



## The panoptic gaze in a non-western setting: self-surveillance on Merapi volcano, Central Java

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### ABSTRACT

Jeremy Bentham's late eighteenth century concept of the 'panopticon', popularized by Foucault two centuries later, has become a ubiquitous model for thinking about not merely surveillance but self-surveillance in the modern state. Foucault's analysis of the panopticon, and indeed perhaps the panopticon itself, is tied to a particular time and place of state development. What are the implications for this scholarship of different, non-western traditions of state surveillance? An effort is made to answer this questions drawing on a body of beliefs about volcanic hazard from the Sultanate of Yogyakarta in Central Java. It is believed that there is a spirit world inside the crater of Merapi volcano that mirrors the world of humans. By monitoring the volcano, it is thought that insight can be gained into what is happening in the everyday world. These beliefs thus represent a model for monitoring, for surveillance, for self-surveillance. The ways that this both resembles and differs from Bentham's and Foucault's model of the panopticon offers new insights into the cultural and historical dimensions of our current understandings of the state gaze. This analysis will also offer new insights into the applicability of Foucault's work on surveillance and governance in non-western contexts.

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### Introduction

Jeremy Bentham's late eighteenth century concept of the "panopticon", popularized by Foucault (1995) two centuries later, has become a ubiquitous model for thinking about the modern state's surveillance of its citizens. The central, distinctive principle of the concept of the panopticon, which was initially proposed as a model design for prisons, is that it is a method of promoting not merely surveillance of state subjects but self-surveillance. Foucault came to see the principles that Bentham idealized in the panopticon, principles of surveillance in particular and discipline in general, as answers to problems of government that "exploded" in Europe in the early sixteenth century (1995:87). His analysis of the panopticon, and indeed perhaps the panopticon itself, is thus tied to a particular time and place of state development, yet the vast body of scholarship that has built on Foucault's ideas about surveillance has been applied world-wide.

What are the implications for this scholarship of different, non-western traditions of state surveillance? What might a counterpart to Bentham's vision look like in another culture? An effort will be made to answer these questions here, drawing on a body of beliefs about volcanic hazard from the Sultanate of Yogyakarta in Central Java. The central role in Southeast Asian cosmologies of a "correspondence" between the microcosm of mundane human society on the one hand and on the other hand the macrocosm of the otherworldly universe has long been recognized. In the case of Yogyakarta, this involves a belief that there is a spirit world inside the crater of Merapi volcano, which rises twenty kilometers to the north of the city, that mirrors the world of humans. Real-world activities are thought to have their counterparts in the spirit world, so that by monitoring the volcano the Javanese can gain insight into what is happening in their everyday world. These beliefs thus represent, in effect, a model for monitoring, for surveillance, of human society. Like the panopticon, this represents a type of self-surveillance. The ways that this both resembles and differs from Bentham's and Foucault's model of the panopticon offer new insights into the cultural and historical dimensions of our current understandings of the state gaze. This analysis will also offer new insights into the applicability of Foucault's work on surveillance and governance in non-western contexts.

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A generation ago studies of natural hazards and disasters emphasized technologically-oriented analysis and mitigation of impacts. Since then an alternate approach has developed within academia, albeit less so within the disaster policy and relief community, which problematizes the concept of natural disaster by locating the sources of disaster in the political-economic structures of society (exemplified by the work of Hewitt, 1983; Watts, 1983; Wisner, 1993). Perhaps because this approach explicitly rejects the “act of God” view of disasters, studies of religion and disasters have languished somewhat as a result. There is a way to bring religious studies back into the picture, however. By locating the primary drivers of natural hazards and disasters in society, this new analytic stance sees these phenomena as “revelatory” (e.g., Solway, 1994; cf. Firth, 1959). That is, natural disasters are seen as revealing the social, economic, and political fault lines of the societies in which they occur. In many societies, traditional as well as modern, this revelatory relationship is enmeshed in cosmology: the occurrence of a disaster – like a volcanic eruption in Central Java – is seen as a divine judgement on those holding the reins of political power. God, or the spirit world, returns to the analysis not simply as the cause of disaster, thus, but as an agent of judgement acting through the medium of disaster.

In the analysis to follow, I will first describe the setting in Central Java, including Merapi volcano, the Yogyakarta court’s ritual relationship with the volcano, and its beliefs regarding a parallel spirit court within the volcano. Next I will examine the belief that perturbations of the volcano reflect perturbations in human society, and the fact that the volcano thus affords a sort of privileged optic into the state of society. I will then discuss the concept of the panopticon, and the extent to which scholars have been able to apply Foucault’s work on governance in general, and the panopticon in particular, in Asia. Finally I will analyze the beliefs of the Yogyakarta court as a distinctly non-western type of panoptic vision, in particular of the upland margins by the lowland state center, and contrast this with the more modern model of volcanic surveillance by the secular Indonesian state. I will conclude with some thoughts about what this analysis has to tell us about the possible dimensions of a non-western model of surveillance.

I will draw in this analysis on, field data that I gathered on Merapi volcano beginning with a study that I conducted there from January 1982 through May 1985, in collaboration with students and colleagues in the Department of Anthropology at Gadjah Mada University in Yogyakarta.<sup>1</sup> This study encompassed the ethno-ecology of the system of agriculture and animal husbandry practiced on the slopes of the volcano. In addition, special attention was paid to the impact of volcanic activities and hazards on this system of natural resource use and on local bodies of knowledge for comprehending and managing these activities and hazards. I also will draw on data gathered in the wake of the major eruption of Mt. Merapi on 22 November 1994, concentrating on the interpretation of this eruption by the wider Indonesian society (Dove, 2007). For more recent developments, I will draw on data gathered during a collaborative study carried out over the past several years with a colleague at Gadjah Mada, Bambang Hudayana (Dove and Hudayana, 2008).

### Merapi volcano and the Yogyakarta court

A high proportion of the 175,000 human deaths due to volcanic eruption over the past two centuries world-wide occurred on the island of Java (Chester, 1993:271). There are 129 volcanoes on Java, and the most active of these is Gunung Merapi “the Fire Mountain” in Central Java. Historical records show that Merapi has had at least 13 major eruptions with human casualties since 1006. However, since all but one of these recorded eruptions took place in the last one-third of this period (viz., since 1672), the poorer records from earlier times are probably disguising a much higher toll. The deadliest eruption in historic times occurred in 1672, leaving a reported 3,000 people dead.

Twenty kilometers to the south of Merapi lies the the *kraton* “residence of the king” of Yogyakarta, the origins of which date to the breaking up of the Sultanate of Mataram by the Dutch in 1755, and where the last ruling sultan (viz., who holds civil authority over a province) in Indonesia still sits to this day. The *kraton* of the sultanate is located on a direct line between Merapi volcano and the Java Sea to the south, and the union of the spirits of mountain and sea is thought to be integral to the spiritual power of the court. To safeguard its standing with the spirits of mountain and sea, to this day the court makes regular offerings to them. Every year on the 29th day of the seventh month (*Rajab*) of the Islamic calendar, the Yogyakarta palace makes *labuhan jumengan* “offerings” to Mt. Merapi, to Mt. Lawu to the east, and on the shore of the southern coast at Parangtritis.<sup>2</sup> To facilitate these offerings, the Yogyakarta palace maintains relations with a particular village, known as the *desa kraton* “court village”, and a particular ritual expert, known as the *juru kunci* “key master”, in each of these places.

According to Javanese cosmology, there is a world within the crater of Merapi that is variously characterized as a parallel to, or replica or miniature of, that of the Javanese themselves. According to the court chronicle of the Sultanate of Mataram (16th–18th centuries), the *Babad Tanah Jawi* “The Clearing of Java” (Santoso, 1979), human settlement of the island drove all of its spirits into the volcanoes and other marginal places, where they remain to this day (Geertz, 1960:23, cf. Carpenter, 1985). It is believed that the *baureksa* “spirits” within Merapi, have their own spirit court, to which humans are called, through death, when there is a need for labour, much as a traditional Javanese ruler would call upon his populace. As this suggests, in many respects “life” in Merapi is thought to resemble the everyday life of the Javanese – although banal events in the spirit world may translate into very non-banal events in the real-world lives of the Javanese. Thus, it is believed that house-cleaning and house-building is scheduled in the Merapi palace during each *Bulan Sura*, the first moon of the Islamic calendar, and the dirt and waste produced by these activities is manifested in the ejection of what are perceived by villagers to be lahar, ash, and gas clouds (cf. Triyoga 1991). It is also believed that some of the volcano’s eruptions represent the sallying forth of inhabitants of the spirit palace in *pawe* “processions”, headed by one of the volcano’s foremost spirits, Kerto Dimejo, riding in a carriage. The river courses on the volcano’s flanks, which eruptions typically follow, are thought to be the “streets” of the volcano’s spirits (Schlehe, 2008:284).

### Volcanic activity, human morality, and surveillance

Life in the spirit world within Mt. Merapi’s crater is thought to not just resemble the everyday life of the Javanese, the two are thought to be intrinsically linked. Of most importance, perturbation in the one world is explicitly thought to be mirrored by an equal perturbation in the

<sup>1</sup> See Pranowo (1985) and Triyoga (1991) for some of the early results of this research.

<sup>2</sup> The Yogyakarta court is nominally Islamic, as all Central Javanese kingdoms have been since the rise of the Moslem Sultanate of Mataram in the sixteenth century, although Islamic teachings are heavily inter-laden with traditional *kejawen* beliefs with earlier Hindu, Buddhist, and animist roots (Geertz, 1960).

other. In the wake of the 1994 eruption of Merapi, for example, Gembong, a prominent ritual expert (called a ‘paranormal’ in contemporary Indonesian speech) in Yogyakarta opined that:

Dalam pandangan spiritualnya, bencana alam gunung meletus dan angin ribut seperti yang terjadi sampai Selasa lalu, merupakan replika atau minatur alam semesta atau jagat raya terhadap manusia “From a spiritual perspective, natural disasters like volcanic eruptions and wind-storms such as took place last Tuesday [viz., 11/22/94], represent, in microcosm, humanity’s place in the universe”. (*Suara Merdeka*, 11/24/94)

Accordingly, the ritual expert who made this comment predicted that this *ledakan gunung* “explosion of the mountain” would be followed by a *ledakan politik* “explosion in politics” (*Suara Merdeka*, 11/24/94).<sup>3</sup> Volcanic activity, accordingly, has political significance.

Events like the 1994 eruption are popularly interpreted as raising questions about the state’s mandate to rule (Anderson, 1972; Harwell, 2000; Keeler, 1988). In Java and, indeed, throughout Southeast Asia (Adas, 1979), perturbations in the natural realm are interpreted as presaging perturbations in the social/political realm.<sup>4</sup> The history of Java is replete with claimed examples of this: the first recorded eruption of Merapi, in 1006, is popularly credited with toppling the Hindu kingdom of Mataram (as distinct from the later Moslem Sultanate of Mataram) (Decker and Decker, 1997; but see Coedès, 1968:128). Amungkurat, who was king of the Sultanate of Mataram, also fell from power following a series of natural perturbations. As described in the earlier-cited *Babad Tanah Jawi* (cited in Moertono, 1981:74): [S]un and moon eclipses occurred frequently; rain was falling out of season; a comet was seen every night. Ash-rain and earthquakes [occurred]. Many omens were seen. There were signs that the kingdom was facing ruin. Adas (1979:140) notes that the revolt of the Yogyakarta prince, Dipanagara, against the Dutch in 1825–1830 was in fact preceded by “famine, cholera epidemics, and volcanic eruptions”. Kartodirdjo (1966:66–67, 166–168) suggests that the 1888 peasant revolt against the Dutch in Banten, northwest Java, was influenced by both the occurrence and prophesy of human and cattle epidemics, earthquakes, and the eruption of Krakatau in 1883.<sup>5</sup> Keeler (1988:98) links the 1965–66 communal violence on Bali to the eruption of that island’s Gunung Agung in 1963. And during the years following Merapi’s 1994 eruption, Indonesia was shaken by financial, political, and environmental crises, which culminated in the collapse of Soeharto’s three-decade-long reign, which accorded with the predictions made in the wake of the eruption.<sup>6</sup>

As a result of the political import read into volcanic activity, there is great interest in monitoring it, which transcends that of simply monitoring a natural hazard. There is a tradition in Java, and indeed to some extent throughout Southeast Asia, of looking to mountains for insight (Boomgaard, 2003). From ancient times to the present Javanese have gone to mountains to fast and meditate. Mountains are places, thus, where one can “see” better, more clearly.<sup>7</sup> Hence the traditional belief that it is from mountains that the *ratu adil* “just king”, who will save and rebuild the kingdom, will come (Kartodirdjo, 1984). The improved sight on mountains does not necessarily involve seeing directly; reflection, from mirrored surfaces, commonly plays a role. Thus, some villagers on the slopes of Merapi say that the water in the spirit palace in its crater is like a mirror, and if you look into it you can see your own intestines. Scarborough, in a Mayan example (1993, cited in Lansing, 2006:33), says that the reflective surface of mountain reservoirs “defines the tension between this world and the next”; and Lansing says that it is in part for this property that reservoirs are built alongside mountain temples in Bali.<sup>8</sup> Through such reflection, therefore, and read in terms of the parallelism between spirit and mundane worlds, Merapi stands as a sort of guage of conditions of the everyday life of the Javanese. When Merapi is perturbed, everyday life will be perturbed as well. By monitoring Merapi, therefore, the Javanese in general and the Yogyakarta court in particular, are monitoring themselves. The volcano represents a mechanism of self-surveillance, even of self-critique.

## Panopticon

The idea of self-surveillance lies at the heart of the concept of panoptic vision, as first laid out in Jeremy Bentham’s 1787 publication, “Panopticon; or the Inspection-house: Containing the Idea of a New Principle of Construction Applicable to Any Sort of Establishment, in Which Persons of Any Description Are to Be Kept under Inspection; And in Particular to Penitentiary-houses, Prisons, Houses of Industry, Work-houses, Poor-houses, Lazarettos, Manufactories, Hospitals, Mad-houses, and Schools” (Bentham, 1995). Bentham describes the panopticon as “a proposed form of prison of circular shape having cells built round and fully exposed toward a central ‘well’, whence the warders could at all times observe the prisoners.” This ideal prison was so designed so as to encourage prisoners to think that they may always be under observation by warders, but may never observe the warders themselves, or other prisoners. As indicated by the title of his work, Bentham thought that the principles of the panopticon could strengthen practically any sort of institution; and Foucault sees this promotion of a state of conscious and permanent visibility and thus vulnerability as a ubiquitous characteristic of modernity, characterizing not just prisons but hospitals, schools, factories, asylums, and so on. Bentham suggested that by promoting the suspicion of constant observation, the cost of actual observation by prison warders could be reduced. Part of the effort of surveillance of the citizenry is thereby lifted from the state and placed on the shoulders of the citizens themselves. This not only spares the state some expense, it is more effective,

<sup>3</sup> More recently, another spiritual expert explained this macro-micro link by saying that the rage of people treated unjustly is absorbed and expressed by nature in its perturbations, such as Merapi’s eruptions (Schlehe, 2008:292).

<sup>4</sup> As a newspaper article noted in the wake of the 1994 eruption, natural disasters as well as illness, and social unrest are all messages from God (*Suara Merdeka*, 11/24/94). Adas traces this interpretation throughout Southeast Asia but suggests that it is especially strong in Java because of its history and culture: “The assimilation and transmutation of Hindu-Buddhist concepts produced a heightened sensitivity among the Javanese to stability and tranquility and the disruptive effects of change. It also resulted in a time sense that was based on a belief in the repeated and cyclic creation, decline, and destruction of the universe” (Adas, 1979:97–98).

<sup>5</sup> Other examples of volcanic eruptions occurring at key moments in Javanese dynastic politics are cited in Raffles’ (1978) compilation of court histories.

<sup>6</sup> Wisner (1993:137n11) compiled an impressive global list of contemporary national governments that have fallen as the result of natural disasters (cf. de Boer and Sanders (2002) on the “far-reaching” impacts of volcanic eruptions). Less studied but equally intriguing is the relationship between natural disaster and the waxing and waning of local societies (cf. Blong (1982) on the Enga of Papua New Guinea).

<sup>7</sup> The efforts to see oneself and the universe are overlapping and simultaneous (Stange, 1989: 134).

<sup>8</sup> Cf. Frömming’s (2005: 274–5) analysis of the divinatory import of changes in the color of the volcanic lakes surrounding Mt. Kelimutu on the island of Flores in eastern Indonesia.

and therein lies the real political power of the panopticon. As articulated in the work of Foucault, power works much more thoroughly when it is assumed by subjects themselves into their everyday practices than when it is exercised at the point of a gun. The more external power “tends to the non-corporal ... the more constant, profound and permanent are its effects” (Foucault, 1995:203).

Thanks largely to Foucault’s widely read analyses of the panopticon, the concept is popularly used today to refer to state institutions of surveillance and discipline anywhere in the world. Such usage belies the fact that the panopticon originated in a particular cultural, political, and historical moment. Bentham wrote in, and was a product of, England in the late eighteenth century. Foucault (1991:87) himself says that the “art of [modern] government” that is the subject of his analysis dates back only to the beginning of the sixteenth century in western Europe. And he maintained, accordingly, that his analysis of government was not universal. And indeed, others have noted that Foucault’s grid of intelligibility is not the same across cultures (Triantafyllou and Nielsen, 2001), which is one reason for the long dearth of Foucaultian scholarship beyond Europe (Lansing, 2003:373).

Noting the “absent Orient” in Foucault, Dutton (2003:109;89) has suggested that it would be difficult to construct a work on government like Foucault’s but grounded in an Asian as opposed to western European tradition. Some have nonetheless made the attempt. This notably includes pioneering work on mechanisms of discipline and resistance in Asian factories by Ong (1987) and Rofel (1992). Equally important have been studies of governmentality in natural resource management in Asia, including agriculture (Gupta, 1998), forestry (Agrawal, 2005; Sivaramakrishnan, 1999), the imperial hunt (Pandian, 2001), and development (Bryant, 2002; Ghosh, 2006; Li, 2007). Less studied is the very process of transplanting of Foucault’s ideas from western to non-western political traditions. An exception is Lansing (2003), who uses Valeri’s research from eastern Indonesia to illustrate an alternative to Foucault’s genealogy of power conceived as deriving from external sources like the state, police, or clinic.

Another exceptional study, and one particularly apposite for the current analysis, is Kaplan’s (1995) examination of the “Panopticon in Poona”, in Maharashtra, western India, under British colonial rule. Kaplan commences her study as follows (1995:85):

Foucault begins *Discipline and Punish* (1979) with a contrast between power over death versus power over life, instantiated by public executions versus prison timetables. He contrasts traditional, ritual, costly, violent forms of power with panopticism, a subtle, calculated technology and economy of subjection. The contrast is seen as part of a European historical trajectory...

Kaplan questions this clear distinction between historical trajectories in Europe and the rest of the world. To begin with, she points out that there was a “a colonial dimension to the history of European panoptical discourse” (Kaplan, 1995:94). That is, the disciplinary mechanisms that European states were developing for their own subject populations were also being deployed in their overseas colonies. Referring to Britain, for example, she writes: “At the very least, spectacle and capillary action, ritual and panopticon, coexist as technologies of power throughout the entire history of the colonial British” (Kaplan, 1995:93; cf. Mitchell, 1991 on Egypt). Indeed, Kaplan (1995:89) documents the actual construction of panopticon prisons in the early nineteenth century in Poona and Bombay.

Kaplan does not simply argue that government traditions in Europe influenced government in the colonies; she also argues that the experience of governing subject populations in the colonies also affected the way that government developed in Europe: “In this model, we would insist that the history of European nations be read as a product of colonizing relations. The making of the European self happens not in Europe alone, but in relation to real and imagined others in the world, in the experience and creation of difference for purposes of control” (Kaplan, 1995:94). Kaplan is not suggesting, however, that the panoptic gaze is purely a function of colonial rule. She rejects the idea of a contradiction between panopticon and custom, which “ignores the [universal] relationship between knowledge and power that Foucault reveals” (Kaplan, 1995:87). She argues that colonial data-gathering in India shows continuity with the pre-colonial system (Kaplan, 1995:92). Thus, she suggests that the native Peshwa rulers who preceded the colonial British in Maharashtra were also panopticalists (Kaplan, 1995:94), albeit not identical to their counterparts in Europe: “[W]e need not imagine that there is only one single form of panopticism” (Kaplan, 1995:94).

This is precisely what European colonists did imagine, however, when thinking about native forms of state surveillance. An example involves European views of the notorious “poison tree” of Java in the early modern era. Dutch (and British) colonists believed that the poison of this tree, used on the much-feared blow-pipe darts of native soldiers, was gathered by means of a sophisticated, native state-run system of poison extraction, manufacture, and storage. A hugely popular account of this system involved such fanciful but panoptic elements as the use of convict laborers to gather the poison, a court priest to administer the “last sacraments” to each of them (18 in 20 were supposed to die in the attempt), and a ledger that meticulously recorded each effort (Foersch, 1783). This vision represented the wholesale imposition of an idealized model of the European panoptic state gaze onto an Asian landscape whose reality was completely different (Dove and Carpenter, 2005).

### Non-western models of surveillance and discipline

The Yogyakarta court offers an example of a gaze that is Foucaultian in the way that it relates knowledge and power but that is, nonetheless, like the Peshwas of Maharashtra, distinctly different from the European panoptic model. There is a sizable literature on the cosmology of the Yogyakarta *kraton* (e.g., Robson, 2003; Pigeaud, 1960–1963, III:9–15; Wessing, 2003); and many of the contributors to this literature observe that the *kraton* was designed as a miniature model of the universe. Study of this microcosm-macrocosm linkage (note that “microcosm” literally means “miniature representation of the cosmos”) hearkens back to the pioneering work of Heine-Geldern (1930, 1942) on how Southeast Asian societies traditionally tried to live in harmony with the cosmos by laying out not just their palaces, but also their temples, their cities, and their state realms to mirror the perceived structure of the cosmos. This replication of the cosmos in miniature was not only about harmony, however, it was also about power: replicating the structure of the cosmos was a way to claim cosmic authority (cf. Thongchai, 1994 on Thailand).

This political dimension is evident in the manner in which traditional cosmologies encompassed upland-lowland relations. Culturally and politically distinct, yet inter-twined, uplands and lowlands characterize Southeast Asian politics, culture, and religion (e.g., Burling, 1965; Day, 1994; Kirsch, 1973). In Central Java, Mt. Merapi represents the spiritual counterpart to the lowland court; and the upland region in which it is located is also the palace’s “other” in wider historical, cultural, and political terms. The incorporation of Merapi into the court’s



cosmology, and its attendant surveillance of Merapi, thus symbolizes its historic surveillance of the upland margins of the state, the zone least subject to political control, and the region from which threats to the state traditionally arose.<sup>9</sup>

The Yogyakarta palace's surveillance of the mountain still has political import today, though it is changed from what it was historically. As a result of the historic colonization of Java by the Dutch and the modern formation of the Indonesian nation and a national consciousness, problematic relations with politically and culturally alienated uplands are no longer an issue for the lowland court. There is still a schism between upland and lowland, which is reflected in the existence on Merapi's slopes of Kinarejo, the volcano's earlier-mentioned "court village" and the home of its "key master" who coordinates the court's ceremonial performances on the volcano. The fact that the lowland court does not turn to ordinary villages on Merapi for this purpose reflects its continued assertion of its own authority vis-à-vis the volcano. It also reflects some differences in belief and practice toward the volcano between common villagers and the court. These differences are not a subject of contest, however; the common villagers on Merapi and the court largely ignore one another. The real axis of contest today involves not village and court, not upland and lowland, but the ritual authority of the court versus the secular authority of the nation state.

There is competition between the Yogyakarta court and the national government to monitor Merapi and claim authority for having knowledge of it.<sup>10</sup> On the side of the court, this involves its rituals and its claims to be able to both predict eruptions and moderate their magnitude and destructiveness; on the side of the government, this involves the activities of the Vulcanology Service. This is a world-class institution, developed by the national government with international assistance, devoted to the study of Merapi (and Indonesia's other volcanos), monitoring its activity, and disseminating warnings to the public (Chester, 1993:292). The service has mapped out the zone judged unsafe for human habitation, with sub-rankings from 1 to 3 (from most to least dangerous). The Vulcanology Service also has developed a ranking system for the day-to-day condition of the volcano, which are routinely publicized in the environs of the volcano. From least to most dangerous, these are: *Aktif Normal* "Normally Active", *Waspada Merapi* "On Guard [for] Merapi", *Siap Merapi* "Prepared [for] Merapi", and *Awas Merapi* "Beware Merapi". When eruptions are imminent or ongoing, the service issues daily, well-publicized press briefings on the state of the volcano, drawing data from its monitoring stations on Merapi's slopes, an example of which follows: *Kemarin, tidak terjadi gempa vulkanik, gempa low frequency, maupun gempa tremor. Hanya terjadi gempa fase banyak 2 kali dan guguran lava 88 kali* (Yesterday, there were no volcanic earthquakes, low frequency earthquakes, or earth tremors. There were only two multi-phase earthquakes and 88 discharges of lava) (Suara Merdeka, 8/12/94). These briefings not only emphasize the civil government's understanding of and thus authority over the volcano, but their use of an esoteric, scientific language emphasizes the exclusivity of this authority in representing the activity of the volcano activity to the public.<sup>11</sup>

The national government's stance toward the threat of volcanic activity is problematized by the continued presence of communities high up on Merapi's slopes, which have demonstrated remarkable resistance to all government initiatives to resettle them off the mountain. The way that the state dealt with one community that refused to move, Turgo, our primary study site, is revealing of the nature of the state gaze. In 1978, in the wake of an eruption of hot gases and ash, the government tried but failed to resettle the villagers of Turgo. Finally, it agreed to allow them to continue to live in Turgo but on the condition that their village would be officially "erased" (*dihapus*) from government maps. The state's erased village on Merapi's slopes can be compared with the Yogyakarta court's spirit palace in Merapi's crater: the latter has political/cosmological but not biological life, whereas the former has biological but not political life. The former is reminiscent of Agamben's (1998) concept of *homo sacer* "sacred man", the paradoxical individual who exists in law only as an exile from it. The secular state governs on Merapi's slopes by means of erasure; the ritual court governs by means of replication.

As illustrated by the case of the erased village, there is a marked political dimension to the Indonesian state's governance of the volcano. The very apogee of the state's powers of surveillance, the Vulcanology Service, reflects this. Its great investment in volcanic research and monitoring (Chester, 1993:292) is clearly not commensurate with the annual toll in life and property due to volcanic activity, compared with the toll from more mundane threats from (e.g.) malnutrition, infant mortality, or even other natural perturbations like landslides and flooding. There is something special about volcanic hazards: death and destruction due to volcanic activity is "privileged" is a way that other deaths and destruction are not, including those in the often unhealthy transmigration sites to which evacuees from Merapi have been sent.<sup>12</sup> The disproportionate response of the Vulcanology Service reflects the earlier-discussed traditional beliefs that natural perturbations like volcanic eruption question and thereby jeopardize the state's mandate to rule. This response also neatly maps onto the earlier-discussed relationship between microcosm and macrocosm. The tiny human population living on Merapi's slopes is a part standing in for the whole; and its welfare is important precisely for that reason. The way that the civil state constructs vulnerability on Merapi volcano thus tells us as much about the state as it does about Merapi.

## Conclusions

This study of the Yogyakarta court's beliefs regarding Merapi volcano in Central Java shows that natural hazards are an apt subject for the study of state systems of discipline and surveillance, as Foucault (1995) illustrated with his discussion of the "plague city". Disasters have, as earlier-mentioned, a "revelatory" character; they render more apparent otherwise embedded disciplinary biases and practices. This analysis shows that religious or cosmological beliefs have an under-appreciated relevance to the current interest in state surveillance. Beliefs regarding the analogic character of relations between sacred and profane realities, and the insight into the latter to be gained through

<sup>9</sup> This dimension is missing from most contemporary studies of the cosmology of the Yogyakarta palace. Analyses of palace cosmology rarely extend beyond the palace proper to encompass its wider territory and there are few if any references to upland-lowland relations.

<sup>10</sup> This is a competition between the secular, scientific knowledge of the state and the ritual knowledge of the court. For an example of competition between Christian and pre-Christian knowledge of volcanic hazard, see Merry (2003) on nineteenth century Kilauea volcano in Hawai'i.

<sup>11</sup> Keeler (1988:100) makes a similar point in his analysis of government coverage of the total solar eclipse in Java in 1983: "By means of language, the government embraced the eclipse, or attempted to embrace it, within its national project, and to make of it not a reflection upon the government, but yet another of that authority's many expressions."

<sup>12</sup> Laksono (1988) argues that mortality rates on Merapi, the volcanic hazards notwithstanding, compare favorably with rates in the government's often unhealthy transmigration sites.

monitoring of the former, can be read as a type of self-surveillance. Finally, this study reveals the little-explored possibilities of non-western systems of surveillance; it suggests that whereas self-surveillance may be universal, its particular modalities are not.

The Yogyakarta court's beliefs regarding Merapi clearly represent a type of self-surveillance, but it is one with several unfamiliar dimensions. First, it is most immediately a system for observing nature, not people. In this system, people or society are observed via the medium of nature. By studying volcanic activity, the state of society is ascertained. Further study of other examples of surveillance through nature promises to be very productive.

Second, the observers are also the observed. The beliefs regarding Merapi constitute a mechanism for observing, and critiquing, not just others, but one's self (viz., including the court, the rulers). This is a state gaze that exposes not only the ruled but also the rulers to critical scrutiny. The warden in the panoptic prison is not monitoring himself or herself, but the traditional Central Javanese rulers were and are to some extent. The state gaze in this case is not solely a disciplinary one; therefore, it is a gaze that can also provide personal insight.

Third, whereas the emphasis in the panoptic prison is on continued, direct, unfettered vision; the emphasis in the case of the Yogyakarta court is on replication, reflection, miniaturization. In the former case, one "gets at" the subject by seeing it; in the latter case, one gets at the subject by reproducing it. These seem to represent fundamental differences in how reality is apprehended.

In summary, the case of the Yogyakarta court suggests that the particular panoptic vision of Bentham and Foucault is culturally and historically western in its details. These details are not necessarily repeated in other idealized models of surveillance elsewhere around the globe. This case study also suggests that the cross-cultural, comparative analysis of surveillance, the question with which Kaplan (1995) ended her study, would be a productive place to commence further studies.

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