

INSTITUTE OF CURRENT WORLD AFFAIRS

BEB-18

Gerhana Fever

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Lembah Keramat

Ulu Kelang Selangor

Malaysia

4 July, 1983

Dear Peter,

Pity Batara Kala. Of all the Hindu demons only he has managed to sip amrita, the elixir of immortality. But alas, for that fleeting privilege he has had to pay an awful price. Batara Kala is bereft of a body.

Long ago, the gods and demons agreed to churn the amrita out of the sea of milk. Meru, the world-mountain, was used as the churning stick; Vasuki, the serpent of the underworld, served as the churning rope; Vishnu, the Preserver, incarnated as a turtle, was the pivot. Mt. Meru was up-ended and placed on the turtle. The serpent was wrapped a few turns around the mountain and the free ends taken up by the gods on one side, the demons on the other. After much effort, much churning, the amrita appeared. But the gods, greedy, hoped to keep it all for themselves and so, distracted the demons with a beautiful woman, another incarnation of Vishnu. Kala was not so easily side-tracked and managed to grab some of the amrita for himself. But no sooner had the liquid touched his lips when the Sun and Moon sounded the alarm. Vishnu rushed to the scene and in a twinkling severed Kala's body from his now-immortal head. The body fell to earth and died. The vengeful head wanders the sky to this day seeking to devour the Sun and Moon. Usually they manage to stay out of harm's way. On occasion, however, one or the other falters and is grasped by Kala's searching jaws. A shadow passes across the Sun or Moon. An eclipse occurs.

This story, from the Hindu Mahabharata epic (one of the longest poems in the world and, with the Ramayana epic, the basis of Hindu literature and culture in South and Southeast Asia), has long been the traditional explanation for solar eclipses in two of Indonesia's most Hinduized islands, Java and Bali. In the past, other cultures had similar interpretations: the Chinese once believed eclipses to be caused by a devouring dragon, while the Scandinavians thought the phenomenon due to ravenous wolves. Though such explanations are less favored today, the Hindu Balinese remain attached to Batara Kala. He is incorporated into their temples, their paintings and their wayang kulit shadow puppet theater. Even on Java, where most inhabitants are now Muslim or Christian, the belief persists. Despite centuries of Dutch colonial rule in Indonesia, the post-Independence influence of education and the impact of television, radio and other media, many of the islanders still resolve eclipses in the traditional manner, by beating on rice-mortars (lesung), bamboo tubes and other noise makers, a racket that never fails to scare the demon off.

This year, the Batara Kala tale took on special significance. On the eleventh of June, 1983, Indonesia was the site of one of the longest total solar eclipses of the century, termed, in local parlance, the Gerhana Matahari Total, or GMT for short. The Indonesian government seized upon the event as an opportunity to promote the country,

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1. Churning the sea of milk.

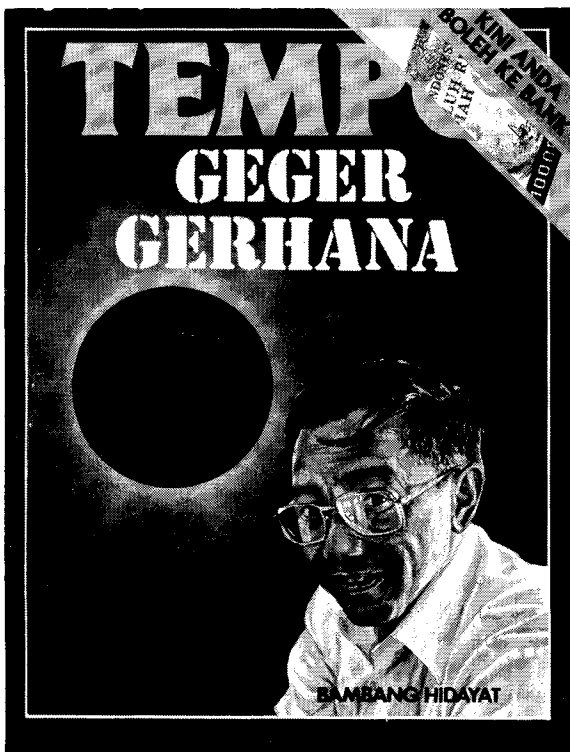


2. Kala eating the Sun. A contemporary batik painting.

in hopes of attracting tourists and scientists who might generate badly needed foreign exchange. Local entrepreneurs used the eclipse to sell merchandise. Batara Kala was their most frequently chosen symbol. Plastered on beer cans, glasses, posters, bags, umbrellas and commemorative medallions, he became the unofficial GMT mascot. As the big day approached, newspapers and magazines began running daily stories covering every possible angle of the eclipse. It quickly escalated from natural phenomenon to media event to national obsession. Tempo, an Indonesian-language news magazine, ran a cover story. The country, it said, was in the grip of Demam Gerhana: Eclipse Fever.

Today we know that eclipses are not caused by hungry demons, but instead are the result of alignments of the earth, sun and moon. Should the earth, sun and moon become so aligned that the shadow of the earth passes across the moon, then a lunar eclipse occurs. If, however, the orbits of the moon and earth so coincide that the moon passes between the sun and earth, a solar eclipse occurs. Because the orbits

(continued on page 3)



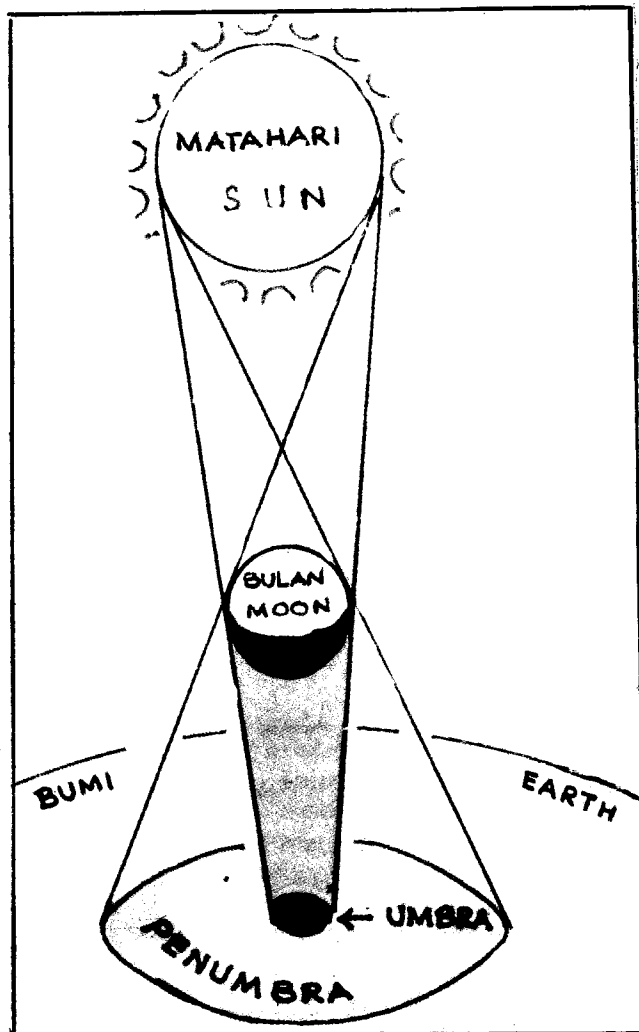
3. Tempo magazine's eclipse cover story. The title translates, "Eclipse Uproar." Professor Bambang Hidayat, pictured next to the eclipsed sun disk, is the director of Indonesia's Bosscha Star Telescope and was an outspoken critic of the misinformation deluge that preceded the eclipse.

the moon, a ring-shaped, or annular eclipse occurs. But if the disk of the sun is the same or smaller than the moon then the eclipse is perfect or total. Since the moon and earth are not stationary bodies, the area of the eclipse is not a fixed point, but rather an arcing, moving "region of totality" that follows the path of the moon. This is called the umbra. A much larger area of partial eclipse is called the penumbra.

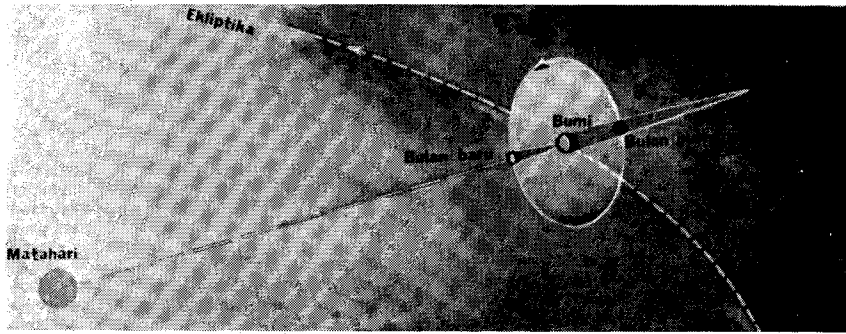
The 1983 total solar eclipse began at 9:10am West Indonesian Time in the Indian Ocean, sweeping eastward at 1600 kilometers per hour (994mph) until the umbra, a 190 kilometer (118 mile) wide

(continued from page 2)

of the earth and moon are offset by some five degrees, solar eclipses occur only once about every eighteen months. And because these orbits are elliptical, the distances between the earth, sun and moon are not constant. Thus the sizes of the sun and moon, as seen from the earth, change. If, at the moment of eclipse, the disk of the sun happens to be larger than that of



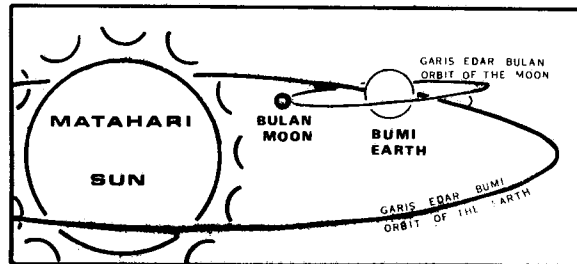
4. An eclipse diagram from a booklet produced by the Yogyakarta Regional Office of tourism.



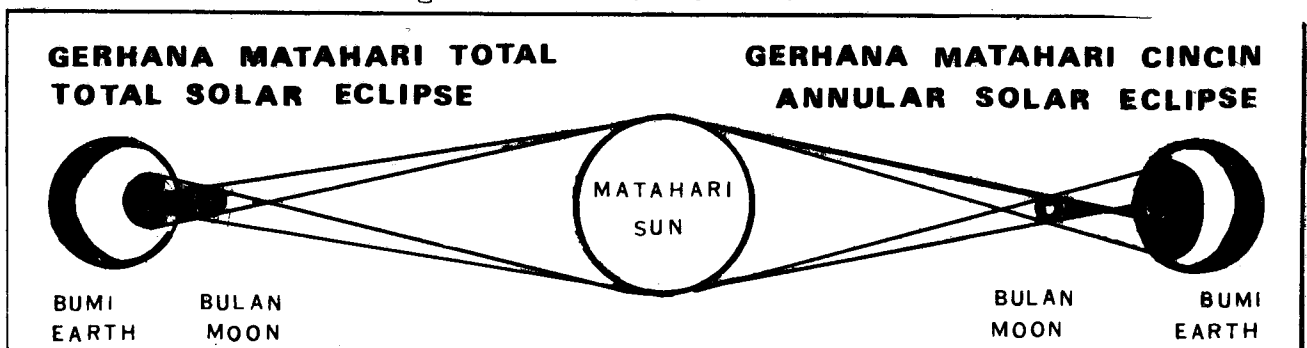
5. Solar/lunar eclipse diagram, from a primary/secondary school pamphlet produced by the Department of Education

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The orbits of the earth and the moon are not situated as if they were in one and the same level but their orbits make an angle of 5° . This is why a solar eclipse seldom occurs. A solar eclipse only happens at the moment when the moon on its path cuts the stereometrical plane where the orbit of the earth is just between the sun and the earth. If for example these 2 orbits coincide then during each revolution of the moon (around the earth) - which takes 30 days - there will occur a solar eclipse once.



6. Diagram of earth/moon orbits from a booklet produced by the Yogyakarta Regional Office of Tourism.

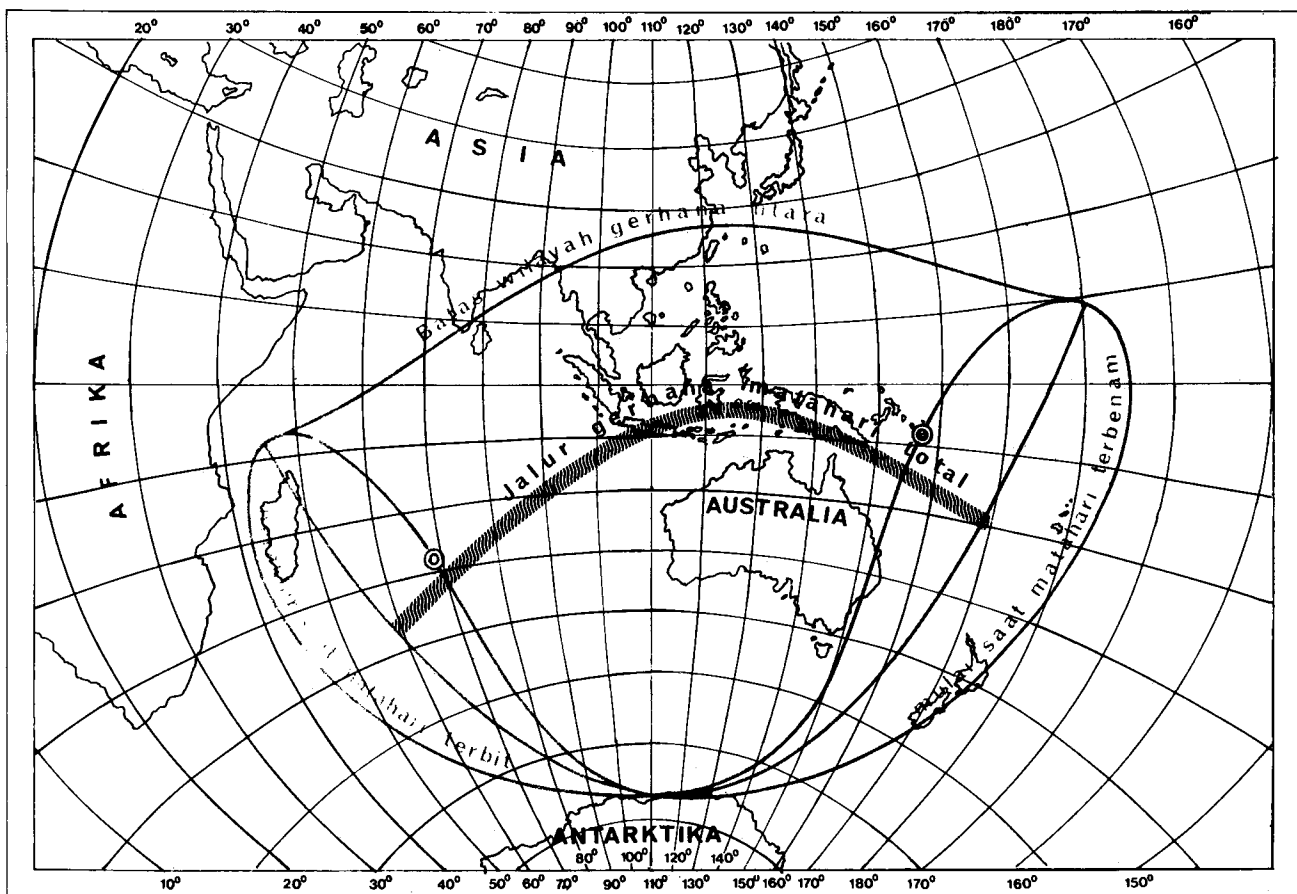


7. Total/annular eclipse diagram from a booklet produced by the Yogyakarta Regional Office of Tourism.

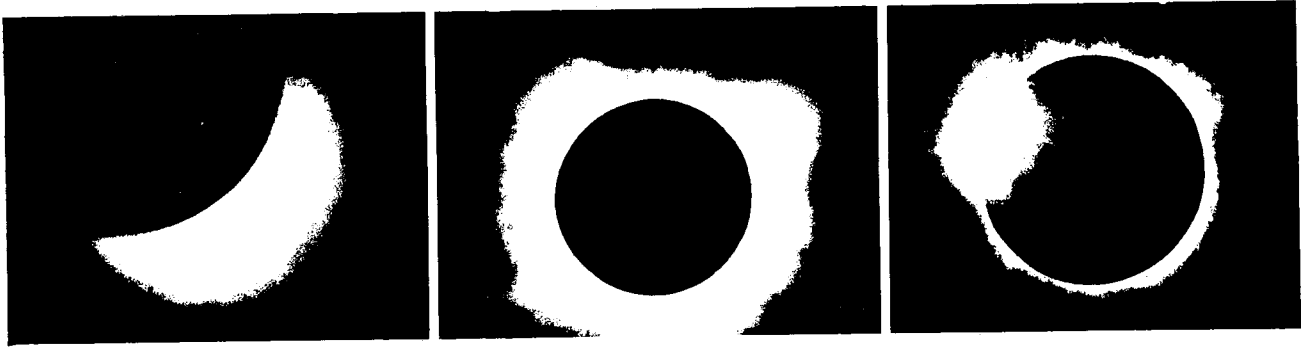
swath of shadow, touched the southern coast of Java at 11:22am. The penumbra reached as far north as China and south to Antarctica. Passing over the cities of Yogyakarta and Surabaya, the path of the umbra cut across central and north-eastern Java, the southern tip of Sulawesi, Ambon and the southern end of Irian Jaya, thence arcing out across the Pacific. At 12:16pm, over the islands of the New Hebrides, the eclipse was over.

Observers on Java had the best view of the eclipse. The day dawned cloudless and remained so throughout the event. First contact, the moment the moon first began to pass in front of the sun, began at 9:53am. Moment by moment the sky began to darken; color drained from the landscape. Second contact, the period of totality, began at 11:26am and lasted five minutes.

GERHANA MATAHARI 11 JUNI 1983



8. A map of the eclipse over Indonesia showing the path of the umbra and the area of the penumbra. From the Department of Education's primary/secondary school pamphlet.



9. First, second and third contact as shown in the Jakarta Post, an English language daily.

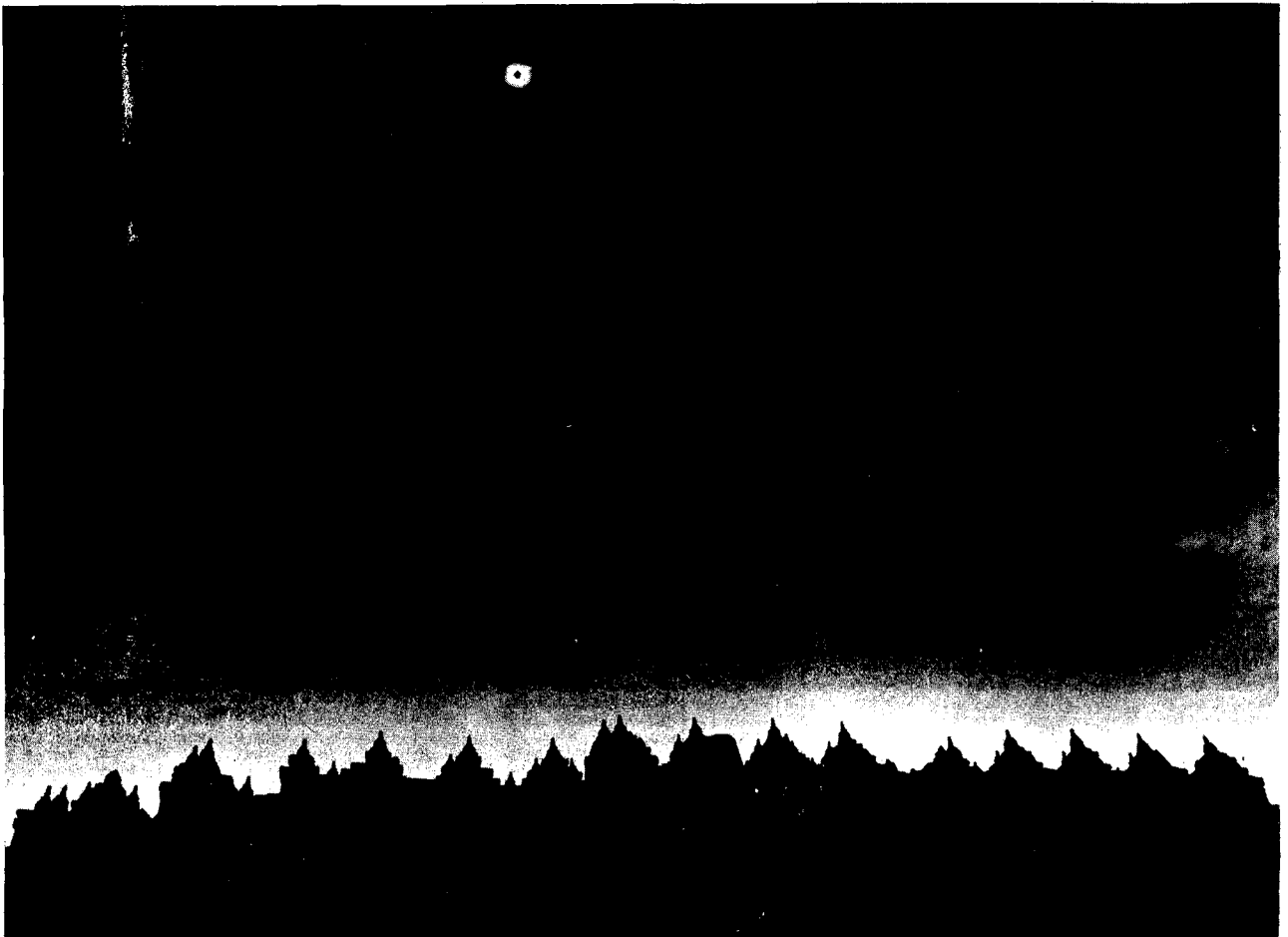
Shadows and color vanished. The cloudless sky became dark, as during a storm. Venus, Mars, Mercury and Sirius could be seen. The eclipse floated above, a black disk edged with glowing white. Diurnal plants began to close; nocturnal animals roused themselves from sleep. The sound of lesung mortars issued from the villages. At 11:31am, third contact, the sun began to reappear. By 1:09, fourth contact, the sun and moon parted ways. Life on Java returned to normal.

Scientists needed little convincing to travel to Indonesia for a view of the eclipse. Because of its exceptionally long duration the eclipse provided an ideal opportunity to study the corona (outer layer of the sun), the prominens (solar surface eruptions) and eclipse-related changes in the earth's ionosphere, magnetic field, temperature, animal and plant behavior and other natural pheno-

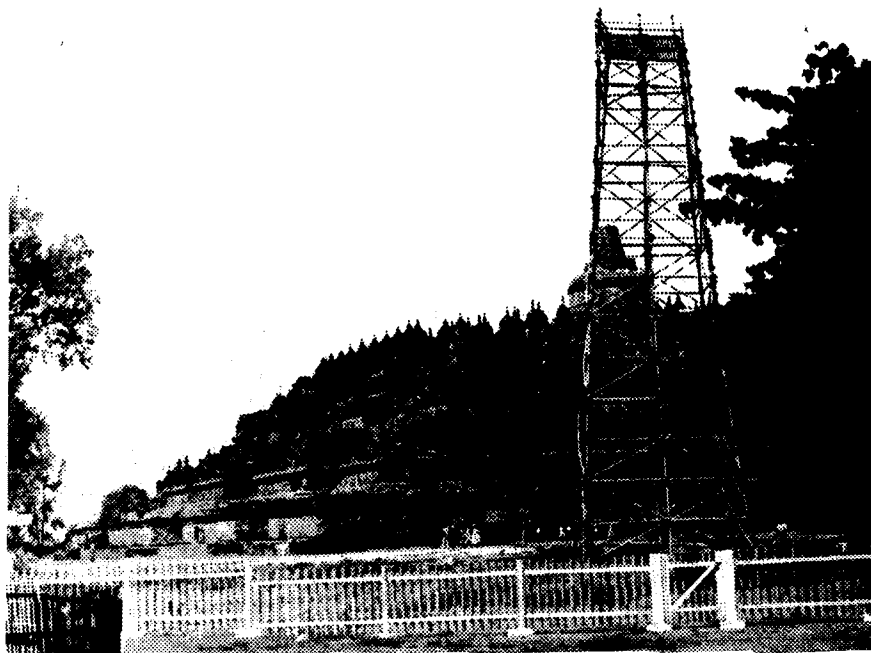


10. First and second contact, as shown in Kompas, a Jakarta Indonesian-language daily.

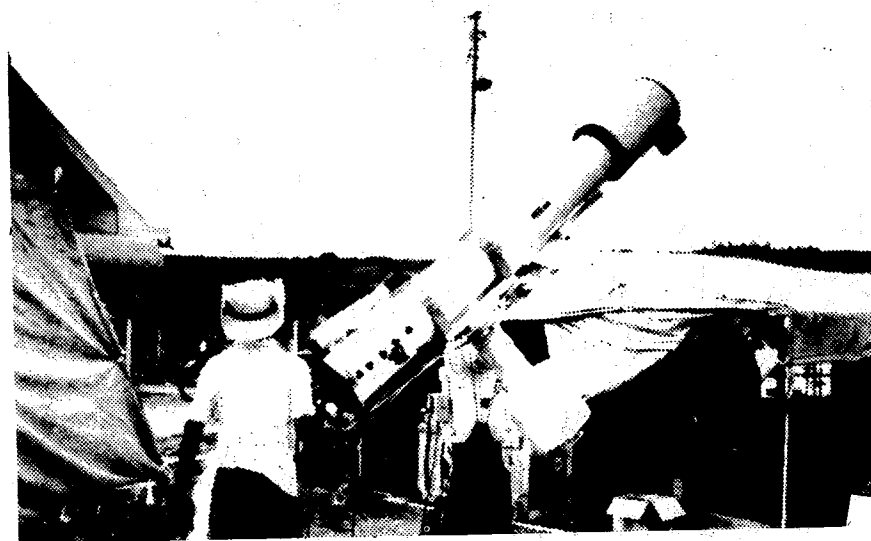
mena. LIPI (Lembaga Ilmu Pengetahuan Indonesia), the Indonesian Science Board, sent informational letters on the eclipse to scientific organizations throughout the world. One hundred thirteen sent initial replies. Eventually, forty-five teams from twenty-two countries came to Indonesia, most sponsored by governments or universities like the United States' National Science Foundation team. Other scientists came independently, self-sponsored, in small groups or alone. LIPI was the local liason for all, offering technical and bureaucratic assistance and providing information on observation sites along the center line of the umbra. In east Java, the favored choice for eclipse watchers was Tuban, a small north-east coast village at the point of longest duration along the center line. Nearby Cepu village was also popular. In central Java, most astronomers converged on Borobudur, a ninth century Buddhist temple near Yogyakarta. Observation towers, telescopes and plant/animal experiments were set up in these areas. High-altitude remote control observation balloons were also released. Tent villages sprang up at the sites to house the participants.



10. The eclipse, as seen from Borobudur.



11. Bamboo observation tower set up at Borobudur.

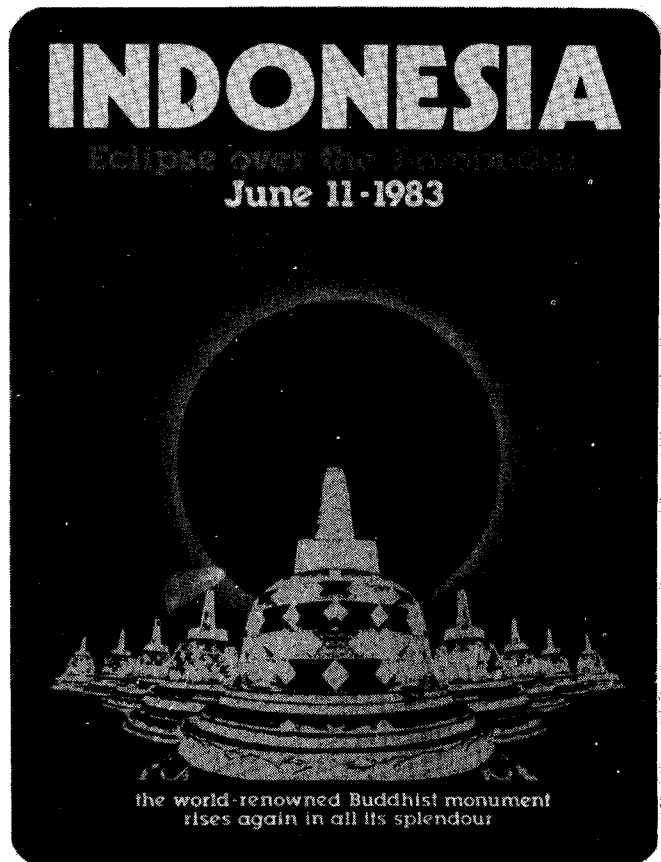


12. Telescope at Cepu.

Though some tourists, the elite, moneyed corps of amateur eclipse watchers, could be expected to follow in the wake of the scientific community, the Indonesian government was intent upon giving the event mass appeal. June is normally the peak domestic tourist season and the beginning of the foreign tourist season (the latter peaks in July/August). Money-making potential was great. Thus, the Directorate General of Tourism in Jakarta devised a promotional campaign linking the eclipse to Indonesian cultural attractions. Central to the campaign was Borobudur. Under restoration for decades and finally opened to full view this year, Borobudur is one of Indonesia's prime tourist attractions: a mandala in stone, the biggest Buddhist stupa on earth. Some 25,000 decals, 7,000 posters and 5,000 booklets were produced for the campaign, distributed in Indonesia and to Indonesian embassies and tourist offices throughout the world. Poster, booklet and decal employed the same image, a high-contrast reproduction of the lattice-bell stupas found on the upper levels of Borobudur, superimposed

over a black, orange-haloed disk on a brown field: a stylized eclipse. The booklet used the title, Sun Eclipse '83 Over Indonesia. The poster and decal were different, employing a large Indonesia and underneath, Eclipse Over The Borobudur, June 11 1983 and a further sub-head, The World-Renowned Buddhist Monument Rises Again In All Its Splendour. One gets the impression that Borobudur, not the sun, was to be the main actor in the event. Inside the promotional booklet, culture was paramount. Only seven of the publication's twenty-one pages were devoted to the eclipse proper. The remainder, lavishly illustrated with color photographs, showed tourist attractions along and near the center line of the umbra in Java and South Sulawesi. Passing mention was also made of the Krakatau Centennial, the hundredth anniversary of that island's eruption on August 26, 1883, the biggest in recorded history.

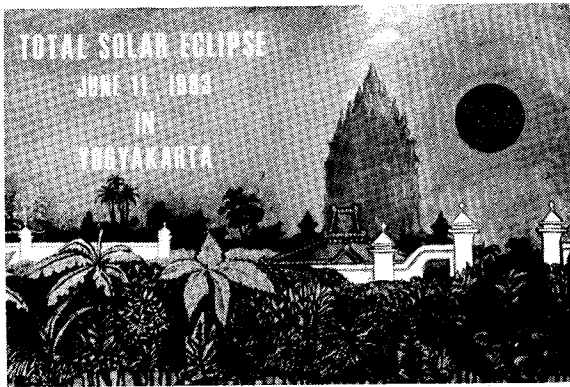
Regional tourist offices ran their own campaigns. The Yogyakarta tourist office produced a one hundred page booklet, its cover depicting the eclipse over Prambanan, a ninth century Hindu temple complex, far from the centerline, but still within range of the umbra. Again, the emphasis was cultural, the eclipse merely the vehicle for Yogyakarta's other tourist attractions. Yogyakarta is already one of Java's most popular tourist areas, a destination both for budget travelers on the Kathmandu-to-Bali shoestring route and richer package tourists doing the whirlwind Jakarta-Yogyakarta-Bali circuit. The city has a well-oiled tourist machine, with weekly performances of wayang kulit and wayang golek



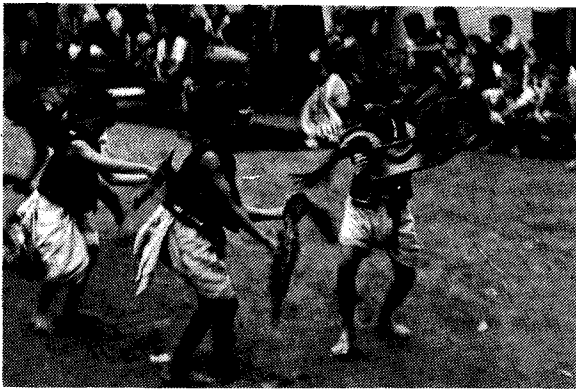
13. Indonesian government eclipse poster and decal image.



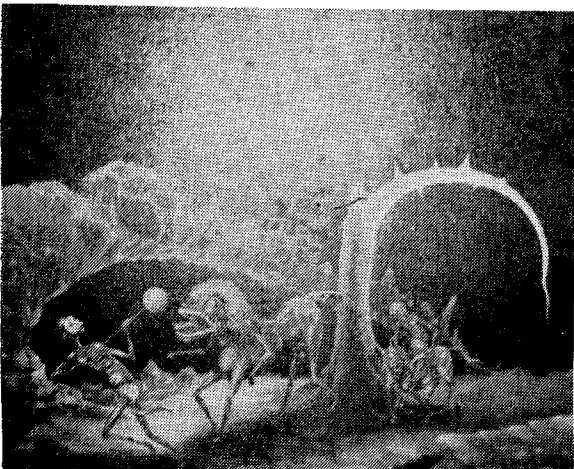
14. Indonesian government eclipse booklet cover.



15. Yogyakarta Regional Office of Tourism's eclipse booklet.



16. Jathilan, a trance-dance in imitation of horses, Yogyakarta.

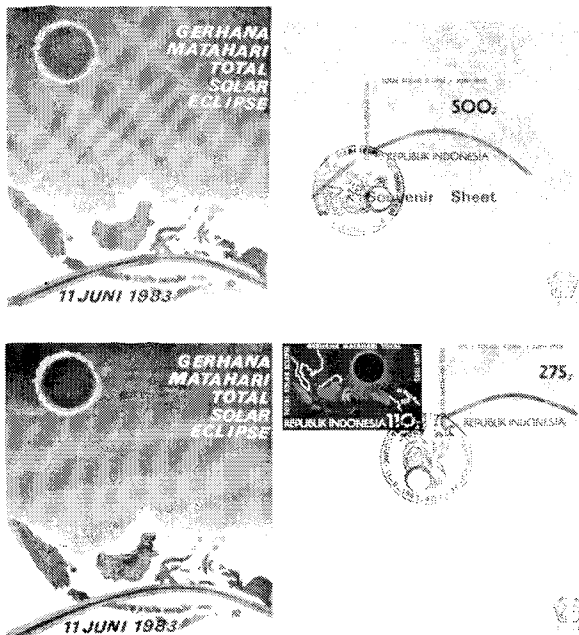


17. Painting by Adhy T. from Mutiara Hotel solar eclipse exhibition.

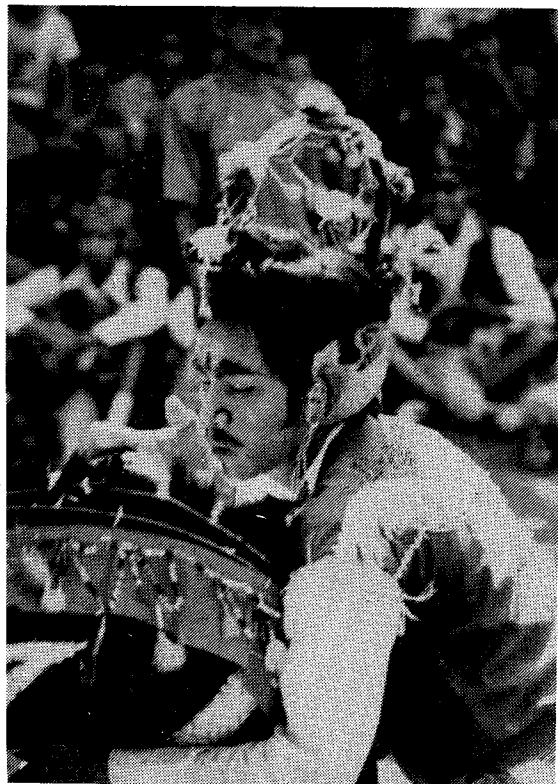
(the latter a wooden puppet theater), dance, gamelan and, during the full moon from May to October, a full-blown "Ramayana Ballet" at Prambanan. Souvenirs, particularly batik, silver and leather goods, are plentiful. Vendors line the streets. For the weeks immediately preceding and following the eclipse, other cultural attractions were planned, including art exhibitions, batik painting contests and performances of Reyog, Ninitiwok, Oglek, Jathilan, Srandul, Laras Madya and other dances, in the city and surrounding villages. On the night preceding the eclipse a Religious Dance Festival was held at the Kepatihan pavilion in downtown Yogyakarta. Performances included a "Ramayana fragment" dance-drama and a lesung competition, troupes of women pounding rice mortars in time to gamelan music.

Numismatic and philatelic enthusiasts were not forgotten in the drive for eclipse-generated revenues. The Indonesian postal service issued two kinds of eclipse stamps and a first day cover, all depicting the umbra path. A Batara Kala envelope was also issued. Two different commemorative medallions were minted for the eclipse, both showing Batara Kala on the obverse and the umbra path on the reverse.

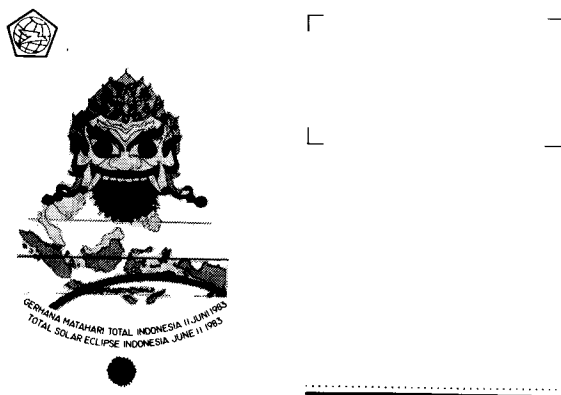
Private entrepreneurs got on the eclipse bandwagon as well. Hotel operators in Yogyakarta, Surabaya and other "eclipse cities" had special Gerhana Matahari rates, usually two to three times the normal price. Bir Bintang, a local brewery, introduced commemorative beer cans, tastefully designed in red, gold, black and white, with the image of Kala and the title, Total Solar Eclipse, June 11 1983, in English and Indonesian. Such cans are becoming an urban tradition of sorts in Indonesia;



18. Eclipse first day covers.



20. Jathilan dance, Kota Gede village.



19. Batara Kala envelope.



21. Jathilan dance, Kota Gede village.



22. Commemorative beer can, one of the many eclipse souvenirs produced by the Bir Bintang brewery. Batara Kala is depicted here in the wayang kulit shadow puppet style.

last year another brewery, Anker Bir, issued a commemorative beer can with a wayang kulit image for the Jakarta InterHash, an international jamboree sponsored by the Hash House Harriers running club. Both the InterHash and Gerhana cans proved popular, particularly among the memento-hungry ex-patriate community. Bir Bintang Gerhana beer glasses, umbrellas, tee shirts, bags and hats were also produced. They were sold in major center line towns and hawked at observation sites from Bir Bintang trucks on the day of the eclipse.

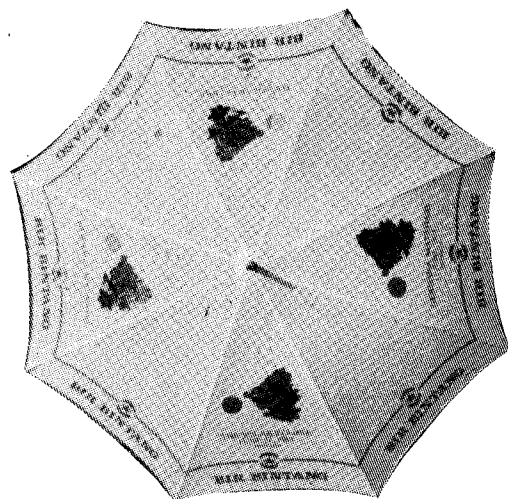
Tee shirts proved to be the most prolific and popular souvenir items crafted for the eclipse. No "official" eclipse tee shirt was produced. Instead, businesses and individuals made their own versions, usually linking the eclipse with major observation sites or towns like Yogyakarta and Solo. Umbra maps, Prambanan, Borobudur and, of course, Batara Kala, were all popular tee shirt images. Yogyakarta entrepreneurs alone produced at least ten different kinds of eclipse tee shirts. Though quite a few of these souvenir shirts were made by Indonesians for personal use and sale to visitors, almost as many were made by resident foreigners and, oddly, by the tourists themselves, this last a way of partially funding an "eclipse vacation." In the week preceding the eclipse, European, American and Australian tourists hawked their wares from rucksacks and travel bags along the streets of Yogya and Solo and at the observation sites. One woman even sold eclipse buttons. Many wore



23. Commemorative medallion with Batara Kala image.



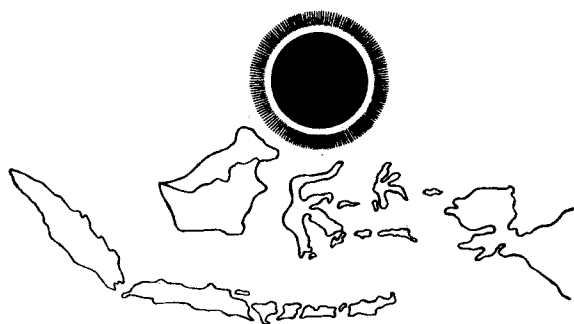
24. Another commemorative medallion.



25. Bir Bintang eclipse umbrella.



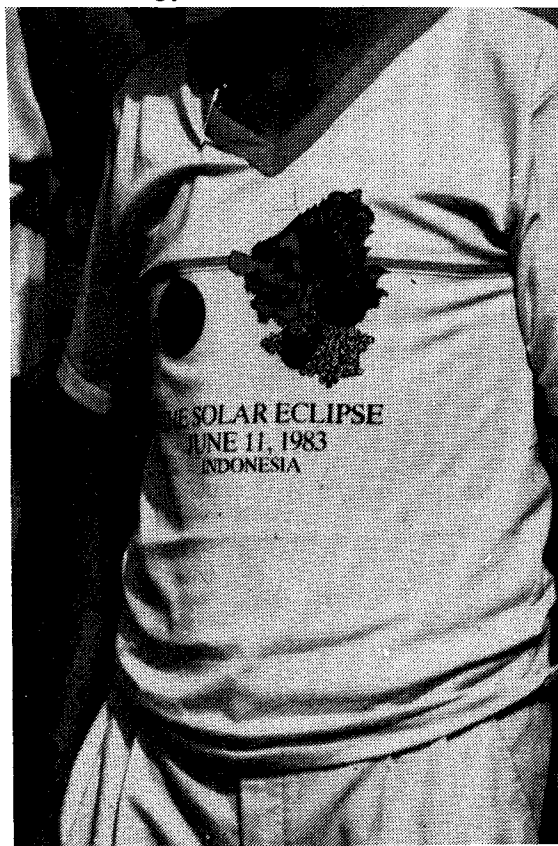
26. Eclipse button, manufactured in San Francisco and sold by an American tourist in Yogyakarta.



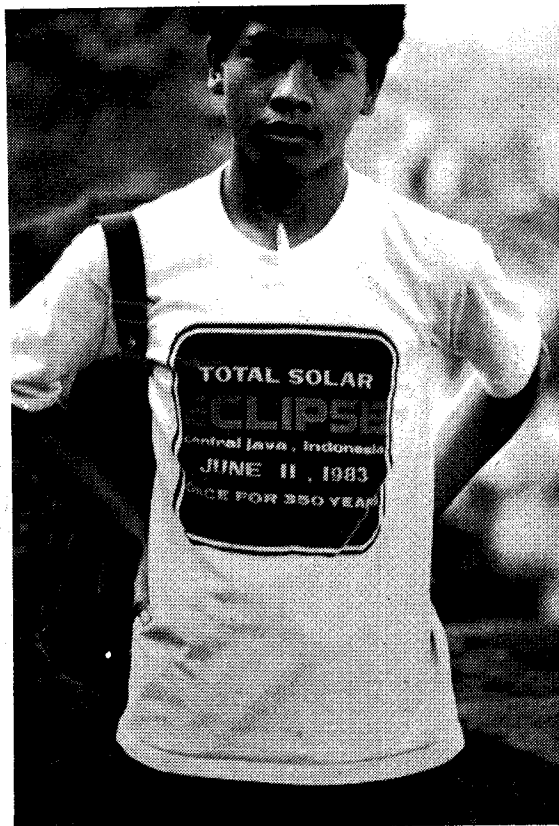
SOLAR ECLIPSE TOTAL
ECLIP de SOLEIL TOTAL
GERHANA MATAHARI TOTAL
(Brahmawijaya)

INDONESIA
11 JUNE 1983

27. Image from eclipse tee shirt sold at the Agastya Art Institute, Yogyakarta with English, French, Indonesian and Javanese type.



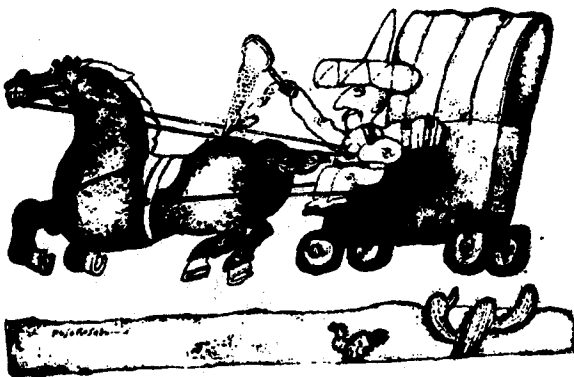
28. Bir Bintang eclipse tee shirt.



29. Indonesian-designed eclipse tee shirt, Yogyakarta



30. Indonesian-designed tee shirt, Semarang.



total solar

31. Tee shirt image from the model sold by the Alliance Francaise, Yogyakarta.

the booty of past eclipses: Australia 1976, Canada 1979 and Africa 1973 tee shirts. Tourists didn't seem to mind buying a souvenir imported from abroad; though more expensive than locally-crafted shirts, they were considered no less authentic. Besides, the material and² silk-screening were often of better quality. More importantly, the foreign shirts employed idiomatic phraseology popular in the West. Indonesian shirts were replete with phrases like "Almighty Gerhana Matahari, gibberish to anyone unfamiliar with Indonesian. A popular Western model, I Was There, Eclipse '83 provided a clearer message. Similar communications were available in French, German and Swedish, for European travelers.

Despite the best efforts of government and private enterprise, tourist response was below expectations. The summer rush never materialized. Some officials in the Directorate General of Tourism had hopefully predicted 500,000 eclipse tourists. The less optimistic had suggested 15,000. But only some 9,000 foreign tourists visited Java on package eclipse tours. An uncountable number came independently. Domestic tourism was also down, thought by some to be due to the recession and the recent devaluation of the rupiah. Local travel agents had expected a flood of requests for tours to eclipse observation sites; only a trickle materialized. Hotel operators in the big eclipse towns had prepared for full bookings and fat profits. Instead, most found their hefty eclipse rates to naught. Observation sites were lightly attended by tourists. Those that did show up were more often than not budget travelers, patrons of losmen (hostels), local bus services and other low cost travel facilities.



32. Two images of Batara Kala: a batik painting from the Hotel Ambarukmo and a booklet cover from the Regional Office of Tourism, Yogyakarta.

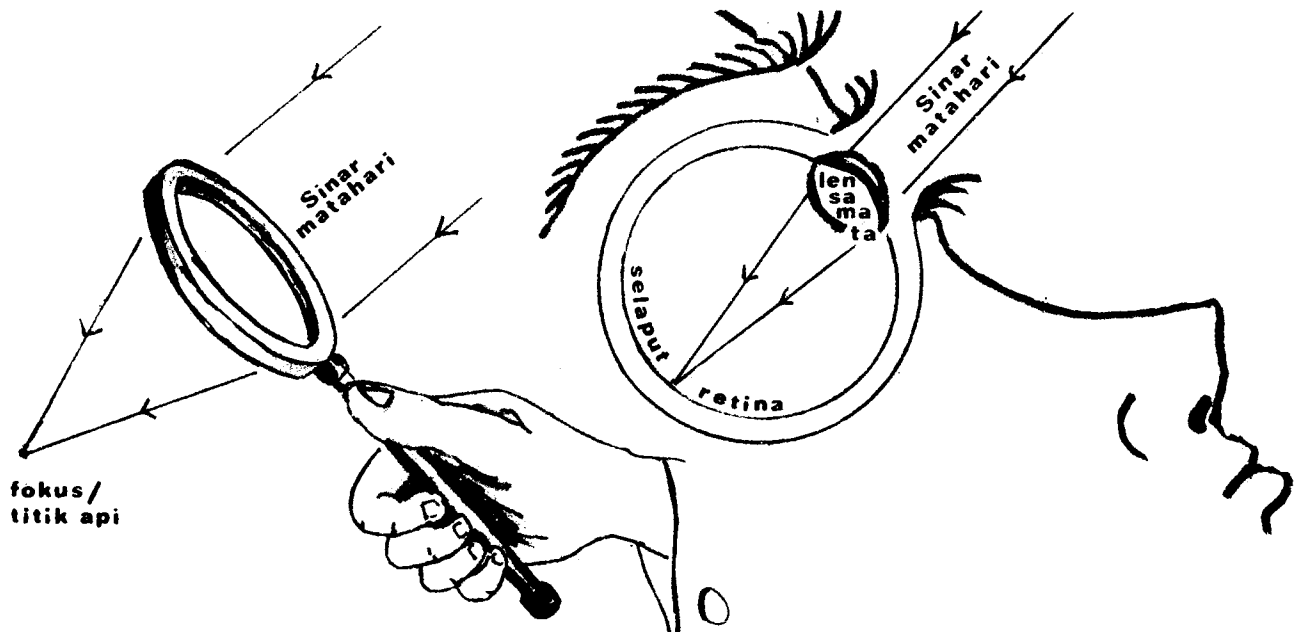


If the tourist promotion campaign was less than successful, a simultaneous government eclipse information/safety campaign more than did the job. Viewing the eclipse with the naked eye for an extended period was known to cause retinal burns or in extreme cases, blindness. Past eclipses over other countries had indeed resulted in blindness: 4000 cases in Russia after the 1912 eclipse, two in Australia in 1976. Since the 1983 eclipse was to pass over Java, one of the most densely populated regions on earth (910 people per square kilometer; 568 people per square mile), with inhabitants who were primarily rural, semi-literate peasants with little understanding of the physics of the event, informing the public was considered essential. Informing the populace in southern Sulawesi was also important, but here the job was made easier by tradition: conventional belief in this part of Indonesia has it that the sun and moon make love during an eclipse and should not be disturbed, much less watched. Java has no such prohibitions; disturbing Batara Kala during his solar meal is here considered of paramount importance. Moreover, government officials had discovered disturbing examples of potentially dangerous private enterprise: one entrepreneur in Surabaya was selling "gerhana glasses," exposed negative film set in plastic frames, that were supposed to allow safe eclipse viewing (they wouldn't); another inventive businessman had created talismans that would protect an eclipse viewer's unprotected eyes from retinal burns (also untrue).

To counteract quackery and insure that people did understand the dangers of the eclipse, the central and regional governments mounted a massive information campaign, beginning months before the eclipse. The Departments of Information, Education and Health, as well as LIPI, each produced their own information booklets explaining the reasons for the eclipse, its dangers and methods for viewing the event safely. Booklets included diagrams of solar and lunar eclipses, pictures showing the effect of sunlight on the unprotected eye, charts of the umbra and penumbra and lists of past eclipses. Covers of the pamphlets ranged from graphic, Borobudur-type stupa imagery (the LIPI pamphlet) to artistic interpretations of Batara Kala eating the sun (this latter image, on the Department of Education's booklet for primary and secondary schools, seems an odd choice, considering the government's efforts at dispelling "superstitious beliefs." Overall, however, this was the best designed and most comprehensible of the lot).

The Department of Religion devised their own pamphlet, a sober treatise, replete with quotations from the Koran. This brochure aimed to convince Muslims that the eclipse was the handiwork of

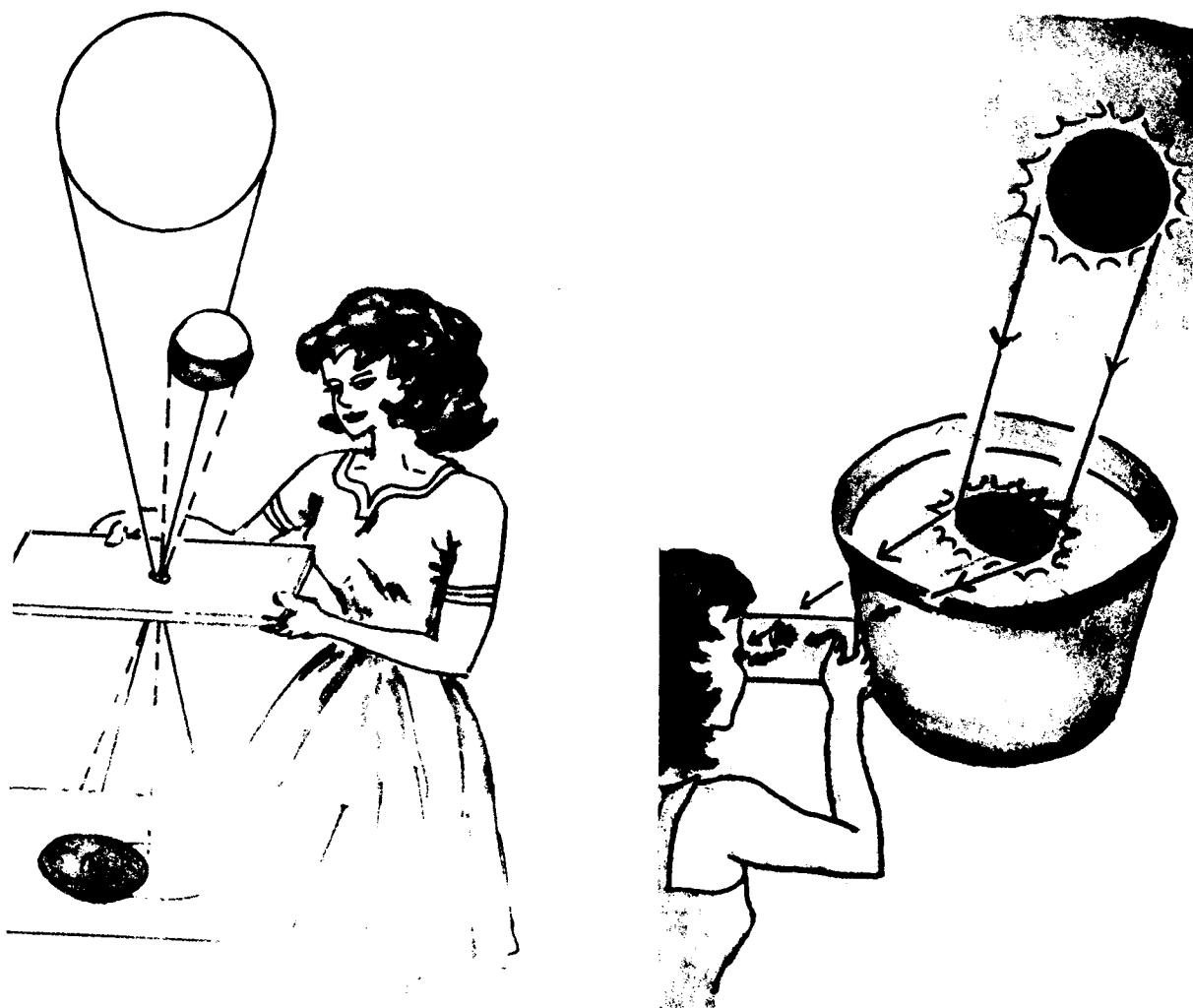
The human eyes — as we know — is equipped with an eye lens which functions as a positive lens to project the sight or view visible on the visual point of the retina film. The heat of the beams of the sun's infra red rays if projected too long on the retina film will an increase of temperature to 23° C above the normal temperature and thus singeing the view sinews and result in a total blindness.



33. A diagram showing the effect of the sun's rays on the human eye, from the Yogyakarta Regional Office of Tourism booklet.

God, a natural phenomenon, not a portent of disaster as some were suggesting, and certainly not the result of a Hindu demon's hunger pangs. Muslims were advised to attend special shalat gerhana matahari prayers during the eclipse.

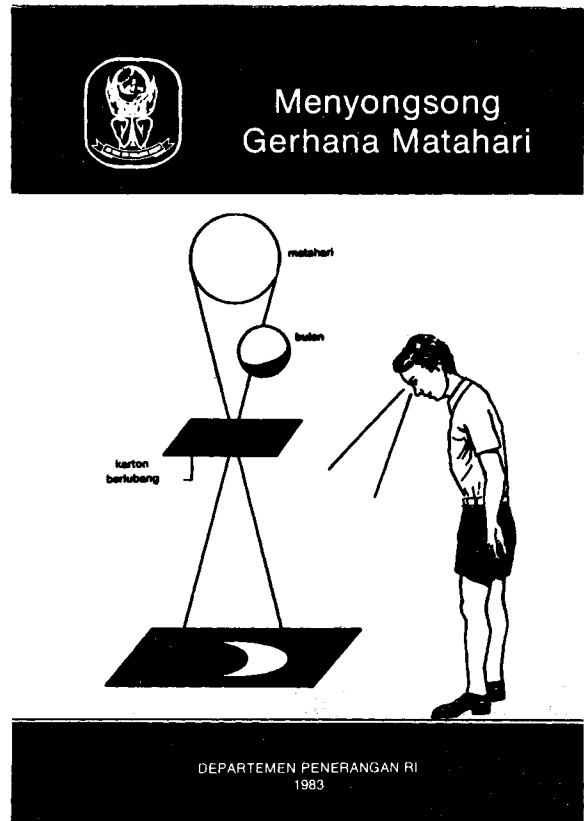
If education was important for the eclipse, deterring the populace from viewing it was imperative. Local governments in towns along the path of the umbra devised their own direct-approach campaigns. No diagrams and explanations here. Local posters, banners and leaflets that appeared before the eclipse carried the same, harsh message: Don't Look Directly at the Total Solar Eclipse or You Will Go Blind. Large towns supplemented these written warnings with speaker-mounted mini-buses that patrolled the streets on the



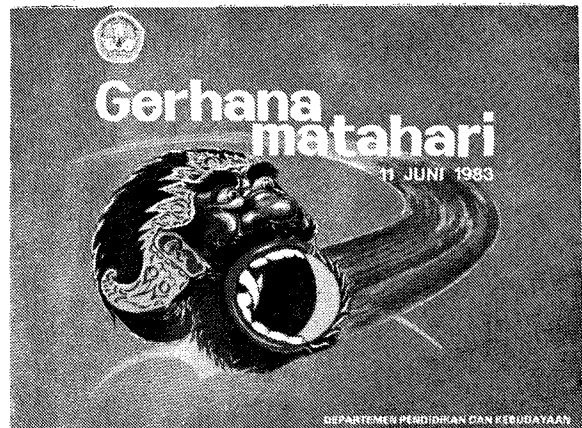
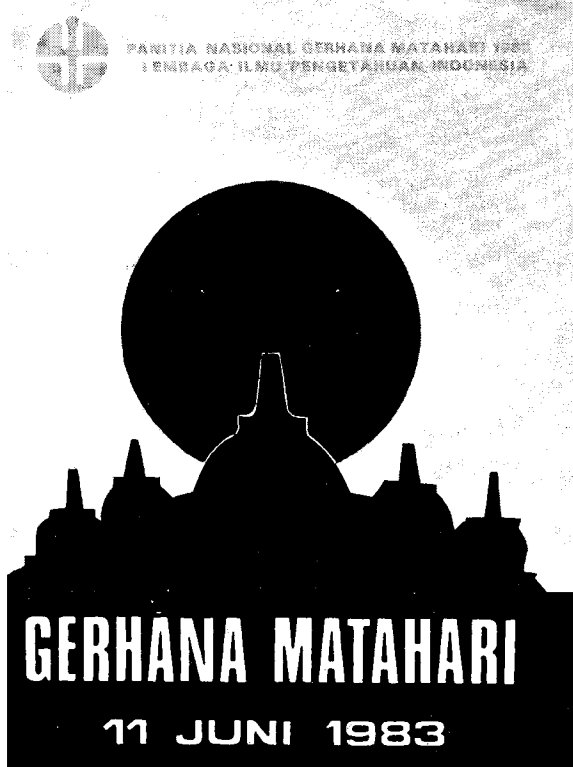
34. Two diagrams from the Yogyakarta Regional Tourism office booklet showing methods for safely viewing the shadow and reflection of the eclipse.



35. Shalat prayers poster, Yogyakarta. Note crossed-out Kala image, used even here as an attention-getting device.



35a Department of Information booklet cover. This same diagram was used in the Department of Education booklet.



36. Department of Education booklet cover, showing Batara Kala.
37. LIPI booklet cover.



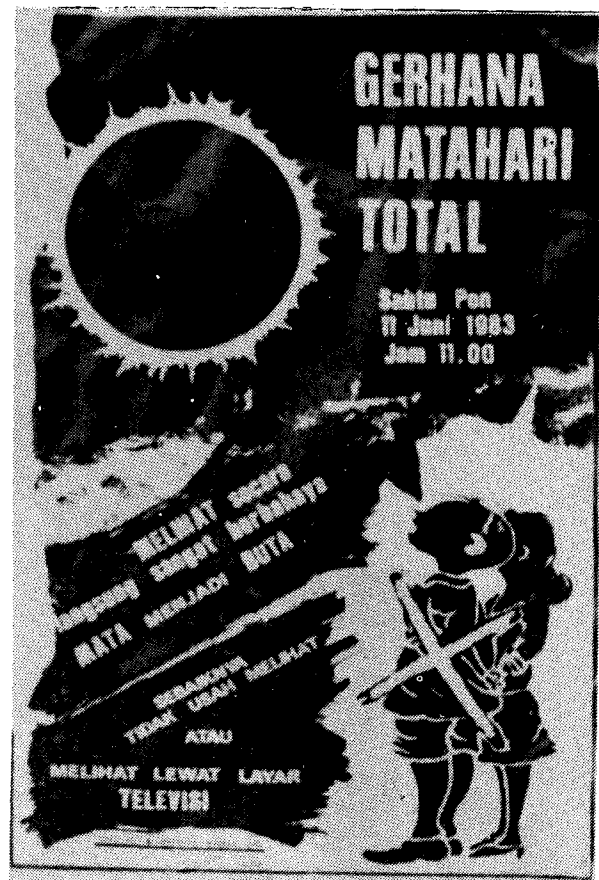
37a. The artistic approach: Hanuman, the Ramayana monkey god, child of the sun, meets the eclipse and warns others not to look in a Yogyakarta Department of Information billboard

that the danger in the villages was not so much blindness from the sun as deafness from all the noise-making precautions.

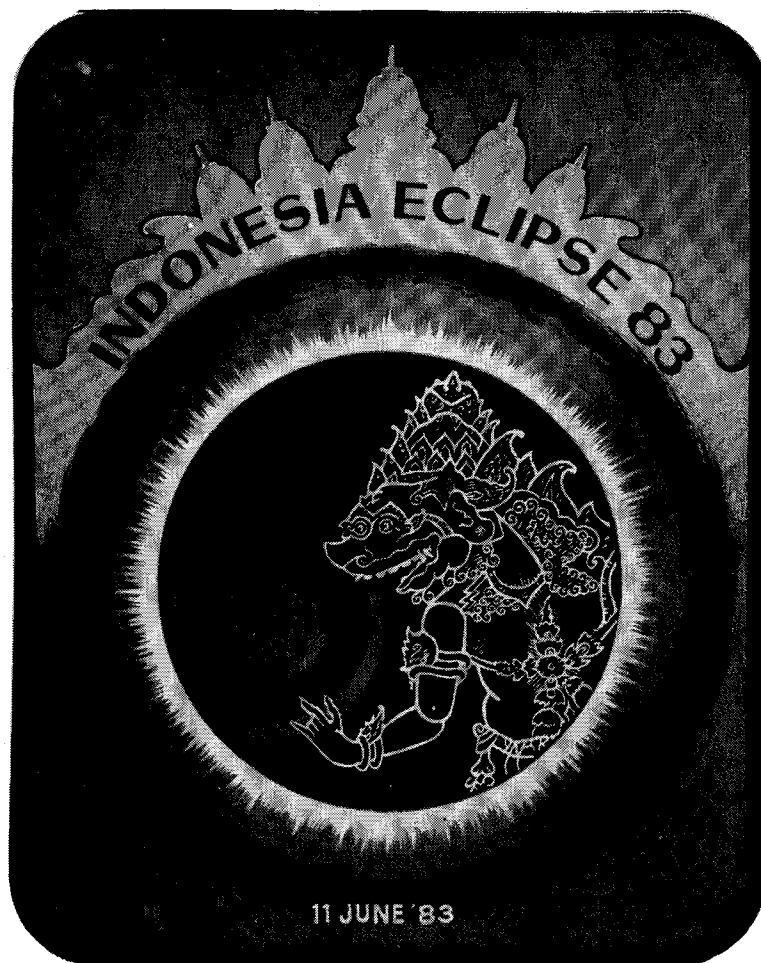
Though few Indonesians own televisions, TVRI (Televisi Republik Indonesia) covered the event for that privileged elite. They were

eclipse day, uttering shrill warnings to the curious. Theaters were also required to warn their patrons of GMT dangers in pre-show advertisements. Radio and television carried similar notices in the weeks preceding the event. Airborne caveats were dropped from planes over remote areas.

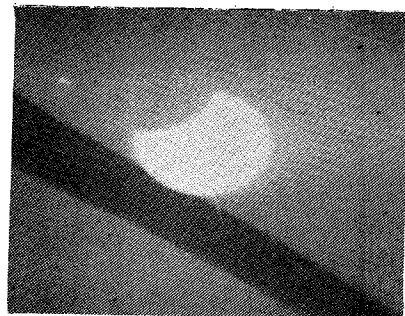
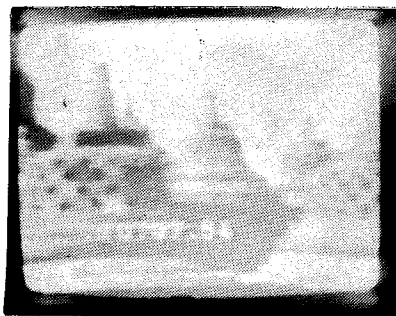
Villages made good use of the lesung mortars during the eclipse, not to ward off Kala, but as the signal for villagers to get their families indoors and their doors and windows closed. Sirens were also used. Tempo magazine commented



37b The direct approach: placed on wall throughout Yogyakarta, this poster warns that looking at the eclipse is dangerous and will cause blindness, recommending not looking or television as alternative



38. Eclipse decal sold on the streets of Yogyakarta. The reverse side carries a warning that protective devices will not nullify the harmful effects of viewing the eclipse and recommends watching the TVRI broadcast instead.



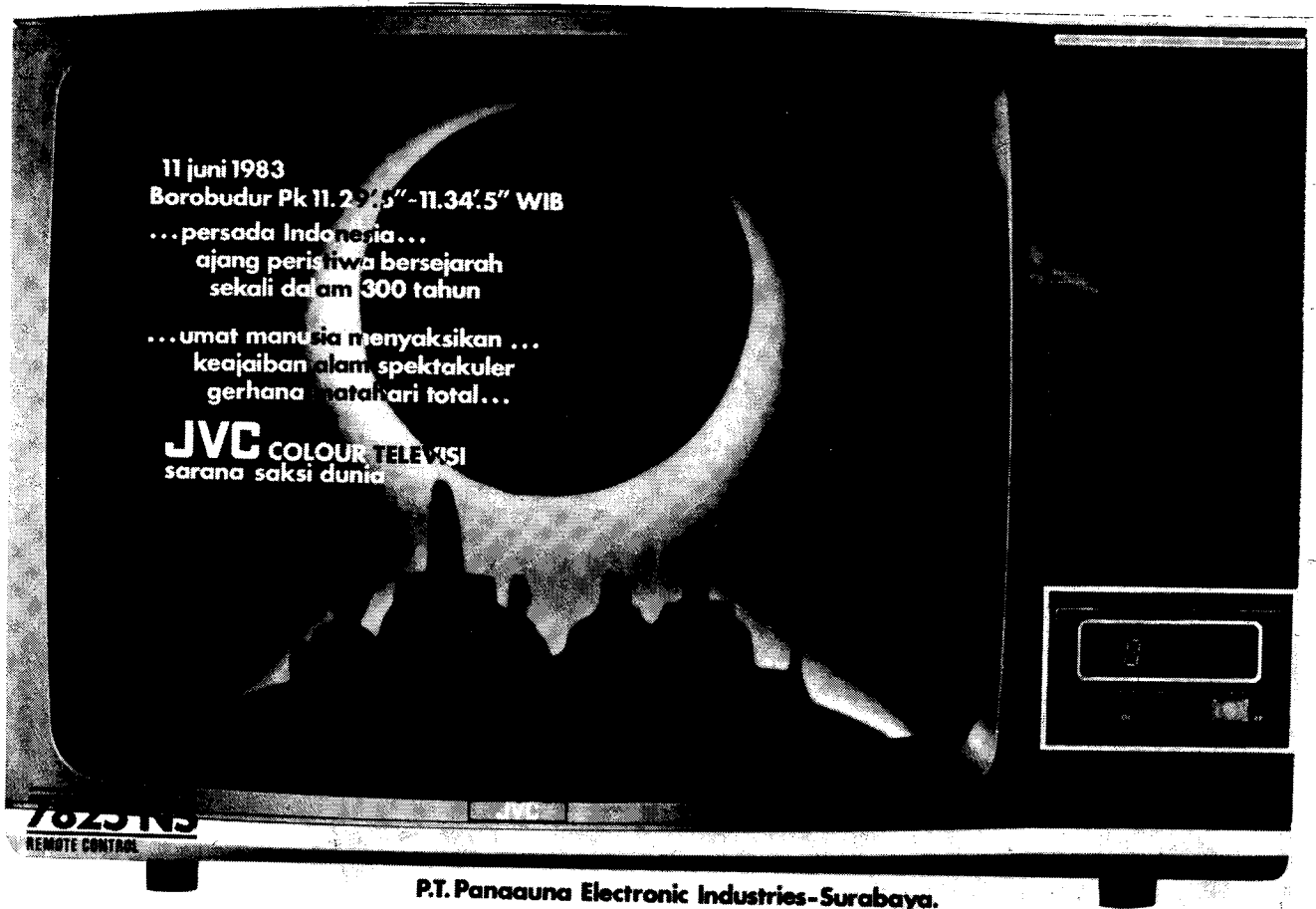
38a The eclipse and Borobudur as they appeared on the TVRI broadcast.



39. Ignoring the warnings: Foreigners and Indonesians look at the eclipse through multiple layers of exposed film or directly.



encouraged to be generous, cooperating with friends and neighbors so that all could view the eclipse safely. Special filters were used on the television cameras so that the sun appeared on the screen without glare, without danger. Coverage began well before first contact. Synthesized mood music played in the background as the eclipse was shown from TV cameras at Borobudur, Tanjung Kodok, Cepu, and Pangandaran on Java, Ujung Pandang on Sulawesi and Irian Jaya. Aerial photography was also employed. Shots of the progressing eclipse were interspersed with pictures of the observation sites, interviews with scientists and discussions of eclipse-related phenomena. The Japanese NHK (Nippon Hoso Kyokai) television station also had cameras at the Borobudur site through a special arrangement with TVRI.



11 juni 1983
 Borobudur Pk 11.29'3"-11.34'5" WIB
 ...persada Indonesia...
 ajang peristiwa bersejarah
 sekali dalam 300 tahun
 ...umat manusia menyaksikan ...
 keajaiban alam, spektakuler
 gerhana matahari total...

JVC COLOUR TELEVISION
 sarana saksi dunia

7625HS
 REMOTE CONTROL

P.T. Panauna Electronic Industries-Surabaya.

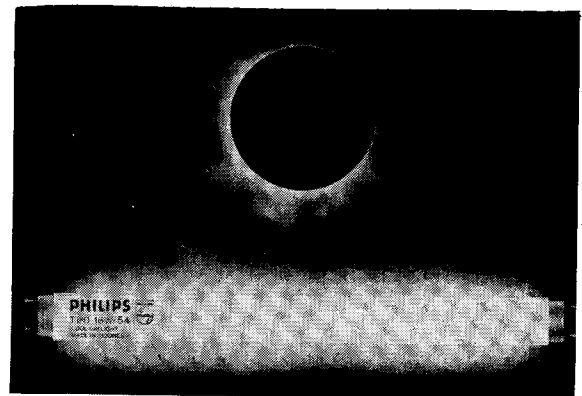


HINDARI MENATAP LANGSUNG GERHANA MATAHARI

ESOK MATAHARI AKAN MENGHILANG
 NAMUN

PT BORSUMIJ WEHRY INDONESIA
 SENANTIASA MEMBERIKAN
 SINAR KEBAHAGIAAN BAGI ANDA SEKELUARGA

PT BORSUMIJ WEHRY INDONESIA MEMDISTRIBUSIKAN
 612 MACAM BARANG KEPERLUAN SEHARI-HARI
 KE 27 PROPINSI DI SELURUH INDONESIA



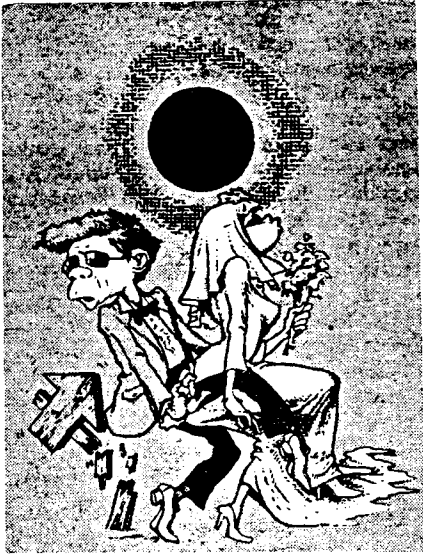
40. These advertisements appeared in Indonesian and English language newspapers during the week preceding the eclipse. They were used to sell televisions light bulbs ("when the sun goes out, we keep on shining") and household goods.

To insure tight security during the eclipse (pick-pockets and thieves were expected to be out in force) 3,300 police officers were dispatched to major towns in Java, some with narcotics-sniffing dogs in case some of those foreign tourists proved to be selling more than just tee shirts. In east Java, officers patrolled the streets, shooing the curious inside their homes.

Though some Indonesians did venture out during the eclipse, even daring an occasional glance skywards, the majority were scared out of their wits and huddled indoors, well away from the deadly "eclipse rays." Though much of the peasantry understood the physics of the eclipse little better after the information campaign than before, the warnings of blindness were taken seriously. In fact the notion had arisen



41. Tempo magazine's eclipse cartoon. The blindfolded sheep caricatures the suggestion of one zoo keeper that the animals should have their eyes covered during the eclipse so that they too would not go blind (more pragmatic was another official's proposal that the animals be fed during the eclipse, to direct their attention groundwards).



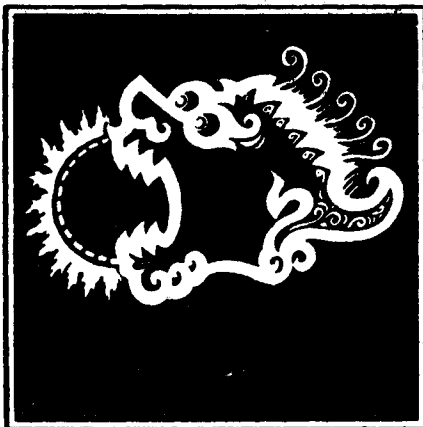
42. Another Tempo cartoon, this one poking fun at the couple that postponed their wedding because the guests refused to come during the eclipse. They considered eloping since the day after the eclipse was the beginning of Ramadan, the Muslim fasting month and an inauspicious time for weddings.

that the actual character of solar light changed during the eclipse; the merest touch was thought to cause blindness. Pregnant women hid under their beds, secure in their belief that the eclipse light would cause their children to be born with black and white spots. Cautious travelers carried newspapers over their heads.

In the cities, where understanding of the event was slightly better, many residents took advantage of the deserted streets to do their shopping and other errands during what were normally peak traffic hours. Shalat prayers were well attended.

Though the Indonesian government was only partially successful in exploiting the commercial possibilities of the eclipse, it did manage a remarkable communications feat: some fifty percent of the Javanese population, the forty-six million people resident in the area affected by the eclipse, plus the inhabitants of Sulawesi and Irian, were informed of the event and its dangers. All conventional media were used to maximum effect, and even the traditional *lesung* was employed in the service of information.

If not everyone understood the eclipse, at least few looked at it; and that, after all, was the hoped for end-result. Though on the day following the eclipse 340 people reported to medical clinics and hospitals complaining of eclipse-related vision problems, only one substantiated case of blindness has so far occurred. Few countries have had to tackle such a challenge to save the popular eyesight. Indonesia did, and won. It remains to be seen whether Malaysia, smaller, better developed and site of the 1988 eclipse, can do as well.



Sincerely,

Bryn Barnard

43. Tempo's version of Kala.

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