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SOME CONSIDERATIONS OF THE PROBLEM OF THE SHIFT OF MATARĀM'S CENTER OF GOVERNMENT FROM CENTRAL TO EAST JAVA IN THE 10TH CENTURY A.D.

By : Boechari

1. A remarkable fact in the ancient history of Indonesia is the shift of the center of government of the kingdom of Matarām from Central to East Java in the first quarter of the 10th century A.D. This fact was preceded by a gradual shift of the attention of the Central Javanese rulers to East Java. Rakai Watukura Dyah Balituŋ was the first of Matarām kings who left us inscriptions in East Java, viz. the inscription on the back of a Ganeśa image from Ketanen dated 826 Śaka,[1] and the inscription of Kinəwu dated 829 Śaka, also on the back of a Ganeśa image[2]. King Dakṣa also issued an inscription in East Java, the inscription of Sugih Manek dated 837 Śaka (O.J.O., XXX), whereas king Rake Layaŋ Dyah Tuloḍoŋ added his edict to the earlier inscription of Hariñjiŋ A dated 726 Śaka (Stein Callenfels, 1934). Of the three known inscriptions dating from the reign of Rakai Sumba (or Paŋkaja) Dyah Wawa, two were found in East Java, viz. the stone inscription of Kinawə dated 849 Śaka (O.J.O., XXXII) and the stone inscription of Saŋguran dated 850 Śaka (O.J.O., XXXI).

Dr. N.J. Krom was of the opinion that it was king Pu Siṇḍok who definitively shifted the center of government to East Java (Krom, 1931, p. 206). He based his opinion on Poerbatjaraka's remark that in Siṇḍok's inscriptions we read in the imprecation formula "**kita prasiddha maṅrakṣa kaḍatwan rahyaŋ ta i mḍaŋ i bhūmi matarām i watugaluḥ**"[3] whereas in Dakṣa's and Wawa's inscriptions this part reads "**kita prasiddha maṅrakṣa kaḍatwan śrī mahārāja i mḍaŋ i bhūmi matarām**"[4]. From these quotations it can be concluded that Pu Siṇḍok did not reside at the palace of Məḍaŋ any more, because it is referred to in his inscriptions as the palace of his deified predecessors (**rahyaŋ ta**). Pu Siṇḍok's palace must thus be situated elsewhere, viz. in East Java.

As to the reasons of the shift, Krom, after scrutinizing several possibilities, e.g. a rebellion of an East Javanese vassal, the will of the gods through a volcanic explosion or an epidemic, and political considerations, i.e. the threat from the descendants of the Śailendras reigning in Śrīvijaya, said: "in our opinion we may not go further than formulating that around 928 A.D. the kingdom had to abandon its Central Javanese part for pressing but unknown reasons. We do not know what had happened, and to an ever lesser extent why it had happened" (Krom, 1931, pp. 206-209).

More than twenty five years after Krom had formulated his opinion two other scholars contributed their opinions on this problem, namely Dr. B. Schrieke (Schrieke, 1941; 1957 b) and Dr. J.G. de Casparis (Casparis, 1958 a). We will deal at length with their articles, and we will try to give our own conception, fully realizing that we will not be able to find definite evidence for the causes of the shift of the center of Matarām's government from Central to East Java.

2. The possibility of political considerations was put up again by Dr. J.G. de Casparis. According to this scholar as a consequence of the flourishing of Arab trade in the 9th century A.D. spices and sandalwood from Eastern Indonesia were much in demand. East Javanese merchants went to Eastern Indonesia, exchanging Javanese rice and other products with spices and sandalwood. They took it to Śrīvijaya, where they met foreign

merchants, and they exchanged their wares with foreign goods, such as gold, silk and porcelain from China, robes from India, incense from Arabic countries, etc. This kind of trade made East Java prosperous.

Śrīvijaya was filled with envy at East Java's good fortune. Their rulers were afraid that East Java would gradually monopolize this international trade by persuading foreign merchants to trade directly with East Java, bypassing Śrīvijaya. They became aware of the necessity to crush East Java before it was too late. This opened a new phase in the history of the relations between Śrīvijaya and Java, starting around 925 A.D., which lasted about a century.

In the first phase the initiative was in Śrīvijaya's hands. In 928/929 or one or two years later an army from Malayu, a vassal state of Śrīvijaya, landed in East Java. They advanced till near Nganjuk, but were defeated by Pu Siṇḍok. This historical fact was attested by the inscription of Añjukladaŋ dated 859 Śaka or 937 A.D. (O.J.O., XL VI).

According to de Casparis this fact clarifies two things. The first is the position of Pu Siṇḍok. He was known to hold the function of **rakryān mapatih i halu** during Tulodoŋ's reign, and of **rakryān mapatih i hino** during Wawa's reign. It was very unusual that a high minister succeeded to the throne, except for extraordinary reasons. In this case it was because he had saved the country from the attack from Śrīvijaya. As a parallel he quoted an episode in India's history, viz. Candragupta Maurya, who succeeded king Nanda after he defeated the Greeks.

The second thing is the shift of the center of government to East Java. De Casparis proposed that in the first phase, king Balituŋ, Dakṣa, Tulodoŋ and Wawa gave more and more attention to East Java because they were fully conscious of the importance of inter insular trade at that time. In the second phase, when the Javanese rulers realized the threat from Śrīvijaya they decided to defend only East Java, leaving the area west of the Brantas delta, including Central Java, to its own fate.

Dr. B. Schrieke connected the problem of why the center of government shifted to East Java with the question of the reasons for the prospering of East Java in the 10th century A.D. He ascribed the latter to the flourishing of Arab trade during the heyday of the Abbasid caliphate. But it was not the only factor; there must have been a deeper cause. Quoting Th. van Erp's description of the Borobudur temple and measuring it with the supposed density of the population of Central Java at that time, which he thought to be not more than one million people, and comparing the resulting picture with G. Groslier's calculations of the work and manpower involved in the building of Banteay Chmar in Cambodia (Groslier, 1936), he expressed the opinion that during the two centuries of the heyday of Central Java people bent under the excessive burden of soccage labour for the building of temples. The men were withdrawn from their work in the ricefields and from other productive activities. At last, weary of that burden, they fled to East Java. The final conclusion is, according to Schrieke, that Central Javanese royal culture was destroyed by its temples.

3. Before proceeding to discuss both theories we will first investigate the problem of when the shift to East Java took place. Afterwards we will deal with the social, economic and religious background of ancient Javanese society, i.e. the structure of the ancient Javanese kingdoms and their cosmogonic background, the relation between king and subject, the attitude towards the building of religious sanctuaries and the nature of the ancient Javanese economy.

We know that Balituŋ was the first of the Matarām kings who left us inscriptions in

East Java. On the evidence of the inscription of Kubukubu dated 827 Śaka we know that he had defeated Bantan. L.C. Damais is of the opinion that Bantan has to be identified with the island of Bali, on account of the occurrence of toponyms like Batwan, Burwan, Air Gaṅga and the term **kulapati** in that inscription. But this evidence may also point to East Java, since **kulapati** and Batwan also occur in some other East Javanese inscriptions 5). And since we do not have any indications of Javanese occupation in Bali at the beginning of the 10th century A.D., I think it better to assume that it was East Java which was conquered by Balituŋ. No evidence, however, was found to show the reasons why he sent an expedition against East Java 6). But it did not necessarily mean that it was Balituŋ who moved the center of government to East Java. The fact that most of his inscriptions were found in Central Java might indicate that he still resided in this area 7).

As is pointed out above Krom relies on Poerbatjaraka's opinion that we have to attach more weight on the word **rahyaŋ ta** in the invocation formula. I do not quite agree with him, because in my opinion the solution of the problem is not as simple as that. If we translate the above cited passage of the inscription of Sugihmanek and of Saŋguran, we have :"thou who perfectly (or successfully) protects the palace of his majesty the king at Məḍaŋ in the kingdom of Matarām", and for the passage in the inscriptions of Añjukladaŋ and of Paraḍah we have : "thou who perfectly (or successfully) protected the palace of the deified (kings) of Məḍaŋ in the kingdom of Matarām situated at Watugaluh".

One important thing has been left out of consideration by Krom, the site of the palace. We have other references pertaining to the site of the palace of Məḍaŋ, namely in the inscription of Śiwagərha dated 778 Śaka (Casparis, 1956) and in the inscription of Mantyāsih I dated 829 Śaka (Stutterheim, 1927). In the inscription of Śiwagərha we find the information that dyah Lokapāla (Rakai Kayuwaṅi) was consecrated king in 778 Śaka in the palace of Məḍaŋ at Mamratipura (**ginlar i mamratipurastha maḍaŋ kaḍatwan**). And in the inscription of Mantyāsih we find in the imprecation formula "**kadi laṇḍap nyān paka śapatha kamu rahyaŋ ta rumuhun ri mḍaŋ ri poḥ pitu. rakai matarām saŋ ratu sañjaya** .... ", i.e. "like the sharpness of the curse of thou, deified kings, who in the past resided in Mədaŋ at Poh Pitu, to wit Rakai Matarām Saŋ Ratu Sañjaya .....".

In our opinion the clue does not lie in the word **rahyaŋ ta,** but in the site of the palace. Poh Pitu is the site of the palace of Balituŋ's predecessors. Presumably it was the palace built by Sañjaya after the destruction of Sanna's capital by an enemy, alluded to in the inscription of Caŋgal dated 654 Śaka (Poerbatjaraka, 1958). Poh Pitu must consequently be located in Central Java, since we know that Balituŋ's predecessors did not issue inscriptions in East Java. Mamrati, the site of Rakai Kayuwaṅi's palace, must also be located in Central Java, since it is mentioned in several Central Javanese inscriptions, such as e.g. in the inscription of Haliwaŋbaŋ dated 799 Śaka (unpublished), in the inscription of Poh dated 827 Śaka (Stutterheim, 1940), in the inscription of Saŋsaŋ dated 829 Śaka (Naerssen, 1937), in the inscription of Lintakan dated 841 Śaka (K.O., I), and in the inscription of Walukan dated 849 Śaka (Goris, 1928, 8) but never in inscriptions found in East Java. Watugaluh is not attested in the already known Central Javanese inscriptions. Worthy of closer examination is the inscription of Hariñjiŋ A dated 726 Śaka (Stein Callenfels, 1934). If it can be shown that it is a misreading for Watugaluh, which is not impossible, then Watugaluh has to be located in East Java 9). We still have at present a village called Watugaluh near Jombang in the delta of the Brantas river.

But then it means that Pu Siṇḍok's predecessors already resided in East Java, and we

had meant, then it must have been Pu Siṇḍok who shifted the capital from Central to East Java. One might ask why should Pu Siṇḍok invoke the dieties who protected an abandoned palace instead of his own.

From epigraphic evidence it can be deduced that during the ancient period there was no centralized government. Haji Wura-wari who attacked Dharmmawaṇśa Teguh in 1016 cannot possibly know who was the king who shifted the capital from Central Java; it could be either Dakṣa, or Tuloḍoṇ or Wawa. Unless we need not take the invocation formula in Siṇḍok's inscriptions too literally, and have to interpret it as: "thou who perfectly (or successfully) protected the palace of the deified kings in the past (and the palace of his majesty the king) of Məḍaṇ in the kingdom of Matarām, situated at Watugaluh". That we frequently do not have to take phrases in inscriptions too literally is shown in note 8 above, because the phraseology in Old Javanese inscriptions tends to be made as concise as possible at the cost of clarity. And if that was actually what the scribe A.D. for one or other reasons, and killed him in battle, must have been one of his vassal kings residing in Central Java (Boechari, 1965)10). After Airlaṇga was crowned king in 1019 A.D. he had to cope with several local rulers, including Haji Wurawari, who would not recognize his uzerainty. His battles of unification were attested by **inter alia** the inscription of Baru dated 952 Śaka (O.J.O., LX) and the inscription of Pucañan dated 963 Śaka (O.J.O., LXII; Kern, 1917a; Poerbatjaraka, 1941). The inscriptions of Cane dated 943 Śaka (O.J.O., LVIII) and of Kakurugan dated 945 Śaka (K.O., V) also allude to battles. In the inscription of Tərəp dated 954 Śaka (Damais, 1955) we find the information that Airlaṇga was even ousted from his capital town of Wwatan Mās by an enemy, and had to flee to Pātakan.

The inscription of Maləṅa dated 974 Śaka (unpublished), issued by Śrī Mahārāja Mapañji Garasakan, mentioned war against Haji Liṅgajaya of Tañjuṇ (Boechari, 1968 a). Several inscriptions from the so-called Kaḍiri period, such as e.g. the inscription of Padələgan dated 1108 Śaka (O.J.O., LXVII), the inscription of Jariṇ dated 1103 Śaka (O.J.O., LXXI) and the inscription of Kəmulan dated 1116 Śaka (O.J.O., LXXIII) mention battles and the term **sāmya haji** (i.e. vassal king). During the Majapahit period members of the royal family were allotted appanage domains over which they ruled with the title of **bhaṭāra,** sometimes abbreviated into **bhra.**

We get thus the picture that the kingdom comprised a number of autonomous areas governed by local rulers with the title of **sāmya haji** or **haji, bhaṭāra or bhra.** We are of the opinion that the situation during the Central Javanese period was not different. We have a large number of persons with the title of **rakai** or **rakryān i,** abbreviated forms of **rakarayān i,** followed by a toponym. They are local rulers who might or might not be members of the royal family. The **mahārāja** himself had such a title. There were also 'clerical' functionaries with the title of **pamgat,** who apparently were allotted appanage domains, too. They may be termed as 'secular clergymen'.

The territories of the **rakai** and **pamgat** were denoted with the term **watak.** We have thus for instance "**si kbəl anak wanua i wuatan yai watak watuhumalaṇ**" in the inscription of Paṇgumulan dated 824 Śaka (Bosch, 1925b), which means "si Kəbəl, inhabitant of the village of Wuatan Yai, which is part of the territory of Watuhumalaṇ". The territory of Watuhumalaṇ is an appanage domain of Rakai Watuhumalaṇ. Another example in the same inscription is "**si parbwata anak wanua i limus watak** puluwatu", meaning "si Parbwata, inhabitant of the village of Limus, which is part of the territory of Puluwatu", a territory under the jurisdiction of Saṇ Pamgat Puluwatu Pu Kunir Saṇ Winita11).

The information in the Hsin T'ang shu about the kingdom of Ho-ling that "on different sides there are twenty eight small countries, and none of them are not acknowledging its supremacy" (Groeneveldt, 1880; 1960, p. 13) may confirm our opinion that the kingdom of Matarām comprised autonomous principalities. We think it rather improbable that we have to interpret it as referring to countries outside Central Java.

Moreover the above mentioned passage plus the information that there are thirty two high ministers reflect the cosmogonic background underlying the idea of Javanese kingship. The numbers twenty eight and thirty two are certainly symbolic numbers. Twenty eight is 4 x 7, which is an interpretation of the seven continents surrounding Jambudvīpa; we have thus seven countries on each of the four cardinal points of Ho-ling12). And the thirty abodes on the Mahāmeru, on the summit of which is found the heaven of Indra, king of the gods (Heine Geldern, 1943).

A passage in the inscription of Tuhañaru dated 1245 Śaka (O.J.O., LXXXIII) also illustrates the existence of the above mentioned conception. It said about the king and the kingdom that "**an tuhu tuhu wiṣṇwatāra inadhiṣṭhāna saŋ parama sujana pinratiṣṭa i rikaŋ rājya i majhapahit kāṅken prasāda. maka praṇāla rake tuhan mapatiḥ dyaḥ puruṣeśwara. maka punpunan akaŋ (read: ikaŋ) sayawadwīpamaṇḍala. makāṅśa ikaŋ nūṣa madhura tañjuŋpurādi**", i.e. "he was in reality an incarnation of Wiṣṇu, elected by the most prominent men, consecrated king in the palace of Majhapahit which was considered as a temple, having as pedestal the Rake Tuhan Mapatih Dyah Puruṣešwara having as **punpunan** lands the whole **maṇḍala** of the island of Java, having as **aṅśa** lands the islands of Madhura, Tañjuŋpura, etc."

From the above quoted passage it is clear that the palace of Majapahit was thought to be a **prasāda,** which, according to Stutterheim, is a replica of the Mahāmeru (Stutterheim, 1931). Consequently Yawadwīpamaṇḍala, the **punpunan** lands of the temple, is the representation of Jambudwīpa, whereas the other islands, the **aṅśa** lands, represent the seven continents surrounding Jambudwīpa. It is thus understandable why in several Old Javanese inscriptions the king is compared with the statue of Wiṣṇu or Śiwa which is usually to be found in the central chamber of the main temple, standing firmly on its pedestal (**praṇāla**), symbol of the **rakryān mapatiḥ,** e.g. in a **jayapātra** dating from the reign of Hayam Wuruk (O.J.O., LXXXV): "**rake mapatiḥ pu mada. sakalanītiwṛhaspatisaṅgrāmikā. prāṇarakṣaka śrī mahārāja praṇālāmratisubaddhaken paṅḍiri śrī mahārājāṅkən iśwarapratiwimba**".

Although we already have a replica of the Mahāmeru in the royal palace, we think that the kingdom as a whole is not yet complete without the state temple, the **pura penataran** in Balinese terminology. For the Central Javanese period it is very likely that the Caṇḍi Plaosan Lor and the Caṇḍi Prambanan, both built around 850 A.D. (Casparis, 1958 b)13), were the state temples. Their layout, viz. the main temple (s) in the central courtyard, surrounded by respectively three and four rows of smaller buildings, is supposed to reflect the structure of the kingdom (Krom, 1923; Casparis, 1958 b), and as such they were also reflections of the macrocosmos. We do not yet know which temples were the state temples before the accession of Sañjaya to the throne in 717 A.D. (Damais, 1951), when the kingdom was still centered in the Pekalongan area and North Kedu. For the East Javanese period, at least from the Kaḍiri period onwards, the Caṇḍi Penataran was most likely the state temple; the name explains itself.

Whether there was also an actual mountain which served as replica of the cosmic mountain cannot be said with certainty, because no such reference has been found in inscriptions up to now. But Mount Penanggungan in East Java with its very peculiar form, i.e. a nearly perfect conical peak surrounded by four minor tops at a lower level, and again by four more nearer the foot, which strongly recalls the form of Mount Meru, might be the sacred mountain for the East Javanese period (Stutterheim, 1926; 1937). Its sacred character is attested by the large number of archaeological remains found scattered along its slopes (Romondt, 1951).

In another article we have tried to show that ancient Javanese kings were no despots. They were expected to reign according to the ideals of kingship as is put down in **inter alia** the **aṣṭabrata.** They had to be just, generous and benevolent, rewarding the meritorious and punishing the evildoers. The people had the right to lodge their complaints with the king, and if they proved to be right the king was always ready to make decisions to the advantage of the people. On the other hand the people were expected to show their unswerving faithfulness and loyalty to the king. We can cite a large number of passages in inscriptions showing the ideal of how a good servant **(sewaka)** should be (Boechari, 1973).

The doctrine of **karmma** and **saṁsāra** apparently played an important role in Javanese religious belief. The hidden foot of Caṇḍi Borobudur is carved with reliefs depicting scenes from the Mahākarmmavibhaṅga (Krom, 1933). In Old Javanese inscriptions we find in the imprecation formula the threat that people who dared to violate the freehold would be burdened by their deeds **(kabwat karmmakna nya)** and that they would be reborn as long as sun and moon shone upon the earth **(kadi lawas saŋ hayaŋ candrāditya sumuluhiŋ aṇḍabhūwana maṅkana lawas nyāmukti saŋsāra)** (cf. Kern, 1917 b). He might be reborn not as a human being **(tan mānuṣajanma)**, or even as a deformed or imperfect human being **(yāpuan mānuṣajanma tiru nya tan paripūrṇna dádi nya)** (O.J.O., XXXIII).

The doctrine of **karmma** and **saṁsāra** presupposes the belief that the ultimate goal in life is to be freed from the endless chain of rebirth. One can attain this by accumulating merit **(puṇya)**, by living up to one's own **dharmma.** Taking part in the building of religious sanctuaries is one of the many ways to acquire merit. In this kind of work people of all castes, **brāhmaṇa, kṣatrya, waiśya** and **śūdra,** may take part; the **brāhmaṇas** by contributing their sacerdotal knowledge the **kṣatryas,** the rulers and court dignitaries, by contributing their power and their wealth, the merchants and other businessmen their riches, the artists and artisans their skill and the **śūdras** their labour.

Ancient Javanese economy was primarily based on agriculture. Next we have trade and home industry. In Old Javanese inscriptions we find mention of **sawaḥ, gagā, təgal** and kəbuan, i.e. wet ricefields, dry ricefields, dry unirrigated fields and gardens or plantations. Wet rice cultivation apparently played the most important role. There were functionaries charged with the regulation of water for irrigation, the **hulair** or **paŋhulu bañu.** There was also a **hulu wras,** a village functionary whose task is not clear, but certainly had to do with rice production. Rice was consequently one of the most important merchandise in domestic as well as inter insular trade.

We find a list of these commodities in the tax regulations in connection with the

foundation of a freehold, in which it is always stated that if the amount of the merchandise and the means of production for home industry did not exceed the prescribed maximum the traders and artisans were exempted from tax duties. To start with products of the soil, we have rice, sugar, coconut oil, cotton, **kasumba (Carthamus Tinctorius L.)**,14 **wuŋkuḍu (Morinda L.)**, areca nuts and betel leaves, onions and fruits. Salt was also an important merchandise ; apart from being produced along the coasts, salt was also obtained from salt-water wells (Groeneveldt, 1960, p. 13). Next we have trade in livestock, such as buffaloes, cows, sheep or goats, ducks and pigs15).

The traders carried their wares with bamboo poles on their shoulders or with buffalo carts to the markets in their own village or in neighboring villages, or with riverboats to more distant places, perhaps to the harbo rs on the mouth of the Bengawan Solo. The latter presupposes interinsular and international trade. We have in fact enough evidence pointing to the existence of such trade, such as mention of **puhāwaŋ** in inscriptions and Chinese chronicles (Damais, 1960), reliefs on the Borobudur temple depicting seagoing ships, mention in Old Javanese inscriptions of India cloth **(wḍihan buat kliŋ)** and the **wārgga kilalān**, comprising Chams, Khmers, Thais, Burmese, Ceylonese and Indians from several regions of India; these foreigners were certainly merchants who settled at several places in Java, and it seems that they might also have become tax farmers16).

A list of activities which might be termed as home industry is found among the **miśra**, like the making of jars or pots **(maŋdyun)**, of sugar **(maŋgula)**, quicklime or slaked lime **(maŋhapū)**, of umbrellas **(magawai payuŋ)**, of all kinds of wickerwork **(mañanamanam]**, of baskets made of woven palmleaves **(magawai kisi)**, etc 17). The taxes drawn from the **miśra** were divided into three parts; one part went to the sanctuary, one part to the holder of the **sīma**, and one part to the **mañilāla drawya haji**18). Sometimes the **miśra** was exempted from tax duties to the king, but what was usually paid in taxes had to be used for the upkeep of the religious building for which the area was made a freehold **(bhaṭāra ataḥ pramaṇā i sadṛwya haji nya)**.

The smiths, like gold smiths, iron smiths, copper smiths, and bronze smiths, the carpenters and the craftsmen who specialized in making kris hilts and kris scabbards **(paṇḍai mās, paṇḍai wsi, paṇḍai tāmra, paṇḍai ganśa, uṇḍahagi, amaraŋgi)**, were mentioned among the **masamwyawahāra**, i.e. traders. They were free from taxes as far as their business did not exceed the maximum allowed in the inscriptions, e.g. that a smith might not have more than three pairs of bellows.

The income of the state was derived from tithes and taxes. In Chinese chronicles it is said that the peasants had to pay 10% of the produce of their lands (Groeneveldt, 1960, p. 16) The inscription of Paləpañan dated 828 Śaka (Bosch, 1917), however, gives the impression that there was a kind of land tax based on the extent of the lands owned by the people. We do not have indications of the amount of taxes drawn from the merchants, craftsmen and artisans, except for the trade in rice. In the Sung annals it is said that "the functionaries superintending the trade take one **ch'ien** of gold from a quantity of paddy amounting to 2,2 **pikuls** (Groeneveldt, 1960, p. 16).

An additional income for the state was the fines for all kinds of delicts, referred to in inscriptions as **sukha duḥkha.** More elaborate information about these delicts and fines may be derived from the law-books (Jonker, 1885). Next we have the tribute paid by the

vassal kings, gifts from friendly kingdoms and war loots. About the latter we have evidence in i.a. the inscription of Pucaṅan dated 963 Śaka and of Sukāmərta dated 1218 Śaka (Poerbatjaraka, 1940). We quote here a passage from the Old-Javanese part of the inscription of Pucaṅan: (27) ..... **muwaḥ i rikaŋ śakakāla 957 wwaya ta samaŋkana ta sira (28) rāja ya ri tapa de śrī mahārāja. sirā mriḥ manusup amet deśa dūrgga. matiṅgal tanaya dāra tka riŋ rājadrawya rājawāhana prakāra** ..... i.e. again in the **śaka** year 957 there was a king of Tapa who was (overcome) by His Majesty the King. He had to flee to impassable areas, leaving his children, his wives, even his royal treasures and royal chariots ..... It goes without saying that the wives and the children of the conquered king were taken captive and his treasures and chariots looted. The next quotation is from the inscription of Sukāmərta, VI b.4: ..... **kawus ṅəsṅəs** (5) **sən tekaŋ śatru tanpa sara. ekalomnānipāta. tan rumurwakən wulu salambā gati nya kewala pa** (6) **rawaśa. hantu wadwa nya. katawan ratu nya. hinir ānak rabi nya. inalap rājadṛwya nya.** ..... i.e. frightened and terrified was the enemy, powerless; not even a single hair dropped (from the king's body), he was simply crushed, his soldiers killed in battle, he himself captured, his children and wives taken captive and his royal treasures looted.

The Chinese chronicles give us a glimpse of the wealth of the island of Java. The Hsin T'ang shu gives the information that "the land produces tortoise shell, gold and silver, rhinoceros horns and ivory; the country is very rich ....." (Groeneveldt, 1960, p. 13). The Sung annals give a more detailed description (ibid., p. 16). Although the Sung period coincides with the East Javanese period, we think that the situation in Central Java during its heyday was not much different. It is to be noted, however, that the description of the location of the capital in the Sung annals gives the impression that it still refers to the Central Javanese period. It is said that the distance from the capital to the sea in the east is one month, whereas to the west it is forty five days. To the north the distance to the sea is five days, whereas to the south it is three days. And it seems that there were harbor in the east, in the north and in the south. Such information could not possibly refer to the Brantas delta, in which the capital of the East Javanese kingdom was situated. It fits more to the Kədu and Mataram plains.

The inscriptions also reflect the wealth of the population. When a piece of land or a village or a number of villages was made a freehold, the grantee had to offer **pasək pasək** to the king, the high court dignitaries and their subordinates, the village elders from the neighboring villages, and to all other people who were involved in the ceremonies on the occasion of the foundation of a freehold. He also had to pay for the offerings and the festivities. Stutterheim has calculated that in the inscription of Poh dated 827 Śaka the **pasək pasək** to be offered by the village elders of Poh, Rumasan and Nyū amounted to 187 pieces of **kain,** 2,023 kg. of gold, 4 buffaloes, 11 sheep, rice and cooked rice with side dishes. Not to mention the amount of food and drink consumed during the festivities. To give an idea of the extravagance of these festivities we will cite an example from the inscription of Taji (O.J.O., XXIII), viz. 57 bales of rice, 6 buffaloes, 100 chickens, and all kinds of salted fish and meat, and intoxicating drinks[19].

4. We will now give some comments on the theories of J.G. de Casparis and B. Schrieke. Both scholars agree that one of the reasons for the move from Central Java was the prospering of East Java because of the flourishing trade during the heyday of the Abbasid

caliphate. But did Central Java not share the profit ? Were there no merchants and no harbours in Central Java ? As we have shown above, there must have been merchants engaged in interinsular and international trade. There were even foreign merchants settling in Central Java. We think it, therefore, not too far fetched to assume that there were harbours, too. Pemalang, Kendal and Jepara were presumably the harbours in the past, which still played an important role during the Moslim Mataram period (Schrieke, 1957 a, pp. 105-108). And even after the center of government was shifted to East Java there was still a flourishing international trade in Central Java, as witnessed by the abundance of Sung ceramics found in Central Java, from the north coast regions (Orsoy de Flines, 1949) to the Ratu Baka hills in the south.

It is true that there are no big rivers running from the interior to the north coast. The Kali Serang and the Kali Tuntang are perhaps too small to be navigable for big river boats. Moreover those rivers do not reach down to the fertile plains of Kedu and Mataram. But we think that it did not form a disadvantage for the trade from the interior to the coastal areas, because we still have the road system. In the inscription of Mantyāsih is mentioned a big road (**hawān**) which had to be protected by the **patiḥs** of Mantyāsih. In our opinion this was the road connecting the Kedu plains with the north coast via Parakan. A branch of this road runs via Wonosobo to the Dieng mountains and thence to the north west to Pekalongan. We think that the road system known to the Dutch in the 17th century was the traditional one dating back to the 9th century A.D., or even earlier.

As for the theory that the struggle between Śrīvijaya and Java was another cause of the move to East Java we think that de Casparis failed to give more convincing arguments. If it was true that around 928 A.D. an army from Malayu had landed in East Java[20], why should Pu Siṇḍok decide to defend only this region ? Was it not rather proof that the Brantas delta could be more easily reached by an army from overseas ? We may remind the readers of the expedition of Kubhilai Khan which landed in East Java at the end of the 13th century A.D., resulting in the downfall of Kadiri. In our opinion the interior of Central Java was less vulnerable from attacks from outside Java than the Brantas delta. Seen in this light it is more likely that the rulers of Matarām would rather stay in Central Java when facing the attack from Śrīvijaya.

Moreover de Casparis' theory lost another argument, now that it is shown that Haji Wurawari who attacked Dharmmawaṇśa Təguh, judging from the whole context of the inscription of Pucaṅan, was his own vassal king from Central Java (Schrieke, 1957 a, p. 215; Boechari, 1965, p. 71). There remains one more piece of evidence pointing to the enmity between Matarām and Śrīvijaya, viz. the Chinese chronicles, which mention an attack from She-p'o against San-fo-ch'i around 992 A.D. (Groeneveldt, 1960, p. 18, 65). But it does not necessarily mean that this was an action in a series of attacks and counterattacks between the two countries. L.C. Damais saw in the inscription of Hujuṇ Laṅit dated 997 A.D., found near Liwa in South Sumatra, a vestige of this expedition (Damais, 1957; 1962). But since the stone inscription is too weathered to allow a satisfactory reading, and since in our opinion its site is too far to the south, we would rather be more careful in dealing with it, and not too rash in drawing any conclusions.

Now we come to Schrieke's theory that Javanese royal culture was destroyed by its temples. We have in fact a large number of ruins of temples, large and small, in Central

Java, the exact number of which is still unknown. They are found in the residencies of Pekalongan, Kedu, Semarang, Surakarta and the Sulatanate of Yogyakarta; the residencies of Banyumas and Pati only yield an insignificant number of archaeological remains. If we adopt the opinion that She-p'o and Ho-ling in Chinese chronicles always meant Java (Damais, 1964), then the history of Central Java covers a period of five centuries, from the 5th to the 10th century A.D. But up to now we do not have evidence of temples dating from before the 8th century.

That is why Schrieke spoke of only two centuries of building activities in Central Java (op. cit., p. 300).

It may be assumed that, like the situation in Bali, there were several kinds of temples in ancient Java. Epigraphic evidence shows us that there were at least three territorial units. The first was the kingdom as a whole, with the capital town and the palace of the **mahārāja,** the second were the regions governed by royal princes, state functionaries and local rulers, the **watak** regions, and the third were the villages or **wanua.** Each territorial unit must have had its own system of temples, to note temples for the worship of the deified ancestors, temples of the dead, to be compared with the **pura dalem** in Bali, and temples for the worship of the gods. There might have been other kinds of temples, such as temples for sacred places, and for special voluntary associations, to be compared with the **pura pəmaksan** (Goris, 1935; 1938).

In fact the inscriptions give us evidence of several kinds of sanctuaries, viz. **caitya, prāsāda, caṇḍi** or **pacaṇḍyan, siluŋluŋ, dharmma paṅasthūlān, parhyaṅan** and **kuṭi,** the exact meaning of which is still problematical. **Caitya, caṇḍi** or **pacaṇḍyan, siluŋluŋ** and **dharmma paṅasthūlān** seem to denote "burial" temples. The meaning of **prāsāda** is uncertain. The inscription of Sugihmanek (O.J.O., XXX) mentions a **prāsāda kabikuan,** in the inscription of Mañjuśrīgərha dated 714 Śaka the Caṇḍi Sewu is called a **prāsāda (prāsādeni kumaŋgap ya puṇya ṇḍa śrī nareśwara),** in the inscription of Kañcana (Buṅur) dated 782 Śaka, copied in 1295 Śaka, is mentioned a **saŋ hyaŋ prāsāda. sthāna nira saŋ hyaŋ arccha boddha pratiwimba** (Kern, 1917 c), but we also find a **prāsāda siluŋluŋ saŋ siddha dewata rakryān bawaŋ** in the inscription of Cuŋgraŋ dated 851 Śaka, which certainly means a "burial" temple (Stutterheim, 1925 a). **Parhyaṅan** may be interpreted as a sanctuary for the worship of the gods (**hyaŋ**). According to the Nāgarakṛtāgama **parhyaṅan** falls into the category of **dharmma 1pas,** i.e. free sanctuaries, or other than royal sanctuaries (**sudharmma haji**), which is under the supervision of a śiwaite **adhyakṣa.** And **kuṭi,** according to the Nāgarakṛtāgama, also falls into the category of **dharmma 1pas,** but under the supervision of a buddhist **adhyakṣa** (Nāg., 75, 2; cf. van Naerssen, 1937).

From the inscriptions can also be learned that some of the state functionaries had their own sanctuaries. In the inscription of Marsəmu (K.O., XIII) is mentioned a **dharmma rakryān i wka i pastika,** i.e. a sanctuary of the Rakryān i Wka, situated at Pastika. From other inscriptions, viz. the inscription of Pastika dated 803 Śaka (Brandes, 1888) and the inscription of Muṅgu Antan dated 808 Śaka (O.J.O., XVIII) it can be deduced that the sanctuary of Rakryān i Wka is a "burial" temple of a deified king, presumably his own father or grandfather. In the inscriptions of Humaṇḍiŋ dated 797 Śaka, of Juruṅan dated 798 Śaka, of Mamali dated 800 Śaka, and of Taragal dated 802

Śaka, all of them still unpublished, Rakryān i Sirikan pu Rakap founded freeholds on behalf of **his prāsāda** at Gunuŋ Hyaŋ (**sīmā ni prāsāda nira i gunuŋ hyaŋ**).

As we have said above (**v. supra**, p.) Caṇḍi Plaosan Lor and Caṇḍi Prambanan were most likely to be the state temples for the Central Javanese period, which functioned as the replica of Mount Meru, whereas Caṇḍi Borobudur was a temple for the worship of the deified founder of the Śailendra dynasty (Casparis, 1950, pp. 170-175). In our opinion it was only those three temples, temples for the worship of special deities like the Caṇḍi Mendut, Kalasan, Sewu, and perhaps also the Caṇḍi Sojiwan 21), and the "burial" temples of the kings and their closest relatives 22), which were built by order of the **mahārāja**, whereas the tens or perhaps hundreds of smaller temples were built by the local rulers, the state functionaries and the village communities 23).

From the short inscriptions engraved on a large number of the accessory temples of Caṇḍi Plaosan Lor it can be learned that this temple compound was built by the king in collaboration with his state functionaries and local rulers. Each of them contributed one or more buildings, sometimes several functionaries together contributed one building (Casparis, 1958 b). Caṇḍi Prambanan was built in the same manner, since we also find short inscriptions on several buildings and on parts of the main temple and the first surrounding wall. Unfortunately they were written with paint, red and white and black, so that most of them have been obliterated and are very difficult to read 24). Caṇḍi Sewu has yielded five short inscriptions; and an Old Malay inscription dated 714 Śaka gives evidence of a **nāyaka**, a state functionary, contributing to the enlargement of the temple (**mawṛddhi diŋ wajrāsana mañjuśrīgṛha nāmaña**).

We can visualize the local rulers and the state functionaries sending their artisans and their workers who belonged to the **śudra** caste, and slaves (**kawula**)25 to the central government to contribute to the building of the state temples. This is among other things what is termed **buat haji** in the inscriptions. With this picture in mind we ask whether it is justified to speak with Schrieke about the burdensome soccage labour forcing people to move to other territories. In our opinion people belonging to the **waiśya** caste who were engaged in agriculture, trade and home industry were left to do their daily work, because they were not actively needed in the building of temples. It required **brahmaṇas** to draw the layout and design of the temple, to determine the exact location of the sanctuary, the exact date to start with building, and to carry out the ceremonies, sculptors to carve the statues and the reliefs, and slaves and **śudras** for the dirty work of carrying the stones from the quarries to the building site and for the preparatory chipping and shaping of the stones.

Moreover it is to be noted that most of the work in the ricefields could be carried out by women. It was only the hoeing and the ploughing of the fields, and the regulation of the irrigation waters which were the men's business. The planting of the seedlings, the weeding, and later on the reaping of the harvest could be done by women. We even have evidence of a female **hulair** (**hulair anakbi**) in the inscription of Juruñan. We see thus that the men could easily leave the village without harming the rice production. If they were nevertheless needed in the building activities they left the village in times in which their presence was not necessary.

Perhaps we can compare the situation with that on the island of Bali during the

so-called **ngayah**, i.e. a coordinated cooperative work by the whole village in cases which concern the interest of the village community, for instance the restoration and building of **puras**, of assembly halls, etc. On such occasions the entire population of the village, old and young, men and women, contribute their share, but the work is arranged in such a way that the individual's interest is not harmed (Soekmono, 1965, p. 33). We are of the opinion that we also have that kind of institution in ancient Java, although perhaps in a somewhat different form, but with the same principle of not harming the individual's interest. Temples for the village community, which are usually of modest size, are most likely to have been built in this manner.

We still have the problem of manpower, indeed. According to Schrieke, the total population of Central Java in the 9th and 10th centuries could not exceed one million. We do not know on what basis he made his estimate. We are of the opinion that it is not as simple as that. We can not simply take as a starting point a known number in a certain period, say, the estimate of the population growth, because of the total lack of data about the fluctuations of Java's population in certain periods. To illustrate our difficulty we cite here the information that the population of Java increased by an average of 2.17% a year between 1930 and 1961, whereas between 1961 and 1971 the annual rate was 1.94% (Hafid, 1973, p. 53). J.M. van der Kroef believed that the period of most rapid growth was 1815-1890, during which years the population multiplied 5.2 times (cited from Hollingsworth, 1969, p. 76).

Herewith we actually enter the domain of historical demography. But since we are anything but an historical demographer we cannot give out own calculations. We can only mention some data which might help to give an idea of how to estimate the number of population in ancient times. We have in fact indications of the existence of a census. Several inscriptions, viz. the inscription of Kuṭi dated 762 Śaka (K.O., II), the inscription of Waharu dated 795 Śaka (O.J.O., IX), the inscription of Kaladi dated 831 Śaka (unpublished 26) and the inscription of Barsahan (Stutterheim, 1938, p.119-121) mention a **wilaŋ thāni** or **wilaŋ wanua**, i.e. a functionary with the duty of counting the number of villages. We think that it was in the first place the number of the inhabitants which was their concern. They were mentioned among the **maṅilāla drawya haji**, up to now interpreted as tax collectors 27), which is understandable, since the only frequent reason for counting people was for levying taxes (Hollingsworth, 1969, p. 42). However, not a single vestige of their activities, no records of the number of the population at a certain period, no vital registration data, no fiscal documents, etc. have been recovered up to now.

We can also make an estimate by counting the number of villages (**wanua**) mentioned in all extant Central Javanese inscriptions 28). The number of inhabitants of a village can be estimated by the number of village elders (**rāma**), by assuming that each **rāma** reflects a certain number of the inhabitants. We may sometimes be fortunate in finding information about the number of householders in a certain village like that in the inscription of Baru dated 952 Śaka (O.J.O., LX), in which the names of all householders (**karamān**), old and young, who received grants from the king, were mentioned. We come to a total of around 400 **karaman** of the village of Baru and its dependencies 29).

But we still have serious difficulties. In the first place we do not know, and will never know, what percentage of all issued inscriptions in the past have been recovered; nor have

all recovered inscriptions been published. As to the number of **rāma** of a **wanua**, we are not certain whether the lists always denote all functioning **rāma**, because we have evidence of such varying numbers; there are villages with 20 to 40 **rāma**, but there are also villages with less than 10 **rāma**. And if a village is mentioned among the 'adjacent villages' (**wanua i tpi siriŋ**) which send witnesses to the founding of a freehold, usually only one or two **rāma** of that village are mentioned.

As to the information in the inscription of Baru we do not know whether **karamān** means the total number of village elders or head of a family, or core villagers. In either case we will not be able to know the exact number of the resident population of the village of Baru, since we will never be in the position to know how many people did not receive grants from the king, or how big the average Javanese family was in the past, or what percentage of the total number of householders constituted the core villagers.

The Sung annals give the information that there were 30.000 soldiers (Groeneveldt, 1960, p. 17). We would be able to estimate the total population of Central Java, if we only knew that the Sung annals mentioned the whole army which the **mahārāja** of Ho-ling could raise in times of war, including the army of the local rulers, since it is to be assumed that the army constituted a certain per cent of the total population. But we are more inclined to the belief that 30.000 was only the number of soldiers of the central government, excluding that of the local rulers.

The number of archaeological remains may also be used for estimating the population of Central Java.

In this case we might apply Cook's method of assessing the population of the Teotihuacan civilization at its height (Cook, 1947). In Th. van Erp's architectural description of the Borobudur we find some figures regarding the amount of stones used for the building of the temple, the total length and extent of the reliefs, the number of statues and other ornaments, etc. (van Erp, 1931, p. 39). If we compared these figures with that for Bantay Chmar, and with G. Groslier's estimate of how many workers and sculptors and how many years were needed for building it (Groslier, 1936), then we would get some idea of the amount of work involved in the building of the Borobudur. In the same manner we could get an estimate or how many workers and sculptors and also how many years were needed for the building of Caṇḍi Sewu, of Caṇḍi Plaosan, of Caṇḍi Prambanan, Kalasan, Mendut, Sojiwan, etc. Adding the estimate for the numerous smaller temples, and by using Cook's method, we are of the opinion that the outcome would show that the total population of Central Java in the 8th and 9th century A.D. far exceeded Schrieke's assumption.

To summarize we can say that the portrait of the ideal king, the structure of the ancient Javanese kingdom, the relation between king and subject, the attitude towards the building of religious sanctuaries, and the nature of the ancient Javanese economy, including the estimate of the density of the population of Central Java, make the picture of a despotic ruler, forcing his subjects to build splendid edifices to his own glory, resulting in economic collapse, rather improbable.

Maybe the very humorous scenes among the reliefs of Caṇḍi Borobudur and Caṇḍi Prambanan, improvisations of the Javanese sculptors, strengthen our conclusion. We may point to the picture of a dog carrying away food in the scene depicting the rape of

Sītā, the picture of a frog, of playing monkeys and birds, etc. We cannot imagine that an oppressed spirit would be able to produce such a great sense of humor. We would rather visualize the sculptors singing and chatting when carving those reliefs.

Another drawback for Schrieke's theory is the fact that Caṇḍi Prambanan, believed to be the youngest temple in Central Java, was already inaugurated in 856 A.D. (Casparis, 1956, pp. 309-311), but apparently it remains unfinished. If de Casparis' theory on the date of Caṇḍi Prambanan is correct, then more than half a century before the shift to East Java no building activities had been endeavored by the kings of Matarām.

5. Now that we have shown that it is improbable to ascribe the shift of Matarām's capital from Central to East Java to strategic and economic considerations, or to the move of the population to East Java because of the excessive burden laid upon them for the building of temples, what then were the causes of the shift ?

In fact shifting of capitals was a common feature in Javanese history. We have shown that Matarām's capital had been shifted at least twice during the Central Javanese period, as was attested by the mention of Mamratipura and Poh Pitu as the site of the capital. We still have a number of villages called Mədang scattered between Purwodadi-Grobogan and Blora in North Central Java, but whether they might have been the site of Matarām's capital in ancient times cannot be made out. Archaeological excavations at those villages may reveal some evidence.

Airlaṅga's capital was also shifted twice during his reign. His first capital, built after he was consecrated king after the destruction of Təguh's capital, was apparently located at Wwatan Mās, mentioned in the inscription of Cane dated 943 Śaka (O.J.O., LVIII). In the inscription of Kamalagyan dated 959 Śaka (O.J.O., LXI) Kahuripan is mentioned as the location of the palace. It is to be supposed that the shift from Wwatan Mās to Kahuripan was due to the invasion by an enemy, attested by the inscription of Terəp dated 954 Śaka (Damais, 1955, p. 66). It seems that the palace was again shifted to Dahaṇa (pura), indicated by the occurrence of the word **dahaṇa** carved in big "square script" in the fashion of a seal on the inscription of Pamwātan dated 964 Śaka 30). No evidence of the reasons for this second shift has been found up to now.

It is to be supposed that Majapahit's capital had also been shifted several times. Wijaya, the first king of Majapahit, built his palace at Tarik in the Brantas delta, east of the present town of Mojokerto. No remnants of this first capital, however, have ever been found. But we have the remains of an extensive ancient town near the village of Trowulan, believed to be remnants of the capital town of Majapahit. We know from the Pararaton (Brandes, 1896; 1920) that the palace of Majapahit had been invaded by a rebel, Kuṭi, in 1319 A.D. From the same source we get the information that between the years 1401-1406 A.D. a war of succession broke out between Suhitā and Bhre Wīrabhūmi, and that in the first phase of the battle the western kingdom, i.e. Majapahit, was defeated. In the inscription of Pəṭak dated 1408 Śaka (O.J.O., XCI) we find evidence of another civil war, in which Śrī Girīndrawarddhana Dyah Raṇawijaya successfully attacked Majapahit.

The Babad Tanah Jawi or History of Java (Olthof, 1941) gives us evidence of the successive moves of Moslim Mataram's capital from one place to another in the course of its history. Ki Agəng Pəmanahan, founder of the dynasty, started a settlement at the

present Kuṭa Geḍe. His son, Panəmbahan Senapati, the first ruler of Mataram, made a walled town of it. Senapati's grandson, Sultan Agung, had a new palace built at Kartå, whereas Agung's son and successor moved to Plered. In 1677 A. D. this new palace was invaded by the rebel Trunåjåyå, forcing Amangkurat I to flee westward; he died at Təgalarum. After the suppression of the rebellion a new palace was built at Wånåkərtå which was to be renamed Kartåsurå. In 1724 A.D. Kartåsurå was invaded by Tjakraningrat IV of Madura, and after the restoration to the throne of the rightful Susuhunan, Pakubuwono II, a new palace was built at Suråkartå in 1744 A.D.

From the above quoted data it can be learned that the shift of a capital is mostly caused by the invasion of the palace by an enemy. This is conceivable, since in the Javanese belief such a palace is desecrated and has to be abandoned. The shift to Kartå by Sultan Agung, and from Kartå to Plered by Amangkurat I, however, was not explained. In our opinion it was the belief in cycles which was the cause of those shifts. Sultan Agung was the fourth generation of kings after Ki Agəng Pəmanahan, founder of the dynasty, whereas Amangkurat I was the fourth generation after Panəmbahan Senapati, the first ruler of Mataram. There is among the Javanese a belief that after three generations, or after a century, there will occur a catastrophe unless the next king moves to a new palace elsewhere 31).

This belief in cycles must have been known in ancient times. It is what Schrieke termed the **kaliyuga** concept in Javanese historiography (Schrieke, 1957a). The phrasing of the invasion of Sanna's capital by an enemy in the inscription of Caṅgal dated 654 Śaka, the wording of the destruction of Təguh's palace in the inscription of Pucaṅan dated 963 Śaka, and the description of the fall of Kərtanagara in the Nāgarakṛtāgama (cf. Poerbatjaraka, 1958) certainly point to this belief in cycles. After those catastrophes a new palace was built.

It can also be learned that the shift of the capital was mostly limited within the same area. We are of the opinion that we have to view this phenomenon against the cosmogonic background of ancient Indonesian kingship. To move to another area, viz. from Central to East Java, means the creation of a new **maṇḍala**, accompanied by the adoption of a new sacred mountain, and the building of a new state temple as replica of Mount Meru. Hence the shift from Central to East Java is only understandable if it was caused by a tremendous happening, which in the belief of the Javanese must be seen as an omen of the gods that the present order came to an end. This cannot be anything else but a cataclysmic explosion of a volcano or another form of natural catastrophe.

Dr. R.W. van Bemmelen, a geologist, thought he had found indications of a catastrophical eruption of Mount Merapi in the past. Its western part collapsed, and slid down with such a tremendous force that the Gendol hills were formed. This explosion was preceded by heavy earthquakes and accompanied by ash rains and lava flows so that a large area around Mount Mərapi, especially the area southwest of the volcano, was entirely destroyed and became a barren, ash-covered desert. Van Bemmelen connected this explosion with the so-called **pralaya**, the destruction of Təguh's kingdom in 1016 A.D., mentioned in the inscription of Pucaṅan (Bemmelen, 1949, p. 560-562).
This is certainly wrong, because the palace had already been shifted to the Brantas delta at that time, so that it could not possibly have been much affected by the explosion.

We need thus a more exact dating of the above mentioned catastrophe. If it can be shown that it occurred around the first quarter of the 10th century instead of the 11th century A.D., we will be certain that it was this very explosion which was the cause of the shift of Matarām's capital from Central to East Java around 929 A.D. We are thinking of the possibility of the capital town being destroyed by the earthquakes or by the lava flow, or by both.

In another article we have tried to show that before the shift ancient Matarām was troubled by incessant wars of succession after the reign of Rakai Kayuwaṅi Pu Lokapāla (Boechari, 1968 b). In the people's believe this provoke the wrath of the gods. And actually it came in the form of the heaviest explosion of Mount Mərapi in history. A large number of the population, including members of the royal family, fled away, trying to escape from the lava flow and the ash rains. The once fertile plains of Kəḍu and Matarām were abandoned because they became uninhabitable and unfit for agriculture for a long time 32). This might be termed an economic factor, indeed, but in our opinion the religious belief played a bigger role.

Notes :

1). This inscription is still unpublished. In this article we only mention the stone inscriptions, because they are less liable to being moved from Central to East Java. We have in fact other East Javanese inscriptions issued by Dyah Balituŋ, viz. the copper-plate inscription of Taji (O.J.O., XXIII), the copper-plate inscription of Kubu Kubu (unpublished), the copper-plate inscription of Kalaḍi (unpublished), and the copper-plate inscription of Tulaṅan (O.J.O., XXVIII). The stone inscription of Mantyāsih (O.J.O., XXVII), is supposed to originate from East Java, but since it commemorates the establishment as a freehold villages and wooded areas which are most likely to be situated in north Kəḍu, we doubt the correctness of the supposition (see Rouffaer, 1909, p. LXXX).

2). The last part of this inscription, written on a stone block, has been discovered in the village of Klampok, Jiwut, regency of Blitar, more than ten years ago.

3). We find this phrase in the inscription of Añjukladaŋ (O.J.O., XLVI) and in the inscription of Paraḍah (O.J.O., XLVIII).

4). We find this phrase in the inscription of Sugih Manek (O.J.O., XXX) and in the inscription of Saŋguran (O.J.O., XXXI).

5). Batwan is mentioned in an unpublished inscription from Gunung Gaprang, in the village of Leran Kulon, regency of Tuban. **Kulapati** is mentioned in the inscriptions of Hariñjiŋ, of Sugih Manek, of Piliŋ Piliŋ and of Saŋguran. Damais also mentions **burwan**, which he considers as a toponym (Damais, 1952, note 2 on p. 46). It sounds indeed like the name of a Balinese village. But in his latest posthumous work he corrected his mistake, and rightly observed that it is part of the term **katuhaburwan**, a derivative form of **tuhaburu**, i. e. hunter or gamekeeper (Damais, 1970).

6). It is to be noted that there are no indications of the existence of a kingdom in East Java except for the inscription of Dinàyà dated 682 Śaka which gives evidence of a kingdom called Kāñjuruhan in the region of the present Malang in the middle of the 8th century A.D. (Bosch, 1916; 1925 a; Casparis, 1941). Not a single evidence has been found to show whether it was his Kāñjuruhan which flourished until the

beginning of the 10th century and was defeated by Dyah Balituŋ.

7) From the 30 inscriptions dating from the reign of Dyah Balituŋ only 5 certainly originate from East Java. Of three other inscriptions the place of origin is uncertain (see Damais, 1970, p. 50-52, inscriptions no. 117 to 147). Very recently a new copper-plate inscription issued by Dyah Balituŋ was found in the village of Diwək, subdistrict of Bulu, regency of Temanggung. It is dated 829 Śaka, and commemorates the foundation of the village of Rukam as a freehold, because it has been wiped out by an explosion of a volcano (**saṅkā yan hilaŋ de niŋ guntur**).

8). The evidence in the inscription of Śiwagərha showing that Rakai Kayuwaṅi's palace was situated at Mamratipura contradicts the evidence in the inscription of Mantyāsih from which must be concluded that the palace of Balituŋ's predecessors, from the time of Sañjaya onwards, was situated at Poh Pitu. In our opinion the solution of this problem is not to take the latter too literally. The most likely explanation is that Poh Pitu was the location of the palace built by Sañjaya after he restored the king dom of his predecessor. The fact that afterwards the palace was probably shifted from one place to another was too complicated to phrase in the imprecation formula.

9). We do not yet have the time to verify the reading on the original stone which is now kept at the Jakarta Museum.

10). For the location of Wurawari in Central Java, see Schrieke (Schrieke 1957 a, p. 211 ff.).

11). In the inscription of Sugih Manek the village of Limus is mentioned as part of the region of Kanuruhan. We are of the opinion that we are here dealing with another Limus to be located in East Java, because Kanuruhan is found solely in East Javanese inscriptions, except for its occurrence among the short inscriptions of Caṇḍi Prambanan. The number of homonyms in Javanese toponyms is legion; we have a Koripan in East as well as in Central Java, a Bumi Jawa in Central Java as well as in Lampung (South Sumatra), etc. According to De Casparis **kanuruhan** is derived from Kāñjuruhan. When in all probability the kingdom of Kāñjuruhan was defeated by Matarām, the ruling family retained authority over the territory as **sāmya haji** with the title of **rakryān kanuruhan** (Casparis, 1941). The occurrence of **kanuruhan** among the short inscriptions of Caṇḍi Prambanan may lead us to the conclusion that Kāñjuruhan had already lost its independence during the reign of Rakai Pikatan (cf. note 6 above). But since the whole compound of Caṇḍi Prambanan remains unfinished, it is to be supposed that after the reign of Rakai Pikatan the successive kings kept on building on it until the centre of government was shifted to East Java. It is thus also possible that Rakryān Kanuruhán contributed his share to the compound some time **after** the reign of Rakai Pikatan. The oldest testimony of **rakryān kanuruhan** in an original document is in the stone inscription of Baliṅawan dated 813 Śaka (O.J.O., XIX-XX). The inscription of Kañcana dated 782 Śaka which also mentions a **rakryān kanuruhan** is a copy from the Majapahit period (1295 Śaka).

It is also interesting to note here that Saŋ Pamgat Puluwatu named Pu Kunis was an inhabitant of the village of Cukulan, under the jurisdiction of Tilimpik (**saŋ pamagat puluwatu pu kunir saŋ winīta anak wanua i cukulan watak tilimpik**). Presumably

Tilimpik is a region under the jurisdiction of a Samgat Tilimpik. It turns out that it was his wife who was inhabitant of Puluwatu (**saŋ puluwatu anakbi pu babi anak wanua i babahan i puluwatu**). It is most likely that Pu Kunir got his **pamagat**-ship over the territory of Puluwatu through his marriage with Pu Babi, who was very likely (the eldest) daughter of the former Pamagat Puluwatu.

12). On the identification of Ho-ling with Java, see the article of Damais on this subject (Damais, 1964).

13). Recently a big stone inscription, written in Sanskrit with **siddhamātṛka** script, was discovered in front of Caṇḍi Plaosan Lor. Regretfully it is badly weathered and found smashed to pieces; only the left half is recovered up to the present. A unique feature of this inscription is that a building was especially made to house the inscription. Excavations are still going on, and it is to be hoped that in the not distant future the whole inscription and its building can be reconstructed. The script is very much like that of the stone fragment numbered D. 82 in the Jakarta Museum, which is supposed to originate from Caṇḍi Plaosan, too (Bosch, 1928; Casparis, 1950, pp. 12-14; 1956, pp. 175-206). But whether they belong together cannot be made out at present. We are still looking for a date in these newly discovered fragments.

14). **Kasumba** produces red dye commonly used in the **batik** process.

15). The inscriptions invariably give **celeŋ**, which in the later Javanese language means wild boar. But we prefer the translation into pig, because we know that pigs were already domesticated since the neolithic stage (Heekeren, 1972, p. 204), although the possibility of trade in wild boars, for which people had to go hunting first, is not to be excluded.

16). We get this impression from the inscription of Wuruḍu Kidul dated 844 Śaka (Stutterheim, 1925 b), which is one of the few judgments of law (**jayapātra**) known to us. In this inscription a certain San Dhanādi, inhabitant of the village of Wuruḍu Kidul, was thought to be a **wka kilalān**, a **wka kmir** (of Khmer descent) by the **samgat** Maŋhuri pu Wukajana, and so he was ordered to collect taxes in the region of Maŋhuri (**kinon milalā ikākikəran i maŋhuri**). It is frequently stated in the inscriptions that the **kilalān** as well as the **maṅilāla drawya haji** were forbidden to enter a freehold.

17). The meaning of a greater number of these terms denoting the **miśra** is still uncertain or totally unknown. For instance we will get a wrong picture if we imagine **dyun** as an earthen water jar called **jun** in the later Javanese language, because **dyun** was apparently made of copper. In i.a. the inscription of Wukajana (Naerssen, 1937) we find among the offerings **tamwaga prakāra kawaḥ 1 dyun 1 dāŋ 1 buri 1 paṅliwəttan 1**, etc., i.e. all kinds of utensils made of copper, viz. one large frying pan (?), one **dyun**, one rice steamer, one **buri**, one rice cooker, etc. A puzzling item among the offerings in the same inscription is **skul dinyun**, perhaps to be translated into rice put in a **dyun** (?).

18). Up to now this term is usually interpreted as tax collectors. But the fact that among the **maṅilāla drawya haji** were mentioned functionaries who were called **watak i jro** or **watak i daləm**, i.e. belonging to a group inside (the palace compound) like,

singers, washermen, king's servants, etc., makes us inclined to the belief that not all of the **maṅilāla drawya haji** were tax collectors who went to the villages to collect taxes directly from the tax payers. Part of them were to be compared with the **abdi daləm kraton** in later Javanese courts, i.e. lower court functionaries who did not get appanage domains, so that for their sustenance they had to be paid from the state treasury (cf. Stutterheim, 1925 a).

19). Quoting these instances should we not speak of the extravagance of the people rather than of their wealth? In more recent times we frequently hear of people, usually influential people in a village, who give extravagant feasts on the occasion of e.g. the marriage of their daughters, although to be able to finance the feasts they go into debts to Chinese or Arab usurers. Presumably the **kilalān** were also the usurers in ancient times. In this connection it is to be noted that we also have evidence of people giving their piece of land in lease to another, even as **sīma.** Evidence of the latter is found in e.g. the inscription of Tija (Stutterheim, 1925 b) in which it is said that the grantee had the right to give in lease or even sell a **sīma kawajwan,** i.e. a **sīma** on behalf of an **awaju,** whatever this last term means. We are not certain whether **saŋ awaju** is an abrreviated form of **saŋ awaju haji,** a synonym of which is **saŋ akalambi haji,** a functionary who is mentioned in some inscriptions as the one who pronounce the curse. In Old Javanese law-books are incorporated clauses on lend-lease matters.

20). We did not have the time to read the inscription of Añjukladaŋ ourselves. There are indeed lacunae in the transcription of Brandes, but as far as we can make out of the published text there is no evidence of an attack from Malayu. We hope that Dr. de Casparis will soon publish his new and more complete transcription of this important inscription.

21). A few months ago a gold plate and a silver plate inscribed with a **dhāraṇī** were found in the court-yard of Caṇḍi Sojiwan. They contain the same text as the **dhāraṇī** from Caṇḍi Plaosan Lor (Casparis, 1956, pp. 170-172). The script is Old Javanese, and very neatly written. Palaeographically it can be dated in the first half of the 9th century.

22). The existence of 'burial' temples can be deduced from inscriptional evidence. We find e.g. **haji dewata lumāḥ iŋ śataśrəŋga** in the inscription of Təlaŋ (Stutterheim, 1934), **saŋ lumāḥ i layaŋ** in the inscription of Panuŋgalan (K.O., IX), **kryan ladheyan saŋ lumāḥ riŋ alas** in the inscription of Wulakan (Goris, 1928), **rakarayān mapatiḥ saŋ lumāḥ iŋ bulai** in the inscription of Bulai (Casparis, 1956, p. 335), **caitya saŋ dewata lumāḥ i pastika** in the inscription of Poh (Stutterheim, 1940), **śrī mahārāja saŋ lumāḥ iŋ pastika** in the inscription of Wintaŋ Mas (K.O.,X), **saŋ dewata lumāḥ i kwak** and **saŋ dewata iŋ pacaṇḍyan i kwak** in the inscription of Laṇḍa (O.J.O., CVI).

23). If it is true that Caṇḍi Gunuŋ Wukir is the temple referred to in the inscription of Caṅgal dated 654 Śaka (Kern, 1917 d; Chhabra, 1935; Vogel, 1941), it might have a special function, namely as the royal palladium built by Sañjaya after the defeat of Sanna by an enemy (cf. Bosch, 1924).

24). De Casparis had collected around 50 inscriptions. They are very short, giving only the titles, such as e.g. **pikatan, gurunwani, hino, sirikan, kanuruhan, maḍaṇḍar, lablab,**

etc. (Casparis, 1956, p. 310/311 note 112).

25). There were indeed slaves in ancient Javanese society (**hulun, dāsa, dāsī, kawula**). The law-books include clauses about the social status of slaves, and about the reasons why a person can be enslaved (Jonker, 1885).

26). It is to be noted that all those inscriptions are late copies. The inscription of Kañcana is certainly a copy dating from the Majapahit period (1295 Śaka). The question arises as to whether the **wilaŋ thāni** existed in Ancient Matarām, because this functionary is never mentioned in original Central Javanese inscriptions.

27). See note 18 above.

28). Unfortunately in Damais' Répertoire Onomastique (Damais, 1970) no separate list of **wanua** has been included. The quotations under **wanua** and **anak wanua** do not give the total number of villages in the extant Central Javanese inscriptions, because a greater number of villages are mentioned in the inscriptions without the preceding **wanua i** or **anak wanua i.**

29). There are four 'dependencies' of the village of Baru, i.e. the **duwān** of Punaśapadma (?), the **duwān** of Gunuŋ Ḍarāt, the **duwān** of Ḍəpur and the **duwān** of Pəkan. This reminds us of the so-called **pañatur deśa,** the later **mácápat** organization, i.e. a territorial unit comprising five villages, a 'mother' village in the center and four 'daughter' villages on its four cardinal points. But it appears that such a cluster does not always comprise five villages. In the inscription of Kañcana is mentioned the **pañatur deśa** of the freehold of Kañcana, but in fact there were mentioned village situated on the eight points of the compass, bordering Kañcana. Other inscriptions mention five, seven, ten, or even twelve dependencies of a village. In present day Bali we still have this cluster of villages ; the 'mother' village is headed by a **pərbəkəl,** whereas the 'daughter' village by a **bəndesa** (Soekmono, 1965).

30). This inscription is still unpublished. The word **dahaṇa** is omitted in the existing paper prints at the Archaeological Institute. This is perhaps the reason why preceding authors did not mention it.

31). Worthy to be noted in connection with this belief in cycles is the fact that if we assume that Ḍapūnta Selendra, founder of the Śailendra dynasty, appeared on the historical scene around the first quarter of the 7th century A.D. (Boechari, 1966), then the shift from Central to East Java occured three centuries afterwards. Pu Siṇḍok who, judging from his position in the administrative hierarchy, was still member of the Śailendra dynasty (Boechari, 1968 b), called himself Iśāna, so that scholars often speak of a new dynasty, the Iśānawaŋśa. And three centuries later another dynasty emerged, viz. the Rājasawaŋśa, starting in 1222 A.D. with a new kingdom, Siŋhasāri. This new dynasty lasted three centuries, because it may be assumed that the kingdom of Majapahit disintegrated around the first quarter of the 16th century A.D. And the turn of each century witnessed radical changes. The first quarter of the 8th century witnessed the destruction of Sanna's capital by the invasion of an enemy, the first quarter of the 10th century the shift to East Java, the first quarter of the 11th century the destruction of Təguh's capital by the invasion of an enemy, the first quarter of the 13th century the downfall of the kingdom of Kaḍiri, the next century witnessed the invasion of Majapahit's capital by the rebel

Kuṭi, a century later we have the Paraəgrəg, the war of succession which marked the beginning of the disintegration of the kingdom of Majapahit. The latter which occurred around the first quarter of the 16th century was the end of a chain of recurring facts which took place within the period of nine centuries, i.e. three times three centuries. We do not know yet what events at the first quarter of the 9th and 12th century might be mentioned as parallel cases in this connection. Dr. M.C. Ricklefs also mentioned such recurring events after the 16th century in a seminar held at Leyden in 1972. The question then arises whether the above mentioned dates and events were fabricated by the ancient historians with the cycle-concept in mind, or whether the belief in cycles was based on real historical facts. We hope to be able in the future to return to this subject more in detail in connection with the problem of the nature of Javanese historiography.

32). For comparison we may mention the explosion of Gunung Agung on the island of Bali in 1963. A number of villages had to be abandoned, and its inhabitants had to be evacuated even to other islands.

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Revisions, Jakarta, May 1976.

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□

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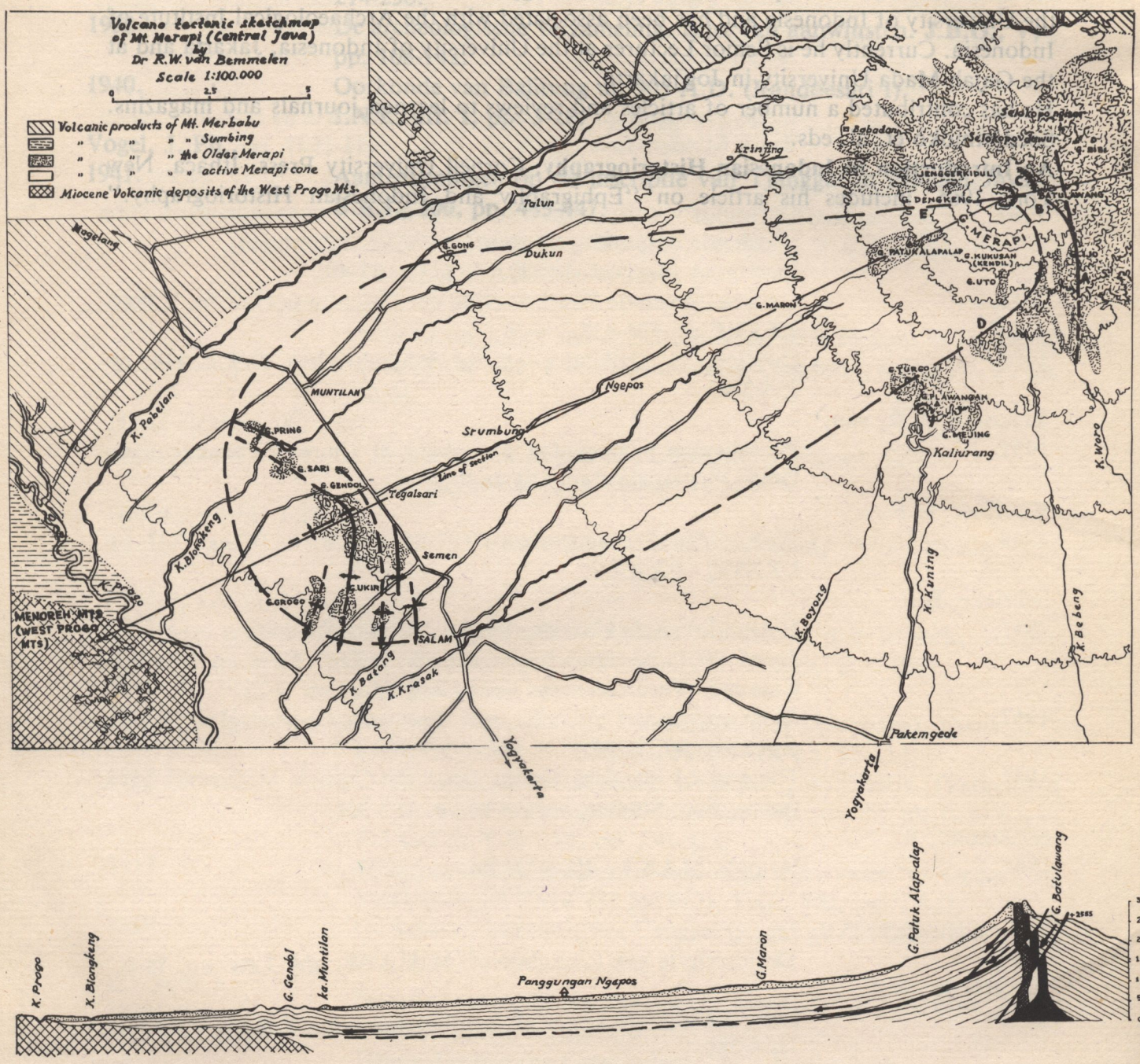
An Introduction to Indonesian Historiography, Cornell University Press. Ithaca. New York 1965, includes his article on "Ephigraphy and Indonesian Historiography."


Volcano tectonic sketchmap of Mt. Merapi (Central Java)
by
Dr. R.W. van Bemmelen
Scale 1:100.000
0 2.5 5
Volcanic products of Mt. Merbabu
" " " " Sumbing
" " " " the Older Merapi
" " " " active Merapi cone
Miocene Volcanic deposits of the West Progo Mts.
Magelang
Kringing
Talun
Dukun
G. GONG
G. Babadan
Selokopo Ulor
Selokopo Dawur
G. MISE
JENGGERKIDUL
G. DENGKENG
BATULAWANG
G. MERAPI
G. PATUK ALAPALAP
G. KUKUSAN (KENDIL)
G. UTO
G. MARON
G. TURGO
G. PLAWANGAN
G. BEJING
Kaliurang
K. Woro
K. Paketan
MUNTILAN
G. PRING
G. SARI
G. GENDOL
Tegalsari
Line of Section
Srumbung
Ngepos
K. Blongkeng
Semen
K. Progo
G. GROGO
G. UKIR
SALAM
K. Batang
K. Krasak
MENOREH MTS (WEST PROGO MTS)
K. Boyong
K. Kuning
K. Bebeng
Pakemgede
Yogyakarta
Yogyakarta
K. Progo
K. Blongkeng
G. Gendol
ka. Muntilan
Panggungan Ngepos
G. Maron
G. Petuk Alap-alap
G. Batulawang
+2565
3000
2500
2000
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