

This Grievable Life: Precarity, Land Tenancy,  
and Flooding in the *Kampung* of Jakarta

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**Abstract**

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Slum clearing in Jakarta has taken on a new intensity since the end of the New Order in Indonesia, despite the nation's claim of providing a more democratic atmosphere and expansion of civil right for its citizens. This paper considers the conflation of forces that work to make the lives of Jakarta's poor residents more precarious, considering Judith Butler's ideas of precarity and dispossession and how these can lead not just to increased poverty but possibly to positive responses from the dispossessed. Considering how the poor have been moved as demand for developable land and land prices escalate in Jakarta highlights how disenfranchised the poor in modern Indonesia have become. Problems of flooding and climate change are explored, as well as the complicated nature of land use and land tenancy in Jakarta. Neoliberal pressures to both provide cheap, informal labor and to conform to international ideals about environmentalism are considered. Finally, this paper explores whether ideas of dispossession paired with social media may increase the ability of Jakarta's poor to struggle against those external forces that pressure quality of lives toward penury.

**This Grievable Life: Precarity, Land Tenancy, Climate Change  
and Flooding in the *Kampung* of Jakarta**

During the early hours of October 4, 2001, public order officials, supported by police, demolished the houses of about 160 people in a community of fisherman in Ancol Timur, on the north Jakarta coast. The village was destroyed by the city authorities to make way for the development of a yacht club and recreation center. This was the fourth time in seven years that the government had evicted the fishermen from their homes.

- Human Rights Watch,  
- “Condemned Communities: Forced Evictions in Jakarta” (2006), p. 8

Among the group were squatters living on Jl. Tongkol in North Jakarta who face eviction this week. They have yet to receive any confirmation regarding their future housing. Gatot Sudarto, 61, revealed that about 200 people living in the area were being forced by authorities to leave their homes by Friday at the latest. “We weren’t told anything before, so we’re completely unprepared,” he said, adding that Jokowi had promised that squatters would not be evicted unless the government could provide low-cost apartments. The squatters said that heavy equipment had been on standby near their houses and that they preferred to stay overnight in front of the State Palace rather than return home. The Jakarta Residents Forum (Fakta) revealed that of 26 evictions that rendered 3,751 families homeless last year, 19 were carried out without notice, leaving residents homeless for months.

- Sita W. Dewi,  
- “Loyal supporters ask Jokowi to fulfill campaign promises” (2015)

Slum clearing in Jakarta has taken on a new intensity since the end of the New Order, despite the nation's claim of providing a more democratic atmosphere and expansion of civil right for its citizens. Human Rights Watch published "Condemned Communities: Forced Evictions in Jakarta" in 2006, documenting illegal evictions and the destructions of poor peoples' homes and theft of their personal property over a six year period. The report identifies actions by the police, army, public order officials and urban gangs in the forceful eviction and destruction of both formal and informal housing.

In 2014, the city of Jakarta announced the city would be "free" of slums by 2017. Over 390 communities spread throughout Jakarta have been identified for clearing, replacement or improvement (Dewi, 2014). In the program to rid Jakarta of slums, the government claims each residence will be valued and the residents compensated accordingly. The second quote above clearly demonstrates this has not accomplished. The government sometimes says that these poor area residents are not citizens, and claim the poor do not own the land upon which they live. What guarantees will the poor have of reasonable recompense? Often, the government of Jakarta has stated that the slums need to be cleared to address flooding problems worsened by climate change.

Just what number of people live in the poor areas of Jakarta? While the rate of poverty in Jakarta is not known with any certainty, estimates range from five percent of Jakartans (Baker, 2012; Firman, Surbakti, Idroes, & Simarmata 2011; Badan Pusat Statistik, n.d.) to 50% (Jakarta Post, 2014).<sup>1</sup> While NGOs and governmental agency consider relocating these people, questions of who will be moved, and to where, and what will

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<sup>1</sup> Based on the references above, this rate is a moving target – the literature is not clear on what is considered "poverty", nor on what geographical area is included. To compound confusion, many of the poorer residents do not have residency cards (discussed in more detail later), and so are not "counted" in statistical analyses.

happen to their communities, remain. At the same time, the land now occupied by the poor is jealously eyed by developers, the government, and by the middle and upper classes.

What effect does clearing the slums have on flooding problems and climate change? The connection is tenuous at best. The poor certainly suffer from flooding and other climate change problems disproportionately, while contributing little to the greenhouse gases that engender climate change. How can the government then justify obliterating the slums, if they are neither demonstrably the cause of climate change nor of flooding? The disconnect lies in ideas of neoliberalism, precarity and the failure of the state to protect all citizens.

This paper considers the conflation of forces that work to make the lives of Jakarta's poor residents more precarious. It revolves around Judith Butler's ideas of precarity and dispossession and how these can lead not just to increased poverty but possibly to solutions. This paper considers how the poor have been moved and removed as demand for developable land and land prices escalate in Jakarta, and how this has further disenfranchised the poor in the more democratic atmosphere of modern Indonesia. Problems of flooding and climate change are explored, as well as the complicated nature of land use and land tenancy in Jakarta. Financial shocks, such as the flooded loss of a home (which often means loss of business or livelihood as well), exceed the capacity of the poor. They simply lack the resources to recover. Neoliberal pressures to both provide cheap, informal labor and to conform to international ideals about environmentalism are considered.<sup>2</sup> Finally, this paper touches on whether the poor can create a space for

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<sup>2</sup> Here, I refer to neoliberal ideas wherein the government disengages itself from monetary regulation and, as far as possible, from welfare provisions for societies vulnerable, leaving such welfare activities to NGOs and iNGOs.

participation in local land use planning, play an active role in environmental rehabilitation and whether ideas of dispossession paired with social media may increase the ability of Jakarta's poor to struggle against those external forces that pressure quality of lives toward penury.

### **From Self-Sufficiency to Penury**

Jakarta's poor crowd into what are called *pemukiman rumah* and *pemukiman liar* for simplicity's sake, this paper refers to these mixed neighborhoods collectively as *kampung*.<sup>3</sup>; *Kampung* in Jakarta occupy marginal lands and are often found along river banks, canals and the swampy North Coast area. For many complicated reasons, Jakarta floods every year, floods which sometimes bring the city to a halt and result in death, disease and displacement. Using the argument that engineers need access to canals and rivers to dredge them to stave off flooding, the Jakarta government sometimes clears *kampung* after floods, often with little or no notice given to residents.

Poor Jakartans often live in self-constructed homes made from scraps and refuse. In the decades leading up to and after *Merdeka*, or independence for Indonesia, the poor often lived in *desa*, or small villages, located outside the city. Over time Jakarta's monstrous growth swallowed these *desa*, and so they became *kampung*, or "villages in the city". In other cases, *kampung* sprang up as homes built on small plots of available, often marginal, lands. The Indonesian government encouraged housing self-sufficiency for many decades.

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<sup>3</sup> *Pemukiman rumah* and *pemukiman liar* translate to poor neighborhoods and "wild" (illegal) neighborhoods, respectively (my translation). Literally, village, the word *kampung* refers to a village within the city, typically composed of self-constructed homes of scavenged materials and occupied by poorer members of the population. Not all *kampung* residents would be considered poor; some middle class families live in the villages, and some of the homes are built from typical construction materials and better constructed.

However, with the switch to Western-style neoliberalism under Suharto, the commodification of land and desire to attract international investment made marginal lands desirable. Since then, the government has at times issued edicts of unsanitary conditions, cited illegal occupation, accused the poor of blocking public access to waterways for dredging, or asserted eminent domain to collect land in the name of the greater good for the public. Each instance ended in evicted residents, or threatened (and carried out) destruction of *kampung* homes. Residents are told their homes are illegal and located in a dangerous zone. Many of the evicted simply have to walk away with nothing (Human Rights Watch, 2006; Kelapa Gading slum fire, 2002). Some Jakartans have been relocated to high-rise buildings far from their original residences, only to return over time to their *kampung* area and build new residences (Padawangi, 2012; Winayanti & Lang, 2004). These returnees appear to have, temporarily, managed to avoid full subjugation by the government. However, the precarity of their situation continues.

While it may be true that living conditions are less than ideal in *kampung*, the argument about access to the waterway makes little sense as a reason for *kampung* clearing – the dredging equipment can be put on barges on the water, with only the need for occasional direct access along the banks of the canal or river to offload dredged material. Further, the *kampung* destruction may not be legal, as titles are not checked, or if they are, “other” land titles mysteriously appear (Kusno, 2012; Thorburn, 2004). Prior to 2000, the state had no clear legal authority to clear land without voluntary compliance by owners (although land was frequently cleared anyway). Former President Abdurrahman Wahid handed down a presidential decree in 2000 that created a form of eminent domain so that the government could clear land deemed necessary for public use (Kusno, 2012).

More recently, the Indonesian government passed Law 02/2012, titled “Pengadaan Tanah Bagi Pembangunan Untuk Kepentingan Umum (Acquisition of Land for Development in the Public Interest)” (Republik Indonesia, 2012). This law is intended to streamline the process and probability that land can be secured and permitted in a timely manner for construction of projects deemed for the good of the public – including roads, ports, dams and airports. The law took full effect in 2015. Project proposers now have access to a single-source, on-line platform for applications and processing of permits (Morris & Tsjin, 2015).

While it is clear that Jakarta needs substantial investment in public infrastructure, what will be the cost to the poor? What happens to their land rights? With increased ability to condemn private property for public use, and increased pressure from private multinational corporations waiting to partner on public-private partnership development projects, the Indonesian government’s legally-enhanced ability to evict people and take their land makes the lives of the poor more precarious (Republik Indonesia, 2012). Until now, the poor of Jakarta have at times been evicted from their *kampung*, their homes destroyed, only to return later and rebuild, as the proposed private or public projects never got off the ground due to lack of funding and the labyrinth-like permitting process. But, as discussed earlier, the process of eviction and destruction has accelerated in the past few years. In fact, the current Governor of Jakarta, Basuki “Ahok” Tjahaja Purnama, has voiced his firm intention to evict the poor and destroy their homes in the name of public good (Wilson, 2014).<sup>4</sup> Ahok stridently assigns blame to the poor for their impoverished situation, has claimed they “don’t know their place” and has even called those demanding

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<sup>4</sup> Ahok previously served as Deputy Governor to now-President Joko Widodo.

their land and human rights communists (Wilson, 2014).

Where are the poor to go? Some are moved, forcibly, to *Rumah Susun Sederhana Sewa*, commonly referred to as *rusunawa* (Adi, 2013).<sup>5</sup> These projects, often located far from the residents' prior neighborhoods, require higher rents and fees than those paid in the *kampung*. The relocation often forces residents out of previous employment, especially those who lived along the North Coast and worked as fishers, fish processors or sellers, or in other occupations related to the sea. Such was the case for Entin, who moved to Rusunawa Budha Tzu Chi, in Muara Angke, in 2007.

When living in her old, informal neighborhood, Entin (58) didn't have to pay rent or contribute to the management fees each month as she does in Rusunawa Budha Tzu Chi, also paying the Rp 90,000 fee for water and Rp 150,000 for electric power. "When we still lived on the edge of the river, we only paid Rp 5,000 for electricity. We just got water from the river" says this widow...Every day, Entin sells *gado-gado*, *rujak* [Indonesian fruit salad], *karedok* [vegetable salad in peanut sauce], and steeped hot coffee. Her income is Rp 50,000 per day. Her three children have had to leave school because she cannot pay the fees.<sup>6</sup>

- Windoro Adi,  
- "Satu Sore di Rusunawa Budha Tzu Chi, Muara Angke" (2013)

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<sup>5</sup> Low-rent, multi-story housing.

<sup>6</sup> "Ketika tinggal di pemukiman liar, Entin (58) tak perlu membayar uang sewa atau uang iruan pengelolaan lingkungan bulanan Rusunawa Budha Tzu Chi, Rp 90 ribu, serta biaya penggunaan air dan listrik, Rp 150.000. "Waktu masih tinggal di pinggir kali, kami cuma bayar listrik Rp 5.000. Air tinggal nyendok di kali," kata janda seorang pekerja kebersihan itu. Sehari-hari Entin berjualan *gado-gado*, *rujak*, *karedok*, dan *seduhan kopi panas*. Pendapatannya sehari Rp 50 ribu. Tiga anaknya putus sekolah karena tak ada biaya." (Bahasa Indonesia, my translation).

Not only do relocated people have to adjust to new work and lower pay, they have also had to leave behind their neighbors and neighborhoods. The *rusunawa* house people from many different areas, varying backgrounds and different ethnic groups and practices. This has led to tensions between neighbors. Other impacts noted include increasing domestic abuse, increasing crime, growing health problems, and the degradation of respect from children toward their parents (Adi, 2013). Many families report they cannot afford *sembako*, or the nine “necessities” of life, which include cooking oil, rice, meat or chicken, sugar, salt, fruit and vegetables. In effect, once self-supporting poor members of society are forced into penury by governmental actions cloaked in ideals of improving peoples’ lives.

Other recent plans to re-house the poor include building very inexpensive, poorly constructed housing and selling these at very low interest rates to qualifying poor people. The mortgages can then be packaged, resold, and used as security for secondary market mortgages (Kusno, 2011). This idea has been tried in Mumbai and other cities with informal housing settlements. In reality, the poor generally cannot afford these residences – but the lower and middle class residents may buy them either to save money or rent out to several poor families per unit. The original *kampung* land is then either held speculatively or redeveloped into shopping malls, golf courses or high-end housing developments. The land, likely illegally seized and generally without proper documentation, thus is converted to real property with a high value, or to its “highest and best use”.<sup>7</sup>

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<sup>7</sup> Highest and best use is an economic concept that arose out of the industrial age and then was adopted to land valuation. The idea is that land that could be put to a more economically-productive use should be, and that removing it from a lower-value use is an economically-sound move for the local jurisdiction, as a higher value results in a higher tax base. By definition, land used for low-economic value pursuits should by rights be converted – leaving no place for the poor to live.

## Housing Rights, Land Tenancy and Land Rights

The Indonesian government generally has no idea to whom land in Jakarta belongs. Land tenancy in Indonesia, and especially in Jakarta, exists in a strange, bifurcated form. Owners of the first type of land, considered “formal” land, register the property with the national government via the Badan Pertanahan Nasional (BPN)(National Land Agency). The second type, upon which most *kampung* sit, is registered at the local level. Both types of registered land are “legal”. The majority of land owners in Jakarta choose the second type of registration for a number of reasons, not the least of which are ease of registration and lower costs. Up to 70% of land in Jakarta may be registered at the local level, where records are scarce (Archer, 1994; Champagne, 2007; Kusno, 2012).

The strategy of locally-registered land and informal occupation of such land stretches back to colonial times. The Dutch, Guided Democracy and New Order governments all encouraged people to create homes for themselves to help both themselves and the government, which promised housing but could not deliver it. The Indonesia Constitution (*Konstitusi Negara Republik Indonesia*, 1945) and the Human Rights Law (*Undang Undang tentang HAM*, 1945 – updated 1999) declare that all have the right to "settle in a house with a good and healthy environment" (Kusno, 2012). After Indonesian independence, Hatta declared in 1950 that the government could not provide needed housing at that time, and he and Sukarno pleaded with Indonesians to make do as they could, encouraging them to create shelter where they might. This entreaty would be repeated by Suharto and even by the “reformed” Indonesian government after Suharto’s fall.

The Asian financial crisis in 1997 – 1998 and the 2007 – 2009 worldwide economic crisis hit Jakarta particularly hard. Poor and displaced people poured into Jakarta from other areas of Java. Some middle class people also lost their jobs and homes and joined the ranks of those living in the streets. The government asked poor residents to occupy land along train tracks or empty, abandoned plots of land (Beard, Miraftab, & Silver, 2008). Why? The city needed those poor people to stay close to the center, where they could continue to supply much-needed and very cheap labor (informal employment) and goods during the crisis (Bunnell & Miller, 2011). As much as 70% of employment in Jakarta is estimated to fall into the category of “informal” jobs. Without these informal workers and their cheaply produced goods, Jakarta officials worried the city might cease to function, and feared the middle and upper class backlash against rising prices for goods and services (Mendoza, 2011). Having complied with official governmental policy for decades and remaining where the government preferred them to live, these same poor residents today find themselves faced with possible eviction.

Customary types of land documentation and land rights further complicate the method of land ownership and tenancy in Jakarta. Thorburn details some of the complexity of working out who has what rights to land, explaining:

...The array of different types of documents and rights (*hak*) that exist – *hak milik* (right of ownership), *hak guna usaha* (right of exploitation), *hak bangunan* (right of building), *hak pakai* (right of use), *hak buka tanah* (right of opening up land), *hak bagi hasil* (sharecropping rights), *hak menempati* (right to occupy)...and the array of *girik*, *ketitir*, *Leter C* (proof of ownership documents maintained by village governments in most of Java and parts of

Sulawesi, also dating back to the colonial period), and a mind-boggling variety of tax register documents...

- Craig C. Thorburn,  
- "The plot thickens: Land administration and policy in  
post-New Order Indonesia" (2004), p. 34.

Thus, the issue of land ownership and rights of use is far from clear. To complicate matters, developers sometimes appear with unexpected documentation that "proves" their right to whatever land is in question, documents that do not agree with any local records but against which the poor have little opportunity to protest (Firman, 2009; Kusno, 2012). Access to legal assistance for these matters generally exceeds the financial capacity of poorer people. Even when proper legal channels are pursued, homes and belongings may be destroyed while the legal evaluation proceeds at a snail's pace.

Issues of land tenancy, as discussed above, illustrates the very base of precarity for millions of people around the world, especially in Asian mega-cities where innumerable poor people try to find a small piece of ground on which to pitch a tent, construct a tiny refuge, or even just sit upon. Those who do manage to establish some type of regular use of the land, in Jakarta and in other deltaic cities, face further threats from natural and manmade disasters, including flooding. Flooding in Jakarta arises from complicated factors, and tends to affect the lives of the very poor most directly. Flooding throughout the world is predicted to increase dramatically due to climate change, including in Jakarta, adding to the precarity of its poorer residents.

### **Precarity of the Poor**

What possible effect does clearing the slums have on flooding problems and climate change? The problem is grounded in ideas of neoliberalism, which became a predominant

force in Indonesia, and especially in Jakarta, in 1965. Toward the end of Guided Democracy and Sukarno's power, levels of poverty increased in Indonesia, exacerbated by poor rice crops and droughts. Increased poverty, along with Sukarno's loathing of the Western-style democracy, set the stage for the bizarre occurrences of the set of coup that occurred in 1965. Suharto's seizure of power resulted in "shocking" the economic system in Indonesia, with which created long-term hardship for the poor.

Naomi Klein's *The Shock Doctrine* details the instigation of the coup and following terror campaign by Suharto et al. Klein implicates the CIA and Chicago School of Economics in assuring the coup's success (2007). Milton Friedman's ideas of aggressive neoliberal economic policies had found a place to roost in Indonesia (although Argentina's coup was the first demonstration of the Chicago School's policies on rapid-fire realignment of an economy). According to Klein, whose research includes an exhaustive review of declassified CIA information, the murder of ½ to 1 million people in the aftermath of the coup in Indonesia was an intentional action, orchestrated by the CIA. Klein argues that CIA agents trained local Indonesian cadres in terror, torture and murder. These intentional actions were aimed to silence local outcry and weed out the intelligentsia and artists of Indonesia.

In *Pretext for Mass Murder: the September 30th Movement and Suharto's Coup d'Etat in Indonesia*, John Roosa takes a different viewpoint than Klein of the PKI September 30<sup>th</sup> movement and the successive slow coup by Suharto and his generals. Roosa's research points to US involvement, albeit at least one level removed. Roosa argues that the US did not, in fact, instigate the PKI-backed kidnapping and murder of upper echelon generals, which would require significant direct involvement and conspiracy that Roosa cannot

support with his evidence. Nor does he argue for CIA direct training of anti-PKI cadres in Java. Rather, Roosa details the US involvement in training Indonesian officers, both in the US and in Indonesia, in various capacities, including economic education. Early on, the Indonesian army was preparing for its eventual control of the Indonesian economy; army officers began investing in businesses around Java long before the pair of coups. Roosa further argues that the US government and Indonesian Army were waiting for the PKI to make a move, and planning counter actions when the communist group did act (Roosa, 2006).

In the waning years of his power, Sukarno's economic policies began to fail and the Indonesian economy to founder. The army elite realized that, if they came to power, economic improvement would be imperative to holding power. Roosa holds that "The economists who taught at Seskoad [a staff college for army officers in Bandung, taught by imported Berkeley professors], such as Muhammad Sadli, later became the so-called technocrats and Berkeley mafia of the Suharto regime" (Roosa, 2006, p. 186). Whatever the route, economic neoliberal policies of the US were imported into Indonesia and enacted after Suharto took power.

The terror enacted throughout Indonesia (and especially in Java) that followed the coups resulted in a complete dislocation of the economy and rapid creation of a middle class – a route considered crucial to economic success by US neoliberal economists. Rice subsidies ended, Suharto moved immediately to reconcile with the US and began an intentional program to diversify the economy. While revised economic policies may have brought about a rapid improvement in the many Indonesians' income, the larger project created a huge disparity between the upper and middle classes and the poor, inserting a

middle class that indicated to the world that neoliberalism and democracy could succeed in an Asian setting, albeit without the social supports and security nets provided in a liberal economy (Klein, 2007).

Yet the growing middle class depended upon their poorer neighbors for access to inexpensive services and food. The poor sometimes worked as *pembantu*, freeing up the middle class from household responsibilities, allowing more time to be spent by the middle class on work, amassing wealth, leisure and accumulating material objects.<sup>8</sup> With the promise of personal advancement and hopes for higher wages, many poor left their villages and headed for Jakarta to take on the *pembantu* role. But the costs of residing and surviving in the metropolitan area quickly outstripped realized monetary gains for many of the urban in-migrants. Dislocated now from their traditional sources of income back in their villages, divested of arable land or an established clientele in the village, these new urban poor began crowding in to the *kampung* of Jakarta, fashioning homes as best they could, often using scavenged materials (Firman, 1998; Goldblum & Wong, 2000; Keivani & Mattingly, 2007)

These self-built homes represent long-term residences for many of the poor. Some families have resided in the same neighborhoods for decades and across generations. During Sukarno's presidency, and then in the early years of Suharto's, the poor were invited to come to Jakarta to help the economy by providing critical, inexpensive services. When the financial crises hit in 1997/98, the Jakartan and federal government pleaded with the poor to remain in Jakarta and asked others to come and join in the fight to save the

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<sup>8</sup> "Helper", *pembantu* are often, although not always, poorer relatives of those for whom they work, and included housekeepers, cooks, drivers and errands runners.

national economy (Kusno, 2012; Susetyo, 2013). People responded, flooding into the greater Jakarta metropolitan region. But these in-migrations largely increased the precarious financial situation of many of the poor. The poor served at once as a much-needed resource of cheap labor and goods, and as the recipient of ire by the upper classes. Thus the lives of the poor became more precarious with regard to social and moral expectations and opinions of those more financially fortunate.

In Judith Butler's ideas about precarity, we see the ambivalence of the nation-state to the condition of the marginalized poor of Jakarta (Butler, 2009).<sup>9</sup> In simple terms, precarity refers to the fact that all living things exist in a precarious state between life and death, as death is the counterpart to life. However, Butler expands this idea to look at a hierarchy of precarity, often exacerbated by governance (Butler, 2004). Any given person's ability to manage and improve their life falls subject to outside forces, some political, some social, some environmental or economic. Many of the poor in Jakarta come from families who have been poor for decades or longer, whose lives are still largely circumscribed, their choices quite limited. Those who inhabit this world epitomize Judith Butler's ideas of precarity.<sup>10</sup>

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<sup>9</sup> We all exist in some form of precarity. Some of the external factors of precarity have become quite normalized in our (Global North) daily lives, to the point we do not even recognize them. Others are more visible – lack of access to health care, lack of livable wage jobs, the requirement (in the US) to pay for car insurance (which is far too expensive for some people). One's measure of precarity depends on where one lives, education level and socioeconomic level.

<sup>10</sup> "...“precarity” designates that politically induced condition in which certain populations suffer from failing social and economic networks of support and become differentially exposed to injury, violence, and death. Precarity also characterizes that politically induced condition of maximized vulnerability and exposure for populations exposed to arbitrary state violence and to other forms of aggression that are not enacted by states and against which states do not offer adequate protection.” – Judith Butler, “Performativity, Precarity and Sexual Politics” (2009), pp. 322-323.

In Jakarta, those living in *kampung* fall subject to several forces of political precarity. For instance, those who have no Jakarta identity cards (called KTP, or *Kartu Tanda Penduduk*) have no identity, and thus have no legal voice and cannot claim citizens' rights.<sup>11</sup> They may lack these cards for a number of reasons (Ito, 2011; Kusno, 2012; Mendoza, 2011).<sup>12</sup>

Even those with a KTP may find their voices silenced, or ignored. Some *kampung* residents have worked with NGOs and Legal Aid groups to try and avert destruction of their homes and the outright theft of their belongings from *kampung* destruction. However, at times, *kampung* have been destroyed during active legal cases, leaving the displaced with no compensation and no further legal claim. Clearly these deliberate actions increase precarity in poor peoples' lives. The government further fails to provide protection against the violent actions of those sent to carry out the slum clearing (Human Rights Watch, 2006). Police, military and public order officers often seize residents' personal property before or during home destruction. One eyewitness from the Human Rights Watch report noted that the thugs and gang members employed by the police to clear slums would sort through the wreckage and even take the better building materials, severely restricting residents' ability to rebuild a reasonable residence.

Why do the *kampung* get cleared, sometimes repeatedly? Real estate concerns, developers and the government want the land on which the *kampung* stand – although not

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<sup>11</sup> Without a proper KTP, residents cannot vote, send children to public school or access health care.

<sup>12</sup> Indonesians' are issued KTP based on their place of residence; obtaining a new one if a person moves to a new location is not simple. In some cases, ethnically Sundanese and Madurese are denied KTPs in Jakarta because they are considered "foreign", not Jakartan. If one does not declare one of six allowable world religions for the KTP, one cannot receive one (and, in fact, can be imprisoned). The most common reason for lack of a KTP is lack of an address. Although *kampung* may be issued status as a neighborhood, each residence must have a street address to qualify as part of the neighborhood. Creation of informal housing often means a home with no address. No address means no KTP.

to reduced flooding, as is claimed. Liberal economic ideas about the commodification of land, along with neoliberal ideals about the use of land (“highest and best use” – see footnote 8) come into play. As Jakarta becomes more and more densely populated, the value of land, any land, increases. Grabbing and holding land for speculative purposes was rampant during the New Order and has reached a frenzy post-*Reformasi* as multinational corporations hesitantly invest in the Indonesian economy (McAdam, 2011; Mietzner, 2013)

Even if flooding has nothing to do with the governmental land grab, flooding and climate change present further hazards for the poor, exacerbating their precarity. Peoples’ lives may become more precarious from natural disasters. Indonesia certainly faces danger from a number of possible natural disasters, with flooding the most common one in Jakarta (Texier & Diterot, 2008). Every year, poor people’s homes are affected, and sometimes destroyed, by the disastrous flooding that occurs in Jakarta, flooding which is now complicated by climate change problems (Budiyono, Aerts, Brinkman, Marfai, & Ward, 2015; Caljouw, Nas, & Pratiwo, 2009; Jakarta Urgent Flooding Mitigation, 2013). Not only do people lose their homes, they simultaneously lose their place of work. Problems with flood-related diseases sometimes occur after the worst of the inundation is over, meaning some poor people cannot return to work for a time, or worse, become permanently disabled or die.

As for social precarity, *kampung* dwellers are increasingly the target of ire by new middle- and upper-class “environmental” Jakartans who blame the flooding, and some of the climate change problems, on the poor. As in many westernized nations, Jakarta’s poor are increasingly blamed for their own poverty, accused of being lazy, stupid and without motivation. This represents a departure in relations between the upper and poorer classes

in Jakarta, who have long participated in a symbiotic (although not equal) relationship (Klein, 2007; Kusno, 2011; Lorey, 2015; Mendoza, 2011).

### **Dispossession**

Is the lot of the poor as hopeless as it seems? Perhaps. But despite the perceived wretchedness of future life in the *kampung*, the fact of the persistence of life despite precarity gives one pause. In a recent book, *Dispossession: The Performative in the Political: Conversations with Athena Athanasiou*, Judith Butler and Athena Athanasiou exchange letters and emails about how people become dispossessed: of objects, or relationships, of power and citizenship. Athanasiou writes about the manipulation of crises to the advantage of the government, "...'crisis' becomes norm [sic] through governmental activities...a perennial state that is of exception that turns into a rule and common sense and this renders critical thinking and acting redundant, irrational and ultimately unpatriotic" (Butler & Athanasiou, 2013, p. 149). This would seem to describe the situation where the Indonesian government manipulates the annual crisis of flooding into an assault on poor citizens and their property, and lends credence to those who accuse the poor of "squatting illegally" on the last open land in Jakarta – open land that is needed to create permeable space so that flood waters can sink below ground rather than collecting on the surface. When evicted, people are simultaneously dispossessed of land, home, personal property and rights.

Although the overall idea of dispossession is negative, dispossession also indicates the necessity for a political and social life. While involvement in the social and political can create precarity for us, it also works in an opposite manner. We are human because we are social and political creatures, willing or unwilling participants in a larger public life. For

Butler, this is the flip side to negative dispossession.<sup>13</sup> This is where we are dispossessed of our limited, bounded selves and realize we need others – and they need us. We are all individuals, but we need a social experience and “sustaining environment” to be human.

This dispossession provides a lacunae in the apparent hopelessness of so many peoples’ lives in this world – if one can somehow reach beyond one’s normal, precarious situation and make a human connection with those of a different experience, one may be able to reclaim one’s agency and reach for an alliance with a larger group. This connection may allow a person or a group to create a chink in the precarious situation engendered by economic, political and governmental power that seeks to stifle individual outcry and recalcitrance to manipulation. At the other end of the connection are people who need/desire to help others – in a way, supporting their own role in dispossession, perhaps enabling those outside to step beyond their own societal norms and pressures, to do something that makes no political or economic sense in this different society.

Even theories of precarity and dispossession, however, fail to take into account something remarkable about Jakarta’s *kampung* dwellers (and many people in similar situations throughout the world). While poorer, with more precarious daily lives than the middle and upper class residents of Jakarta, these people demonstrate an amazing level of resiliency. As mentioned above, many have had their homes destroyed and personal property stolen numerous times. Yet they persevere. They may return to their old

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<sup>13</sup> “...we are moved by others in ways that disconcert, displace and dispossess us; we sometimes no longer know precisely who we are, or by what we are driven, after contact with some other or some group, or as a result of someone else’s actions. One can be dispossessed, in grief or in passion – unable to find oneself...we can say that dispossession establishes the self as social, as passionate...as dependent on environments and others who sustain and even motive the life, the self, itself”. – Judith Butler, “Precarious Life: The Powers of Mourning and Violence” (2004), p. 3-4

neighborhood and rebuild. They may self-construct new residences from scraps and odds and ends in a different location. They may alter their work from fisher to garbage picker or food vendor. The poor continue to live, to marry, to have children, and sometimes send those children to school. Some continue to fight for their rights, increasingly accessing the larger world through social media. And in a nation that suffered through the abrogation of choice, voice, and sometimes life under the New Order, many, including the poorer citizens, are learning to work together to demand rights and access to services. While remaining in precarious lives, some have learned that we all deal with precarity to some degree. From a shared understanding of the lack of control we have over our lives may arise an increasing call for minimizing governmental and military forces that exacerbate precarity.

However, despite the possibilities offered via dispossession and international social media connections, the poor of Jakarta will have to deal with flooding and the exacerbating forces of climate change, especially if they hope to remain in their *kampung*, which, after all, sit in the path of all these environmental impacts. We now consider the environmental conundrums pressuring all Jakartans to seek ways out of their current predicament. Some disaster and management plans have been created, but a look at the problems will help clarify whether these approaches are feasible or even useful. The subsections below consider the history and causes of individual factors related to climate change and flooding in Jakarta.

## **Flooding, Kampung Housing and Climate Change**

### **History and Causes**

Before Jakarta was Jakarta or Batavia, when it was a village named Jacatra, flooding occurred in the alluvial plains where the future megacity would grow (Setiawati, 2013). Although the Dutch originally settled away from the existing small *kampung*, they later moved down into the muddy, river-crisscrossed lowlands and constructed a fort. The local population would enter the fort as servants, to deliver goods, and to trade. Eventually, the fortifications expanded to include the *kampung*.

The Dutch also built canals. Jan-Pieterszoon Coen, second governor general of Batavia, designed the early canals of Jakarta, the design of which would later inspire the canals in Amsterdam (Susetyo, 2013). Over time, some canals silted over and were turned into roads. The Ciliwung River was dammed and a diversion canal built to the west of the nascent city in the 18<sup>th</sup> century. Lesser canals were built. Yet the flooding continued. Recent significant flooding in 2002, 2007 (when 60% of Jakarta was under water) and 2013 led to loss of life, loss of residence for hundreds of thousands of people, flood-related illnesses and expensive infrastructure repairs (Abidin, Andreas, Gumilar, Fukuda, Pohan, & Deguchi, 2010; Caljouw, Nas, & Pratiwo, 2009; Susetyo, 2013).

Jakarta flooding results from complicated factors. Rain falls all year in Jakarta, but most heavily during the monsoonal months. Climate change compresses the wet season and also intensifies the level of precipitation (IPCC, 2013). Lying in an alluvial plain running down to Java Bay, the city is crossed by 13 rivers and many canals. When rain falls too quickly, the rivers and canals leave their banks. Watershed destruction in the hills around Jakarta contributes to high water runoff levels, as water cannot permeate the ground fast

enough and so rapidly runs off into the rivers and down the hillsides, carrying tons of silt along with it. The waterways silt up, adding to the flooding problems. Rivers and canals both seem permanently clogged with solid waste (Ward, Marfai, Poerbandano, & Aldrian, 2012)<sup>14</sup>. Labyrinth-like governmental agency responsibilities with no clear lead agency mean little action is taken to address the flooding issue. Uneven and ongoing land subsidence (collapsing or sinking of land) means that water that formerly had a path to rivers, canals and the sea now sits trapped below these outlets (Chaussard, Amelung, Abidin, & Hong, 2012; Akmalah & Grigg, 2011).

### **Population and Tenancy Patterns**

*Daerah Kapital Ibu Kota Jakarta* (literally, Capital Mother City Area), or DKI Jakarta (the actual “city”) counts a population of ten million people, which swells with commuters and others to about 13 million during business days. However, the greater metropolitan area (Jabodetabek) includes about 25 million people (Izral, 2013).<sup>15</sup> The area encompasses five cities, one regency (or *kabupaten*, Bahasa Jawa), 44 districts and 267 sub-districts/villages.<sup>16</sup> Continued population growth may bring the population to 30 million people in the metropolitan area by 2030 (Izral, 2013). Whatever the number, many of the poorest live alongside or very near the Ciliwung, Cisadane, Sunter, Pesanggrahan and Grogol Rivers, beside the smaller rivers and streams, along the canals, or in the swampy north coast area beside Java Bay (Abidin et al., 2011; Vollmer & Grêt-Regamey, 2013). These settlements tend to house people with restricted access to municipal services,

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<sup>14</sup> It is true that *kampung* residents dispose of waste (including human) in the canals. So do most other Jakartans. Only about 2% of Jakarta has solid waste disposal services (Akmalah & Grigg, 2011).

<sup>15</sup> “Jabodetabek” refers to: Jakarta, Bogor, Depok, Tangerang and Bekasi.

<sup>16</sup> Indonesia is divided into provinces and regencies.

especially fresh water and solid waste disposal (both garbage and human waste disposal)<sup>17</sup>. Proximity to a river or canal allows residents to meet some of these needs (Vollmer & Grêt-Regamey, 2013). But in order to dredge the waterways and facilitate water flow to the sea, the government needs access, and claims the informal settlements block public access.

### **Watersheds, Waterways and Drainage**

One of the most manageable flooding problems may be the constantly clogged waterways of Jakarta. Each year, vegetation loss results in more sediment running down from deforested catch basins of the hills around Jakarta. With little in-city green or open space to absorb rains, the streets quickly fill with water, which should run off into the canals and rivers (NL Agency, 2012; Parkes et al., 2010). But the canals are often full of sediment and garbage. Jakarta residents, poor and rich, dispose of garbage in available canals, streams and rivers. Only 60% of garbage in Jakarta is estimated to wind up in landfills, collected by the City Sanitation Office (Ward, Marfai, Poerbandano & Aldrian, 2012; Vollmer & Grêt-Regamey, 2013). In 2008, the city's residents disposed of 30m<sup>3</sup> of solid waste per day, and much of it ended up in the waterways (Vollmer & Grêt-Regamey, 2013).<sup>18</sup> In August, 2013, Jakarta Deputy Governor Basuki Tjahaja Purnama noted, "The sewers are all clogged up, so some areas get flooded really quickly during rains. Our sewer

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<sup>17</sup> However, some *kampung* dwellers DO have access to electricity, municipal water and some other municipal services, and pay land taxes (*pajak tanah*). In their minds, this helps prove their claim to land ownership and legal tenancy. "We had electricity and water and we paid for it. We also paid land taxes to the government. We have been paying for a long time" (Budi Santoso). "I had been living here for seven years before the eviction. Everything was complete. I had electricity, telephone; it was all in our name" (Agus Adil). - Human Rights Watch, "Condemned Communities: Forced Evictions in Jakarta" (2006), p. 27. Many interviewees in the Human Rights Watch report also paid monthly fees to local officials, with the understanding this guaranteed they would not be evicted. However, they later were evicted and their homes destroyed (*dihancurkan*).

<sup>18</sup> A nine story building is about 30 meters tall; a cube with that dimension on each side would approximate the daily Jakarta garbage.

network is in very bad condition. Almost all of it was built more than 15 years ago and has never been cleaned since then” (Tabmun, 2013).

Yet rivers and canals can be dredged. The World Bank had developed a project in 2011 (JUFMP – Jakarta Urgent Flood Mitigation Project), ready to dredge the rivers and canals as well as 65 hectares of retention facilities in and around Jakarta. The overall project parceled out eight contracts, covering 15 individual sites, administered by DKI Jakarta, the Directorate General of Human Settlements, or the Balai Besar Wilayah Sungai Ciliwung & Cisadane. Each contract was to include an *Environmental and Social Management Plan*. The project includes resettlement of homes and communities in 6 of the 15 sites. Those impacted would be reimbursed in a number of ways, including retraining for new employment and, in some cases, cash settlements (Baker, 2012).

However, Joko Widodo, the former Governor of Jakarta and current President of Indonesia, balked at the *Environmental and Social Management Plan* requirements, apparently scrapping the project in April 2013. The governor’s office felt the five-year time-frame for dredging was too long and protested against the stipulations for resettlement and compensation (Tabmun, 2013)<sup>19</sup>. Instead, the governor proposed buying dredging equipment and proceeding without World Bank participation. This, of course, begged the question of where the money would come from for a project estimated at US\$140 million. In September 2013, the governor and the World Bank came to an agreement about the contract wording. The dredging project commenced in 2014. The requirement to resettle and compensate relocated people was changed, but to what extent has yet to be seen. It may still be that *kampung* residents are evicted illegally and/or without fair compensation.

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<sup>19</sup> According to the World Bank website, the actual work would be accomplished in three years.

## **Subsidence**

Subsidence, particularly in combination with sea level rise, heavy rains (such as monsoon), or storms, aggravates inundation risk from the major rivers and widens the coastal areas affected by storm surges and tidal inundation.

The costs associated with subsidence are enormous, directly, because of damages to buildings and infrastructures, and indirectly given the increase in flood risk and the threat to human life.

- E. Chaussard, F. Amelung, H. Abidin, and S. Hong, 2012  
- "Sinking cities in Indonesia: Alos palsar detects rapid subsidence due to groundwater and gas extraction" (2012), p. 150

Subsidence (sinking or collapsing land) is an on-going problem in Jakarta. The subsidence stems from several forces. Natural subsidence occurs due to geological activity and soil types. Over the past century, pumping out of much of the aquifer that underlies Jakarta and its attendant, slow collapse has added to subsidence. Excessive physical structure weight (too many buildings and roads, without needed attention to load bearing requirements) compound the aquifer collapse and worsen subsidence. Therefore, flooding in Jakarta is partly a natural process, partly a human-created problem, and partly (and increasingly) due to general human behavior and consumption of fossil fuels. The sum problem can be devastating: Something like 150,000 people were dislocated in floods in 2007 and another 100,000 in January 2013.<sup>20</sup> With much of the metropolitan region was under water during the 2013 flood, some areas for weeks, bringing the economy to a

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<sup>20</sup> This includes people from all socioeconomic classes.

grinding halt and raising alarm with multinational corporations operating out of Jakarta (Baker, 2012; Tabmun, 2013).

The more quickly fluid is extracted from the aquifers underlying Jakarta, the faster the subsidence (Chaussard et al., 2012). Information on groundwater extraction rates in the middle and lower aquifers correspond to subsidence rates in the areas studied<sup>21</sup>. A growing population and increasing commercial development in Jakarta equate to more fresh water demand, with aquifer depletion rates accelerating as a result. The groundwater levels in the middle and lower aquifers underlying Jakarta dropped in the range of 0.2 to 2.0 meters from 2002 – 2007 (Abidin et al., 2011)<sup>22</sup>. Complicating the land subsidence, sea water at times infiltrates the aquifer, causing problems with drinking water for people throughout the city.

The annual subsidence rate in Jakarta is estimated at anywhere from 6.1 to 28.2 cm/year, depending upon which method of measurement is used and where one measures (Ward, Marfai, Poerbandano & Aldrian, 2012). Subsidence is not equally distributed across the region. One location in northeastern Jakarta, near the coast, subsided 85 cm (about 33.5 inches) per year from 1997 to 2007 (Abidin et al., 2011). One area in northern Jakarta, toward the west end of Java Bay, is estimated to have sunk by 4.1 meters in the past 40 years (Deborah, 2012). More extreme estimates project a further subsidence in north Jakarta, at another 5 meters over the next two decades. (NL Agency, 2012). This subsidence creates a situation where water outflows that previously existed no longer do, adding to

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<sup>21</sup> There are three levels of aquifer below Jakarta; the upper aquifer depletion actually has the least to do with subsidence.

<sup>22</sup> It is common practice in social science and humanities writing to spell out all numbers under 11. However, given the more scientific bent of this section, and the fact that it is easier to compare numbers when the same format is used throughout, I have chosen to use only digits in this subsection.

floodwater levels in Jakarta. When combined with the fact of sea level rise, the total future flooding picture is devastating.

Yet despite all of the research and findings, not much can be done about subsidence. “Filling” of aquifers with other materials creates issues with soil compaction and stability, especially in a nation punctuated with volcanoes and subject to significant tectonic activity. Reducing the groundwater extraction from Jakarta aquifers may slow the rate of subsidence. Without alternate water sources, however, this remains impractical in the short term. Further, the ground will continue to subside even without extraction, as the other subsidence factors will remain in play. To some degree, then, the Indonesian government must accept continued subsidence and concentrate on efforts to stave off rising seas and find ways to reduce riverine flooding (Akmalah & Grigg, 2011; Baker, 2012; Chaussard et al., 2012).

### **Open Space**

Open space is one critical factor in flood control, as it allows rainwater and river or canal overflow to be absorbed and percolate back into the water tables or flow below-ground out to the sea. Without open space, the water just accumulates on the surface. Climate change threatens not only to increase riverine flooding, but the entire city of Jakarta is threatened by seas that may rise by 10 to 15 feet in the next 50 years (IPCC., 2013).

In the past, *kampung* often included some arable land, from which residents produced crops for consumption and sale (Parkes et al., 2010; Peluso, Afiff, & Rachman, 2008). This land, obviously, was permeable. But in the past 30 years, *kampung* residents have been pushed from their existing villages and crowded into ever-smaller plots of land

or even into marginal lands along roadways, train tracks or canals<sup>23</sup>. Much of the formerly open/permeable land has been converted to developments such as malls and higher-end housing (Vollmer & Grêt-Regamey, 2013). Dispossessed of their traditional lands and rights to use, and having no control over what happens to that land, the poor are now the targets of accusations of occupying and destroying needed open space in Jakarta (Kusno, 2011; Server, 1996).

### **Climate Change and Rainfall**

The Intergovernmental Panel on Climate Change (IPCC) released the first part of its Fifth Assessment Report (AR5) *Climate Change 2013: The Physical Science Basis* in October 2013. The full report and policymakers' summary provide results of data modeling and analytical work performed by over 100 scientists from around the world, all concerned with the issue of global climate change. The results differ dramatically from the AR4 data, released in 2007. Succinctly, climate change is occurring much more rapidly than previously thought. Increasing ice sheet retreat, loss of ice reflectivity, ocean acidification, and ocean and ambient temperature changes will have striking impacts on the world in as few as 50 years (IPCC, 2013).

Jakarta is positioned to suffer from climate change in the extreme. According to a one World Bank study, up to 40% of the city sits below sea level (Baker, 2012). Jakarta lies largely in an alluvial plain, openly vulnerable to concomitant flooding from tidal surges and riverine runoff, especially during periods of heavy rain. The Jabodetabek area receives about 65 inches of rain per year. However, river catchments upstream, however, collect water from much higher rainfall levels - an average of 177 inches of rain per year from

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<sup>23</sup> Which may or may not be "green space", but if so, is of poor quality and quite limited quantity.

1977 to 2008 – and most of that ran downhill into the Jakarta plain. Rain falls primarily between November and March. Rainfall is increasing in Southeast Asia and will continue to increase due to climate change. This will be accompanied by changing rainfall patterns that will include longer dry seasons and more intense wet seasons (Baker, 2012; IPCC, 2013; Ward et al., 2012).

### **Sea Level Rise**

The combination of heavier rains, lack of drainage, subsidence and sea level rise threaten Jakarta with severe and ongoing flooding. Sea level rise related to climate change happens for three basic reasons: melting sea ice and glaciers; retreating (melting) ice sheets (which cover land, not the sea), especially the Greenland Ice Sheet; and warming oceans, since water expands as it warms. The oceans warm as a result of increasing air temperatures - when the warmer air arrives above the Arctic Ocean, it “sinks” into the water, warming first the upper, and eventually the lower, levels of the ocean. Although the seas around Java have been rising steadily over the past 100 years, the rate of rise seems to be accelerating (IPCC, 2013).

Measurements of recent of sea level rise vary. One study found a sea level rise in Java Bay of 2.0 to 4.0 cm/year from 1992 to 2005, along with increased storm surges in the area (Ward et al., 2012). In other studies, the tide gauges at Tanjung Priok on Java Bay showed a sea level rise of about 9.0 mm/year from 1984 – 2004. Satellite altimetric data showed a higher rate of about 15.0 mm/year in that same area over the same time period (Abidin et al., 2011).

Sea level rise and subsidence in the north coast area of Jakarta could lead to a *conservative* net sea level rise relative to the coast of 0.3 meters in 2020 and 1.1 meters in

2050. The high range of estimates puts relative sea level rise at 1.3 meters in 2020 and 4.6 meters in 2050 (Abidin et al., 2011). However, these projections were based on the IPCC AR4 released in 2007. The AR5 data of 2013 indicate more drastic mean sea level increases.

Rising seas have already affected poor households along the north coast areas of Jakarta. Regular flooding related to monthly lunar tidal surges regularly inundates some settlement areas (Padawangi, 2012).<sup>24</sup> The Seribu Islands, low ridges in Java Bay and home to about 85,000 people, experience frequent flooding during storm and tidal surges (Ward, et al., 2012).<sup>25</sup>

### **Governance Issues**

Although many laws and regulations are in place in Indonesia to deal with flood-related issues, such as the Disaster Management Law of 24/2007, the Water Law of 7/2004 and the Spatial Planning Law of 26/2007 (Katsuhama and Grigg 2010), to date programme management in terms of climate change adaptation is limited

- P. J. Ward, W. P. Pauw, M. W. van Buuren, & M. A. Marfai,  
- "Governance of flood risk management in a time of climate change: the cases of Jakarta and Rotterdam" (2013), p. 527

Due to radical political changes since 1998, it is difficult to predict governmental response in Indonesia to climate change and/or disaster (Malley, 2011). Few could argue that the changes from Suharto's regime to the present day have been to the nation's detriment. Power has been decentralized in the past few years. A 2008 law requires public information be disseminated with regard to planning and implementation of development

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<sup>24</sup> Many houses along the north coast are built on stilts to accommodate the regular fluctuations of the tide.

<sup>25</sup> *Seribu* Islands translates to Thousand Islands, Bahasa Indonesia.

projects (Marfai, Sekaranom, & Ward, 2015). One unintended consequence of decentralization of power may be the overlaying of multiple jurisdictions, with no clear direction for ultimate responsibility for any given governmental action. This, in turn, makes final decision-making a drawn out process.

Governance in Jakarta has always been complicated. As noted above, as a special region, Jakarta is divided into five *kota* (cities), each with a mayor.<sup>26</sup> One regency still exists in the area, the Seribu Islands, overseen by a *bupati*.<sup>27</sup> As one of three special regions in Indonesia the Jakarta areas overall government is headed by a governor.<sup>28</sup> Several departments and cabinets function under the governor, some with wide-ranging and overlapping responsibilities. For instance, BAPPEDA (*Badan Perencanaan Pembangunan Daerah*, or Regional Planning Board) has responsibility for planning and funding of projects for all of Jakarta, while BAPPENAS (*Badan Perencanaan Pembangunan Nasional*, or National Development Planning Agency) heads up specific land use planning processes (Ward et al., 2013).

With regard to water, flooding and waterways, a three-tier system comes into play. The Ministry of Public Works and DKI Public Works (Jakarta) each bear separate but overlapping responsibility for managing Jakarta's flood control system. Floodways and rivers that cross provincial boundaries fall under the Ministry of Public Works' purview. The DKI Public Works department is responsible for drains and retention basins within its

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<sup>26</sup> North Jakarta, West Jakarta, South Jakarta, East Jakarta, and Central Jakarta.

<sup>27</sup> There are actually only 76 islands in the Thousand Islands. Some feature tourism resorts. These are the Seribu Islands mentioned earlier that frequently suffer from flooding during tidal surges. *Bupati* translates to regent.

<sup>28</sup> The other two special regions are Aceh and Yogyakarta. However, as of 2015, many areas and cities have applied for special area or special city status, which changes overall regulation and devolves more national power to the local level.

boundaries (NL Agency, 2012). The individual city responsibilities add the third tier; each city has some responsibility for waterways within its boundaries. And although the Ministry of Public Works maintains floodways crossing provincial lines, the Banten and West Java provinces also have some say in water and flood control (Firman, 2009).

The Forestry, Agriculture, Environment and Finance Ministries all have some responsibility and some voice in flood control and waterway management (NL Agency, 2012). In 2006, the Ministry of Public Works created the *Balai Besar Wilaya Sungai Cisadane-Ciliwung* (Department of River Basins for the Cisadane and Ciliwung) basic management unit. This agency “...is responsible to operate and maintain flood drains, detention ponds, pumping plants, etc. and carry out flood warning. Its funding is from central government (APBN) [*Anggaran Pendapatan dan Belanja Negara*, or State Budget Agency] budgets while DKI Jakarta, Banten and West Java governments have limited involvement or control,” (NL Agency, 2012). The complications will likely increase as governmental authority is further decentralized (Firman, 2009; Parkes et al., 2010).<sup>29</sup>

All of this becomes more complicated as NGOs work to facilitate public participation in decisions about flood control. That the Indonesian government recognizes a need for public participation is encouraging, yet it has not exercised itself much to facilitate public input. Some researchers believe that limited, community participation has happened with flood mitigation projects in the recent past, and much of this was facilitated and insisted upon by NGOs (Marfai et al., 2015; Ward et al., 2013).

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<sup>29</sup> Although the World Bank is funding dredging for the entire region, as discussed above, that is a one-time deal. An ongoing dredging plan and funding for it still must be determined.

As complicated as this already seems, the system above only deals with flooding from the riverine side of the equation. The subsidence and sea level rise issues fall under different departments and Ministries. In 2007, a national Spatial Planning Law passed, which requires all 34 provinces to prepare spatial plans within two years<sup>30</sup>. Only ten provinces had done so as of March 2013 (Wardany, 2013). The law intends for more localized roles and responsibilities in land use planning, and includes emergency management plans related to climate change problems. Such planning can be expensive, and some provinces may lack the funds or expertise to accomplish the required plans.<sup>31</sup> No doubt emergency planning will be critical in saving lives in disaster-prone Indonesia, no matter the province. The case of Jakarta flooding may serve as the bellwether for emergency planning and climate change adaptation in Indonesia.

Having looked in some detail at the physical problems of flooding and climate change, I now turn to the social and human complications of flooding and the plans being made to deal with climate change in Jakarta.

### **The Human Aspect of Climate Change Plans**

Governor Fauzi Bowo stated Monday that he refused to totally revise the 2030 Jakarta spatial planning draft as requested by a coalition of concerned citizens, who are advocating greater public participation in their city's future. Fauzi said he was ready to face the legal consequences posed by Citizens Coalition for Jakarta 2030, who submitted a legal warning to the

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<sup>30</sup> Cities also have to create plans, and had three years to do so.

<sup>31</sup> Some provinces cover large areas with very different groups of people, and some extend across islands.

governor on Monday. Fauzi said he would only listen to recommendations of the coalition **on the condition that it represented the voice of majority of Jakartans.**" (emphasis added).

- Irawaty Wardany,  
- "Governor refuses to scrap 2030 spatial plan" (2013)

Amidst accusations of blocking access to documentation and talks, the Citizen's Coalition for Jakarta 2030 filed suit in 2010 to stop implementation of the Jakarta 2030 Spatial Plan. The plan proposed actions to redevelop parts of the city, increase green/open space, and prepare for longer-term climate change problems. Despite existence of the 2008 Public Information Law, the public apparently had no say in the Spatial Plan discussed in the quote above. As for the Jakarta Coastal Development Strategy (JCDS), the Ministry of Infrastructure and Environments' 2012 Final Mission Report notes the dearth of public involvement as a major flaw with that plan. The Final Mission Report states that "Participatory approaches were mentioned in the report, however eviden[ce] are not included in the report that support the participatory processes, e.g. signed declaration by the key stakeholders... According to Menko, they were not "involved" but "informed" in January 2012." (NL Agency, 2012). The report, published in April 2012, may have reinforced the public perception that Fauzi Bowo was not attending to the critical issues of flooding and decentralized government. Bowo lost the gubernatorial election later that year to Widodo.

As governor, Widodo originally embarked on a series of "slum clearing" programs to obliterate settlements in the way of the planned Ciliwung River Canal project. This construction project in Central Jakarta, intended to divert flood waters from the Ciliwung

River to the East Canal via a new waterway, included the forced relocation of thousands of people to make way for the canal itself and to “provide access” for dredging and maintenance along the Ciliwung River and the East Canal<sup>32</sup>. Despite the general belief that these settlements house only very recent arrivals, people with little or no connection to their neighborhood of residence, in fact many *kampung* residents have lived and worked in their neighborhoods for generations. Despite the temptation of “new” and “modern” facilities in high-rise, government-built, subsidized apartments, most coastal and riverine residents have resisted relocation, thus blocking progress on the new canal project.

Widodo then seemed to soften the stance on relocation without public participation. He at least appears to have backed away from using direct force to gain control over the disputed settlements’ land. With flooding recurring in November, 2013, Widodo pledged to visit the area around Pesanggrahan River where flooding was worse than in 2007. According to the Jakarta Post on November 16, 2013, Widodo commented, “I will check to see the real problem’, he said, adding that he assumed the issue was compensation. ‘Dredging the river [which leads to relocation] is a public decision. The project should continue no matter what. Should [the squatters] refuse to accept the compensation and relocate, we can settle the matter in court’”. Whether the “public decision” to relocate occupants included input from the to-be-dispossessed is open to question. However, the reference to using the courts to adjudicate the matter indicates some movement on the part of the government from its previous hard line.

The action of the Citizen’s Coalition in 2010 and Widodo’s statement are unusual in a country with a long history of tightly centralized power and decision-making. The

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<sup>32</sup> Why the dredging equipment cannot be put into the canal and taken out as needed is not explained.

formula of public involvement in public decisions has existed in Western governments to some extent for decades, and for centuries in some societies. Yet the sudden release of power and required direct involvement of everyday people in decision-making may be overwhelming for a society accustomed to a very different form of governance. “Both decentralization and civil society involvement in policy now constitute the central pillars of governance reforms for empowerment, particularly in developing countries” (Ito, 2011, p. 414). A history of uneven power between the state and a society, and within a society, make liberal reform policies like social involvement tricky, and perhaps not productive. If nothing else, the process requires introduction, education, and an adjustment period. Although some NGOs have attempted to educate and encourage Jakartan citizens in public participation, these efforts have primarily revolved around very specific subjects and have met with uneven success.

Further, the notion of “handing over” power to the people may not result in intended outcomes.

“...a critical view of participatory development indicates that participatory approaches tend to conceptualize communities as natural, homogeneous, and continuous entities, and view the contours of such local institutions and their boundaries with the state as distinct, fixed, and objective when in fact they are overlapping, shifting, and subjective. Indeed, it is by this strategy of identifying and strengthening local institutions that the civil society approach to decentralization has failed the poor.”

- Takeshi Ito

-“Historicizing the power of civil society: A perspective from decentralization in Indonesia” (2011), p 420

Although the central government has decentralized power to the regions, in doing so, it passes power down along a ladder of interdependent and long-established seats of power, not the least of whom are local elites. I would argue that any neighborhood or organization boasts one or more elite members to whom others cede their authority. This is as true in a poor neighborhood as in a wealthy, gated community.<sup>33</sup> The utopian ideal of democratized power and authority exists only rarely. Expecting it to burst, unhindered, from the poor settlements along Jakarta's polluted and compacted waterways is folly.

Compounding the problems associated with investing (or not investing) local people with unknown levels of power, little information exists on just how information about new planning processes and the climate change adaptation plan details have reached the people of Jakarta. Despite extensive research on climate change analysis and modeling, little attention has been paid to the information's relationship to social factors (Firman, 2011; Parkes et al., 2010). In other words, devolving authority to the local level has little real meaning if the information needed to make decisions is not also handed over.

### **Climate Change Mitigation Plans – North Coast Area, Jakarta**

In her work with North Jakarta residents in 2011, Rita Padawangi found a distinct lack of knowledge about the Jakarta 2010 – 2030 Master Plan and plans for the giant Sea Wall (discussed below). Residents certainly knew about climate change; it affected their everyday lives. Yet they had received no information about the Master Plan, which included massive redevelopment along the North Coast, ostensibly in preparation for sea level rise

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<sup>33</sup> Based on the author's 20+ years of experience working with neighborhood and special interest groups throughout the United States and internationally.

and continuing climate change problems forecast for Jakarta. According to Padawangi, the plan would impact about 150,000 people – poor people (2012).

Padawangi's fieldwork was undertaken through a lens of spatial, social, and environmental justice, proceeding from the theory that different groups of people would be affected differently by climate change. Many of those interviewed by Padawangi made their living from Jakarta Bay, either as fishers, sea product processors, or working in the Mauru Baru seafood/fish market, which employs 25,000 people. Fishers often cannot extract fish and shellfish from Jakarta Bay for weeks or months at a time each year, due to pollution. The pollution has been increasing, as have the fishing restrictions, as floods increase and bring more and more garbage and human waste into the Bay (Padawangi, 2012; Winayanti & Lang, 2004).

The Jakarta 2010 – 2030 Master Plan features reclaimed land along the coast. Existing area settlements would be cleared to make way for high-end housing, waterfront recreation, and governmental high rise buildings. By declaring the illegal nature of extant housing and commerce, the government can use the project to clear a path for upper echelon investment and development. Although residents' tenancy may be legally questionable, many of the communities have existed for long periods of time, with families creating substantial community dependencies and relationships. These neighborhoods support their own micro economies, dependent upon the continued existence of the neighborhood and patronage from long-time clients. The Master Plan includes "resettlement" of north coast residents into high-rise buildings far from the sea that supports them (Adi, 2013; Izral, 2013; NL Agency, 2012; Padawangi, 2012).

Some residents have resettled voluntarily (see discussion about *Rusunawa Budha Tzu Chi* in subsection “From Self-Sufficiency to Penury”, above.). Others have not. Padawangi spoke with several families who have had their homes destroyed three or four times by the government in an attempt to clear an area of settlements. Forced to relocate to the new buildings, the former residents find they cannot continue to support themselves. The neighborhood supported their livelihoods; they have no place to store boats or equipment and they cannot clean oysters or fish in the new buildings. Despite the need for resettlement, residents interviewed by Padawangi said they could learn to adapt to high-rise living as long as they could still have the same work or access to other employment. But the Master Plan includes no mitigating efforts for loss or work for the existing residents. Nor does the Sea Wall Project, intended to mitigate rising sea level problems in Java Bay.

### **The Sea Wall Project**

“Jakarta’s future giant sea wall project would not only prevent flooding but, with a reservoir built between two giant walls, also supply raw water to the capital, says...[d]eputy to the coordinating economic minister for infrastructure and regional development Luky Eko Wuryanto... during a seminar on climate change, land conversion and the threat of flood and tidal floods in Jakarta, at Bandung Institute of Technology in Bandung, West Java. [T]he reservoir, which the central government would construct after

the giant sea walls were built, was estimated to hold up to 1 billion cubic meters of water”

- Corey Elyda,  
- “Giant sea wall, islet project could cause more harm than good” (2013)

The Sea Wall project, or the National Capital Integrated Coast Development (NDICD) project represents an extremely ambitious proposal by the Indonesian government to deal with sea level rise and flooding. Known variously as the NDICD, the Jakarta Coastal Defence Project and the Sea Wall project, it limits ground water extractions (to reduce subsidence); increases water detention areas; builds islands to “protect” the existing coastline and increase land area; and constructs a series of dikes, or sea walls, to hold back rising seas (Izral, 2013; Sea Wall project, 2013).<sup>34</sup>

By far the most ambitious project in the overall climate response for Jakarta, the Sea Wall project culminates with a high, protecting dike six to eight kilometers out into Java Bay. The outermost of three proposed dikes, this sea wall would support a 10-lane toll road and railroad tracks, connecting the east and west ends of the bay and purportedly assisting in traffic relief in Jakarta (Izral, 2013). This part of the project, as well as the potential development investment for the reclaimed land “islands”, would be leveraged to pay off the non-revenue generating segments of the project– the middle dike, an enormous fresh water catchment, and constant water pumping at a rate of 500 cubic meters/second (Deborah, 2012; Izral, 2013; Susetyo, 2013; Ward et al., 2012).

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<sup>34</sup> High end housing, water recreation areas and new governmental buildings would be built on the reclaimed land.

The first stage of the Sea Wall project involves reclaiming 5000 hectares along the inner curve of the central coast of Java Bay. An inner dike constructed outside the reclaimed lands would be grounded below waters now at about 8 meters in depth. A second dike, located at Java Bay depths of about 14 meters, would be constructed further out. The project includes a new, deep water port between the dikes, as well as some type of holding facility for one billion  $\text{cm}^3$  of fresh water (Izral, 2013). The third dike, up to 8 kilometers out into the bay, includes the substantial pumping equipment intended to balance the bay's water depth, which will increase from run-off during rain events (remember, the city will still receive a lot of rain, as well as runoff from the surrounding hills. Even if riverine flooding can be solved, the water has to go somewhere). The Ministry of Infrastructure and Environment Final Mission Study found that, "[As] has been pointed out in the JCDS [Jakarta Coastal Development Strategy] study to protect the coastal area of DKI will require very large quantities of outfall pumping and huge low-lift pumping stations. These will increase costs and require failsafe and fully reliable operation," (NL Agency, 2012).

Whether any of this might be feasible is not yet known. The individual pieces of engineering may be possible, but the combined project exceeds previous experiences. The engineering of massive dikes in silt-laden bottom soils could be difficult. The project includes dredging in the bay. The quality or level of contamination of those soils is unknown; significant contamination is expected. The scope of the project is audacious. So are the potential environmental and human costs. One wonders what happens to ocean currents and wave action with construction of such an ambitious sea wall. The sea life in Java Bay, already polluted to the point that fishing becomes impractical for several weeks

or months per year, would likely suffer, resulting in hardship for fishers and sea life-related industries, now clustered along the north coast. Of course, if they are all displaced, there may be no one fishing in Java Bay.

The fresh water storage facility planned with the project is intended to address the lack of fresh water in Jakarta<sup>35</sup>. The only source for the new fresh water storage would be the polluted river run-off from Jakarta. The NL Agency Final Mission Report states:

“71. Creating a fresh water lake in the Jakarta Bay as raw water source for cleanwater purposes is a myth. There were strong indications that most of the key stakeholders expect that the JCD system designed as a completely closed system will create a fresh water lake in the enclosed bay area. Taken the sanitation condition, the water quality of the rivers flowing into the bay, the contamination of the accumulated deposits in the bay over the years, it is considered most unlikely that the water quality in the enclosed bay meet the quality standard of bulk water for clean water supply. At least not within the coming 50 years.” (n.p.)

It would seem thousands of long-term north coast residents may lose their homes soon for a long-term environmental project which, at the least, cannot fulfill one of its promises (clean, fresh water storage) and which may not work at all (the Sea Wall system itself). But this begs the question of why current residents have to be moved. If the land can be cleared, and safely redeveloped for high-end housing and accouterments, then why

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<sup>35</sup> Jakarta has both too much water and not enough. Only about 30% of the city relies upon piped water from the aquifers. Many households cannot afford the fees to connect to the piped water system. Even that water has to be boiled, as sea water sometimes infiltrates the aquifer as does waste water. The bizarre, complicated story of fresh water conveyance and delivery in Jakarta even involves organized crime, and is worthy of treatment in another research project (Caljouw et al., 2009; Parkes et al., 2012).

cannot the poor also be housed there safely and economically? Why the need to transport them inland, away from their neighborhoods and work? It is likely the marketability and financial feasibility of the Sea Wall project would suffer (at least in the eyes of some) from inclusion of the poor and their homes in the area (Simone & Rao, 2012). Jakarta's poor are something multinational corporations and Jakarta's middle and upper classes have no wish to see. In Jakarta, newer ideas about environmentalism seem to have been warped into a blame game, with the poor being called out as the root cause.

### **Green Washing, Environmentality, and Turning the Tables**

Although *kampung* residents provide critical services and labor for other Jakarta residents, the government would now prefer this group disappear from the urban scene. Indonesia's government wants to brand Jakarta as a modern city, bright and shiny, environmentally sensitive, suitable and desirable for international investment. The poor are getting in the way (Keivani & Mattingly, 2007; Roy, 2011). The *kampung* and their dwellers hunker in the shadows of high rises, huddle beneath toll roads, straddle riverbanks and canals. They flood the streets with carts and inexpensive transportation in full sight of international visitors (Dowling, 2010; Goldblum & Wong, 2000; Roy, 2011; Simone & Rao, 2012).

Jakarta's poor often work as part of the informal sector – working as drivers, maids, selling inexpensive goods from small neighborhood shops and carts, selling food from push carts and tiny stalls (Rolnik, 2013). These jobs are considered informal because there is no assurance of continued, consistent hours, payment of taxes or provision of benefits. There is no work contract, written or implied. Removing these residents to “somewhere else”

removes access to work for these people – and access to their goods and services for others (Mendoza, 2011; Roy, 2011; Simone & Rao, 2012).

In a disquieting turn, the growing middle and upper classes of Jakarta, who accepted and relied upon *kampung* residents and their services for so long, residents who were once considered a vibrant part of the social and economic fabric of the city, have turned against the poor. Kusno argues this turnabout results from the “green washing” of Jakarta.<sup>36</sup> The (limited) public participation in land use plans that grew out of the Decentralization Law (1999, revised in 2004) has helped create an “environmentality” in the middle classes.

The Indonesian government has championed environmentally-sensitive development in an effort to attract international investment (Champagne, 2007). Using the public planning process to inculcate the populace into environmental citizens, the government in effect created new subject positions for its upper and middle class residents (Agrawal, 2005; Dowling, 2010). This has led citizens to champion inclusive mega-developments, understanding this type of development to be “sustainable”, or environmentally friendly. Developers boast the developments have places for residents to work, shop, live and recreate, and as such are places that residents rarely need to leave, which should lead to a reduction in vehicle traffic. Yet there is no proof these communities reduce traffic congestion. These walled and gated communities do serve, however, to further delineate the widening economic gap among Jakarta’s residents. Many of the new communities deny access to street vendors (Dowling, 2010; Firman, 1998; Firman, 2009; Mietzner, 2013; Simone & Rao, 2012; UN-Habitat, 2010).

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<sup>36</sup> Meaning the government makes Jakarta seem green, or environmentally sustainable, but washing over the very real environmental problems and promoting small projects such as tree plantings upon a few busy streets.

Needing a villain in climate change, the middle class has turned on the poor, an easy target and one that could be identified with the concept of “other”. They are blamed for causing climate change through burning of wood, cooking oil or other carbon-producing materials. Their carts get the blame for traffic problems. The poor’s use of river and canal water, and their settlements along the edges, are blamed for flooding (Asrianti, 2008; Beard & Dasgupta, 2006). Yet *kampung* residents have begun to find small ways to resist both the blame and the marginalization of their existence, and in the past, some displaced residents have resisted by rebuilding their homes either in the original location or nearby. Several NGOs and activists have worked with *kampung* residents on projects to improve their living situation, organize and demand neighborhood status, demonstrate their own environmentalism by voluntarily clearing rubbish from roads and waterways and creating planting areas near their homes, and demanding access to governmental services for the poor (Asrianti, 2008; Padawangi, 2012; Texier & Diterot, 2008).

### **The Power of Everyday Resistance and Dispossession**

Despite the seemingly untenable situation of Jakarta's poor, many have not allowed their agency to be completely obliterated. Some speak out to the press and NGOs. Some participate in demonstrations. Others work with international and local aid organizations to present legal cases to the government in efforts to claim their rights. While the idea of precarity equates to personal (and collective) danger, it does not abrogate the idea of personal power. Increasingly, poor peoples' routes of outcry include use of social media. Cell phones and other equipment can be used to access the wider world, to allow those in danger to connect with outsiders who may then lend their voices and support to battle the social and political tribulations suffered by poor people, in Indonesia and in other parts of the world.<sup>37</sup>

While internet service is notoriously unreliable in Jakarta, cell phone service is not. One of many self-proclaimed "capitals of social media", Jakarta boasts more cell phones than people and its residents send tweets and messages at amazing daily rates (Bollier, 2014). "On Facebook, approximately 63 million Indonesians now use the service — equal to roughly the whole population of the UK. Former Twitter CEO Dick Costolo visited Jakarta to offer a new app for low-income mobile phone users to access Twitter" (Safitri, 2015). With a new opening for reaching beyond the *kampung*, Jakarta's poor may in fact have found that chink in the armor of imposed precarity. Social media have been used around the world to raise awareness and foment and spread social revolutions. In

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<sup>37</sup> I am grateful to Professor Christoph Giebel and my associate Lauren Pongan for suggesting access to social media as a form of empowerment for many people in ways that were closed off to them in the past.

Indonesia, Mary Jane Veloso, accused of importing drugs from the Philippines, had her execution stayed in part due to social media outcry<sup>38</sup>.

Asking for international attention to their plight, Jakarta's *kampung* residents may stave off the moment of dislocation. Yet the evictions and dislocation are just a symptom of a greater problem, in an international sea of seemingly unmanageable problems and tragedies. We live awash in war, suffering, starvation, disease, and now climate change, which exacerbates war, suffering, starvation, and disease. Can we get to the crux of the social and economic problems of Jakarta's poor residents? Can they transcend the enormous gap that separates the innumerable poor from others? "The question that preoccupies me in the light of recent global violence is, who counts as human? Whose lives count as lives? And, finally, what makes for a grievable life? Despite our differences in location and history, my guess is that it is possible to appeal to a "we", for all of us have some notion of what it is to have lost..." (Butler, 2004, p. 20). Perhaps using tools of traditional and non-traditional media, through exercise of rights and insistence upon justice, the lives of Jakarta's poor will be perceived as grievable – and thus valuable.

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<sup>38</sup> The Philippine government also acted to intervene. A similar effort to stop the execution of two Australians for drug charges, however, failed.

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