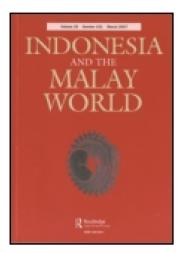
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Ann Kumar

SAILING UP THE MAP

A re-examination of constructs of
Javaneseness in the light of new
evidence

While Java's culture has extended to other parts of Indonesia and mainland Southeast Asian countries (on Angkor under Jayavarman II, for example, and on the Chams) it exerted even stronger influence on a more distant country, Japan. The encounter pre-dated Indianisation and was between the Jomon population of Japan — a decentralised population living by hunting, fishing, and gathering — and wet-rice growing Javanese immigrants who had an advanced and much more centralised political organisation and sophisticated technology, art and culture. We need thus to adjust our ideas about the antiquity of Javaneseness and the length of time this civilisation has been in contact with other cultures.

This paper begins by noting the long-standing fascination of the subject of Javaneseness for non-Javanese and Javanese alike, and goes on to demonstrate what a very difficult task acquiring Javaneseness could be, perhaps especially for Javanese. It goes on to look at received western views of Javaneseness and how these have been essentialised and projected back into the past. Finally, it presents some highly revisionary new evidence to demonstrate that these received views need considerable revision.

What constitutes Javaneseness has been for many centuries a major focus of attention both of the Javanese themselves and of their neighbours. The Malay-language chronicles of the smaller states within the Javanese sphere of influence, particularly the sections that deal with embassies to the Javanese court, make it clear that the Javanese were the people against whom they measured their worth. Some, like the Malays depicted in the *Sejarah Melayu* (Brown 1970), reacted with a 'Well, we certainly outdid and outsmarted those Javanese' attitude. Others, like the Banjarese, settled for repeated asseverations that in Banjar absolutely everything was done in the Javanese way, if not more so (Ras 1968). The readiness of non-Javanese to conform to Javanese mores is still evident today in the courses offered in contemporary Indonesia to help them do just that.

The Banjarese and the contemporary Indonesians who have gone through courses on how to behave like a Javanese probably had a hard time, but not necessarily a harder



one than the Javanese themselves have had in learning 'Javanese' behaviour. The common expression durung Jawa implies that one is not just born Javanese: one has to acquire this state. An early 19th-century work, the Sasana Sunu of Yasadipura II (in some recensions also called the Sana Sunu), reveals just how much was involved by that period in the achievement of the highest levels of Javaneseness, and how deeply self-conscious and sophisticated the education underpinning this had become. This work sets out a regime for aspirant priyayi, one of the four groups into which Yasadipura divides Javanese society. These are the priyayi, the santri, the tani (peasants) and the sudagar (merchants). These groups correspond to a certain extent with C. Geertz's famous three aliran, i.e. santri, priyayi and abangan (Geertz 1960): see following table.

C. Geertz	Yasadipura II
priyayi (gentry with Hindi-Buddhist orientation) abangan (peasants adhering to non-Islamic ideology) santri (pious Muslims engaged in trade)	priyayi (servants of the ruler, which is their principal religious duty) tani (peasants, no ideological connotations) santri (pious Muslims, no specified occupation) sudagar (merchants, no particular Islamic connotation)

It can be seen that whereas Geertz describes the *santri* as the merchant class, Yasadipura considers merchants (*sudagar*) and *santri* to be separate groups, of which the merchants have just a commercial, not an Islamic, ethos. Secondly, while Geertz characterises the *abangan* as peasants who adhere to a particular (non-*santri*) ideology, Yasadipura's peasants, called *tani*, are not associated with any ideology.

Each of Yasadipura's groups (which one might roughly translate as 'estates') has its distinctive set of duties (budi), as follows. The budi of the priyayi is to maintain the proprieties and good forms of social intercourse, not to behave in a common way, to dress appropriately, to be rather frugal in respect to food, to be careful and precise, to treat other people's opinions nicely, to be able to get people to work together, not to be afraid of suffering a personal loss, to be intelligent and civilised in action and thought. The budi of the santri is to be pure and holy, and to multiply the works of Allah and give thanks to Him - though it should be noted that for Yasadipura Hinduism had equal status with Islam in Java's religious tradition. The budi of the farmer is to work long and hard at all sorts of work, heavy and light. He is never envious, given to talking about other people's affairs, presumptuous or arrogant. He is steadfast (mantêp) and in earnest and stout-hearted about his work, not given to time-wasting and shirking. The farmer is also têmên, which can be translated as 'sincere' or 'honest', with the additional implicit meaning of 'in their devotion to their superiors'. Thus the farmers' example is to be followed by the young priyayi as they carry out their work for their ruler. The budi of the merchant is to be calculating, economical and careful and to treat his undertakings with respect. It is however the priyayi who have a uniquely special position as they are expected to combine the particular code of their own estate with all the virtues of the other estates, that is, the purity of the santri, the earnest application of the farmer, and

the careful calculation of the merchant. They develop these qualities for the service of the ruler, a religious service that the text foregrounds and emphasises far more than devotion to gods, whether Hindu or Muslim.

In order to carry out this duty the aspirant priyayi are given an extensive schedule of instructions in deportment in the interior sense of the word, i.e. manner of conducting one's life or way of behaviour. They are required to exercise the utmost discipline and self-control in eliminating bad qualities and developing good ones. They must not fall prey to mêndêm, 'intoxication', whether with regards to strong drink, opium, fine clothes, wealth, pleasure, or excessive sleeping. Anger is also to be avoided, along with têkabur/kibir (overweening conceit), ujub (the desire to impress), riya (the desire for praise and prominence), sumungah (boastfulness), duraka (speaking ill of others) and dora (lying). They must not criticise people, tell jokes or pointless or irreligious stories, or speak for the sake of speaking. On the positive side, they must be grateful, modest, steadfast, loyal, careful, wellmannered and patient. They must make friends with people of good character and themselves be loyal to their friends and preserve their confidences.

Yasadipura's Sasana Sunu also puts great emphasis on correctness in all areas of deportment in the external sense, i.e. as it relates to carriage, bearing, demeanour, and address. There is a small forest of regulations relating to dress, eating, sleeping, going out, receiving guests — for all of which detailed regulations are laid down, along with 'general underlying principles' which should be observed (for example, to maintain a proper standard in dress without being too smart, or to pay due respect to the old but to distinguish between the merely old and the old and wise).

Aside from the observation of such a comprehensive moral and social discipline, Yasadipura II also considered bravery in war to be absolutely essential to Javanese identity. He deplores in anguished words what he sees as its disappearance in the Javanese of his time (Kumar 1997: 392–93). Thus he shows awareness both of diachronic change as well as of variation within society at any one time. The few aspects of the Sasana Sunu that I have brutally summarised above can give no idea of the overwhelmingly dense, complex and profoundly thought-through nature of this work, which apart from its emphasis on moral and social education, also has a distinctly managerial character in its emphasis on hard work, application, carefulness and precision. It has in addition a 'social engineering' aspect in its advice on how to manage regional and village administration in order to have a well-functioning community and avoid driving people to crime.

Western imaginings of Javaneseness: the construction of a received view

By contrast, western accounts of Javanese society often appear rather insubstantial: less sophisticated, nuanced and aware of diachronic differences in Javanese society.

It was anthropologists who did much pioneering work in the early decades after independence and some of their generalisations have become part of the received wisdom of western academia about Java — far more so (in a classic example of Orientalism) than anything written in Javanese, even by *pujangga* like Yasadipura. Hildred

Geertz (1963) for example, wrote one of the earliest English-language surveys of Indonesian societies in the well-known Human Relations Area Files monograph series, which was intended to systematically analyse all the world's cultures. She classified Indonesian societies into three main groups: the strongly Hinduised inland wet-rice areas; the trade-oriented, deeply Islamic coastal peoples; and the mainly pagan tribal groups of the mountainous inland regions. The culture of the first group, according to Geertz, derives from India. Within this group, Javanese culture is particularly characterised by a marked development of an etiquette reflecting a hierarchical society - hierarchy being the most notable point of agreement with Yasadipura's analysis - and of the arts, such as dance, music and drama (H. Geertz 1963: 25-30). She also distinguishes between 'centrifugal' and 'centripetal' societies: the pasisir peoples are given as an example of the former, the Balinese and Toraja as examples of the latter, and by implication the Javanese also belong to this grouping (H. Geertz 1963: 69). Geertz speculates that it may be Islam that accounts for the centrifugal character of Java's pasisir society since Islam is tied to no locality and has an egalitarian ethos. So according to this view Javanese high culture comes from India, and movement and enterprise were imported into a previously centripetal Javanese society by Islam.

Clifford Geertz in his work on what he calls the nêgara, defined as the 'characteristic form of the Indicized state in Indonesia', the classic polity (C. Geertz 1980: 9), considers the Balinese state — whatever its special environmental setting or other peculiarities — to be but one example of a system of government once very much more widespread. He claims that on the basis of the Balinese material, one can construct, 'a model of the Negara as a distinct variety of political order, a model which can then be used generally to extend our understanding of the developmental history of Indic Indonesia (Cambodia, Thailand, Burma)'. Thus Javanese states fall into this category. C. Geertz sees the nêgara as a dramaturgical, aesthetic, symbolic centripetal theatre-state — further developing and foregrounding the ideas of centripetality and theatricality and pushing them back into the past, specifically to the period spanning the 5th to 15th centuries (C. Geertz 1980: 10) not to mention extending them spatially to the rest of Southeast Asia. Characterisations made by famous scholars have a way of expanding their scope over time, both in the view of those who made them and among their followers.

Both Geertzes foreground the great importance of Hinduism and Islam to Javanese, Balinese and indeed Southeast Asian societies and states. They share a wide-spread view of the Javanese as importers, certainly not exporters, of ideas — indeed of a whole Great Tradition. Apart from culture, even the very basis of the archetypal form of Javanese society, *sawah* (wet-rice) cultivation, is sometimes considered as an Indian import. Bellwood (1985: 244) writes that it is 'so closely tied historically with the Hinduised civilizations' that an introduction in the first millennium AD 'must always remain likely'. Van Leur, on the other hand, considered that *sawah* cultivation, as attested by the *pacul* (hoe), was definitely an earlier indigenous development, one which had taken centuries to evolve (van Leur 1955: 254).

Earlier colonial scholars also suggested that the Javanese were lacking in the sort of skills and enterprise that Europeans possessed. One, for example (Koster 1926), argues that the Javanese were never a real seafaring people but could only creep along close to the coast. This suggests that Koster himself may have been something of a

land-lubber, since 'hugging the shore' is in fact far from being an easy option, given the lee-shores, rocks, sandbanks, rips and onshore sets that are characteristic of inshore waters. His attitude is common in works written on early navigation by land-dwellers who could not imagine how sailors could strike out across apparently pathless oceans without getting lost (Taylor 1956: 4).

To sum up, the prevailing picture of Javanese society given by westerners, with the notable exception of van Leur, is of a stay-at-home people in a hierarchical and centripetal society based on wet-rice agriculture and with a well-developed Great Tradition — both wet-rice agriculture and the Great Tradition being imports from India. Any centrifugal and enterprising elements are considered to have been brought by Islam.

Questioning the received western view

It is, of course, the special budi of the historian to demonstrate to the rest of the population that things were not always as they are now (and so by implication, things may also be different in the future). Kumar (1980) and Ricklefs (1974), working from different Javanese sources, were both inescapably struck not by the theatrical but by the military aspect of the successor-states to Mataram (the former, and presumably also the latter, was motivated by the desire to give an 'internal' view of Javanese history through the use of what Javanese themselves had written about it - in reaction to what Said was later to describe as the 'Orientalist' habit of speaking for the Orient (Said 1978: 6 and 21). To scholars with this background, Yasadipura's insistence on the martial virtues is not at all surprising and even less so in the light of other events known to historians such as the extent of Javanese expeditions to mainland Southeast Asia and beyond. In early historical times, the Javanese are known to have launched naval expeditions as far as the northernmost part of mainland Southeast Asia (for details of these expeditions see Schafer 1967: 64). Nor was this a purely military expansion. The Cham art style of the beginning of the 10th century comes from a period of profound Javanese influence on all aspects of Cham culture, including the arts and the science of magic (Schafer 1967: 73 and Stern 1942: 109-10). In addition, there is evidence that there were Javanese (Ho-ling) traders in Canton in the early 8th century (Schafer 1967: 78). The Geertzes, on the other hand, were observing Javanese society at a time when power had long departed and 'pomp', as C. Geertz (1980) put it was all that remained - a state of affairs which it was easy to assume had always been the case.

Like Yasadipura's *priyayi*, we historians should be careful and precise. Historians of Java do not have the abundant sources of historians working on some other parts of the world, so they should look very carefully at what they do have. If I may slip for a

¹Kirch s excellent study of prehistoric seafaring (Kirch 2000), although it deals with Oceania, provides additional evidence of the ability of Austronesians to carry out lengthy sea voyages, for example from the Bismarck islands off New Guinea to Yap, and if the members of the small-scale societies of Oceania were able to do this, those from the much larger-scale societies of Java can be assumed to have had an at least equal capacity.

moment into Yasadipura's didactic mode (though in the service of a rather different agenda), they should not just search for bits and pieces to confirm what is already 'known', but should on the contrary be prepared to entertain radically new possibilities not envisaged in the ruling myth.

Could these new possibilities go so far as to include the possibility that the Javanese were not a stick-in-the-(sawah) mud people whose Great Tradition derived from India? What first made me question received wisdom about the Javanese were a few small signs that Java's early history had some hitherto unrecognised links with Japan. Firstly, I read a court diary from the Heian period - The pillow book of Sei Shonagon (Morris 1967) – that seemed to me eerily familiar because of my acquaintance with Old Javanese court life as reflected in its literature. Secondly, I found a passing reference to Javanese rice being a sub-group of japonica rice. And thirdly, I came across another Japanese link in an article on horse lore (called katuranggan in Javanese) written at the end of the 19th century by the Dutch scholar J.J.M. de Groot (1899). De Groot too seems to have been inspired to further investigation by seeing something that did not fit into the accepted categories, to wit three Japanese watercolours painted in 1765 for the information of the Dutch East India Company officials on Desima who had been asked to purchase three Persian stallions for the emperor of Japan. Two of the watercolours depicted unfavourable hair-whorls, and the third favourable ones. De Groot found a virtually complete correspondence between the stigmata depicted in these three Japanese watercolours and those identified in written accounts of Indonesian beliefs.

Imagining a radical revision: a hypothesis

All this may not seem to add up to much, and indeed I myself resisted drawing any conclusion for a long (perhaps too long) time. A general similarity between Japanese and Javanese court life could be merely typological or generic and perhaps found in other similar milieu elsewhere in the world. However, the rice relationship seemed to offer the prospect of something more specific and scientifically demonstrable. In addition, sometimes our whole view of the world can be altered just because someone has the idea of juxtaposing things that have never been juxtaposed before. One of the most spectacular examples of this is the work of Alfred Wegener who noted that the same Permian plants and reptiles were found both in South America and Africa, and that the fossils found in a particular place often indicated a climate utterly different from the climate of today (for example, fossils of tropical plants, such as ferns and cycads, are found today on the Arctic island of Spitsbergen). He also noted that the modern coastlines of now separate continents are mirror images of each other and if fitted together could be hypothesised to have once formed a single ancient landmass. He calculated that about 200 million years ago there had been a supercontinent, called Pangaea by Wegener, which had subsequently split into a northern continent, Laurasia, and a southern continent, Gondwana. Wegener called the mechanism that broke apart this ancient continent 'horizontal continental displacement' - what we now call continental drift. Heretical at first, his ideas were subsequently firmly established.

Like de Groot with his horses and Wegener with his plants, I too was confronted with things which were known to me as belonging to one place being found in a surprisingly different place. As I read more, I found that I was not alone in seeing a link between Java and Japan. While historians and pre-historians tended to maintain a strong boundary between East and Southeast Asia, some specialists on subjects that tend to encourage a more global outlook had already concluded that there must be a Java-Japan link. For example, Lommel writes that only in Japan and Java has the mask developed into a pure 'theatre mask' (Lommel 1970: 182) and that 'Links between the Japanese and Javanese masks are obvious' (Lommel 1970: 216). He notes that Javanese masks are of an artistic perfection comparable to that of Japanese masks (Lommel 1970: 214) and that 'Javanese masks have developed their own, very characteristic style, which, in turn, has influenced the masks of Japan' (Lommel 1970: 93). Lommel also points out that there is a relationship not only between the form of the Japanese and Javanese masks but also between certain theatrical and aesthetic preferences, notably stylisation, associated with mask theatre. He notes that the historical connection that brought this about has never been discovered, though the Japanese philosopher Kitayama had tried to do so (Lommel 1970: 180–1).

In similar vein, another scholar notes that some Old Javanese masks have pronounced Japanese characteristics, and indeed can scarcely be distinguished from Bugaku masks (Lucas 1973: 9)².

Turning to Japanese architecture, it is sufficient to note that this has long been recognised as having a 'southern' or Austronesian character and Waterson (1991: 11, 15-18) remarks on the characteristic Indonesian architectural features found in Japan's most sacred shrines. Since these artefacts are from a later period, they can only be suggestive of a link and are useful only in amplifying the picture developed from more probative evidence.

Encouraged by the perceptions of these scholars, I proceeded to form a hypothesis, in recognition of Darwin's principle that one cannot make sense of the data without one. The fact that some of the items involved advanced technology and/or an advanced level of social organisation suggested that the link if there was one must have been at a period when there was already a well-developed Great Tradition and royal courts. I began to read about early Japan and found that there was a massive discontinuity at c. 500 BC between the so-called Jomon and Yayoi cultures. Around this discontinuity, Japan was totally transformed by a whole range of radical innovations: wet-rice farming, much new technology including bronze and iron production, a new architecture, a new religion, and a hierarchical society culminating in an emperor. Before this, in the Jomon period, the population of Japan had consisted of local hunter-gatherer societies, a mode of subsistence that had lasted 10,000 years. This was totally transformed in the relatively brief Yayoi period both by the beginning of agriculture and by the introduction of a sophisticated civilisation, in a single swift process, as opposed to the more gradual and long-term process of development, from hunter-gatherer societies to early

²There are two main categories of old Japanese masks, Gigaku and Bugaku. Bugaku masks are boldly formalised and standardised, appropriate to the rhythmically based symbolic form of the Bugaku dance, and quite different to the dramatic style and strongly naturalistic masks of Gigaku.

agricultural societies and then to complex court-centred societies, found elsewhere in the world.

Previous hypotheses as to how and why this huge leap took place at this time are unsatisfactory. At one time it was thought that the Jomon suddenly made all these changes themselves, a theory that was attractive to some because it upheld the idea of the indigenous origin of Japanese civilisation. However, skeletal evidence does indicate a change of body type, which it is hard to imagine that the Jomon could have brought about by their own volition. So we must accept that it was immigrants who brought about this great leap forward. Where these immigrants actually came from has however remained problematic. It has been assumed by many scholars that they must have come from Korea, but my hypothesis was that another group had been extremely important.

Finding evidence in support of the hypothesis

I wanted to find out if these immigrants came from Java, but unfortunately there was (and is) a near-total absence of research on bronze-iron age civilisation in Java, a period which lies outside the reach of recorded history (unlike other parts of the world where written records from early civilisations survive). So it was necessary to use some ingenuity and find sources that could be made, one way or another, to break this silence. This meant that at least for this project the historian, like Yasadipura's *priyayi*, had to take on the *budi* of a number of other groups: the plant and human geneticists, the experts on weaponry and other artefacts, and the linguists, to name a few. I summarise below the sources used and the results these produced.

These striking similarities also extend, particularly in the case of blades, beyond appearance to specific techniques of production.

Rice

It was once thought that rice cultivation in Indonesia, Malaysia and the Philippines did not begin until after 1500 BC (see Spencer 1963), but we can now see that the archaeological record, though slight, clearly indicates that there was rice cultivation in western Borneo as early as 2500 BC. According to Bellwood (1997: 237, 234–35) it is likely that rice was always important in the ideal soil and climatic conditions of magnificently fertile Java and Bali from the time the first Austronesians settled there. Turning to Japan, we find that rice arrived in Japan at a considerably later period than this date of 2500 BC for the earliest evidence of rice cultivation in Indonesia, since Hudson concludes that a date of c. 1000 BC is probably a good guess for the first arrival of rice in Japan. For the next millenium rice cultivation was mainly limited to north Kyushu (Hudson 1999: 112).

The relationship between the different types of cultivated rice is complicated. Most scientists who work on rice would agree that there are now, and have been for a long time, three large 'eco-geographic races' of cultivated rice (*oryza sativa*). These are *indica*, *japonica* (sometimes also called *sinica*) and *javanica*. These were

formerly considered sub-species of *oryza sativa*, but are now generally considered to be eco-geographic races whose origin is the result of selection by man in the process of the domestication of the various wild rice under different environments (Chandler 1979: 12). However, the term sub-species is still retained by some, thereby introducing an element of confusion in the literature on rice. It should also be noted that some scientists do not accept the classification into three eco-geographic races because they argue that *japonica* and *javanica* should actually be considered as one single eco-geographic race.

Some rice workers have described a number of distinct 'eco-species' which developed within the eco-geographic races of *oryza sativa*. These eco-species have in turn been sub-divided into a number of 'ecotypes'. Thus the *indica* eco-geographic race contains the eco-species *Aman* (monsoon rice, photoperiod sensitive — a term used to indicate sensitivity to day length), and *Aus* (spring rice, photoperiod insensitive). The *Aman* eco-species is further divided into three ecotypes: *Aman*, *Cereh* — which is grown in Indonesia — and *Boro*. The *japonica* eco-geographic race contains the eco-species *Japonica*, and within this eco-species the ecotypes 'ordinary Japan rice' and *Nuda* (Morinaga 1968: 4). At the lowest taxonomic level, that of the variety, the range is enormous though it has become less so with the recent spread of the so-called High-Yielding Varieties (HYVs) which superceded older varieties and brought about a large measure of uniformity.

Morinaga's work published in 1968 already demonstrated that Javanese rice (known as *javanica*) was the closest relative of ordinary Japanese rice, and vice versa. It is a fact that *bulu* — in all classifications and in terms of morphology, hybridisation and chemical tests (made by another scientist, Oka, working on rice) — clearly has a close relationship with the ordinary Japanese rice ecotype of japonica, strikingly enough a much closer relationship than the one it has with its immediate neighbour, the *indica cereh*. Some years after Morinaga's work, the chief scientist at the International Rice Research Institute, T.T. Chang (1976: 432), concluded that Javanica rice had spread from Indonesia to the Philippines, Taiwan, and Japan. These findings are very important in establishing the first demonstrably genetic, as opposed to typological, link between Java and Japan.

Rice, particularly wet rice, was the basis of this earliest Japanese civilisation, that of the Yayoi. Perhaps not surprisingly given its importance, rice also had a parallel religious significance in Java and Japan and was associated with central royal rituals.

Artefacts

Traces of contact between Japan and Java are vanishingly small in the standard works on prehistory, which is not surprising given the abysmal state of research on Java's early civilisation. However, it is at least obvious that there is a striking typological similarity between the Yayoi artefacts — bells, blades, and pottery for example — and their Javanese counterparts. This is not just the sort of similarity one might expect of objects with the same function, but extends to design features unrelated to function, and to the recurrent motifs and details of the decoration. The Yayoi artefacts also resemble Javanese artefacts much more than they do Korean ones. Notably, the Korean pottery of the time is plain, whereas Yayoi pottery is decorated, with the

same range of geometric motifs (predominantly the *tumpal* and spiral motifs) as Javanese pottery. The Yayoi bells also use motifs from the Javanese world.

DNA etc.

Now the fact that *javanica* rice was imported into Japan, as it was to other places, does not in itself imply that Javanese settled in Japan. However, since it is known that there was immigration into Japan in the Yayoi period when rice cultivation first began, it is worth asking the question whether there is evidence of Javanese migration. In practice it is necessary to be less precise and look for evidence of Indonesian migration, since the categories used by scientists do not extend to the level of specific Indonesian ethnic groups. And in fact there is evidence of an Indonesian element. This is indicated by a very large range of indicators from numerous independent studies. A number of craniometric and cranioscopic and dental studies supporting a genetic link are surveyed in Kumar (1998), which also reports on a d-loop study carried out by Kumar herself. To this can now be added: (a) further dental studies e.g. Matsumura (1990 and 1991, on tooth size), and T. Hanihara (1992a and 1992b, based on a variety of specific dental traits), and (b) blood: studies include Mourant (1983) and Nakajima et al. (1967) on the Rh system, and Serjeantson (1989: 160–2) on HLA.

The work of Hammer and others on the Y chromosome (which is paternally inherited) initially seemed to support my hypothesis. However, it has recently become clear that the history of the Y chromosome is fraught with much uncertainty. It now appears that it is likely to be more useful in questions relating to recent or local human migration events, but liable to introduce an unpredictable element into analyses of more ancient events. The reason is that it is not even clear whether the Y chromosome is ancestral to Africa or Asia, and its subsequent branching order is unresolved. New lineages are likely to be found, changing the picture dramatically, and even supposing that all of them are eventually located and their branching order worked out, the existence of rare deep-rooting haplogroups and the high geographic structuring of the Y chromosome suggests a volatile birth-and-death process for its lineages (Weale et al. 2003: 232–33).

That so many different studies demonstrated an Indonesian connection is all the more astounding since no one was trying to prove this, and the data on Indonesians are also extremely poor compared to other populations. The relationship with Indonesia rises willy-nilly — and often 'at first sight' to be later dismissed as implausible — in a larger range of different studies than any other genetic relationship posited with the Japanese.

This made it clear that we have a case not just of great cultural and technical influence from Java, but also of significant numbers of migrants.

Language

It is axiomatic that if some Javanese/Indonesians settled in Japan this must have involved language contact and borrowing.

A very large number of diverse theories concerning the relationships of the Japanese language has been put forward by previous researchers: Japanese has been said to be related to languages ranging, if not from Arabic to Zulu, at least from Basque to Tamil. The two 'front runners' are (a) some sort of connection with Korean and/or the putative Altaic language family; and (b) some Austronesian element, though there are many competing hypotheses as to whether only (a) or only (b) is involved, and if both are involved, which arrived first and what was the nature of the relationship between the two!

One thing is clear however: while there may very possibly be some Korean element in the Japanese language, Korean cannot have been the language brought in the Yayoi period. If it had been, it would have been very much easier to demonstrate the connection by use of the Comparative Method than it actually has been. The Comparative Method is a powerful tool that can reach back 6,000 years or more to demonstrate linguistic relationships, i.e. much further back than the Yayoi period. The very serious problems in establishing the relationship with Korean can only indicate that any such relationship would have to be from a much more distant time than the Yayoi period — that is to say from a time outside the reach of the Comparative Method.

The linguistic data were statistically evaluated by Rose (see Kumar and Rose 2000), using the appropriate framework for assessing the strength of evidence in support of a hypothesis, namely Bayesian probability. These data clearly establish linguistic borrowing into an earlier form of Old Japanese, not from Korean, but from an antecedent of Old Javanese.

In the end the linguistic evidence was the most useful of all. This is because it elucidates so many different aspects of the contact. These include:

- directionality, which can be deduced from the nature of the sound shifts that took place when words were borrowed
- precise location of the donor language
- intensity of contact: the borrowings include items such as many verbs and basic
 vocabulary (words like sosok, to pour, and tutup, to cover) and there is also evidence of structural influence, all of which only takes place in cases of intense
 contact
- the ideas and concepts which were imported, and which by their nature cannot be visible in archaeological remains. It should be noted that some words do relate to the material culture, specifically to items introduced in the Yayoi period, which is also important. These words include tapih, cloth, wakul, basket, lêsung, rice mortar, piring, plate, gudang, warehouse for rice or for precious objects, duduk, spear/stabbing weapon and kikis, fence.

Some of the borrowed words are from the high-culture end of the language spectrum, such as Old Javanese *matur*, 'to present, offer, tell or report to person of higher rank', which was borrowed into an antecedent of Old Japanese as *matur* — 'to give or present something to a person of high rank/God; to offer prayers; to honour the memory of God by making offerings at a shrine etc. (In its Modern Japanese form, it is used to mean a religious ceremony or religious worship.) It was also used as the 'humble auxiliary' *matur*-. Of this word Bentley says, that its original meaning was 'to present offerings to deities and men' (Bentley 2001: 204). Its

usage as an affix indicating humble speech shows that it had in Old Japanese the full range of meanings it had in Old Javanese – i.e. including speaking to a superior – and which it still has in Javanese and Balinese today. In Modern Javanese it is also used as a humble auxiliary verb in expressions like 'my humble answer/question/respects/ thanks'. Its adoption into the Japanese language both as a lexeme and as a 'humble auxiliary' strongly suggests that the Javanese brought to Japan that strong sense of hierarchy which everyone agrees is characteristic of Javanese society at home. There are other borrowed words that refer to abstract concepts, for example tuntun, to lead.

At the other end of the language spectrum, we find the borrowing of words like tutup, to cover, and wuwuh, to grow or increase. These words are both basic vocabulary and verbs, two categories which are borrowed only in cases of intense language contact.

With this data we can draw a very much fuller and more interesting picture of the first Japanese civilisation than is possible from archaeological research alone.

Myths

To establish and maintain a civilisation, it is not enough to have a high level of competence in agriculture, weaponry, artefacts and other technical areas. Civilisations require founding myths that engage the imagination of those who belong to them, binding them together. This social binding is not necessarily on the basis of equality for all: myths are sacred and cannot be questioned, making them suitable for use by a dominant group to manipulate others. Nevertheless the myths give the civilisation its particular character, distinguishing it from other civilisations, even those that have the same economic basis. We can get some idea of the founding myths of the civilisation that the Yayoi immigrants brought to Japan through the use of later sources that clearly relate to the civilisation's origins. Perhaps the most significant in this regard is the myth of the angel who descended from the moon to bring rice to mankind, and whose heavenly robe both Javanese rulers and Japanese emperors must don at the time of their accession. The sea goddess, on the other hand, is seen as giving rulers dominion over the undersea world and the world of the spirits, whereas the first goddess provided a guarantee of rice. Then there is the secular myth of the radiant prince, peerlessly beautiful, superbly adorned, phenomenally accomplished, and of hyper-refined sensitivity. He appears designed to epitomise the highest imaginable attainment and refinement promised by urban court life as much lauded by its poets as village life was denigrated – as well as the epitome of the sexually desirable male. Furthermore, not only are Panji and Genji sexually desirable, they are somehow deeply connected with the cultivation of the emotional life.

It is also the case that the ensemble of cults called Shinto corresponds closely to a parallel ensemble of cults in Java. These include the crane, the tree and mountain; the sacred central pillar; the sacred couple; the sacred gateway; and sacred, particularly imperial, tombs: see further Kumar, forthcoming.

Conclusions

The strategy used in this research was one invented by William Whewell and is called 'consilience of induction'. This means taking a number of apparently disparate facts and finding that they can be made to cohere, but 'one, and in absolutely only one, possible way', via the sole coordinating explanation that can bring them together into a single, simple and elegant explanation (Gould 2003: 208–9). So we now have to make a major revision of our ideas about the histories of Java and Japan — even if the received view seems much more intuitively probable. When I explained to a colleague what the implications of this research are for our view of Java's past, she exclaimed, 'You mean they sailed up the map!' For that is how it instinctively seems to us — a difficult climb, whereas in reality the currents make it easier to sail 'up' the map than 'down' it (as the Austronesians did much earlier on the large migration from Taiwan which took Austronesian speakers right across the Pacific).

This research shows why we have to resist the powerful tendency to read the present situation back into the past and to essentialise what it is, and by extension supposedly always has been, to be Javanese. Early Java, pre-Hindu and pre-Islam, was not a centripetal society waiting for the highly productive wet-rice system, and a Great Tradition, to be supplied by India. It was on the contrary a dynamic expansionist society with a well developed, indigenous, Great Tradition. For a long period, the salience of Indian-inspired remains - or rather western scholars' greater openness to them - plus the evident Indic influence on Javanese literature caused the said western scholars to over-emphasise the significance of the Indic. Even so observant a scholar as Geertz has had his attention misdirected by taking on the beliefs of earlier western scholars - much earlier western scholars, whose received wisdom had already been challenged by the time he wrote. Van Leur, whose immense achievement seems only to shine more brilliantly with the passage of time, had criticised the one-sided emphasis on Hindu culture (van Leur 1955: 148). He pointed out that prehistoric agrarian civilisation, especially in its largest single complex in Indonesia, i.e. Java, supported a highly organized political structure the unchanged existence of which has to be taken into account (van Leur 1955: 256) since sawah farming necessitated special forms of social organisation in the village, region, and royal court with its officials (van Leur 1955: 167). He concluded that both governmental technique and sacral organisation had developed slowly on an indigenous basis (van Leur 1955: 257) - and in what are probably his best known words, that the world religions subsequently formed only a thin, easily flaking glaze on these.

C. Geertz (1980: 9) is aware that the major and salient differences between the states included in his group of Indic states which he calls nêgara pose a problem for his study, and attempts to address this by stating that his model is 'abstract'. In fact his model is far from being a Weberian ideal-type (the patrimonial state, the bureaucratic polity) and is firmly grounded in a particular time and place: 'Indic' states in Southeast Asia between the 5th and 15th century. This group is only a group (has group-ness, one might say) because of certain assumptions about a particular reality: that the Great Tradition of all these states was uniformly Indic, and that the form of the state, indeed the origins of the state at all (see Geertz 1980: 4), was shaped by this Indic parentage. It is not that positing links and groupings is to be avoided in favour of individual studies: humankind has lived in a profoundly

interlinked world since prehistoric times. But we should not rush to assume that we already know in all cases what is linked with what, and what the nature of the link is. $N\hat{e}gara$, like the categories East Asia and Southeast Asia, is a box that forms a barrier to understanding more important things. Java's closest relationship is actually not with a group of Southeast Asian states or $n\hat{e}gara^3$ by definition produced by Indian influence — cultural colonies of India. The closest relationship of the earliest Javanese state was not with an Indian 'parent' but with a Japanese daughter state in which its own indigenous agricultural base (wet-rice cultivation), technology, social organisation, and Great Tradition were replicated.

If C. Geertz took a step back from van Leur, I propose we now find some van Leurian courage and take a daring step forward. Let us acknowledge that Java not only had an indigenous Great Tradition but that this Great Tradition was profoundly seminal throughout Southeast Asia and also, evidently, in Japan.

The pursuit of knowledge produces many surprises. Who would have thought that knowledge of Java would have explained the Yayoi mystery? Equally, who would have thought knowledge of Yayoi Japan would reveal something about Java, i.e. the hitherto undemonstrated great antiquity of its indigenous Great Tradition and hierarchical social structure, and of their technological underpinnings like wet-rice cultivation and advanced metal-working? It is the immense depth of this indigenous Great Tradition that explains Yasadipura II and his formidable armoury of qualities which should be developed by those who aspire to the higher levels of Javaneseness. Though it is recognisably the same tradition over the long expanse of time that stretches between the Yayoi period and the 19th century, this is not to say that there have been no changes. For instance, the contempt of the village/agrarian sphere shown in the foundational Panji/Genji myth has been replaced by Yasadipura's tender (for him) appreciation of the virtues of the tani. This constitutes an interesting parallel to European and English sentiments of the Romantic period prizing the virtue and innocence of the yeomanry above the corruption and decadence of court life.

What is enduring and central in Java and Japan? Having established the connection through the specific and scientific, perhaps one is now licensed to consider the less concrete elements. These seem to have included fine workmanship, a refined and elegant aesthetic, hierarchy, the goddesses and their rites conducted by a divine ruler, the exemplary prince (Genji and Panji still live in modern media like the cinema and the comic book). This refinement, so much prized in Java and Japan, did not preclude a strong military organisation and ethos. Did the migrants also inculcate a formidably intense and comprehensive schedule of virtues like Yasadipura II's, which is so like the *bushido* of the samurai? Very likely they did, but the evidence so far does not permit us to judge just which virtues they brought.

It is sometimes said that too much attention has been paid to Java. On the contrary, all of those who have studied Java — that is the whole history of Javaneseness in all its richness, sophistication, contradictions and paradoxes — and who study it now constitute but a small band shining weak torches into a huge and complex world that is still for the most part in darkness. But sometimes it is possible for a small torch to pick up the signs of something very large indeed.

³The Javanese state was not even called a negara: its chroniclers and presumably its inhabitants described it by the indigenous terms *kraton* and *praja*.

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