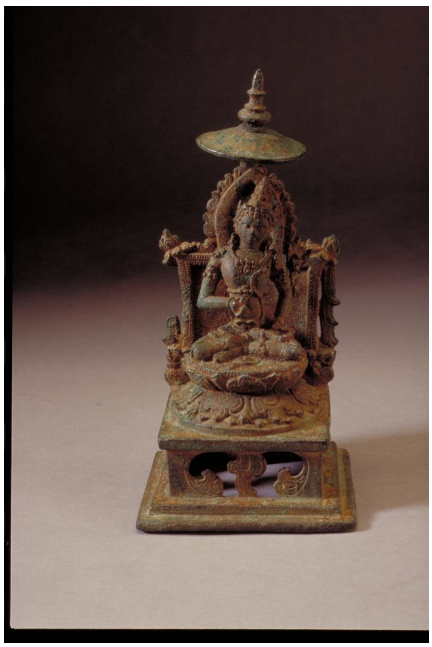
B63. Domela Nieuwenhuis "Kubera 2." Domela Nieuwenhuis Collection. Source: Nandana Chutiwongs, *Indonesian Bronzes in the Domela Nieuwenhuis Collection* (Amsterdam: Christie's Amsterdam B.V., 1990), p. 127, cat. 10.

B64. Brooklyn Museum Buddha. Brooklyn Museum. Accession no. 82.2334. Source: "Seated Buddha," Brooklyn Museum, accessed March 6, 2022, https://www.brooklynmuseum.org/opencollection/objects/109959.

B65. Brooklyn Museum "Ardhanārīśvara." Brooklyn Museum. Accession no. 1991.178.1. Source: "Standing Ardhanarisvara," Brooklyn Museum, accessed March 6, 2022, https://www.brooklynmuseum.org/opencollection/objects/147099.



B66. ACM Nganjuk Deity. Asian Civilisations Museum, Singapore. Accession no. 2014-00586. Source: "Seated Deity," Roots.sg, accessed March 6, 2022, https://www.roots.gov.sg/Collection-Landing/listing/1276730.



B67. ACM "Vajrapāṇi." Asian Civilisations Museum, Singapore. Accession no. 1995-00298. Source: "Figure of Vajrapani," Roots.sg, accessed March 6, 2022, https://www.roots.gov.sg/Collection-Landing/listing/1070425.

B68. ACM "Kubera." Asian Civilisations Museum, Singapore. Accession no. 1995-00297. Source: "Figure of Kubera," Roots.sg, accessed March 6, 2022, https://www.roots.gov.sg/Collection-Landing/listing/1070935.

B69. Ashmolean Two-armed "Avalokiteśvara." Ashmolean Museum. Accession no. EA1997.239. Source: "Seated figure of Avalokiteshvara," Ashmolean Museum, accessed March 6, 2022, https://collections.ashmolean.org/collection/browse-9148/object/92182.

B70. Ashmolean Six-armed "Avalokiteśvara." Ashmolean Museum. Accession no. EA2013.80. Source: "Figure of Six-armed Avalokiteshvara," Ashmolean Museum, accessed March 6, 2022, https://collections.ashmolean.org/object/710313.

B71. Ashmolean "Buddha 1." Ashmolean Museum. Accession no. EA2002.46. Source: "Seated figure of the Buddha," Ashmolean Museum, accessed March 6, 2022, https://collections.ashmolean.org/object/358378.

B72. Ashmolean "Buddha 2." Ashmolean Museum. Accession no. EA1997.240. Source: "Seated Buddha," Ashmolean Museum, accessed March 6, 2022, https://collections.ashmolean.org/object/357906.

B73. Ashmolean Standing "Buddha." Ashmolean Museum. Accession no. EA1997.229. Source: "Standing Figure of the Buddha," Ashmolean Museum, accessed March 6, 2022, https://collections.ashmolean.org/object/358265.

B74. Ashmolean Standing "Bodhisattva." Ashmolean Museum. Accession no. EA1997.232. Source: "Standing Figure of a Bodhisattva," Ashmolean Museum, accessed March 6, 2022, https://collections.ashmolean.org/object/357738.

B75. Ashmolean "Kubera." Ashmolean Museum. Accession no. EA1991.65. Source: "Figure of Jambhala or Kubera, God of Plenty," Ashmolean Museum, accessed March 6, 2022, https://collections.ashmolean.org/object/357289.

B76. Met Nganjuk Parasol Deity. Metropolitan Museum of Art. Accession no. 1986.509.4. Source: "Seated Male Deity Holding a Parasol and an Unidentified Object," The Met, accessed March 6, 2022, https://www.metmuseum.org/art/collection/search/39045.

B77. Met Nganjuk Manuscript Deity. Metropolitan Museum of Art. Accession no. 1991.457.2. Source: "Seated Male Deity Holding a Manuscript(?)," The Met, accessed March 6, 2022, https://www.metmuseum.org/art/collection/search/39169.

B78. Met Nganjuk Flower Deity. Metropolitan Museum of Art. Accession no. 1987.142.5. Source: "Seated Male Deity Supporting a Vajra on His Finger," The Met, accessed March 6, 2022, https://www.metmuseum.org/art/collection/search/39046.

B79. Met Nganjuk Viśvavajra Deity 1. Metropolitan Museum of Art. Accession no. 1987.142.6. Source: "Seated Deity Holding a Double Vajra," The Met, accessed March 6, 2022, https://www.metmuseum.org/art/collection/search/39049.

B80. Met Nganjuk Cuirass Deity 1. Metropolitan Museum of Art. Accession no. 1987.142.7. Source: "Seated Male Deity Holding a Cuirass (Chest Armour)," The Met, accessed March 6, 2022, https://www.metmuseum.org/art/collection/search/39047.

B81. Met Nganjuk Deity with Two Forearms. Metropolitan Museum of Art. Accession no. 1987.142.8. Source: "Seated Male Deity Holding Two Ritual Objects," The Met, accessed March 6, 2022, https://www.metmuseum.org/art/collection/search/39048.

B82. Met Nganjuk Deity with Conch and Branch. Metropolitan Museum of Art. Accession no. 1987.142.9. Source: "Seated Female Deity Holding a Conch and Branch (?)," The Met, accessed March 6, 2022, https://www.metmuseum.org/art/collection/search/39054.

B83. Met Nganjuk Female Deity, Arms Broken. Metropolitan Museum of Art. Accession no. 1987.142.164. Source: "Seated Female Deity," The Met, accessed March 6, 2022, https://www.metmuseum.org/art/collection/search/39051.

B84. Met Nganjuk Conch Deity. Metropolitan Museum of Art. Accession no. 1987.142.164. Source: "Seated Deity from an Esoteric Buddhist Mandala," The Met, accessed March 6, 2022, https://www.metmuseum.org/art/collection/search/39050.

B85. Met Nganjuk Viśvavajra Deity 2. Metropolitan Museum of Art. Accession no. 1987.142.302. Source: "Seated Male Deity Holding a Double Vajra," The Met, accessed March 6, 2022, https://www.metmuseum.org/art/collection/search/39052.

B86. Met Nganjuk Female Deity. Metropolitan Museum of Art. Accession no. 1994.27. Source: "Seated Esoteric Buddhist Female Deity," The Met, accessed March 6, 2022, https://www.metmuseum.org/art/collection/search/39179.

B87. Met Nganjuk Cuirass Deity 2. Metropolitan Museum of Art. Accession no. 1990.280. Source: "Seated Bodhisattva," The Met, accessed March 6, 2022, https://www.metmuseum.org/art/collection/search/39152.

B88. Met "Vajrapāṇi." Metropolitan Museum of Art. Accession no. 1984.486.1. Source: "Seated Bodhisattva Vajrapani." The Met, accessed March 6, 2022, https://www.metmuseum.org/art/collection/search/39037.

B89. Met Four-armed Bodhisattva. Metropolitan Museum of Art. Accession no. 1984.473. Source: "Seated Four-armed Bodhisattva," The Met, accessed March 6, 2022, https://www.metmuseum.org/art/collection/search/39056.

B90. LSK Group 2 "Śyāmatārā." Rijksmuseum voor Volkenkunde, Leiden. Accession no. RMV 1403-3052. Source: Pauline Lunsingh Scheurleer and Marijke J. Klokke, *Ancient Indonesian Bronzes: A Catalogue of the Exhibition in the Rijksmuseum Amsterdam with a General Introduction* (Leiden: E. J. Brill, 1988), 70.

B91. LSK Group 2 "Akṣobhya." Museum voor Volkenkunde, Rotterdam. Accession no. 49500. Source: Pauline Lunsingh Scheurleer and Marijke J. Klokke, *Ancient Indonesian Bronzes: A Catalogue of the Exhibition in the Rijksmuseum Amsterdam with a General Introduction* (Leiden: E. J. Brill, 1988), 71.

B92. LSK Group 2 "Cundā." Society of Friends of Asiatic Art, on loan to the Rijksmuseum, no. 1202. Source: Pauline Lunsingh Scheurleer and Marijke J. Klokke, *Ancient Indonesian Bronzes: A Catalogue of the Exhibition in the Rijksmuseum Amsterdam with a General Introduction* (Leiden: E. J. Brill, 1988), 72.

B93. LSK Group 3 "Mañjuśrī." Municipal Museum "Het Princessehof," Leeuwarden. Accession no. 1932-1. Source: Pauline Lunsingh Scheurleer and Marijke J. Klokke, *Ancient Indonesian Bronzes: A Catalogue of the Exhibition in the Rijksmuseum Amsterdam with a General Introduction* (Leiden: E. J. Brill, 1988), 82.

B94. LSK Group 3 "Padmapāṇi." Rijksmuseum voor Volkenkunde, Leiden. Accession no. RMV 1403-1699. Source: Pauline Lunsingh Scheurleer and Marijke J. Klokke, *Ancient Indonesian Bronzes: A Catalogue of the Exhibition in the Rijksmuseum Amsterdam with a General Introduction* (Leiden: E. J. Brill, 1988), 83.

B95. LSK Group 3 "Amoghspāśa Lokeśvara." Private collection. Source: Pauline Lunsingh Scheurleer and Marijke J. Klokke, *Ancient Indonesian Bronzes: A Catalogue of the Exhibition in the Rijksmuseum Amsterdam with a General Introduction* (Leiden: E. J. Brill, 1988), 87.

B96. LSK Group 4 "Pāndarā." Rijksmuseum voor Volkenkunde, Leiden. Accession no. RMV 1403-3025. Source: Pauline Lunsingh Scheurleer and Marijke J. Klokke, *Ancient Indonesian Bronzes: A Catalogue of the Exhibition in the Rijksmuseum Amsterdam with a General Introduction* (Leiden: E. J. Brill, 1988), 98.

B97. LSK Group 6 Sumatra Buddha. Society of Friends of Asiatic Art, on loan to the Rijksmuseum, no. 196. Source: Pauline Lunsingh Scheurleer and Marijke J. Klokke, *Ancient Indonesian Bronzes: A Catalogue of the Exhibition in the Rijksmuseum Amsterdam with a General Introduction* (Leiden: E. J. Brill, 1988), 107.

B98. LSK Group 7 Sulawesi "Avalokiteśvara." Society of Friends of Asiatic Art, on loan to the Rijksmuseum, no. 1234. Source: Pauline Lunsingh Scheurleer and Marijke J. Klokke, *Ancient Indonesian Bronzes: A Catalogue of the Exhibition in the Rijksmuseum Amsterdam with a General Introduction* (Leiden: E. J. Brill, 1988), 111.

B99. LSK Group 7 Sulawesi Buddha. Society of Friends of Asiatic Art, on loan to the Rijksmuseum, no. 1233. Source: Pauline Lunsingh Scheurleer and Marijke J. Klokke, *Ancient Indonesian Bronzes: A Catalogue of the Exhibition in the Rijksmuseum Amsterdam with a General Introduction* (Leiden: E. J. Brill, 1988), 112.

B100. Kronos Collection "Mahākāla." Kronos Collection. Source: Martin Lerner, *The Flame and the Lotus: Indian and Southeast Asian Art from the Kronos Collections* (New York: The Metropolitan Museum of Art, 1984), pp. 126-7, cat. 48.

APPENDIX TWO: List of Attributes

This appendix lists all 93 attributes I examined my hundred objects for. It also assigns each attribute a code number (A1, A2 and so forth) for ease of reference elsewhere in the thesis.

Code	Attribute
A1	*Uṣṇīṣa*
A2	Ascetic robes
A3	Long ears
A4	Snail hair
A5	Conical crown
A6	*Sarong*
A7	Girdle(s)
A8	Necklace
A9	Sacred thread
A10	Armband(s)
A11	Bracelet(s)
A12	Anklet(s)
A13	Seated on chair (*Bhadrāsana*)
A14	Crossed legs (*Sattvaparyaṅka*)
A15	*Lalitāsana*
A16	Standing with feet together
A17	*(Praty)ālīḍha* posture
A18	Half-squat pose
A19	One foot kicking the air
A20	Halo
A21	Throne
A22	Parasol
A23	Socle
A24	*Vajra*
A25	*Khaṭvāṅga*
A26	Bow
A27	Corpse
A28	Goad (*aṅkuśa*)
A29	Noose (*pāśa*)
A30	Club (*gadā*)
A31	Decapitated forearms
A32	Axe
A33	Cuirass
A34	Trident
A35	Wheel (*cakra*)
A36	Cup
A37	*Tarjanī mudrā*
A38	*Varada mudrā*
A39	*Dharmacakra mudrā*
A40	*Bhūmisparśa mudrā*
A41	*Dhyāna mudrā*

A42	*Vitarka mudrā*
A43	*Bodhyagrī mudrā*
A44	*Abhaya mudrā*
A45	*Channawīra*
A46	Bag of coins
A47	Chain
A48	Circular disk
A49	Harp
A50	Fan
A51	Fragrance container
A52	Long-stemmed incense holder
A53	Lamp
A54	Flute
A55	Lap Drums (*mukunda*)
A56	Floor Drums (*muraja*)
A57	Flag
A58	Sprinkler
A59	Tray
A60	Branch
A61	Dance hand gestures
A62	*Stūpa*
A63	Thick stem
A64	Stick
A65	Goat
A66	Horse
A67	Mongoose purse
A68	Tower offering
A69	Jacket
A70	Sash
A71	Figure in crown
A72	Book (*pustaka*)
A73	Rosary (*akṣamālā*)
A74	Ball in hand
A75	Conch (*saṅkha*)
A76	Water bottle (*kamaṇḍalu*)
A77	Pot belly
A78	Pot of wealth (*pūrṇaghaṭa*)
A79	Umbrella
A80	Lotus flower
A81	Floral motif
A82	Pig's head
A83	Bell (*ghaṇṭā*)
A84	Fierce eyes
A85	Fangs
A86	Skull(s)
A87	Long tresses of hair
A88	Meditative eyes
A89	Smile

A90	Dot between eyes
A91	Lotus pad
A92	Decapitated pig’s head
A93	Height (measured in centimetres)

APPENDIX THREE: Types and Their Attributes

This appendix lists all one hundred objects according to their types, indicating which of the 93 attributes each object possesses. Objects are identified by their assigned object number (B1, B2 and so forth) as mentioned in appendix 1. Attributes are indicated by their code number as mentioned in appendix 2.

An "x" marks the possession of an attribute, while a blank box its absence. "NC" indicates that the attribute has a "state of no comparison," that is to say its presence or absence cannot be determined, for example when the part of the object where an attribute would appear has broken off prior to examination. This system applies to all attributes save the last, A93. Given A93 measures height, the corresponding box lists the object's height in centimetres. Where that height is unknown or unmeasured, the box indicates "UK" instead.

Artefact 1: The Ascetic, Seated, Major Deity Artefact Type (5)

	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16	A17	A18	A19	A20
B43	x	x	x	x										x						x
B52	x	x	x	x										x						
B54	x	x	x	x										x						
B55	x	x	x	x										x						x
B91	x	x	x	x										x						

	A21	A22	A23	A24	A25	A26	A27	A28	A29	A30	A31	A32	A33	A34	A35	A36	A37	A38	A39	A40
B43	x		x																	
B52	x		x																	x
B54	x		x																	
B55			x																	
B91	x	x	x																	

	A41	A42	A43	A44	A45	A46	A47	A48	A49	A50	A51	A52	A53	A54	A55	A56	A57	A58	A59	A60
B43	x																			
B52																				
B54			x																	
B55			x																	
B91																				

	A61	A62	A63	A64	A65	A66	A67	A68	A69	A70	A71	A72	A73	A74	A75	A76	A77	A78	A79	A80
B43																				
B52																				
B54																				
B55																				
B91																				

	A81	A82	A83	A84	A85	A86	A87	A88	A89	A90	A91	A92	A93
B43								x	x	x			8.9
B52								x	x		x		13.8
B54								x	x	x	x		15.5
B55								x	x	x	x		12.2
B91								x	x	x	x		16

Artefact 2: The Ascetic, Seated, Intermediate Deity Artefact Type (2)

	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16	A17	A18	A19	A20
B2	x	x	x	x									x							
B42	x	x	x	x										x						x

	A21	A22	A23	A24	A25	A26	A27	A28	A29	A30	A31	A32	A33	A34	A35	A36	A37	A38	A39	A40
B2			x																x	
B42																				x

	A41	A42	A43	A44	A45	A46	A47	A48	A49	A50	A51	A52	A53	A54	A55	A56	A57	A58	A59	A60
B2																				
B42																				

	A61	A62	A63	A64	A65	A66	A67	A68	A69	A70	A71	A72	A73	A74	A75	A76	A77	A78	A79	A80
B2																				
B42																				

	A81	A82	A83	A84	A85	A86	A87	A88	A89	A90	A91	A92	A93
B2								x	x		x		25
B42								x	x	x	x		5.7

Artefact 3: The Ascetic, Seated, Minor Deity Artefact Type (5)

	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16	A17	A18	A19	A20
B1	x	x	x	x										x						
B21	x	x	x	x										x						
B64	x	x	x	x										x						
B71	x	x	x	x										x						
B72	x	x	x	x										x						

	A21	A22	A23	A24	A25	A26	A27	A28	A29	A30	A31	A32	A33	A34	A35	A36	A37	A38	A39	A40
B1																				
B21																				x
B64																				
B71																		x		
B72																				x

	A41	A42	A43	A44	A45	A46	A47	A48	A49	A50	A51	A52	A53	A54	A55	A56	A57	A58	A59	A60
B1																				
B21																				
B64		x																		
B71																				
B72																				

	A61	A62	A63	A64	A65	A66	A67	A68	A69	A70	A71	A72	A73	A74	A75	A76	A77	A78	A79	A80
B1																				
B21																				
B64																				
B71																				
B72																				

	A81	A82	A83	A84	A85	A86	A87	A88	A89	A90	A91	A92	A93
B1								x	x	x			13.5
B21								x	x	x	x		7.6
B64								x	x		x		UK
B71								x	x	x	x		8.5
B72								x	x		x		9.5

Artefact 4: The Ascetic, Standing, Intermediate Deity Artefact Type (3)

	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16	A17	A18	A19	A20
B40	x	x	x	x												x				
B41	x	x	x	x												x				x
B97	x	x	x	x												x				x

	A21	A22	A23	A24	A25	A26	A27	A28	A29	A30	A31	A32	A33	A34	A35	A36	A37	A38	A39	A40
B40	x	x	x																	
B41																				
B97																				

	A41	A42	A43	A44	A45	A46	A47	A48	A49	A50	A51	A52	A53	A54	A55	A56	A57	A58	A59	A60
B40		x																		
B41		x																		
B97		x																		

	A61	A62	A63	A64	A65	A66	A67	A68	A69	A70	A71	A72	A73	A74	A75	A76	A77	A78	A79	A80
B40																				
B41																				
B97																				

	A81	A82	A83	A84	A85	A86	A87	A88	A89	A90	A91	A92	A93
B40								x	x	x	x		30.1
B41								x	x	x			10.2
B97								x	x				17

Artefact 5: The Ascetic, Standing, Minor Deity Artefact Type (3)

	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16	A17	A18	A19	A20
B22	x	x	x	x												x				
B73	x	x	x	x												x				
B99	x	x	x	x												x				

	A21	A22	A23	A24	A25	A26	A27	A28	A29	A30	A31	A32	A33	A34	A35	A36	A37	A38	A39	A40
B22																				
B73																				
B99																				

	A41	A42	A43	A44	A45	A46	A47	A48	A49	A50	A51	A52	A53	A54	A55	A56	A57	A58	A59	A60
B22				x																
B73		x																		
B99		x																		

	A61	A62	A63	A64	A65	A66	A67	A68	A69	A70	A71	A72	A73	A74	A75	A76	A77	A78	A79	A80
B22																				
B73																				
B99																				

	A81	A82	A83	A84	A85	A86	A87	A88	A89	A90	A91	A92	A93
B22								x	x				42
B73								x	x				13
B99								x	x	x			15

Artefact 6: Ornamented, Seated, Major, Peaceful Artefact Type (18)

	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16	A17	A18	A19	A20
B20					x	x	x	x	x	x	x			x						x
B31					x	x	x	x	x	x	x	x		x						x
B49					x	x	x	x	x	x	x			x						x
B51					x	x		x	x	x	x			x						x
B53			x		x	x			x					x						
B56					x	x	x	x	x	x	x	x		x						
B57					x	x		x	x	x				x						
B62					x	x		x	x	x				x						
B63			x		x	x		x		x	x	x		x						
B67					x	x	x	x	x	x	x	x		x						
B68					x	x	x	x		x		x			x					
B69			x		x	x	x	x	x	x	x	x			x					x

B75					x	x	x	x		x		x			x					
B89			x		x	x	x	x	x	x	x	x			x					
B90					x	x	x	x	x	x	x				x					
B92					x	x	x	x	x	x	x	x		x						
B93			x		x	x		x		x	x	x		x						
B94					x	x	x	x	x	x	x			x						

	A21	**A22**	**A23**	**A24**	**A25**	**A26**	**A27**	**A28**	**A29**	**A30**	**A31**	**A32**	**A33**	**A34**	**A35**	**A36**	**A37**	**A38**	**A39**	**A40**
B20			x																	
B31			x															x		
B49			x																	
B51	x	x	x																	
B53	x		x																	
B56	x	x	x															x		
B57	x	x	x																	
B62	x		x															x		
B63	x		x															x		
B67	x	x	x																	
B68	x	x	x																	
B69			x															x		
B75	x	x	x															x		
B89	x		x																	
B90	x	x	x															x		
B92	x		x													x				
B93	x	x	x																	
B94	x	x	x															x		

	A41	**A42**	**A43**	**A44**	**A45**	**A46**	**A47**	**A48**	**A49**	**A50**	**A51**	**A52**	**A53**	**A54**	**A55**	**A56**	**A57**	**A58**	**A59**	**A60**
B20																				
B31																				

B49																			
B51			x																
B53	x																		
B56																			
B57	x																		
B62					x														
B63					x														
B67																			
B68																			
B69																			
B75																			
B89																			
B90																			
B92	x																		
B93	x				x														
B94																			

	A61	**A62**	**A63**	**A64**	**A65**	**A66**	**A67**	**A68**	**A69**	**A70**	**A71**	**A72**	**A73**	**A74**	**A75**	**A76**	**A77**	**A78**	**A79**	**A80**
B20																				
B31						x								x						
B49																				x
B51																				
B53								x												
B56																				x
B57																				
B62														x			x	x		x
B63							x										x			
B67														x						x
B68							x							x			x	x		
B69																				

B75							x							x			x	x		
B89														x						
B90			x																	x
B92												x	x							
B93																				x
B94																				x

	A81	**A82**	**A83**	**A84**	**A85**	**A86**	**A87**	**A88**	**A89**	**A90**	**A91**	**A92**	**A93**
B20								x	x		x		10.2
B31								x	x	x	x		12.9
B49	x						x	x	x	x	x		13.7
B51	x							x	x	x	x		29
B53								x	x	x	x		26
B56	x						x	x	x		x		17.5
B57	x						x	x	x		x		11.5
B62	x						x	x	x		x		7.3
B63	x							x	x	x	x		12.2
B67	x						x	x	x	x	x		12.5
B68								x	x		x		1.7
B69	x							x	x	x	x		9.8
B75	x						x	x	x	x	x		12
B89							x	x	x	x			14
B90							x	x	x		x		18
B92								x	x		x		12.5
B93	x						x	x	x	x	x		10.7
B94	x						x	x	x		x		11.3

Artefact 7: Ornamented, Seated, Intermediate, Martial Artefact Type (4)

	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16	A17	A18	A19	A20
B66					x	x	x	x	x	x	x			x						x
B70					x	x	x	x	x	x	x				x					
B85			x		x	x	x	x	x	x	x	x		x						x
B87					x	x	x	x		x	x	x		x						x

	A21	A22	A23	A24	A25	A26	A27	A28	A29	A30	A31	A32	A33	A34	A35	A36	A37	A38	A39	A40
B66				x																
B70	x											x			x					
B85				x																
B87													x							

	A41	A42	A43	A44	A45	A46	A47	A48	A49	A50	A51	A52	A53	A54	A55	A56	A57	A58	A59	A60
B66																				
B70																				
B85																				
B87																				

	A61	A62	A63	A64	A65	A66	A67	A68	A69	A70	A71	A72	A73	A74	A75	A76	A77	A78	A79	A80
B66																				x
B70														x	x					x
B85																				x
B87																				

	A81	A82	A83	A84	A85	A86	A87	A88	A89	A90	A91	A92	A93
B66	x						x	x	x	x	x		11.5
B70	x						x	x	x	x	x		9.5
B85								x	x	x			11
B87							x	x	x	x	x		14.6

Artefact 8: Ornamented, Seated, Intermediate, Peaceful Artefact Type (8)

	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16	A17	A18	A19	A20
B24					x	x	x	x	x	x	x	x		x						
B32					x	x	x	x	x	x	x	x		x						x
B35					x	x	x	x	x	x	x	x		x						x
B45					x	x	x	x	x	x	x			x						x
B83					x	x	x	x	x					x						x
B84					x	x	x	x		x		x		x						x
B88					x	x	x	x	x	x	x				x					
B96					x	x	x	x		x	x			x						x

	A21	A22	A23	A24	A25	A26	A27	A28	A29	A30	A31	A32	A33	A34	A35	A36	A37	A38	A39	A40
B24			x																	
B32																				
B35																				
B45																		x		
B83																				
B84																				
B88			x																	
B96																				

	A41	A42	A43	A44	A45	A46	A47	A48	A49	A50	A51	A52	A53	A54	A55	A56	A57	A58	A59	A60
B24																				
B32																				
B35								x												
B45								x												
B83																				
B84																				
B88																				

B96	x																		

	A61	**A62**	**A63**	**A64**	**A65**	**A66**	**A67**	**A68**	**A69**	**A70**	**A71**	**A72**	**A73**	**A74**	**A75**	**A76**	**A77**	**A78**	**A79**	**A80**
B24																				
B32																				x
B35																				x
B45											x	x	x	x						x
B83																				
B84																				x
B88			x																	
B96														x						

	A81	**A82**	**A83**	**A84**	**A85**	**A86**	**A87**	**A88**	**A89**	**A90**	**A91**	**A92**	**A93**
B24								x	x	x	x		13.5
B32								x	x	x	x		UK
B35								x	x	x	x		UK
B45	x						x	x	x	x	x		6.7
B83	x						x	x	x	x			11
B84	x						x	x	x		x		8.6
B88	x						x	x	x	x	x		11.4
B96	x						x	x	x	x	x		9

Artefact 9: Ornamented, Seated, Minor, Martial Artefact Type (10)

	A1	**A2**	**A3**	**A4**	**A5**	**A6**	**A7**	**A8**	**A9**	**A10**	**A11**	**A12**	**A13**	**A14**	**A15**	**A16**	**A17**	**A18**	**A19**	**A20**
B3					x	x	x	x		x	x			x						
B5					x	x	x	x		x	x			x						
B23					x	x	x	x		x	x			x						
B26					x	x		x		x	x	x		x						
B27					x	x	x	x	x	x	x			x						

B37					x	x	x	x		x	x	x		x						
B39					x	x	x	x		x	x	x		x						
B78					x	x	x	x		x	x	x		x						
B79					x	x	x	x		x	x			x						
B81					x	x	x	x		x		x		x						

	A21	**A22**	**A23**	**A24**	**A25**	**A26**	**A27**	**A28**	**A29**	**A30**	**A31**	**A32**	**A33**	**A34**	**A35**	**A36**	**A37**	**A38**	**A39**	**A40**
B3						x														
B5				x	x															
B23				x																
B26				x				x												
B27																				
B37				x																
B39				x																
B78				x																
B79				x																
B81											x									

	A41	**A42**	**A43**	**A44**	**A45**	**A46**	**A47**	**A48**	**A49**	**A50**	**A51**	**A52**	**A53**	**A54**	**A55**	**A56**	**A57**	**A58**	**A59**	**A60**
B3																				
B5																				
B23																				
B26																				
B27							x													
B37																				
B39								x												
B78																				
B79																				
B81																				

	A61	A62	A63	A64	A65	A66	A67	A68	A69	A70	A71	A72	A73	A74	A75	A76	A77	A78	A79	A80
B3																				
B5																				
B23																				
B26																				
B27																				
B37																				x
B39																				x
B78																				x
B79																				x
B81																				

	A81	A82	A83	A84	A85	A86	A87	A88	A89	A90	A91	A92	A93
B3							x	x	x	x	x		5.9
B5							x	x	x	x	x		5.5
B23			x				x	x	x	x	x		11
B26							x	x	x	x	x		9.5
B27							x	x	x	x	x		11.5
B37							x	x	x	x	x		UK
B39							x	x	x	x	x		UK
B78							x	x	x	x	x		9
B79							x	x	x	x	x		9.2
B81							x	x	x	x	x		9.1

Artefact 10: Ornamented, Seated, Minor, Peaceful Artefact Type (22)

	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16	A17	A18	A19	A20
B4					x	x	x	x		x	x			x						
B6					x	x	x	x		x	x			x						
B7					x	x	x	x		x	x			x						
B8					x	x	x	x		x	x			x						
B9					x	x	x	x		x	x			x						
B10					x	x	x	x		x	x			x						
B11					x	x	x	x		x	x			x						
B12					x	x		x		x	x			x						
B25					x	x	x	x		x	x			x						
B28					x	x	x	x	x	x	x	x		x						
B29					x	x	x	x	x	x	x	x		x						
B30					x	x	x	x		x	x			x						
B33					x	x	x	x		x	x	x		x						
B34					x	x	x	x		x	x	x		x						
B36					x	x	x	x		x	x	x		x						
B38					x	x	x	x		x	x	x		x						
B58					x	x	x	x	x	x	x			x						
B76					x	x	x	x		x	x			x						
B77					x	x	x	x		x	x	x		x						
B80					x	x	x	x		x	x	x		x						
B82					x	x	x	x		x	x	x		x						
B86					x	x	x	x		x	x			x						

	A21	A22	A23	A24	A25	A26	A27	A28	A29	A30	A31	A32	A33	A34	A35	A36	A37	A38	A39	A40
B4																				
B6																				
B7																				

B8																			
B9																			
B10																			
B11																			
B12																			
B25																			
B28																			
B29																			
B30																			
B33																			
B34																			
B36																			
B38																			
B58																			
B76																			
B77																			
B80													X						
B82																			
B86																			

	A41	**A42**	**A43**	**A44**	**A45**	**A46**	**A47**	**A48**	**A49**	**A50**	**A51**	**A52**	**A53**	**A54**	**A55**	**A56**	**A57**	**A58**	**A59**	**A60**
B4																				
B6																				
B7												X								
B8													X							
B9														X						
B10															X					
B11																X				
B12									X											
B25																	X			

B28																		x	x	
B29												x								
B30										x	x									
B33																				
B34								x												
B36																				
B38																			x	
B58																				
B76																				
B77																				
B80																				
B82																				x
B86																				

	A61	**A62**	**A63**	**A64**	**A65**	**A66**	**A67**	**A68**	**A69**	**A70**	**A71**	**A72**	**A73**	**A74**	**A75**	**A76**	**A77**	**A78**	**A79**	**A80**
B4																				
B6		x																		
B7																				
B8																				
B9																				
B10																				
B11																				
B12																				
B25																				
B28																				
B29																				
B30																x				
B33																				
B34																				
B36																				

B38																			
B58																			
B76															x			x	
B77											x								
B80																			
B82														x					
B86																			

	A81	**A82**	**A83**	**A84**	**A85**	**A86**	**A87**	**A88**	**A89**	**A90**	**A91**	**A92**	**A93**
B4							x	x	x	x	x		5.9
B6							x	x	x	x	x		5.8
B7							x	x	x	x	x		6
B8							x	x	x	x	x		5.6
B9							x	x	x	x	x		5.8
B10							x	x	x	x	x		5.8
B11							x	x	x	x	x		5.4
B12							x	x	x	x	x		5.8
B25							x	x	x	x	x		9
B28							x	x	x	x	x		10.3
B29							x	x	x	x	x		10.2
B30							x	x	x	x	x		8.3
B33	x						x	x	x	x	x		UK
B34	x						x	x	x	x	x		UK
B36							x	x	x	x	x		UK
B38	x						x	x	x	x	x		UK
B58	x						x	x	x		x		11
B76							x	x	x	x	x		9
B77	x						x	x	x	x	x		8.6
B80							x	x	x	x	x		9.2
B82							x	x	x	x	x		9

B86							x	x	x	x	x		5.7

Artefact 11: Ornamented, Standing, Major, Martial Artefact Type (2)

	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16	A17	A18	A19	A20
B61					x	x	x	x	x	x		x				x				
B65			x		x	x	x	x	x	x	x					x				x

	A21	A22	A23	A24	A25	A26	A27	A28	A29	A30	A31	A32	A33	A34	A35	A36	A37	A38	A39	A40
B61	x		x																	
B65			x											x						

	A41	A42	A43	A44	A45	A46	A47	A48	A49	A50	A51	A52	A53	A54	A55	A56	A57	A58	A59	A60
B61																				
B65																				

	A61	A62	A63	A64	A65	A66	A67	A68	A69	A70	A71	A72	A73	A74	A75	A76	A77	A78	A79	A80
B61				x	x				x											
B65																				x

	A81	A82	A83	A84	A85	A86	A87	A88	A89	A90	A91	A92	A93
B61	x			x			x			x	x		16.7
B65	x						x	x	x		x		21

Artefact 12: Ornamented, Standing, Major, Peaceful Artefact Type (1)

	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16	A17	A18	A19	A20
B48			x		x	x	x		x							x				x

	A21	A22	A23	A24	A25	A26	A27	A28	A29	A30	A31	A32	A33	A34	A35	A36	A37	A38	A39	A40
B48	x																	x		

	A41	A42	A43	A44	A45	A46	A47	A48	A49	A50	A51	A52	A53	A54	A55	A56	A57	A58	A59	A60
B48				x																

	A61	A62	A63	A64	A65	A66	A67	A68	A69	A70	A71	A72	A73	A74	A75	A76	A77	A78	A79	A80
B48											x	x	x							x

	A81	A82	A83	A84	A85	A86	A87	A88	A89	A90	A91	A92	A93
B48							x	x	x	x	x		17.8

Artefact 13: Ornamented, Standing, Intermediate, Ferocious Artefact Type (2)

	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16	A17	A18	A19	A20
B50					x	x	x	x	x	x	x	x					x			
B100					x	x	x	x	x	x	x	x					x			

	A21	A22	A23	A24	A25	A26	A27	A28	A29	A30	A31	A32	A33	A34	A35	A36	A37	A38	A39	A40
B50			x		x		x		x	x						x	x	x		
B100			x				x										x	x		

	A41	A42	A43	A44	A45	A46	A47	A48	A49	A50	A51	A52	A53	A54	A55	A56	A57	A58	A59	A60
B50																				
B100																				

	A61	A62	A63	A64	A65	A66	A67	A68	A69	A70	A71	A72	A73	A74	A75	A76	A77	A78	A79	A80
B50				x						x										
B100										x										

	A81	A82	A83	A84	A85	A86	A87	A88	A89	A90	A91	A92	A93
B50				x	x	x					x		17
B100				x	x	x				x	x		15.9

Artefact 14: Ornamented, Standing, Intermediate, Peaceful Artefact Type (1)

	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16	A17	A18	A19	A20
B48			x		x	x	x	x	x		x					x				x

	A21	A22	A23	A24	A25	A26	A27	A28	A29	A30	A31	A32	A33	A34	A35	A36	A37	A38	A39	A40
B48																		x		

	A41	A42	A43	A44	A45	A46	A47	A48	A49	A50	A51	A52	A53	A54	A55	A56	A57	A58	A59	A60
B48																				

	A61	A62	A63	A64	A65	A66	A67	A68	A69	A70	A71	A72	A73	A74	A75	A76	A77	A78	A79	A80
B48											x	x	x							x

	A81	A82	A83	A84	A85	A86	A87	A88	A89	A90	A91	A92	A93
B48							x	x	x				13.3

Artefact 15: Ornamented, Standing, Minor, Ferocious Artefact Type (2)

	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16	A17	A18	A19	A20
B13					x	x	x	x		x	x	x					x			
B14					x	x	x	x		x	x	x					x			

	A21	A22	A23	A24	A25	A26	A27	A28	A29	A30	A31	A32	A33	A34	A35	A36	A37	A38	A39	A40
B13				x																
B14								x												

	A41	A42	A43	A44	A45	A46	A47	A48	A49	A50	A51	A52	A53	A54	A55	A56	A57	A58	A59	A60
B13																				
B14																				

	A61	A62	A63	A64	A65	A66	A67	A68	A69	A70	A71	A72	A73	A74	A75	A76	A77	A78	A79	A80
B13																				
B14																				

	A81	A82	A83	A84	A85	A86	A87	A88	A89	A90	A91	A92	A93
B13	x	x		x	x					x	x		7.9
B14	x	x		x	x					x	x	x	8.2

Artefact 16: Ornamented, Standing, Minor, Martial Artefact Type (8)

	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16	A17	A18	A19	A20
B15					x	x	x	x	x	x	x	x					x			
B16					x	x	x	x	x	x	x	x					x			
B17					x	x	x	x	x	x	x	x						x		
B19					x	x	x	x	x	x	x	x				x				
B46					x	x	x		x							x				
B59					x	x	x	x		x	x					x				
B95			x		x	x	x	x	x	x	x					x				
B98			x		x	x	x	x	x	x	x	x				x				

	A21	A22	A23	A24	A25	A26	A27	A28	A29	A30	A31	A32	A33	A34	A35	A36	A37	A38	A39	A40
B15				x																
B16						x														
B17																				
B19										x										
B46									x									x		
B59										x					x			x		
B95																				
B98																		x		

	A41	A42	A43	A44	A45	A46	A47	A48	A49	A50	A51	A52	A53	A54	A55	A56	A57	A58	A59	A60
B15																				
B16						x														
B17							x	x												
B19																				
B46																				
B59																				
B95																				
B98																				

	A61	A62	A63	A64	A65	A66	A67	A68	A69	A70	A71	A72	A73	A74	A75	A76	A77	A78	A79	A80
B15				x																
B16																				
B17																				
B19																				
B46											x	x								x
B59														x	x					
B95				x						x		x	x			x				
B98				x							x									

	A81	A82	A83	A84	A85	A86	A87	A88	A89	A90	A91	A92	A93
B15	x						x	x	x	x	x		7.9
B16							x	x	x	x	x		8.2
B17							x	x	x	x	x		7.6
B19	x						x	x	x	x	x		8.9
B46							x	x	x		x		13.3
B59							x	x	x		x		17.6
B95								x	x		x		13.7
B98							x	x	x	x			24

Artefact 17: Ornamented, Standing, Minor, Peaceful Artefact Type (4)

	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16	A17	A18	A19	A20
B18					x	x	x	x	x	x	x	x							x	
B44					x	x	x		x							x				
B60			x		x	x	x	x	x	x	x					x				
B74					x	x	x	x	x	x		x				x				

	A21	A22	A23	A24	A25	A26	A27	A28	A29	A30	A31	A32	A33	A34	A35	A36	A37	A38	A39	A40
B18																				
B44																				
B60																				
B74																	x	x	x	x

	A41	A42	A43	A44	A45	A46	A47	A48	A49	A50	A51	A52	A53	A54	A55	A56	A57	A58	A59	A60
B18																				
B44																				
B60																				
B74	x	x	x	x																

	A61	A62	A63	A64	A65	A66	A67	A68	A69	A70	A71	A72	A73	A74	A75	A76	A77	A78	A79	A80
B18	x																			
B44											x									x
B60													x							
B74																				x

	A81	A82	A83	A84	A85	A86	A87	A88	A89	A90	A91	A92	A93
B18	x						x	x	x	x	x		7.9
B44							x	x	x	x	x		9.2
B60	x							x	x	x			7.8
B74	x							x		x			10.2