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Dead Cities and Other Tales

The Monster at Our Door

The Global Threat of Avian Flu

Mike Davis



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for my comrade doctors:
Michael Alcalay, Stefano Sensi, & Jorge Mancillas

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Contents

Lo, when the wall is fallen shall it not be said unto you,
Where is the daubing wherewith ye have daubed it?

Ezekiel (xiii, 3, 10–12)

<i>Preface: Pieta</i>	3
1: Evolution's Fast Lane	9
2: The Virulence of Poverty	21
3: The Wrong Lessons	31
4: Birds of Hong Kong	45
5: A Messy Story	55
6: Pandemic Surprise	69
7: The Triangle of Doom	81
8: Plague and Profit	97
9: Edge of the Abyss	115
10: Homeland Insecurity	127
11: Structural Contradictions	139
12: The <i>Titanic</i> Paradigm	151

<i>Conclusion: Year of the Rooster</i>	165
<i>Notes</i>	179
<i>Index</i>	201

The Monster at Our Door

Preface: Pieta

*The evil that happened here in the last month
was a sign.¹*

The village chief of Ban Srisomboon

In a time of plague, like the influenza pandemic that swept away my mother's little brother and 40 to 100 million other people in 1918, it is difficult to retain a clear image of individual suffering. Great epidemics, like world wars and famines, massify death into species-level events beyond our emotional comprehension. The afflicted, as a result, die twice: their physical agonies are redoubled by the submergence of their personalities in the black water of megatragedy. As Camus put it, "a dead man has no substance unless one has actually seen him dead; a hundred million corpses broadcast through history are no more than a puff of smoke in the imagination."² No one mourns a multitude or keens at the graveside of an abstraction. Unlike certain other social animals, we have no collective sorrow instinct or biological solidarity that is automatically aroused by the destruction of our fellow kind. Indeed, at our worst we find a perverse, often delectable sublimity in Black Deaths, tsunamis, massacres, genocides, and collapsing skyscrapers. In order to grieve over a cataclysm, we must first personify it. The Final Solution, for example, has little gut impact until one reads *The Diary of Anne Frank* or sees the pitiful artifacts in the Holocaust Museum. Then it is possible to weep.

The threat of avian influenza—a plague-in-the-making that the World Health Organization (WHO) fears could kill as many as 100 million people in the next few years—is perhaps most movingly exemplified by the story of Pranee Thongchan and her daughter Sakuntala. Indeed, the image of the dying eleven-year-old tenderly cradled in the arms of her young mother was the *pieta* that gave visceral meaning to the writing of this little book, which reports on the failure of our government and others to protect the world from the imminent danger of an almost unfathomably dangerous influenza outbreak. The intimate and heart-moving scale of this mother-daughter tragedy is precisely what will be lost if avian flu, as so many predict, becomes the next great pestilence of globalization, following in the wake of HIV/AIDS.

Ban Srisomboon is a village of 400 households in Thailand's northern province of Kamphaeng Phet, a pleasant, sleepy region whose decayed temples and palaces attract few tourists but which is renown throughout the country for its famous bananas. Like rural Thais elsewhere, the people of Ban Srisomboon are preoccupied with chickens. They raise free-range poultry for cash income, then invest their earnings in the fighting cocks that are a national obsession. In late August 2004, however, chickens started dying mysteriously throughout the village, much like the rats in Oran in the early scenes of *The Plague*. Unlike the hapless *colons* in Camus's famous novel, however, the farmers of Ban Srisomboon recognized that the dead chickens were a portent of the avian influenza that had been insidiously creeping across Thailand since November 2003.

Given the genetic license-plate number "H5N1" by virologists, this flu subtype had been first recognized in Hong Kong in 1997 when it jumped from waterfowl to humans, killing six of its

eighteen victims. A desperate cull of all the poultry in the city contained the first outbreak, but the virus simply went underground, most likely in the "silent reservoir" of domestic ducks. In 2003, it suddenly reappeared on an epic scale throughout China and Southeast Asia. Researchers were horrified to discover that H5N1—like the doomsday bug in Michael Crichton's old thriller, *The Andromeda Strain*—was becoming "progressively more pathogenic" both to chickens and humans. In the first three months of 2004, as new human fatalities were reported from Vietnam and Thailand, more than 120 million chickens and ducks were destroyed in a massive international effort to create a firebreak around the outbreak. Most of the slaughtered poultry belonged to small farmers or contract growers who were often wiped out by the losses. The countryside of Southeast Asia, as a result, was full of apprehension and bitterness.

The family heads of Ban Srisomboon thus faced an excruciating dilemma. On one hand, they were aware that the disease was truly dangerous to their children as well as their chickens and that they were legally required to summon the authorities. On the other hand, they also knew that the government would promptly kill all their poultry, including their prized fighting cocks. The official compensation was only 20 *baht* per bird (about 50 cents), but the cocks were worth up to 10,000 *baht*—in some cases, they were a family's principal wealth.³

Bangkok newspapers reported different versions of how the village resolved this contradiction. In one account, the villagers decided to hide the outbreak and hope for the best. In another version, they twice warned the Agriculture Ministry that abnormal numbers of chickens were dying, but officials failed to inspect the village. In any event Sakuntala's uncle, Somsak Laemphakwan,

later told reporters that he dug deep holes to ensure that his dead birds did not spread their infection. Despite this precaution, his niece, who like other village children had daily contact with the birds, soon developed a suspicious stomachache and fever. Somsak took her to a nearby clinic, but the nurse dismissed her illness as a bad cold. Five days later, however, Sakuntala began to vomit blood, and she was rushed to the district hospital in the town of Kamphaeng Phet (population 25,000). When she continued to deteriorate, her aunt, Pranom Thongchan, called Sakuntala's mother, who was working in a garment factory near Bangkok, and told her to come home quickly.⁴

Pranee was horrified to discover her daughter in the terminal phase of viral pneumonia: coughing up blood and gasping for breath (pneumonia kills by slow suffocation). Throughout that last night, according to nurses, she cradled her daughter, kissing and caressing her, whispering endearments; such love, one hopes, would have allayed some of the little girl's terror and suffering. (The accounts were especially poignant to me as they eerily recalled my mother's recollection—she was eight in 1918—of the death of her toddler brother in the arms of her stepmother.)

The hospital listed Sakuntala's cause of death as "dengue fever" and she was cremated before anyone could take a tissue sample. At the funeral, Pranee complained of muscle aches and acute exhaustion, and her family took her to the same clinic that had misdiagnosed her daughter's critical illness as a cold. In a dreadful repeat of the earlier incompetence, Pranee was reassured that she was just suffering from grief and exhaustion. She returned to her factory job, but she soon collapsed and was rushed to a hospital where she died on 20 September, two weeks after her daughter. She was only twenty-six years old.

While public health officials awaited an autopsy report on Pranee, her sister, Pranom, was in medical isolation with similar symptoms. Fortunately, the doctors now suspected bird flu and quickly administered a course of oseltamivir (Tamiflu), a powerful antiviral that, if administered promptly, has proven uniquely effective against the most deadly strains of influenza. While Pranom was recovering, teams of men wearing gas masks and white biosafety suits nervously entered Ban Srisomboon, now a "red zone," to kill, bag, and bury all the remaining birds. Other crews in rubber boots and rain gear sprayed disinfectant on "everything from pickup trucks full of schoolboys to three-wheeled tractors." In an atmosphere of near panic, villagers avoided their neighbors but, at the first sign of a cough or sniffles, raced into the district hospital emergency room, terrified that they had the bird plague. Others implored local monks to exorcise the malevolent spirit that, Stephen King-like, had descended upon their peaceful village.

Their fears were not irrational: on 28 September, WHO announced that Pranee had probably contracted her infection directly from Sakuntala, thus marking the first person-to-person transmission of avian flu since the emergence of the current virulent subtype in 1997. Although the WHO and the Thai government tried to downplay the significance of Pranee's death—"a viral dead end" in the words of one official—influenza researchers knew that the disclosure deserved the headlines and alarm it generated around the world. If the avian virus had acquired enabling genes from a human influenza strain, then Pranee might be only the first of millions of new victims of a plague that in its current incarnation (poultry-to-human transmissions) was killing two-thirds of those it infected.

In this case, the virus was found to be unmodified, suggesting

that Pranee had contracted it only because of sustained intimate contact with her daughter's body fluids. But, as the lead researchers pointed out, "this should not be a rationale for complacency"; "the person-to-person transmission of one of the most lethal human pathogens in the modern world should serve as a reminder of the urgent need to prepare for a future influenza pandemic."⁵

The essence of the avian flu threat, as we shall see, is that a mutant influenza of nightmarish virulence—evolved and now entrenched in ecological niches recently created by global agrocaptialism—is searching for the new gene or two that will enable it to travel at pandemic velocity through a densely urbanized and mostly poor humanity. This is a destiny, moreover, that we have largely forced upon influenza. Human-induced environmental shocks—overseas tourism, wetland destruction, a corporate "Livestock Revolution," and Third World urbanization with the attendant growth of megaslums—are responsible for turning influenza's extraordinary Darwinian mutability into one of the most dangerous biological forces on our besieged planet. Likewise, our terrifying vulnerability to this and other emergent diseases has been shaped by concentrated urban poverty, the neglect of vaccine development by a pharmaceutical industry that finds infectious diseases "unprofitable," and the deterioration, even collapse, of public-health infrastructures in some rich as well as poor countries. The evil that visited Ban Srisomboon, in other words, was not some ancient plague awakened from dormancy, if such can exist independent of historical circumstance, but a new form in whose creation we have inadvertently but decisively intervened. And that, as the villagers in Ban Srisomboon avowed, is surely a "sign."

Evolution's Fast Lane

*In essence, it's a destructive form of molecular burglary; flu gets into the building, cracks the safe, takes what it wants; and wrecks the place on its way out.*⁶

Pete Davies

The most ferocious of man-eaters is an innocuous companion of wild ducks and other waterfowl. At the end of every summer, as millions of ducks and geese mass in Canadian and Siberian lakes for their annual migration, influenza blooms. As researchers first discovered in 1974, the virus replicates harmlessly but vigorously in the intestinal tracts of juvenile birds and is copiously excreted into the water.⁷ Other birds ingest this viral soup until as many as one-third of the young ducks and geese are producing influenza. In northern lakes, moreover, diverse strains of influenza coexist in the same population, even within an individual duck; one study in Alberta found twenty-seven different subtypes in a community of mallards, pintails, and bluewinged teals.⁸

During their migrations to the Gulf Coast and southern China, the birds continue to shed virus in their feces for as long as one month, increasing the likelihood of the infection spreading to