

**Workshop on Disaster and the City: Historical Perspectives from the Philippines, Indonesia and Japan, 1945-2011**

Date: 16 January 2013

Venue: Tonan-tei (Room 201, Inamori Building), Centre for Southeast Asian Studies, Kyoto University

Program as at 3 Dec 2012

<b>Time</b>	<b>Program</b>
0845 – 0900	Registration
0900 – 0910	Introduction by Loh Kah Seng, Kyoto University
0910 – 1000	Opening Remarks by Hiromu Shimizu, Director CSEAS Q & A. Moderator: Loh Kah Seng
1000 – 1030	Tea Break
<b>Session I Japan. Moderator: Ekoningtyas Margu Wardani</b>	
1030 – 1115	Benigno Calip Balgos, Centre for Disaster Preparedness Discussant for Oguma Eiji, 'Disasters and Social Structures: Perspectives from Japan's Historical Experiences'
1115 – 1200	James Francis Warren, Murdoch University Discussant for Shuhei Kimura, 'Repetitive Tsunamis and Transformation of a Coastal Town in Japan'
1200 – 1300	Lunch
<b>Session II Philippines. Moderator: Shuhei Kimura</b>	
1300 – 1345	Ekoningtyas Margu Wardani, Leiden University Discussant for Loh Kah Seng, 'Floods and Historical Change: Typhoon Ondoy, Disaster Response and Informal Settlers in Barangay Banaba, Manila'
1345 – 1430	Saiful Mahdi, Syiah Kuala University Discussant for James Francis Warren, 'A Tales of Two Decades: Typhoons, Manila and the Marcos Years'
1430 – 1515	Hiromu Shimizu, Director CSEAS Discussant for Benigno Calip Balgos, 'Coping Mechanisms, Interpretative Patterns, and Memories of Urban Dwellers on Volcanic Eruptions: Implications in Disaster Policy'
1515 – 1545	Tea Break
<b>Session III Indonesia. Moderator: Loh Shilin</b>	
1545 – 1630	Shuhei Kimura, Fuji Tokoha University Discussant for Saiful Mahdi, 'Tsunami Baby Boom? City Population Changes in Post-Tsunami Aceh, Indonesia'
1630 – 1715	Oguma Eiji, Keio University Discussant for Ekoningtyas Margu Wardani, 'Living in a Vulnerable Place, Learning from the History: A Case Study of Kali Code Community, Yogyakarta'
1715 – 1745	Concluding Discussion

## **Abstracts**

**James Francis Warren**

Murdoch University

### **A Tales of Two Decades: Typhoons, Manila and the Marcos Years**

The typhoons and associated floods that occurred in the Marcos Years ( 1965-1986) were labelled ‘natural disasters’. But it would have been appropriate then to label them ‘un-natural disasters’ because of the nature of politics in those unsettling years. The storms and floods of the 1970s and 1980s, which took a huge toll in lives and left behind an enormous trail of destruction in Manila, were caused as much by the interactive nature of politics with the environment, as by rampaging nature and geography per se. The changing character of the global climate and weather patterns were catalysts , but not the sole determinants of the scale of the destruction caused by typhoons and floods in the Marcos period. The political environment and natural disasters can, and often do, interact with one another.

This paper examines the interactive relationship between the spate of remarkable typhoons and floods in the early 1970s and mid 1980s and politics and political crisis. The surfeit of storms presented a major challenge to the Marcos government and to Manila. The paper outlines the destruction caused by these typhoons and the subsequent political turmoil, social upheaval, and associated problems of large scale displacement of population and disaster mitigation and relief.

Throughout the 1970s and 1980s, these so-called ‘natural disasters’, which required mobilization of nation-wide relief efforts, emerged out of a particular institutional and cultural setting in the Philippine context. However , the President and his First Lady refused to recognize the links between politics, crony capitalism and unsustainable economic development that increased the risks of man-made, rather than natural disasters, in an increasingly unstable political and economic environment.

**Loh Kah Seng**

Kyoto University

### **Floods and Historical Change: Typhoon Ondoy, Disaster Response and Informal Settlers in Barangay Banaba, Manila**

This paper will consider ways in which historical approaches are pertinent to disaster studies. In the commonly used ‘pressure and release’ model, where natural disasters are ‘trigger’ events, the underlying causes are seen to be human – demographic, social, economic, political. This model frames disasters as occurring at the intersection between natural and what are ultimately processes. Conversely, in the ‘access’ model, communities endowed with social capital and resources are able to cope with and respond to natural hazards; such a response also develops over time. In addition to large-scale, long-term developments, urban residents possess their own history of living with natural hazards. For many informal communities in Southeast Asia, this is part of everyday life, and their experience has over

time forged what Greg Bankoff has termed ‘cultures of disaster’, which are the community’s way of coping with hazardous living. Such local knowledge are also central to community-based disaster management approaches. Historical processes operate variously at international, national, regional, and local levels.

However, it is characteristic of the compartmentalisation of knowledge that professional expertise typically regards natural hazards in isolation as ‘external’ threats that can be prevented or mitigated. This also holds true for community-based approaches to disaster management. By contrast, within cultures of disaster, communities often assess hazards as part of a bundle of challenges that they encounter on a daily basis, or as part of their history. In other words, hazards are part of local history and can only be understood within it; they are not extraordinary events that stand outside it and are to be dealt with in isolation. Disaster management work must be attentive to its own assumptions, and also to context, in knowing how communities pragmatically weigh the different challenges they confront.

This paper aims to consider how people’s vulnerability to disaster is conditioned by historical factors, how they cope with hazards within the frame of local history and how disasters have the ability to disrupt historical continuity. The paper will discuss informal communities in Barangay Banaba in Manila. In 2009, they were affected by Typhoon Ondoy and subsequently adopted a community-based approach towards flood management, led by a locally based people’s organisation. The paper will map the origins and development of these communities, in particular their growing vulnerability to floods due to long-term processes in Manila and beyond, such as urbanisation, migration, economic development, and environmental degradation. Conversely, through the use of oral history interviews with the residents, the paper will also discuss the residents’ agency in dealing with both environmental and socio-economic problems, as expressed in rationalist and non-rationalist, and organised and spontaneous responses. The interviews suggest that Ondoy has been a historic turning point in the way that informal communities perceive and respond to floods.

### **Benigno Calip Balgos**

Centre for Disaster Preparedness

### **Coping Mechanisms, Interpretative Patterns, and Memories of Urban Dwellers on Volcanic Eruptions: Implications in Disaster Policy**

Communities that are constantly at-risk with natural hazards have developed worldviews vis-à-vis the risks they are facing. Generally, these worldviews influenced how people perceive and respond to disaster events. The belief systems and philosophies of communities on disasters are considered as vulnerabilities. However, amidst the enormous investment of governments in disaster policies, programs and technologies to better understand and assess natural hazards at the community level, the impact of these initiatives to the citizenry is not that significant because community-based knowledge and experience in dealing with disasters are often not capitalized and considered. Also, success stories of how local

knowledge (i.e. Simulue Island in Banda, Aceh during the 2004 Indian Ocean Tsunami) has been used by vulnerable communities in order to prepare, prevent, mitigate, and recover from the stress brought about by disasters have proved that such knowledge are embodiment of local capacities being utilized by communities to deal and cope with catastrophes.

Over the years, there have been attempts to document existing local adaptation practices of communities on disasters. Nevertheless, even though there is recognition on the value of local knowledge in disaster risk reduction, because of contentions such as its reliability, replicability, being context-specific, insufficiency for resilience vis-à-vis types and scales of impending risks, and the lack of comprehensive documentation, there is a dearth of appreciation and integration of such knowledge in disaster policies.

This paper draws upon the concepts of vulnerability, marginalization, capacity, and public policy in the face of natural hazards. As a case study, it underscores the local knowledge of the urban dwellers of Yogyakarta, Indonesia (for Mt. Merapi) and Pampanga, Philippines (for Mt. Pinatubo). More pointedly, the paper presents how people in both locations deal, perceive, discourse (i.e. result of environmental degradation, disregarding cultural heritage in the pursuit of economic development, and diminishing social and traditional values as a result of population growth and rapid urbanization among others), and remember volcanic eruptions.

The paper draws from field interviews, focus group discussions, and review of secondary literature. The paper argues that not only urban communities have means of coping, interpreting, and remembering disaster events, but also policymakers, development professionals, and academics can utilize these as a gauge in formulating grounded policies on minimizing disaster risks.

### **Saiful Mahdi**

Syiah Kuala University

### **Tsunami Baby Boom? City Population Changes in Post-Tsunami Aceh, Indonesia**

Natural disasters can impact societies in various different ways. One such example is population movement and change. Previous research has examined how natural disasters influence population. In general, population in an affected area decreases after a disaster due to rapid mortality and out-migration. Paul (2005), however, argued that not all affected communities out-migrate permanently after a disaster when there is a “constant flow of disaster aid and its proper distribution by the government and non-governmental organizations (NGOs)”. Therefore, such post-disaster situation is usually followed by an immediate but temporary increase in population due to inflow of relief works, workers, early returnees, and internally displaced persons. This is especially true for disaster-affected urban areas where most relief organizations tend to be centered, causing “beneficiaries follow aid organization” problems.

So far, studies had focused on population changes based on population movement in shorter period scenarios. That is, little research examines how population changes over a longer period, and especially from within affected regions through newborn cohort. Obviously, there are challenges in following up an affected communities using a time-series or longitudinal study in under-developed regions affected by disaster. On the other hand, as people exposed to disaster is increasing in low lying urban areas, understanding population growth and changes after a disaster is imperative to mitigate for future disasters.

In this study I will examine population structure changes in urban areas of Aceh based on population census data and indicators and contrast them in term of gender, age group, pre- and post Indian Ocean Tsunami (2000, 2005) and afterwards (2010). I will mainly use population pyramid comparisons. Indication that a new cohort of newborns are emerging in urban areas of Aceh five years after the 2004 Indian Ocean Tsunami will be investigated both quantitatively and qualitatively. I will also show urban vs. rural population structural change, which underlines societal changes in different communities in Aceh. A special focus will be given to urban and peri-urban areas of the City of Banda Aceh in which population mobility is very fluid during post-tsunami reconstruction. This city was the capital of Aceh Province, Indonesia, and was the major hub for both relief and reconstructions efforts after the tsunami. But it was also the “host” for migration from rural areas due to pro-longed conflict and urbanization.

It is expected that this study will help us understand the longer-term trend of population changes in post-tsunami Aceh in comparison to other major disasters. Will Aceh urban centers, for example, follow a trend found by Chang (2010) out of Kobe earthquake which shown the effect of accelerating long term patterns of population decline in the inner city and growth in the suburbs. Further, will the peri-urban (suburbs) areas become new centers for baby boom due to cultural understandings of traditional families which requires children in family? Implications of these urban centers population change to general trend of population growth and its social ramification in Aceh will be discussed.

**Ekoningtyas Margu Wardani**

Leiden University

### **Living in a Vulnerable Place, Learning from the History: A Case Study of Kali Code Community, Yogyakarta**

Mount Merapi which is located in the northern part of Yogyakarta is the most active volcano in Indonesia. It also has unpredictable behavior that it can suddenly erupt after years showing no activity. Despite the facts, people still lives in slope areas of Mt. Merapi for it gives them livelihood. After generations of living so close to the volcano, many people think that they can predict its behavior better than even trained scientists employed to do so. When Mt. Merapi showed signs of eruption, the people refused to leave their homes to go to safer places. This stance, unfortunately, cost 259 casualties when Mt. Merapi erupted massively on

October, 26 and November 5, 2010. Not to mention other losses in the form of economic losses and job losses as 54,153 people forced to evacuate and also health problems.

About 105,284 inhabitants are living in the most severely hit districts affected by Mt. Merapi. They have of late trickled back to their devastated homes after the eruption ended. That said, they now live in a very vulnerable area. The impact of 2010 Mt. Merapi disaster is still being felt to this day, not only by people who live in surrounding area of Mt. Merapi but also in urban area of Yogyakarta, especially those who live alongside main rivers that flow from Mt. Merapi toward the South Sea. One of the communities is Kali Code community, which has experienced the most severe impact of Mt. Merapi eruption, manifested in the cold lava flood still occurs during the rainy season. The eruption that occurred in October-November 2010 brought volcanic materials from the Mt. Merapi such as mud, sand, and stones. Heavy rainfall afterwards and strong winds, induced largest outflow of cold lava and mud to reach areas that were in the proximity of Mt. Merapi, namely Yogyakarta and Magelang.

Historically, Kali Code residents are urban dwellers, with people who live in the area being mostly classified as urban poor. Some sections of the urban poor who live in transient or illegal shelters by and large earn a living by working menial and short term jobs which generate meager income. Earning a livelihood is a difficult and risky as they lack the requisite education, and little skills, important to obtain decent urban employment. However, today, most of the Kali Code area is very different away from what one would imagine. It is an area that shows well organized settlement. Thanks to Romo Mangunwijaya or Father Mangunwijaya, a Catholic Priest, who contributed substantially to helping the community in developing its livelihood. In 1984, Kali Code the community were forced to accept the fate, when they lost their homes located along Kali Code as a result of local government regulation. According to local authority, the unstructured and unorganized nature of Kali Code settlement was an urban sore for the city of Yogyakarta. Romo Mangun, an architect, has since then used his knowledge to rebuild the settlement based on his ability to design structures. It can be said that the existence of Kali Code community officially came into being in 1984. As part of urban culture, Kali Code community, its way of life is characterized by a unique set of local knowledge and customs.

This paper will attempt to explore some experiences in using historical knowledge for disaster risk reduction for urban people living alongside Kali Code in Yogyakarta. Hence, as the first contribution, this paper will make print outs of vulnerable area maps (VAM) of Mt. Merapi volcano which were developed through a combination of historical and local knowledge basis. In this respect, the concept of willingness to accept (WTA) will be explored in unusual way to analyze the characteristics of disaster victims. The WTA approach will be determined using the local perspectives of the community rather than using conventional quantitative approach. At the end, it is hoped that the findings will give a timely contribution to the academic debate on the nature and level of treatment of the victims in the aftermath of the eruption based on WTA result.

**Shuhei Kimura**

Fuji Tokoha University

### **Repetitive Tsunamis and Transformation of a Coastal Town in Japan**

The East Japan Great Earthquake caused complex and mass damages to Japanese society. Tsunamis destroyed and uprooted buildings and infrastructures at the large part of coastal area in East Japan. Considering the aging and decreasing of the population there, many expect that even if the reconstruction of the devastated areas would be possible, it would take at least ten years. Although the failure of the TEPCO Fukushima Daiichi Nuclear Power Plant attracted major attention worldwide, we should remember that the great tsunamis took approximately twenty thousand lives.

In this presentation I attempt to follow the transformation of a devastated fishing town in Iwate prefecture. The town, administratively a part of a city with a population of 40,000, had nearly 3,000 inhabitants itself before the tsunami. This town saw four major tsunamis in the past 120 years: Meiji Sanriku Tsunami in 1896, Showa Sanriku in 1933, Chile-Jishin Tsunami in 1960, and so-called 3.11 in 2011. Each of them caused massive damage to the town and made changes to its pattern of settlement. After the Showa Sanriku Tsunami, about 200 households relocated to a higher area. However, since these households remained in possession of property in the devastated lower lands, as time passed by, people gradually began to build houses there once again. What the tsunamis swallowed on March 11 were these low-lying houses and fishery facilities.

The question here is how the past and future of the town are imagined in the ongoing process of reconstruction and how these images are coordinated with each other. Standing before the ruins, some claim that this is an opportunity to reform the society, and they argue that the communities should be relocated to and rebuilt in higher areas. Others express their hope to return to the lives that they were leading, resenting the imposition of a “bright future” by politicians. Historians and folklorists, as well as local elders, re-describe the past tsunamis and emphasize the importance of the symbiosis with nature.

Different actors in and beyond the town conceive different visions of the town’s future. People who lost their houses by tsunami seek the land to rebuild their houses. Fishermen calculate the past damage and future income. The city municipality designs the reconstruction plan, drawing the “tentative” future land-use maps of each community. Municipality’s maps are prescribed by the prefectural government’s decisions, for example regarding the height of seawalls, as well as the results of tsunami simulations by an appointed consulting company, not by local people’s demands. Thus, even though the municipal officers were not high-handed, the conflicts among the future images became visible at town meetings and workshops. Based on my field research, I follow the exacting process to create a new landscape of the town, coordinating the different images with frictions in the dynamic but historically-conditioned power relationship among the actors.

**Oguma Eiji**  
Keio University

### **Disasters and Social Structures: Perspectives from Japan's Historical Experiences**

What effects do disasters have on societies? Furthermore, how can damage minimization, aid and reconstruction be effectively undertaken? I will address these questions from my knowledge of Japan's historical experiences.

Ultimately, at the same time that disasters inflict the most damage on a society's vulnerable areas, they also accelerate the pace of social transformation. Disasters in a period of ascending social mobility can become opportunities for rapid progress; conversely, calamities in a time of decreasing social mobility exacerbate decline.

When disasters occur in cities experiencing economic growth, slum areas suffer extensive damage. However, this clears the way for initiatives like slum clearance, public infrastructure construction, and suburban migration. In terms of industrial configuration, too, the damage incurred by stagnant industries may facilitate moving labor to emerging sectors. For rural areas, disasters also present the potential to spur regional growth, in cases where governments undertake infrastructural projects such as the building of dams, roads and bridges.

But what happens in cases like the Japan of recent years, with its standstill economy and aging population? The large-scale urban disaster of the 1995 Kobe earthquake intensified the sinking of Kobe's existing industries, and as businesses shifted to other regions, this worsened the ongoing industrial stagnation. Government-funded reconstruction projects were taken up by large metropolitan corporations, which hampered the revitalization of Kobe's local economy. Low-income residential buildings in redeveloped areas lacked tenants and remained empty. Yet the local population did not decline, and as the economy continued to hollow out, Kobe increasingly became a "bed town" to the nearby industrial center of Osaka, or a mere residential suburb from which people commute to a larger city for work.

Similarly, in rural municipalities with stagnant economies, disasters also accelerate the sinking of existing industries, alongside increased unemployment, an exodus of young people and the consequent greying of the local population. In particular, agricultural and fishing villages with aged populations whose communal structures are supported by existing industries experience not simply a higher incidence of elderly victims; the societal dissolution that occurs with post-disaster economic collapse tends to produce higher rates of alcoholism and suicide amongst aged residents. In these cases, traditional infrastructure-oriented reconstruction projects are largely unable to rejuvenate communities or existing industries, with the exception of a temporary increase in orders received by companies in the construction sector. Moreover, attempts to attract new industries will produce few results. In fact, the construction of roads and related infrastructure may even hasten population outflow by directly linking the disaster-hit areas with metropolitan regions.



In conclusion, if disaster recovery during periods of economic growth is carried out in systematic and accountable fashion, it potentially creates opportunities in areas such as government investments in infrastructural services and industrial transition. However, such investment-based recovery projects in times of economic decline tend to produce negative effects, both in terms of efficacy and of finance. Relief efforts that focus on "soft" methods, including utilizing NGOs and related organizations within local societies, or community support activities like providing counseling for vulnerable people, are far likelier to be cost-effective.

**Loh Shi Lin**

Harvard University

Interpreter and Translator