



Pl. 1. Relief of smithy at Candi Sukuh, Central Java. On the left, a smith forging a weapon. In the center, a dancing elephant-headed figure. Far right, an assistant operating the traditional double-piston bellows of Southeast Asia.

METALLURGY AND IMMORTALITY AT CANDI SUKUH, CENTRAL JAVA

Stanley J. O'Connor

At Sukuh, a fifteenth century mountain sanctuary in Central Java, there is a relief sculpture that represents two men forging a weapon in a smithy (Plate 1). This work has resisted explication.¹ No textual source has been adduced for the iconography, and one's initial response is that a mundane metallurgical endeavor seems incongruous in a sanctuary conventionally agreed to be devoted both to ancestor worship and to rites aimed at effecting the liberation of the soul from its earthly bonds after death. Efforts to unravel the meaning of the relief are even further clouded, however, by the anomalous presence between the two smiths of a dancing figure with a human body and an elephant's head who appears to be carrying a small animal, probably a dog.

My aim in this article is to establish that the relief is in fact appropriate to its context, that its meaning is rooted in an important religious and imaginative complex, and that, to an uncommon degree, the artist has succeeded in enacting in visual terms a deeply felt correspondence between metallurgy and human fate. By seizing upon the processes through which metallic substances are transformed, he has provided an equivalence in natural energies and rhythms for those spiritual transformations believed to govern the career of the soul after death.

At the very outset, it is essential to understand that almost everywhere in the preindustrial world iron working was invested with an aura of danger and magic. To us now the smith appears merely as someone who performs technically neutral operations on inert matter, and this conviction makes it almost metaphysically impossible for us to recover the imaginative universe implied by the Sukuh relief. We are aware, of course, that the great empirical discoveries and inventions such as the steam engine, the clock, the pendulum, and cybernetics have structured thought and feeling by providing a new fund of analogies, homologies, and metaphors with which to construe experience.² Our speech is enlivened daily by such phrases as "on track," "the swing of the pendulum," "feedback," "safety valve," "a head of steam." None of these images, however, confounds our central intellectual order, our conception of the gulf between subject and object, the natural world and the conscious mind, the supernatural and the natural. But at the heart of the technological metaphor presented by the Sukuh relief, I would argue, is the visionary claim that the operations of the smith and smelter parallel cosmic processes and that, with their ability

1. I have previously discussed the relief briefly and in the context of a general study of the symbolic aspects of metallurgy. See S. J. O'Connor, "Iron Working as Spiritual Inquiry in the Indonesian Archipelago," *History of Religions* 14, 3 (February 1975): 173-90.

2. D. Edge, "Technological Metaphor and Social Control," *New Literary History* 6, 1 (Autumn, 1974): 135-47.

to alter the mode of being of metals, the smiths also possessed the key to the means of spiritual transcendence.³

This redemptive vision will govern the present enquiry, which will be in the form of a hermeneutic circle. The theme of spiritual liberation so pervasive at Sukuh will provide the enframing context against which I will assess the particular for either its harmony or disjunction, with the aim of developing a coherence of thought, a tissue of interconnections sufficiently dense in its cumulative implication to prove persuasive. Specifically, I will argue that a substantial body of evidence provides, either by compelling implication or by explicit statement, support for the view that iron working was a metaphor for spiritual transmutation in ancient Java. The evidence presented includes myths surrounding the smith; a description of *śrāddha* rites in the fourteenth century text, the *Nāgara-Kertāgama*; an echo of parallel Tantric rites in palace ceremonies in Central Java recorded early in this century; the precious insight into Indonesian death rites offered by Robert Hertz's classic essay, "A Contribution to the Study of the Collective Representation of Death"; the internal evidence of the relief itself; and finally, acting as a control, the sense that mountain and water temples like Sukuh constitute a kind of genre in which ancestor worship and ritual for the liberation of the soul are centrally at issue.

Myths

The smith in Java and Bali clearly traces his power to an ancient order of thought and social arrangements. In his study of the genealogical charter of the smiths on Bali, Goris notes that they draw their powers from the god of fire. This god apparently existed prior to the introduction of Hinduism in Bali, for, according to the smiths, they provided the Brahmins with all their wisdom and knowledge. The smiths prepare their own holy water instead of using that prepared by the Brahmins. In fact, they are not allowed to employ Brahmins for any ritual purpose. Significantly, the smiths' charter lays considerable emphasis on *mantra* (sacred formulas) to be used both in forging and for the ritual of the dead.⁴ Similarly, Hooykaas encountered on Bali a myth that the iron smith Mpu Gandring was granted the power to deliver "his forefathers' spirits."⁵

This theme of death and deliverance through the power of the smith appears throughout the archipelago. The Toraja of Sulawesi have a smith god who reforges souls.⁶ In Borneo, the Iban have a creator figure, Selampandai, whose symbol

3. For an understanding of the relationship between metallurgy and spiritual transcendence, see Mircea Eliade, *The Forge and the Crucible: The Origins and Structures of Alchemy*, trans. Stephen Corrin (New York: Harper, 1962).

4. R. Goris, "The Position of the Blacksmiths," in *Bali: Studies in Life, Thought and Ritual*, ed. J. C. Swellenghel (The Hague: van Hoeve, 1960), pp. 291-97.

5. C. Hooykaas, "The Balinese Sengghu--Priest, a Shaman, but not a Sufi, a Saiva, and a Vaisnava," in *Malayan and Indonesian Studies: Essays Presented to Sir Richard Winstedt*, ed. John S. Bastin and R. Rodvink (Oxford: Clarendon Press, 1964), p. 274.

6. E. D. Baumann, *De Mythe van der Manken God*, quoted in R. J. Forbes, *Metallurgy in Antiquity* (Leiden: Brill, 1950), p. 89.

is the bellows forge and who is described as being able to make the souls of the dead live again,⁷ and the Dusun have a smith god, Kinorohingan, who welds the souls of the dead.⁸

It is not only the smith who possesses supernatural power but, at least on special occasions, the smithy itself is seen as a shrine. Rassers has noted that, before forging a *kris* (a short rapier that is a symbolically important weapon), the smithy is decorated in ceremonial fashion.⁹ Among the Land Dyak of Sarawak, a ritual knife (*pendat*) is still forged in a smithy that has three altars.¹⁰ Today, some Toraja say that the site of a forge was formerly considered a special place and its potency was such that it was a place "which makes things become large."¹¹

But the nineteenth century Balinese dynastic chronicle, the *Babad Buleleng*, provides perhaps the most penetrating insight into the symbolic importance of metallurgy. In it we see kingship both legitimated and empowered by the possession of a *kris* that serves as the palladium of the kingdom. The weapon is described as *pasupati-astra*, a reference to a flaming arrow given by Śiva to the hero Arjuna to make him invincible. It is also referred to as the "essence of power." Finally, both the royal chaplain (*purohita*), and the son who succeeds him in that strategic office, are described as skilled in the manufacture of swords and *kris*.¹²

Process

While this conspectus of myth should demonstrate that iron working is both a craft and a spiritual exercise, we need to establish in just what manner the isomorphism between metallurgy and the liberation of the soul exists. The answer hinges on the fact that the traditional Indonesian view of what actually happens to both the body and the nonmaterial components of a person after death is remarkably similar in operational pattern to the reduction of ores to a blackened bloom of iron sponge, and the successive purification and reconstitution of that substance into a new and utterly transfigured blade of steel.

Physical death was not viewed as an immediately terminal event, but rather the inauguration of a lengthy period of transition through spiritual death and rebirth. During this transitional period, the soul was neither fully alive nor

7. Tom Harrisson and Benedict Sandin, "Borneo Writing Boards," *Sarawak Museum Journal*, special monograph no. 1 (November 1966), pp. 32-286.

8. I. H. N. Evans, *The Religion of the Tempasuk Dusuns of North Borneo* (Cambridge: Cambridge University Press, 1953), pp. 15-17, 75.

9. W. H. Rassers, "On the Javanese Kris," in *Panji: The Culture Hero* (The Hague: Nijhoff, 1959), p. 233.

10. C. and I. Neimitz, "The Forging of a Ritual Knife (Pendat) by Land Dayaks in Sarawak Borneo, Cultural and Religious Background," *Sarawak Museum Journal* 23, 44 (July-December 1975): 243-57.

11. Charles Zerner, "Signs of the Spirit, Signature of the Smith: Iron Forging in Tana Toraja," *Indonesia* 31 (April 1981): 95.

12. J. Worsley, *Babad Buleleng: A Balinese Dynastic Genealogy* (The Hague: Nijhoff, 1972), pp. 52-54, 57, 59, 153-54.

ultimately dead. In this state it was homeless, distraught, and potentially malevolent. The great insight of anthropologist Robert Hertz, after an extended survey of mortuary custom in the Indonesian archipelago, was to see that the fate of the body, which must go through unpleasant transformations--swelling, putrefying, desiccating--is analogous to the fate of the soul.¹³

Although ritual expressions of this transitional or liminal period vary widely in the region, they commonly involve some kind of secondary treatment of the dead, and are marked at their termination by a feast celebrating the passing of the soul into the realm of the powerful and glorified ancestors. Whether the process culminates in the *nulang* feast of the Berawan of Borneo, the *memukur* of the Balinese, or the *śrāddha* rites of ancient Java, the pattern involves the putrefaction of the corpse, the manipulation and drying of the bones during an intermediary period, and the successive refinement and reconstruction of a finer essence.¹⁴ Metallurgy, especially the complex and, to the pre-scientific mind, mysterious process by which ores drawn from the living earth are reduced to a molten state, transformed first into a rough iron mass of residual slag and iron chips by the smelter, and then purified, hardened in the presence of carbon, and forged into beautiful and useful objects by the smith, makes a fruitful analogue for the metamorphosis of the soul after death.

For the metaphoric coherence of the process to become evident, it is essential to reestablish the continuum that joins metal extraction--both the mining and the smelting of ore--with the finishing stage of work that is smithing. The stages are helpfully joined in Ursula Franklin's phrase "metal winning and metal fabrication."¹⁵ The viewers for whom the Suku relief was intended would have brought to the encounter a horizon of belief that linked those processes. In the synthetic and combinatory manner in which consciousness actively cooperates in experiencing a work of art and bringing out its implicit meanings, the viewer would draw on his whole range of knowledge and experience. Thus the relief would be wreathed in memory, a pressure of feeling, something more gossamer than a set of propositions. Ignited in the mind were images of the smelter sweating over the rising gorge of fire; the splintered roasting ore glowing in the reeking smoke; a pod of orange-white bloom bulging in the hearth; the blood-red threads of slag tapped off in steady trickles; the phased rhythm of the bellows with its pulse of spurting air; the granite hammer-stone ringing on chilled steel; the searing hiss of white-hot iron plunged in water.

13. Robert Hertz, "Contribution à une Étude sur la Représentation Collective de la Mort," *Année Sociologique* 10 (1907): 48-137.

14. I am following here the understanding of mortuary ritual in Southeast Asia advanced by R. Huntington and Peter Metcalf in their wide-ranging study: *Celebrations of Death: The Anthropology of Mortuary Ritual* (New York: Cambridge University Press, 1979). Dr. Monni Adams has drawn attention to processes in Southeast Asia involved in humid transformations of food processing and textile dyeing that are similar in operation to royal funeral practices in Thailand, Cambodia, and Laos: "Style in Southeast Asian Materials Processing: Some Implications for Ritual and Art" in *Material Culture: Styles, Organization and Dynamics of Technology*, ed. Heather Lechtman and Robert Merril (St. Paul, Minnesota: West Publishing Co., 1977), pp. 21-52.

15. Ursula M. Franklin, "On Bronze and Other Metals in Early China," in *The Origins of Chinese Civilization*, ed. David N. Keightley (Berkeley: University of California Press, 1983), pp. 279-96.

All this and more--the dangers faced by miners intruding in the living earth--would constitute transparent currents forming a penumbra of thought and feeling, through which, and with the cooperation of which, the Suku relief was read.

The relief also calls upon the viewer's understanding that the smith is pattern-welding or "marrying" nickelous meteoric iron (*pamor*), fallen to earth from the heavens, with iron drawn from the maternal body of the earth. By a series of laminations, resembling a many-layered torte, he interleaves the diverse forms of iron so that their differential crystalline structure will become visible in the finished blade. After etching, dark traces of nickel will form patterns which the smith is able to envision and control through a long series of operations sometimes involving the development of almost one hundred layers of iron and steel before forging out a finished weapon.

Thus the mysteries of metallurgy trace the structure of the rites for the dead. The ores are destroyed, reduced to a bloom of wrought iron, just as cremation or putrefaction reduce the body. The bloom is gathered together and reconstituted by heating in the presence of charcoal to charge it with carbon, just as the reduced products of the body are given ritual processing during an intermediate stage of funeral ritual. Finally, a new and perfected body is forged in the smithy, joining the quasi-sexual, polar, but mutually attractive elements--terrestrial and celestial iron--into a new unity, and this stage is marked on the plane of ritual by the release of a new being constituted by an effigy (*puṣpa*) in the final rites of liberation.

The Relief: Internal Evidence

At face value, the relief portrays four figures framed by an open structure surmounted by a tiled roof (Pl. 1). This is apparently a traditional iron smithy, for one of the figures is operating a double-piston bellows, while the other is surrounded by tools and weapons and is forging a sword. Although sufficient care has been taken in depicting the various weapons and tools for them to be identifiable,¹⁶ nevertheless there are enough clues to indicate to the viewer that in fact these are ideal actions in the realm of myth rather than a mere transcription of the workaday world. Aside from the obvious presence of the man-elephant, the smiths, who were normally commoners attached to the palace as special craftspersons, are here portrayed in the dress of aristocrats. The smith (Pl. 2) may actually be Bhīma, one of the five Pāndawa brothers of the great Indian epic, the Mahābhārata. Other images of Bhīma have already been identified both at Suku and at several other mountain sanctuaries in Java, where he apparently was the central figure of a cult of deliverance of souls during the fifteenth century.¹⁷ The smith is portrayed wearing his

16. Ph. Subroto, "Kelompok Kerja Besi Pada Relief Candi Suku," *Pertemuan Ilmiah Arkeologi*, Proyek Penelitian dan Penggalan Purbakala, Departemen Pendidikan dan Kebudayaan, Cibulan, 21-25 Februari (Pusat Penelitian Purbakala dan Peninggalan Nasional, 1980), pp. 342-54. I am grateful to Professor Aurora Roxas Lim of the University of the Philippines for bringing the Subroto article to my attention. For the best recent work on the kris and its manufacture, see G. Solyom, *The World of Javanese Keris* (Honolulu: East-West Center, 1978). An older standard work is J. E. Jasper and Mas Pirngadie, *De Inlandsche Kunstnijverheid in Nederlandsch Indië*, vol. 5 (The Hague: Mouton, 1930).

17. W. F. Stutterheim, "An Ancient Javanese Bhima Cult," in *Studies in Indonesian Archaeology*, ed. F. D. K. Bosch (The Hague: Nijhoff, 1956), pp. 107-25.



Pl. 2. Detail of Pl. 1 showing smith grasping tang of weapon with bare hand. Note the blade rests on the smith's knee. There is no hammer in the upraised hand.

hair caught in a diadem (*jamang*) and swept back as in the Wayang puppet theater in the *supit urang* style. The bulging eyes, mustache, *upawita* (the serpentine cord running across his shoulder, here treated in the form of a snake), and the *poleng* or diamond pattern on his loin cloth, are all iconographic conventions of Bhīma in the sculpture of the Majapahit period. It should be noted that the *upawita* hangs from the right shoulder and goes across the body to the left. This reversal of the normal order is adopted in Indian rites of creation and *śrāddha* (a cycle of rites for the dead) and that may be the meaning intended here.¹⁸ (There is, however, the distinct possibility that the artist means us to see the smith from behind, that is with his back to us; in that case, the sacred thread would be in its customary position.) There are other anomalies. No hammer is held in the upraised right hand of the smith. He grasps the tang (*pesi*) of the sword (*pedang*) with his bare hand, instead of the tongs used to hold red-hot metal. Nor is the sword resting on an anvil, or at least there is no indication of the traditional convex anvil of Java. Actually, the tang of the sword is resting on the knee. What may be portrayed here is the familiar Indonesian myth of the smith who has supernatural power to forge weapons by using his fist as a hammer and his thigh as an anvil, and who draws the fire he needs from the palm of his hand.¹⁹

Bhīma, who is the physically immense, powerful, and forthright hero of the *Mahābhārata*, undergoes a sea change in Javanese literature and becomes a spiritual guide who "knew the path that leads to perfection."²⁰ He would be admirably suited to master the esoteric mysteries governing the liberation of the soul, and, of course, he does actually rescue the soul of his father, Pandu, from the fires of hell in the *Bhīmasvarga*. This poem is recited on the twelfth day after cremation.²¹ Bosch has discussed both a Sanskrit text from Bali in which Bhīma is identified with the Tantric Buddhist figure, Vajrasattva, and a tenth century Javanese text describing him as the supreme teacher and guide to absolute knowledge.²² Professor Johns observes that through his quest for immortality and esoteric knowledge in the ninety stanzas of the possibly sixteenth century text *Dewaruci*, Bhīma was admitted into the "rights and privileges of the Tantric pantheon."²³ Pigeaud in his summary of the Javanese-Balinese epic prose tale, the *Windu Sara*, describes Bhīma as having

18. Meena Kaushik, "The Symbolic Representation of Death," *Contributions to Indian Sociology* (NS) 10, 2 (1976): 280-81, and Veena Das, "The Uses of Liminality: Society and Cosmos in Hinduism," *ibid.*, pp. 249-50. On *śrāddha* in southern India, see G. Moréchand, "Contribution à l'Étude des Rites Funéraires Indiens," *Bulletin de l'École Française d'Extrême Orient* 62 (1975): 55-124.

19. P. de Kat Angelino, "Over de smeden en eenige andere ambachtslieden op Bali," *Tijdschrift voor Indische Taal-, Land-, en Volkenkunde* 60 (1921): 216.

20. H. Ulbricht, *Wayang Purwa: Shadows of the Past* (Kuala Lumpur: Oxford University Press, 1970), p. 98.

21. J. Gonda, "Old Javanese Literature," in *Handbuch der Orientalistik; Indonesien, Malaysia und die Philippinen: Literaturen* (Leiden: Brill, 1976), p. 212.

22. F. D. K. Bosch, "The Bhimastava," in *India Antiqua* (Leiden: Brill, 1947), pp. 57-62.

23. A. Johns, "The Enlightenment of Bhima," in *R. C. Majumdar Felicitation Volume*, ed. H. B. Sarker (Calcutta: Mukhopadhyay, 1970), p. 146.

taken pity on the *pitara*s who were plunged into the fires of hell in the shapes of animals.²⁴

Within the framework of Tantric thought, it is possible to discover the meaning of the dancing elephant-man (Pl. 3) who is the central figure of the relief. He wears a crown and is Gaṇeśa, the guardian of thresholds, the remover of obstacles, and his presence here, in my view, embodies the process of crossing over from one state to another through the transformative power of the metallurgist's art.²⁵ But clearly we are looking at a distinctive treatment of Gaṇeśa, as indicated by the exposed genitals, the demonic physiognomy, the rosary of bones, the strangely awkward dance posture. One is immediately reminded of the stylistically different, but equally demonic, Tantric Gaṇeśa from Caṇḍi Singasari in East Java.²⁶ A link seems possible between our Sūkuh figure and the Tantric ritual of the *Gaṇacakra* referred to in Canto 43, stanza 3 of the *Nāgara-Kertāgama*. Recalling the Tantric rituals of King Kertanagara (1268-1292), Prapañca, the poem's author, observes that in his old age the king held to the esoteric sense of all rites (*kriyas*) citing the *Gaṇacakra* as one such rite.²⁷ Gaṇa is another name for Gaṇeśa.

In his commentary on this stanza of Canto 43, Pigeaud relied on a note written in 1924 by Poerbatjaraka who found an explanation of the *Gaṇacakra* in the history of Buddhism in Tibet written by Taranatha.²⁸ There the ritual

24. T. G. Th. Pigeaud, *Literature of Java*, vol. 2 (The Hague: Nijhoff, 1968), p. 581.

25. It may be relevant to point to Gaṇeśa's association in Sri Lanka with ceremonies of magical exorcism and purification (*pirit*) which, according to Edmund Leach, are like *śrāddha* rites. See "Pulleyar and the Lord Buddha: An Aspect of Religious Syncretism in Ceylon," *Psychoanalysis and the Psychoanalytic Review* 49, 2 (Summer 1962): 81-102.

26. See Plate 235 in A. J. Bernet Kempers, *Ancient Indonesian Art* (Cambridge, Mass.: Harvard University Press, 1959).

27. T. G. Th. Pigeaud, *Java in the Fourteenth Century*, 5 vols. (The Hague: Nijhoff, 1960-63), 3: 49.

There are a number of demonic Gaṇeśa images from East Java in a style similar to the Singasari image. All are notable for the human skulls they wear as adornment. Images from Bara, Karang-kates, and Mount Smeru, as well as the Singasari Gaṇeśa, are illustrated and discussed by P. H. Pott, "Four Demonic Ganesas from East Java," *Mededelingen van het Rijksmuseum voor Volkenkunde, Leiden* 15 (1962): 123-31.

In addition, and perhaps even more directly related to our present purpose, there is a portrayal of a demonic dancing Gaṇeśa as a subsidiary figure on the relief sculpture of Cāmuṇḍā found at Ardimulya in the vicinity of Kertanagara's funerary temple. It is illustrated and discussed by P. H. Pott in *Yoga and Yantra* (The Hague: Nijhoff, 1966), pp. 130-36 and plate XIII.

As a group, these images provide evidence of Gaṇeśa's importance in Tantric rituals employing the symbolism of the cremation ground. This would, of course, fit easily with *śrāddha* and the cycle of rites for the dead; but it should be emphasized that the Tantric rites would not be confined to those concerns. While it appears that the meaning of the blacksmith relief at Caṇḍi Sūkuh can most directly be understood within *śrāddha* ritual, I do not wish to imply that all esoteric ritual at Caṇḍi Sūkuh served that purpose.

28. Poerbatjaraka, "Aanteekeningen op de Nagarakertagama," *Bijdragen tot de*



Pl. 3. The elephant-headed figure, almost certainly Ganeśa, wears a crown and carries a small animal, probably a dog.



Pl. 4. Detail showing bone rosary or rattle carried by Ganeśa.

is associated with several figures, one of whom is described as the "King of the Dogs," who taught his disciples by day, and by night performed the *Gaṇacakra* (wheel or dance) in a burial ground. It is an almost irresistible temptation to link the quite clearly Tantric representation of the dancing Gaṇeśa holding a dog in the Sukuh relief to the ritual described by Taranatha. But, as Professor Zoetmulder has pointed out, texts tell almost nothing about the rules and purposes of such rituals in Java. Their secrets have always been carefully guarded.²⁹

Surprisingly, however, a faint echo of these Tantric practices could still be heard in the present century in the courts of Central Java. In 1932, Stutterheim obtained accounts of court attendants in Surakarta whose office it was to perform buffoonishly and shockingly on special ceremonial occasions.³⁰ They were called *cantang balang*, their seal of office was a phallus inside a heart-shaped vulva, an insignia well suited to their function since they were in charge of the public dancing girls, *talèdhèk*, who in addition to performing with the gamelan, also functioned as prostitutes. Although differing in details of title, similar officials could be found in the neighboring kraton in Yogyakarta.³¹

On special occasions, the *cantang balang* performed a dance called the "drunken elephant," while holding a glass of gin in the right hand and accompanying themselves with small pieces of buffalo bone strung together on a string and played with the left hand. Although it had not been performed for some thirty years, one of the dances formerly in their repertoire was an imitation of dogs mating. As recorded by Stutterheim, the dance step of the *cantang balang* seems to have consisted of rather awkward hopping first on one foot and then on the other.

By superimposing this image of the *cantang balang* of the twentieth century on our fifteenth century relief we find a remarkable series of parallels: the dancing elephant, the awkward hopping dance form, the reference to a dog,

Taal-, Land- en Volkenkunde 80 (1924): 238-39. See Taranatha's *History of Buddhism in India*, translated from Tibetan by Lama Chimpada and Alaka Chattopadhyaya, ed. Debiprasah Chattopadhyaya (Simla: Indian Institute of Advanced Study, 1970), p. 242.

29. P. J. Zoetmulder, "The Significance of the Study of Culture and Religion for Indonesian Historiography," in *An Introduction to Indonesian Historiography*, ed. Soedjatmoko et al. (Ithaca: Cornell University Press, 1965), pp. 336-37.

30. W. F. Stutterheim, "A Thousand Years Old Profession in the Princely Courts on Java," in *Studies in Indonesian Archaeology*, pp. 93-101.

31. The association between the *cantang balang* and the *talèdhèk* was not merely confined to the Kraton but was apparently a widespread feature of life at the village level. In his discussion of the Wayang theatre in 1872, C. Poensen noted that *talèdhèk* often sang at Wayang performances where they also served as prostitutes. Most of the women were poor, often divorcées, and their musical training was rudimentary. They were forced to live in special kampongs under a bordello-owner who was called the *grema* or *tjantang-baloeng*. C. Poensen, "De Wajang," *Mededeelingen van wege het Nederlandsche Zendelinggenootschap* 1872 (16th year), pp. 215-16.

For a recent study of the female singer-dancer profession (*talèdhèk*) in Java see R. Anderson Sutton, "Who is the Pesindhèn? Notes on the Female Singing Tradition in Java," *Indonesia* 37 (April 1984): 119-33.

the bones, which in our relief are also carried in the left hand (Pl. 4),³² and, to draw a possible further connection, the insignia of office is almost mirrored by the very realistic phallus and vulva (Pl. 5) contained within an ornamental surround carved in the first stone arch that offers entrance to the Sukuḥ terraces. If we then add to this list something not included in the relief--the gin and the dancing girls who are specialists in erotic attraction--we have completed the left-handed Tantric associations of promiscuous intercourse, drunkenness, and graveyards (the rattling bones).

What possible connection exists between the dancing demonic elephant on the Sukuḥ relief with its intimations of Tantric revels that break the strictures of conventional behavior and the śrāddha rites for the liberation of the soul? Fortunately we have in Cantos 63-69 of the *Nāgara-Kertāgama* a description of the posthumous rites in honor of the Rajapatni in 1362. These rites took place twelve years after her death, rather than shortly after cremation as in India. The ceremony in Java was also much more elaborate than a simple feeding of the ancestor's spirit and a reconstitution of a new body. It was opulent, animated, high theater involving fire offerings, ritual gestures, sacred formulas, and "exertion"--all of a public Mahayana Buddhist, but Tantric-tinged character. Through these means the Rajapatni's soul was brought to lodge itself in a flower effigy (*puspa*). The effigy was then placed on a lion throne where it was accorded public homage. There was an air of great festivity and, as liquor was "streaming like a flood," a certain amount of drunkenness. Then, during the night before the final release of the soul from the flower effigy, the princes cloistered themselves in a hall with the Rajapatni's throne, where they performed dances of an erotic character with women who were presumably professional singers and dancers like the *talèdhèk*. There were no other men present, only the women, some of whom "forgot what they were doing," apparently a reference to an altered state of consciousness which could be arrived at through a variety of means such as spirit possession, trance, drunkenness, or, as seems likely here, erotic abandon.³³

What breaks the frozen immobility of death and carries the soul across the silence, the distance that separates the realm of existent beings from the land of the perfected ancestors, is the vitality of sexual attraction, the energy of sexual license, the social chaos of drunkenness, the full rhythmic force of ecstatic dance. In our relief it is the darkly energetic dance of Gaṇeśa, the guardian of thresholds, who breaks open a path for the soul, which is represented here as an animal wreathed in the flames of Hell, just as the śrāddha rites of the Rajapatni culminate in the erotic tension, the vital pressure generated by the princes' transports with the dancing girls.

In attempting to recover the relief's meaning, one is inevitably led back to the intention of the artist. All the evidence so far indicates that he was aiming to give visibility to states of movement, process, and change. Inescapably, his work is mimetic, since its claims are based on a harmonious reciprocity between macrocosm and microcosm. It follows that perturbations on one level are causally antecedent to consequents on the other. But rather

32. During his residence in Tibet, Heinrich Harrer photographed a pilgrim wearing a "rosary cut from human bone." See the photographs between pages 64 and 65 in his *Seven Years in Tibet* (New York: Dutton, 1954). It is very similar to the necklace worn by Gaṇeśa in the Sukuḥ relief.

33. Pigeaud, *Java in the Fourteenth Century*, 3: 78 and 4: 195-96.



Pl. 5. Phallus and vulva represented, on the floor of the monumental gateway at Suku.

than the skillful depiction of a prior reality to be enjoyed for its powers of persuasive similitude, the artist's intention seems to have been theurgic. Simple representation would have been at once too static in aim and too equivocal in result, since the work's power actually derives from the tension of its disparate parts--smith, bellows, and the dancing Gaṇeśa, a dog, the flames of Hell--on the face of it a confusion of realms and expectations. Its unity of theme and its metaphorical energy depend upon something outside the actual work itself.

On the other hand, the work certainly is not a free play of the imagination, a self-sufficient world of its own, intended to be contemplated disinterestedly for its own sake as the prevailing contemporary aesthetic would have it. And, although the relief clearly leans on, indeed depends upon, the knowledge, interests, and sympathies of an audience to bring out its full meaning, it nevertheless does not seem motivated, in the first instance, by a desire to teach or admonish that audience, as might be the case if we read the scene simply as a depiction of the anguish of purgatory. The difficulty of bringing the artist's intention into focus may arise from the fact that what is being interpreted is first of all an operative statement, the utterance of which produces the effect intended. The viewer is closer to witnessing an event than interpreting a text.

By analogy, the artist may be said to give us in stone what J. L. Austin described as a "performative utterance" in speech.³⁴ There is, he demonstrated, a whole series of operative statements in language which in their very utterance actually effect an intended result. These would be phrases such as "I promise," "I baptize," "I authorize you," words that do things. If we read the Suku relief as a performative utterance, then what it performs, through a presentation of craft mysteries, is the transfiguration, transformation, or transportation of spirit. In the spatial art of sculpture we have a parallel to the ritual gestures in time by which the Balinese Brahmin priest prepares *toya pagentas*, the water for "shipping over" the souls of the dead to the hereafter.³⁵ And just as the priest's activities are efficacious only within an appropriate context, presumably the relief is efficacious only within the context of a specific kind of place and within the conventional framework of ritual. There is thus a convergence between work, place, and ceremonial context that, joined together, form a conceptual pattern, a set, or better, a genre.

*Genre: Mountain Temples and Liberation*³⁶

Sukuh has been subject to a great deal of destruction and alteration so that its original character and its sculptural program can only be surmised.

34. J. L. Austin, "Performative Utterances," in *Philosophical Papers*, ed. J. O. Urmson and G. J. Warnock (London: Oxford University Press, 1961), pp. 220-39.

35. C. Hooykaas, *Drawings of Balinese Sorcery* (Leiden: Brill, 1980), p. 1. During the description of the śrāddha rites for the Rajapatini Nāgara-kertāgama, canto 64, stanza 5, there is a reference to *parishrama*. The Monier-Williams *Sanskrit-English Dictionary* (Oxford: Clarendon Press, 1964), p. 602, defines the word *parishrama* as, "fatigue, exertion, labour, fatiguing occupation, trouble, pain." This would seem to offer echoes of the exertion of the smith, the bellows operator, and the dancing Gaṇeśa as well as the Brahmin priest's effort to "ship over" the soul.

36. My understanding of mountain temples in general, and of Sukuh in particular,



Pl. 6. Lingga discovered at Caṅḍi Sukung and now in Museum Pusat, Jakarta [from C. J. van der Vliet, Report of 1843].

When Sir Stamford Raffles visited it in May 1815, he found that many sculptural slabs had been thrown down on the ground, and that most of the free standing figures had been decapitated.³⁷ C. van der Vlis, who visited the site twenty-seven years later, left a detailed account in which he noted that Suku had been so altered that it was quite possible that even the present arrangement of three terraces was arrived at by consolidation of an original plan which could have included a dozen terraces.³⁸ He also recorded sculptures on the first and third terraces that were missing during my visit in 1977. On the third terrace, too, it is very likely that some structures have disappeared altogether. But, insofar as the relief sculptures at Suku have a narrative logic, this is one of "liberation." Whether it is the *Sudamala*, which is, Gonda notes, supposed to be performed dramatically or recited "in places where corpses are cremated in order to counteract curses or expel evil spirits,"³⁹ or the story of Garuḍa's deliverance of his mother Vinatā from a curse, the theme is deliverance. This is echoed too in the system of water channels at the site which, although ruined, are clearly connected by inscription to the release of souls.⁴⁰

The theme is restated in a most emphatic manner by the *liṅga* (Pl. 6) which Raffles found broken into two parts and which he recognized could easily be rejoined. Its colossal size--over six feet long and five feet in circumference--argues for its potential use as a visual focus for the terraced site. It would also link the site to the rising peak of Mount Lawu. Finally, the *liṅga* bears an inscription down its length which Martha Muusses has translated from Old Javanese into Dutch.⁴¹ The relevant portion is: "Consecration of the Holy Gangga sudhi . . . the sign of masculinity is the essence of the world."

Important to our present concern is the fact that a kris or sword is carved in relief on the shaft of the *liṅga*. Thus the armorer's art and the creative principle are joined together in a symbol of release that crowns and culminates the terrace temple. This would seem both to confirm the central importance

has been greatly influenced by the work of Professor Aurora Roxas Lim. A preliminary statement of her views was presented in a paper, "Caves and Bathing Places in Java as Evidence of Cultural Accommodation," delivered at the Association for Asian Studies Meeting in Toronto in March, 1981. I have also profited from a paper by Judith Patt, "The Aesthetics of Architectural Planning," delivered at a Social Science Research Council-sponsored conference on Southeast Asian Aesthetics at Cornell University on August 23-25, 1978. For an introduction to the subject, see F. M. Schnitger, "Les terrasses mégalithiques de Java," *Revue des Arts Asiatiques* 13 (1939-42): 101-14.

37. Stamford Raffles, *The History of Java*, vol. 2 (London: Black, Parbury and Allen [etc.], 1817), pp. 45-51.

38. C. J. van der Vlis, "Proeve Eener Beschrijving en Verklaring der Oudheden van Soekoeh en Tjetto," *Verhandelingen van het (Koninklijk) Bataviaasch Genootschap van Kunsten en Wetenschappen* 19 (1843).

39. Gonda, "Old Javanese Literature," p. 238.

40. A. J. Bernet Kempers, *Ancient Indonesian Art* (Cambridge, Mass.: Harvard University Press, 1959), p. 103.

41. M. A. Muusses, "De Soekoeh-Opschriften," *Tijdschrift voor Indische Taal-, Land-, en Volkenkunde* 62 (1923): 503-5.

of metallurgy at the site and to reinforce our reading of the smith's art as a metaphor for spiritual transfiguration and release.

Conclusion: The Question of Alchemy

To speak at length, as here, about the transmutation of metals within the frame of a spiritual tradition such as Tantrism, is to touch the essence of alchemy without ever employing the term. Whatever other more material and fanciful goals it may have, such as the transformation of base metals into gold, alchemy through a system of correspondences offers a correlative for spiritual redemption. The perfection of spirit is figured in the perfection of metals, and, in a sense, imposes itself in the poetic logic of the metal workers' physical operations. Even if one were persuaded, as I am, that the atmosphere of alchemy hovers over the ruins of Suku, one must admit that there is no positive evidence to establish that alchemy *qua* alchemy was actually intended there, or that it was even a factor in ancient Javanese culture.⁴²

For what it is worth, however, there is some tantalizing archaeological evidence that does suggest that a very precise knowledge of Indian alchemy existed in the archipelago in the period of the thirteenth to fourteenth century. This comes from the research of the late F. E. Treloar who, as a chemist, took an interest in applying chemical analysis to archaeological material excavated in Southeast Asia. Through an analysis of pieces of gold foil cut into the shape of *linga*, and excavated in a ritual deposit in the Merbok Estuary of Kedah which dated from the thirteenth to the fourteenth century, Treloar was able to establish that the structure of the gold had been altered by the addition of mercury, which had been rubbed into the metal. What is so important about Treloar's study is that he traced this practice to an Indian text on alchemy of the eleventh to twelfth century, the *Rasaratnasamuccaya*.⁴³ Treloar followed up this line of investigation by studying a type of coarse earthenware bottle excavated in substantial numbers at Santubong, Sarawak, in a thirteenth to fourteenth century context. He believed that the bottles were employed in the shipment of mercury. Similar bottles have been found at Angkor in Cambodia and Fort Canning in Singapore.⁴⁴ It is noteworthy, too, that Chinese merchants in the latter part of the Sung dynasty regarded cinnabar as a staple of their trade with Java.⁴⁵

42. I do not find specific reference to alchemy in several recent publications on magic in Indonesia: C. Hooykaas, *The Balinese Poem Basur: An Introduction to Magic* (The Hague: Nijhoff, 1978), or his *Drawings of Balinese Sorcery* (Leiden: Brill, 1980); or in Marie-Therese Berthier and John-Thomas Sweeney, *Bali, L'Art de la Magie* (Paris: FMVJ Voyages, 1976).

43. F. E. Treloar, "The Use of Mercury in Metal Ritual Objects as a Symbol of Siva," *Artibus Asiae* 34, 2/3 (1972): 232-40, and "Ritual Objects Illustrating Indian Alchemy and Tantric Religious Practice," *Isis* 58 (1967): 396-97.

44. F. E. Treloar, "Stoneware Bottles in the Sarawak Museum: Vessels for Mercury Trade?" *Sarawak Museum Journal* 20, 40-41 (January-December 1972): 377-84.

45. P. Wheatley, "Geographical Notes on Some Commodities Involved in Sung Maritime Trade," *Journal of the Malayan Branch, Royal Asiatic Society* 32, 2 (1959): 91.

Although it is used in mining to separate gold from quartz, and is used too for producing red pigment, mercury is a central ingredient in Indian and Chinese alchemical texts, where it plays a role in the transformation of base metals into gold and also in the preparation of elixirs and medicines for longevity, virility, strength, or beauty.⁴⁶ In India, these texts flourished in the period from the tenth to the sixteenth century, which is well within the date of the Sukuh complex.⁴⁷

These are, of course, little more than intimations that in ancient times alchemy may have been an important current of thought in maritime Southeast Asia. If, however, we extend our horizon to Burma we find an exuberant tradition of alchemy. According to Maung Htin Aung, alchemy can be traced in Burma to the fifth century, and it was already beginning to decline in importance by the eleventh century.⁴⁸ That it is even today still a vital current in Burma is apparent from a recent study of the *Weikzas* or masters of wizardry and the occult.⁴⁹

None of this establishes the existence of alchemy in fifteenth century Java. At best, we can point out that little in the metaphysical foundations of alchemy would, in any of its variants, pose insuperable obstacles to acceptance in early Southeast Asia. Despite the many obvious differences in historical experience and patterns of thought, alchemists, whether Islamic, Western, Chinese, or Indian, based their claims on a shared vision of the universe as a vital and unified whole. They posited a parallelism between the microcosm and the macrocosm. They figured cosmic process as the creative conflict of quasi-sexual and mutually attractive polar opposites, and envisioned the consummation of their operations, whether material or spiritual, as a journey from division and multiplicity to a primal unity of being. This cosmic design, which could be traced from the Arabic alchemists such as Morienus through the hermetic and neo-Platonic revival in the Renaissance, would seem to have a family likeness to concepts familiar in early Southeast Asia. Within this imaginative framework, the physical operations of the metalworker can be read as an effort to speed up the slow natural process of metallic growth and to bring base metals to

46. For Chinese alchemy see N. Sivin, "Chinese Alchemy and the Manipulation of Time," in *Science and Technology in East Asia*, ed. N. Sivin (New York: Science History Publications, 1977), pp. 109-22, and N. Sivin, *Chinese Alchemy: Preliminary Studies* (Cambridge, Mass.: Harvard University Press, 1968); J. Needham, *Science and Civilization in China*, vol. 5, pt. 2, *Spagyric Discovery and Invention* (Cambridge: Cambridge University Press, 1974); J. R. Ware, trans. and ed., *Alchemy, Medicine and Religion in the China of A.D. 320: The Nei P'ien of Ko Hung* (Cambridge, Mass.: M.I.T. Press, 1966). For Indian alchemy see P. C. Ray, *A History of Hindu Chemistry*, vols. 1 and 2 (Calcutta: Chatterjee, Chatterjee & Co., 1925); M. Eliade, *Yoga: Immortality and Freedom* (Princeton, N.J.: Princeton University Press, 1969), ch. 7; S. Mahdihassan, *Indian Alchemy or Rasayana* (New Delhi: Vikas, 1979); M. Roy and B. V. Subbarayyappa, trans. and eds., *Rasārṇavakalpa* (Calcutta: Indian National Science Academy, 1976).

47. Roy and Subbarayyappa, *Rasārṇavakalpa*, p. 2.

48. M. Htin Aung, *Folk Elements in Burmese Buddhism* (Westport, Conn.: Greenwood Press, 1978), ch. 4.

49. J. Ferguson and E. M. Mendelson, "Masters of the Burmese Occult: The Burmese *Weikzas*," *Contributions to Asian Studies* 16 (1981): 62-80.

the perfection of gold. What is important to recognize is that consciousness does not invent this redemptive journey. Instead, it is the intentionality of metallurgy itself, the dramatic changes in the structure and color of metals, that gives direction to the imagination and accounts for the astonishing parallels in metallurgical lore between cultures otherwise marked by radical diversity.⁵⁰ In the Western world the triumph of the experimental procedures of the sciences in the seventeenth century emptied this ordering design of its propositional credibility and weakened its symbolic power.⁵¹

50. Mircea Eliade has employed the concept of intentionality in his discussion of vegetation. See "The Sacred in the Secular World," *Cultural Hermeneutics* 1, 1 (April 1973): 103.

51. An excellent introduction to alchemy that does full justice to the ordered principles of the alchemical tradition is Titus Burckhardt, *Alchemy: Science of the Cosmos, Science of the Soul* (London: Stuart & Watkins, 1967). A splendid collection of Renaissance alchemical illustrations may be found in Johannes Fabricius, *Alchemy: The Medieval Alchemists and Their Royal Art* (Copenhagen: Rosenkilde & Bagger, 1976). Among the recent works on the place of hermetic thought in the European Renaissance see especially Allen G. Debus, *The Chemical Philosophy: Paracelsian Science and Medicine in the Sixteenth and Seventeenth Centuries*, vol. 1 (New York: Science History Publications, 1977), pp. 1-61; Jocelyn Godwin, *Robert Fludd: Hermetic Philosopher and Surveyor of Two Worlds* (Boulder: Shambhala, 1979); and Frances Yates, *Giordano Bruno and the Hermetic Tradition* (London and Chicago: University of Chicago Press, 1964); D. P. Walker, *Spiritual and Demonic Magic from Ficino to Campanella* (London: Warburg Institute, 1958), and *The Ancient Theology, Studies in Christian Platonism from the Fifteenth to the Eighteenth Century* (Ithaca: Cornell University Press, 1972). The Morienus text, a product of the Arabic alchemical tradition, has recently been edited and translated: Lee Stavenhagen, *A Testament of Alchemy* (Hanover, N.H.: University Press of New England, 1974).