Western scholars interested in the underlying philosophy of the Javanese and Balinese calendars have tended to focus on their use of cyclical rather than linear time. In this paper I will look at a contrast in a different dimension of time, that is, between what one might call ordinary or neutral time and significant or meaningful time in the Javanese calendar, using the Christian calendar as an explicit (rather than, as is often the case, implicit) counterpoint. This heuristic device will, it is hoped, lead to some interesting comparisons between the two calendrical traditions.

Calendrical time becomes significant when it is connected to an underlying myth. What do we mean when we describe something as a myth? In current English usage the word has two main senses. Firstly, it means that something is erroneous or untrue — as in the well-known expression, “an urban myth”, referring to some widely current story, typically transmitted orally, in which there is no foundation of truth. This sense of a myth goes back as far as the Romans. The second widely current meaning of myth denotes a traditional, pre-modern narrative usually involving stories of the Gods and often enacted in ritual. Lass, however, uses the term “myth” in what he calls a non-pejorative or neutral way, pointing out that even we academics have our myths, which we rarely question. These myths are stories or images that structure some epistemic field — knowledge, thought, belief — in a particular culture. In the case of the calendar, it seems to me, the effect of a myth in producing “significant” time is stronger if the myth is enacted in a calendrical ritual.
Both the Christian and the Javanese calendars exhibit in their mythic dimensions the religious history of societies that use them. The commonly used version of the Christian calendar exhibits the influence of pre-Christian religion in the names of days; and of the Christian religion in the Sabbath and the holidays of Christmas and Easter. It has, however, had most of its mythic skeleton removed, and this is now mainly preserved in liturgical calendars under the control of different Christian churches. In many countries in which it is used, the influence of a later, secular system, is apparent, as in the holidays for Independence Day, Washington’s and Martin Luther King’s birthdays, and Veterans’ Day in the United States. Calendars provide a universal schedule of public and communal observations and orient individuals in widely separated places to the same structuring myth: if you like, they are a powerful means of developing imagined communities that has existed for a very long time and does not require literacy to be effective, unlike the later phenomena described by Anderson (1991). Perhaps the most powerful public and communal occasion in the Christian calendar is the observance of the Sabbath, when congregations receive guidance from the pulpit on their social and political behaviour.

An understanding of the Javanese calendar is made more difficult by the circumstance that a Javanese date from after the adoption of the “Islamic” calendar can contain a startling number of elements compared to a date from the Christian calendar. This can be readily seen by a quick examination of the dates cited by Ricklefs, which demonstrate this complexity — and also the lack of consistency as to which elements are included or omitted, and the high frequency of internally inconsistent dates. For example, one date contains the following elements: the combination of the 5-day week (pasaran) and the 7-day week (sometimes called the wétom), i.e. Sukra-Manis (Friday Légi); the date and month in the lunar month system, 1st Rabingulawal; the warsa, Je; a sangkala (chronogram), naga tussa swaren jamma, which is AJ 1798/AD 1869; the mangs Sadha; and the wuku Julungwangi. The wuku is incorrect and should actually be Warigagung.

The elements in this date are:

- The days of the five and seven day weeks, which are usually given together (Sukra-Manis). There are other Javanese weeks of different lengths but the above pair is most commonly used and together constitute a 35-day month.
- The warsa, referring to the windu, i.e. the year of the Javanese octave.
- The sangkala or “chronogram”, consisting of a number of words with numerical values. For any of the numerals from zero to nine there is a list of words with this value, and it is considered optimal practice if the meaning of the words chosen somehow makes reference to the nature of the event for which the date is given. To obtain the date in numbers one reads from the last word back to the first.
- The Šaka era, an Indian era that begins in 78 AD. It will be noted that unlike other Muslim countries the Javanese did not adopt the era beginning with the hijrah.
- The mangs, one of the solar months that were introduced with the Šaka era.
- The wuku, one of the weeks of a cycle of 30 weeks, each of which has a name, whose underlying myth is outlined below.

Looking at a few other dates in Ricklefs book, we see that one of them has the same elements as the date cited above except that it does not give the day of the pasaran week. Two further dates specify, respectively, that it was morning (wayah enjing), and that it was also the start of the rainy season. Yet another date gives only the combination of the 5-day and 7-day week (Wednesday-Paing); and one last one has only Thursday, 18 Rêjêb, in the windu year Je, and is internally inconsistent.

This variability in dates is not confined to the manuscripts studied by Ricklefs. Two manuscripts dealing with the history of Surapati provide maximally contrasting attitudes as to what the key information in a date actually is. One gives the combination of the 5-day and 7-day week, i.e. Kêmis-Wage; the date in solar months, i.e. the 1st day of the 10th month; the date in lunar months, i.e. Ahad 11th Rabingulakir; the windu, Jimmawal; and adds a further dimension of exactitude by giving the sangat, Jabaraiil. The sangat are the five watches of the day, named Ahmad, Jabaraiil, Ibrahim, Yusup and Ngijraill. However it also adds a dimension of inexactitude in giving no year date, which is moreover impossible to reconstruct given that the other data converge in more than one year. In contrast the other manuscript provides only a year date, given in sêngkala form, gejaj tunggal pandhiteng rat, i.e. elephant, one, priest, world, which translates to 1718 AJ or 1791 AD.
Ricklefs claims to be at a loss as to why errors are so frequent, and lightly suggests “a bit of opium or intoxicating drink” as a possible cause. He has however solved his own problem where he later notes a Dutch source that has given a very simple date, i.e. Monday 10 April, incorrectly, as the 10th actually fell on the Tuesday. Given that we all know from our own experience that this is hardly a unique mistake and that Ricklefs himself has made a typographical error in a date on this very page (see note 4), we can conclude that the problem was not opium but the fact that the Javanese system was an extremely complex, high-maintenance, demanding one in which the balance of probability was towards some internal inconsistency, and which could only be operated by a very cluey professional secretariat at court, able also to keep track of the calibrations that had periodically to be made to the calendar. This intricate maintenance is the cerebral equivalent of the physical maintenance of old European weight-driven clocks with their multiple linked mechanisms.

Of these many elements, I will deal only with those that are most heavily myth-laden, i.e. the months of the lunar year, and the wuku cycle. I shall argue that the calendar was a major ideological tool in the construction of a highly royalist community over a long period. During this period both Hinduism and Islam were purposefully massaged to provide support for royal claims to extraordinary, divine power. In the first half of the nineteenth century, the famous pujiangga or court savant, Yasadipura II, stated that Islam comprised half of Java’s religious tradition, and Hinduism the other half. But he also stated clearly that the supreme spiritual value was actually to serve the king; in Canto IV stanzas 35–9 of the Serat Sanasamu, Yasadipura says that carrying out your allotted tasks in the service of the King can be compared to prayer (performance of the five daily salat). He states that the Ruler is the true Kalifah — a very Javanese sentiment that puts serving the ruler on a par with serving God.

The lunar months proclaim the importance of Islam and of royalty. There are a number of major occasions in the Javanese calendar which can be compared with the Christian observances of Christmas and Easter. These are the Garêbêgs, i.e. Garêbêg Mulud, celebrating the birth and death of Muhammad, on the 12th of Mulud; Garêbêg Bakda Pasa, marking the end of the fasting month on the 10th of Sawal; and Garêbêg Bésar, on the 10th day of the month of that name, which marks the end of the Hajj. These were national events over which the ruler presided in person. Two of them are canonical festivals of the Muslim year everywhere. The third, Mulud, is not, but it was nevertheless the greatest of the Garêbêg celebrations in Java. At it, the ruler personally cooked rice for his subjects, and his nobles and others travelled from the far reaches of the kingdom bearing gifts and joining in this “ritual of the extended national community.”

In his magisterial work on the old Muslim calendars of Southeast Asia, Proudfoot points out that Mulud contains elements of a national harvest festival. It is however no ordinary harvest festival, but an audacious claim to royal divinity that was repeatedly made. It is based on the myth of Nawang Wulan, a nymph (widadari) who flew down to earth with her companions to bathe in a lake (sêndhang). It happened to be the day of Anggara Kasih (Tuesday-Kliwon). A young man called Jaka Tarub hid while the angels undressed and bathed in the lake. Attracted by their beauty, he stole and hid the clothes of one of them. Not realizing this, the angels continued to bathe happily. Then the young man cleared his throat. The angels were startled to hear a human and quickly flew away, each taking her own clothes. Only one, called Nawang Wulan (“gazing at the moon”), had to remain at the lake, because her clothes were missing. The young man approached, and said to Nawang Wulan that if she would agree to marry him, he would return her clothes. Out of fear, Nawang Wulan agreed. They married and had a child, Nawang Sih. Nawang Wulan possessed the secret of producing an unending supply of rice, so that no matter how many meals she cooked the rice-granary never diminished. One day she went to do the washing in the river and left her husband in charge of the rice-pot, enjoining him that he must not look inside it. However, he disobeyed her, looked inside, and saw that there was only one grain of rice there. This breach of trust destroyed her magic, so that from that time on she had to work like an ordinary mortal. She longed to leave this life of drudgery but was unable to do so until she discovered her robe under the last of the rice in the granary. This robe was called Antakusuma: a contraction of Anantakusuma, which means endless or eternal flowers. She flew back to heaven, promising to return to suckle her child, Nawang Sih, whenever she cried. According to the Babad Tanah Jawi, Nawang Sih’s grandson Ki Ageng Sela was the grandfather of Ki Pamanahan, the first ruler of the kingdom of Mataram, the most powerful modern Javanese kingdom.

Another version of this story provides further clues to its significance. It is from the Tenggerese (an isolated population in the mountains of East Java with conservative beliefs) and relates to Sunan Bonang, one of the apostles of Islam on Java. In this story, Sunan Bonang has an illegitimate
son with a hermit. This son, named “Djaga Tarup”, was brought up by a widow. He came upon 12 angels bathing, stole the wings of one, Nawang Wulan, and forced her to marry him. They had a daughter Nawang Suh [sic]. One day Nawang Wulan went out leaving him in charge of the rice-pot, and against her orders he looked in and saw the single grain. This destroyed her power, the rice-granary diminished, and she then found her wings at the bottom of it, enabling her to fly back to heaven. So far, the story is much the same as that of the Babad Tanah Jawi (except that Jaka Tarub’s father is said to be Sunan Bonang). What follows is more detailed and explicit: when Nawang Wulan left her husband to return to heaven she left him the instruction that her daughter should be left in the sawah and a bundle of rice-straw set alight as a sign for her to return and feed the child. Pleyte comments that this is obviously an agricultural myth, with Nawang Wulan, the goddess of agriculture, bearing a daughter, rice. This daughter has to be taken to the field, symbolising the sowing of the grain, where her mother gives her to drink, symbolising the flooding of the rice-fields by the rain, after the flame of the rice straw, symbolising the burning-off of the fields, has alerted her.

This myth was central to Javanese royalty over the centuries. Sultan Hamengkubuwana VII (1877–1921) wore the sacred heirloom robe, Anantakusuma, both on his accession to the throne and after it at the Garebega: this robe is said to be that of Nawang Wulan.14 In Surakarta, every eight years the ruler conducts a ceremony where he personally cooks rice for his subjects. When he does this he is said to use the dangdang (rice cooker) of Nawang Wulan. In the third major Javanese kraton, Cirebon, it is believed that the Antakusuma jacket protects against rain, drowning, heat and other dangers.15 An official of the Kanoman kraton said it also gave the power of flight. Van Dapperen, writing of Cirebon in 193316, noted that old people were accustomed to wear the Antakusuma jacket at Mulud. It was made of dull red and white squares, red and white being sacred colours in traditional Javanese religion. The Mulud ceremony in Cirebon is centred on the Panjang Jimat, a dish believed to have belonged to Nawang Wulan, which is filled with lucky rice (gabah), husked grain by grain, that participants compete to obtain. The Panjang Jimat is carried in procession by young virgins (prawan suntri) and is the Cirebon equivalent of the dangdang of Nawang Wulan in which the Sunan of Surakarta cooks rice for his subjects. As I have noted elsewhere17 Javanese rulers claimed, by a rather audacious act of appropriation, to possess wahyu, the light of prophecy, a quality in the rest of the Islamic world associated with the Prophets, particularly Muhammad. They also, unlike Muhammad, claimed divine descent from the rice goddess, celebrated on the principal feast of the Islamic year, when the ruler re-enacted his role as provider of rice, in which he has a special power deriving from his link with the divine woman, Nawang Wulan, who brought it to his ancestor. Her descent to earth is also honoured every 35 days on Anggara-Kasih (Tuesday-Kliwon).

The second profoundly royalist element of the Javanese calendar is the wuku cycle. Zerubavel regards the Javanese wuku calendar as the most remarkable week-calendar ever invented, and the most intricate: being based entirely on weekly cycles created by human beings, it is a rare example of an exclusively artificial time-reckoning system that totally disregards nature and its rhythms, with neither the seasons nor the lunar phases playing any role whatsoever. Indeed Zerubavel considers it probably the most remarkable calendar ever invented, a unique manifestation of the workings of the rational human mind as well as of humans’ capability of living in accordance with entirely artificial rhythms which they themselves create.18

The Royal Myth of the wuku Cycle

Wukus appear in Old Javanese inscriptions from the early tenth century AD.19 The myth from which they derive is found in a number of slightly different versions. The following is a précis of one version recorded in Gresik in the early nineteenth century,20 a slightly different version can be found in Raffles History of Java.21 Watu Gunung was descended from gods and goddesses, and grew faster than human children. One day when he asked his mother, the divine Dewi Sinta, for rice, she hit him on the head with a rice spoon, after which he left home. After becoming a Maharajah he dreamt that he would be given two Widadari, heavenly nymphs or angels, as his wives. It transpired that there were indeed two Widadari, Dewi Dara and Dewi Dari, not far away. To obtain them as his wives Watu Gunung had to triumph over his rivals, including the ruler of Giling Wesi (“iron rod”), whom he killed, though not before the ruler had cursed him. He duly married the two Widadari. Watu Gunung then begot twin sons named Raden Wukir and Raden Kurantil, then twins named Talu and Gumbrêg; then Wariga Alit and Wariga Gung; then Julung Pujud and Pahang, then Kuru Wêlur and Marakèh, then Tambir and Medangkungan; then Maktaul and Wuye; then Manail and Prang Bakat, then Bala and Wugu, then Wayang and Kulawu; and finally one son named
Dukut, making a total of 27 sons; thus totalling, with Watu Gunung and his two wives, 30 persons.

Watu Gunung was enterprising and undertook to build an iron city; he was warned by a voice from heaven to offer the proper prayers to Batara Guru and to do asceticism, after which he built the iron city in less than seven years. He subsequently became more and more conceited and populated the city with 40 men resembling the gods and 40 maids like the Widadaris, claiming that it was like the palace of Batara Guru.

Now it happened that Dewi Dara discovered the scar on Watu Gunung’s head and realised that she had married her own son, for Dewi Dara and Dewi Dari were actually no other than Dewi Sinta and her sister Dewi Landēp. To extricate themselves from this shameful situation they encouraged Watu Gunung to ask the gods to give him Dewi Sēkandi as wife, at a time when Batara Guru and Batara Wisnu were themselves rivals for her hand. When Watu Gunung sent his son Prang Bakat to heaven with a letter, containing two riddles to be solved, Batara Wisnu solved them. A heavy battle followed, with many casualties on both sides, but the gods could not kill Watu Gunung because he was invulnerable. The gods only prevailed when they succeeded in contacting Dewi Dara and Dewi Dari and persuaded them to reveal Watu Gunung’s weak point. As a result of their betrayal Watu Gunung and all his sons were killed; but then Dewi Dara and Dewi Dari began to weep and wail, and since they were of heavenly birth this had the power to create a great noise and flood in heaven. Batara Guru sent the god Sang Yang Arsira Narada to ask what they wanted, and at their request Watu Gunung and all his family were taken to heaven with them: first Dewi Sinta and Dewi Landēp, then the 27 sons in order of age, and finally Watu Gunung.

Ricklefs notes a further refinement of the wuku system in which the 30 wukus are subdivided into five groups of six wukus each, within each of which there are six named seven-day weeks called ringkēl.22 Interestingly, the names of five of the six ringkēl ing wuku mean, in order: humans, animals, fish, birds, and leaves. This, taken in conjunction with the Watu Gunung story, suggests to Ricklefs that the wukus were originally part of a Javanese creation myth. However, the extant version does not follow the usual pattern of creation myths in depicting a primeval world, as the world depicted here is one that already has a mighty ruler who can build a city of iron.

Each wuku week is named after Watu Gunung, one of his wives, or one of his sons. The wukus are also presided over by a combination of the following signs: a god, a tree (invariably), a bird, a foot, often with water, a house, and a pennant (umbul-umbul) indicating (military) rank.23 These, in combination, establish the characteristics of this week and thereby predict the character and fortune of those born in it. As we shall see, the wuku calendar shows a strong preoccupation with gaining official position and the favour of the ruler, suggesting that it was originally designed for the court, rather than the population at large. Here are a few examples:

21. Maktal

God: Batara Sakri
Tree: nagasari
Bird: wood-hen (ayam alas)
House lying on a kēndhil
Pennant on the house
Interpretation:

brings the world’s goods.
beautiful and fragrant.
favourite of the great.
i.e. rests on riches.
rich.
a child born in this wuku is the ancestor of great office-holders, is a favourite of his lord, has abundance, is generally loved, is rich but inconstant. This wuku is harmful for wild animals and is very hot and windless.

23. Manail

God: Tritra gatra
Tree: tēgaran
Bird: sasēpahan
Water behind [in a pot]
Interpretation:

upright.
useless, without a function [i.e. is not granted a position at court].
careful and strong.
his stratagem is concealed.
a child born in this wuku is upright and has no [official] employment;
his stratagem is discovered later on; he takes offence at everything, and thinks over everything; he is treacherous. This wuku is bad for crops.
gained status in Christianity in their roles as Defenders of the Faith, and
an alliance between church and court was formed. The enemies of both
saw the calendar as a powerful instrument of their domination, which
was the motivation for the French Revolutionary rejection of Pope Gregory’s
calendar. In 1792 the revolutionary Committee of Public Instruction
formed a subcommittee which published the results of its deliberations
in September 1793. This was followed by a decree in October bringing in
the new calendar, whose inaugural date was not the birth of Christ but 22nd
September 1792, the beginning of the French Republic, also claimed to
be the beginning of equality for all Frenchmen. The calendar consisted of
12 months, each with 30 days. On top of this there were also five
jours complémentaires (originally called in revolutionary spirit sansculottides)
and leap years had an extra jour complémentaire. The poets among
the committee chose the names of the new months to reflect their typical
weather or crops, thus giving them a secular, non-religious nature, and anti-
Jacobin British wits made fun of this by christening the months, Wheezy,
Snazzy, Freezy, Slippy, Drippy, Nippy, Showery, Flowerly, Bowery, Wheaty,
Heaty and Sweety. Perhaps the most continuingly famous date from this
calendar is the one immortalized by Karl Marx in his 1852 pamphlet, The
Eighteenth Brumaire of Louis Napoleon. The 18th Brumaire Anno VIII
(CE 9 November 1799) is considered the end of the Revolution. Each
month was divided up into three equal decades of ten days each, and
the day was divided up into ten decimal hours. Each hour contained 100
minutes and each minute 100 seconds. Each day in the three decades had
its own name, and the tenth day, Decadi, was a day of rest when shops
and businesses had to close. It actually became a criminal offence for a
shop to close on the old Sunday, testifying to the strong intention to break
the power inherent in the Sabbath.

The five jours complémentaires, also public holidays, were named
Fête du Vertu, Fête du Génie, Fête du Travail, Fête de l’Opinion and
Fête de Récompenses, while the extra leap year day was titled the Fête du
Révolution, a public holiday when great games were to be held. Instead of
saints’ days, each day was presided over by an animal (for days ending in
5), a tool (days ending in 0) or a plant or mineral (all other days). This
elaborate and radically revolutionary calendar had some problems: fewer
days off (one in ten as opposed to one in seven under the old calendar)
and serious problems with the calculation of leap years. It lasted until
1805 when the Emperor Napoleon reached an agreement with the Pope
and in so doing restored both Catholicism and the Gregorian calendar
to France and its empire. The Jacobin calendar did however make brief
reappearances during the Revolution of 1848 and during the brief Paris
Commune of 1871.26

In more conservative countries using the Christian calendar, the
 calendrical alliance of god and king suffered no such radical challenge.
The present author as a schoolgirl swore daily allegiance to both, and
observed two minutes’ silence at the Anzac Day ceremony — a key period
of significant time involving a ritual based on a myth of special importance
to Australian national or rather colonial identity.

Watu Gunung though a king is not like the Christian kings whose
status is based on their role as defenders of the faith: he is rather the
analogue of Jesus, and indeed his myth has some parallels with the
Christian one, in that he too was betrayed and killed but subsequently
taken into heaven. He is however a very different figure from the celibate
Nazarene preacher, as he is not a figure of moral perfection and brings no
religious revelation. We can say that the Javanese calendar has no ordinary
or neutral time: all time is significant. It is however potent rather than
exemplary time, as the destiny of every person is determined by the wuku
in which s/he was born. It seems fair to say that the Christian calendar
originates with the church, whereas the Javanese calendar is essentially a
court calendar, as is attested by the dominance of royalty in its myths, in
its preoccupation with whether someone born in a particular wuku will gain
employment at court, and in the extreme complexity of the calculations it
requires, far beyond the population at large.

Weiss suggests that Javanese musical tradition allows a layering of
new performance possibilities onto older traditions without the obliteration
or obsolescence of the latter, a “method of change that may well have been
going on in Java for centuries”.27 A similar phenomenon can be observed
in the calendar, with older material not replaced by newer additions, such
as the Islamic elements. However, what is involved here is not mere
layering or even synthesis but an extraordinarily complex, difficult and
precise articulation of elements which, again like the trains of old European
clocks, need a lot of thought and application before they can be got to
work together.

Gender and Power in the Calendar

It would seem that, given the king’s central role in the greatest of all
annual festivals, Garêbêg Mulud, and the weekly reminder of the royal
family who preside over the wuku cycle, the Javanese must have been comprehensively overawed by their kings. And yet, are these myths really the stories one would choose to demonstrate that kings can do great and terrible things? One is the story of a royal ancestor who, against his wife’s explicit instructions, took the lid off the rice pot and in so doing destroyed her benign magic: the exact reverse of the Pandora’s box story, where it is a woman who takes the lid off and releases evil things, and also very different to the story of Eve’s temptation of Adam. His wife returns to her heavenly home before she does so sorts out the situation on earth. The other is the story of a king who, because he has built an iron palace and rules on earth, mistakenly thinks he can attack heaven and bend the gods to his will. Again, it is his wives who take him to heaven (after first having conspired with the gods to kill him). Would a king like Henry VIII, who ruthlessly used every means ideological and physical to impose his will and break his enemies, have been much impressed by a courtier who produced such stories as these as justification for royal omnipotence and omniscience? It seems hardly likely, for these Javanese myths reveal kings as not terribly clever, inclined to overestimate their power, and needing to be rescued by wives who have power from heaven. And so, at the heart of a first sight hostile calendar dominated by imported religions and local kings, there lies a recognition of indigenous female divinity and power. And unlike, say, Hinduism, there are no indigenous male gods.

The Javanese calendar is royalist and court-centric but not king-centric. It is king-and-queen centric, with the female partner if anything more powerful. Mythological kings and queens take the place occupied by Jesus in the Christian calendar, and provide a powerful counterpoint to canonical Islamic festivals.

This pairing of male and female is mirrored at a lower social level, that of the village. It is believed that rice must be planted by women or it will not prosper, and this female role is celebrated at the village equivalent of the royal harvest festival of the Garêbêg, the slaméta métîk. This celebrates the marriage of Dewi Sri, the rice goddess, and her husband Jaka Sudana (“jaka” means “young man”). This ritual identifies every wife with Dewi Sri and every husband with Jaka Sudana, and according to Jay it seems to say something about the nature of the marriage bond that satisfies the participants profoundly.28

Notes

4. Ricklef, The Seen and Unseen Worlds, p. 33. Ricklef has written AD 1798, but this is obviously a scribal error.
9. Ibid., p. 139 n. 36.
12. Ibid., p. 59.
15. Pak Sujana, personal communication
20. See Kumar, Java and Modern Europe 1997, ch. 3.
23. The *wuku* system can be found in a more elaborated form in Javanese almanacs: for instance with information about a monster called Jabung Kala who watches over the *wuku* and rotates in a circle synchronically with the *wuku* weeks, changing position every seven days, and whose position is important for human undertakings.