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Ethnography of Epidemiologic Transition:

Avian Flu, Global Health Politics, and the Agro-Industrial Capitalism in Thailand.

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Introduction:

This paper seeks to situate the ethnography of Avian Flu within the geopolitical contexts of new epidemiologic transition. As suggested by Barrett et al (1998), recent resurgence of infectious diseases marks the third epidemiologic transition. Distinctive to the first, which associated with a rise in infectious diseases during the Neolithic Revolution, and the second, which involved the shift from infectious to chronic diseases associated with industrialization, the third epidemiologic transition is characterized by newly emerging, re-emerging, and antibiotic resistant pathogens in the context of an accelerated globalization. Within this global context, the avian flu epidemic calls for a mode of ethnographic practices with a much wider perspective.

Based on the experience of the outbreak in Thailand, this paper examines areas of inquiries in which ethnographic approach could contribute to a better implementation of prevention and control measures. However, the task of ethnography in the context of disease globalism needs to extend far beyond local circumstances. This paper argues for the mode of ethnographic experiments which not only help to understand local practices with regard to risk, response and impact, but also account for global forces that accelerate the epidemics, retard the containment, or deepen human suffering. Examining the Thai situation, this paper reveals two major global contexts in which the ethnography of epidemiologic transition must take into consideration: Global agro-industrial capitalism and the global health politics in the international health organization. The case of Thailand poses a question of how ethnographic practices could be reinvented to account for the reality of global-local interlace of the third epidemiologic transition.

The Epidemic and Its Representation

In October 2004, Time magazine Asia edition reports the tragic story of Somsak Laemphakwan and his family in Ban Srisomboon in Kamphaengpet Province. It all began with unusual dying of his chickens in early August. Hoping to purge the bird flu ravaging his village, he culled all his birds and buried the corpses deep in the ground. Despite his precaution, his 11-year-old niece Sakuntala Premphasri soon developed a stomachache and a mysterious fever. Somsak took her to a nearby clinic on September 2, nurses dismissed her illness as a common cold. Five days later, however, Sakuntala was unable to walk and vomiting blood. She was sent to the district hospital, and her mother, Pranee Thongchan, was summoned from working in a garment factory near Bangkok to comfort her. Pranee kissed and took care of her through the last night of her life, and Sakuntala was cremated two days later. Doctors there never diagnosed the child with bird flu. Sakuntala was listed as dying of “dengue fever.”

At the funeral, Pranee looked ill and complained of muscle aches and exhaustion. Villagers and her relatives thought it was because of the stress of losing her daughter. Pranee visited a clinic, but like her child, was sent home, and then returned to Bangkok. Two weeks after her daughter's death, Pranee died and became the country's 10th confirmed victim of bird flu. On Sept. 28, a joint World Health Organization (WHO) and Thai investigation announced what scientists studying the H5N1 bird-flu virus had long feared: Pranee hadn't contracted the disease from chickens. She had almost certainly caught it in the hospital while

nursing her dying daughter. Human-to-human transmission of the virus was possible. Since the reemergence on a massive scale of avian flu in China and Southeast Asia, the H5N1 virus has caused three outbreaks of avian flu in Thailand, killing 14 out of its 22 victims. Although most victims were identified as being infected through direct contact with sickened chicken, there has been enormous concern about the possibility of human to human infection from close contact with cases of severe infection, as was suggested by the case of Pranee.

Although raising free-range poultry was common throughout rural areas, epidemics in Thailand concentrated in the Central and lower northern region where there were intensive practices of poultry and especially free-grazing ducks. As early as November 2003, stories of massive deaths of chickens in the central provinces rapidly spread and the sale of chicken in local markets sharply declined. While Prime Minister Thaksin Shinawatra and his ministers' gulping down chicken dishes was televised on national television to calm public panic, local villagers were anxiously dumping their dying poultry down the pit. Although a veterinary scientist at Chulalongkorn University announced that he found H5N1 in several dead chickens, Deputy Minister of Agriculture Newin Chidchob insisted that the massive death of poultry was in fact a few cases of "chicken cholera."

Only after three humans were afflicted by the virus that the government was forced to admit that there was the outbreak of avian flu in the country. The late admission of the presence of a fatal strain of the flu was due to the fact that Thailand was the world's fourth-largest poultry exporter with the export revenue worth \$1.2 billion in 2003. In addition to poultry industry, Thailand's tourist industry, one of the most important sources of revenue of the country, was extremely threatened by the existence of virulent viral strain. To the interest of agribusiness and tourist industry, governments around the world have covered up outbreaks and concealed illnesses and deaths. But the epidemic was not the only thing to be covered up in Thailand, conflict of interest in the crony administration was also secretly concealed.

Bangkok-based agricultural-export conglomerate, Charoen Pokphand, or CP, as it is universally known, was the largest producer of poultry in Asia. Owned by Dhanin Chearavanont, who expanded his family's Chia Tai seed shop in Bangkok Chinatown into one of the world's largest agribusiness groups, the conglomerate now has 10,000 contract farmers in Thailand and 100,000 employees around the world. Its global presence was evident as it expanded its business in China. The lobbying for a favorable China-US trading agreement during the Clinton administration had led to the indictment of illegal contribution to the US Democrat Party in which one-third of the people convicted in the Democratic fundraising scandal were connected to the company (The Nation, October 23, 2000).

CP's role in national politics was no less significant. In 2001, Dhanin's son-in-law Wattana Muangsuk was appointed as Deputy Commerce Minister. The government was led by Thaksin Shinawatra, a telecommunication billionaire whose coming to power was described by prominent economist Pasuk Pongpaichit as signifying "a new consolidation of big business and politics" (Pasuk 2003). As Davis puts it, "On the eve of the plague... Thailand was governed by a crony coalition of the telecommunications and livestock industries (Davis 2005: 101). Control of the national media and telecommunication served well to protect the livestock industry at the time of suspicious outbreak of the catastrophic flu epidemic.

The government's denial of bird flu epidemic amid mounting evidence of massive deaths of chickens while a son-in-law of the biggest agribusiness group was sitting in the cabinet has led to allegations that CP had supported the government to cover up the news of epidemic's outbreak. Delayed admission of bird flu outbreak gave the big exporters several months to process and sell their inventory as well as to disinfect their plants. At the same time, CP reportedly spent over 22.2 million baht on advertisement campaigns on

television, radio, and newspapers to ensure the safety of poultry products from their enclosed factory farm. In 2004 epidemics as new cases and fatalities surfaced, 60 million chickens and ducks were slaughtered in Thailand. Most of the culled poultry belonged to small farmers or contract raisers who could never afford the construction of closed poultry farming system. As with the story of Somsak and his families at the outset, it was these small farmers and local villagers who not only had to endure the economic blow more than they could shoulder, but also bore the misery of the losses of lives of the loved ones.

Situating the Epidemics: The third epidemiological transition

The advent of the third epidemiologic transition was noticed by a number of studies showing an ominous resurgence of morbidity and mortality from new and old infectious diseases (Lederberg et al 1992; Morse 1995) and the growing multidrug resistant strains of pathogens (Lewis 1994). Pinner et al (1996) reveal that in the US, age-adjusted mortality from infectious disease has increased by 40% from 1980 to 1992, while the US Centers for Disease Control and Prevention (CDC) has compiled a list of 29 pathogens that have emerged since 1973 (Satcher 1995).

Although the devastating impact of global epidemic of swine flu in 1918, resulting in more than 20 million people died, could be readily felt, the new context of speedy globalization in the past few decades has made the third epidemiologic transition exceedingly alarming. Statistics from the World Tourism Organization show that some 1 million persons per day traveled from their homes by air in 1995. International travel has steadily increased at the average of 6% per annum in the past thirty years (IATA 2003). The rapid spreading of re/emerging of infectious diseases is clearly attributed to global changes such as the increasing mobility at the global scale. As the UNFAO stated in its 2001 report that no country can consider itself safe from the risk of the disease due to increased international trade, tourism, the movement of animals, animal products, and foodstuff.

Localizing Global Epidemic: The Need of Local Knowledge

It is evident that the dominant framework by which resurgence of new epidemic is conceptualized has been those of globalization. Disease outbreaks are conceived as a threat to global and national economic growth with relatively little attention paid to local experience of surviving, coping, and adapting to the crisis. It could be readily argued that if we are to be more capable of handling global crises and their aftermath, we need a better knowledge of local circumstances and a more methodical understanding of the situations from local perspectives. In other words, we need to localize global crises in order to be more effective in maintaining preparedness, managing emergency situation as well as delivering aids and services as well as facilitating healing for those whose lives were shattered by catastrophic impact of the new plaque.

Amidst the risk of globalization of disease ecologies, for instance, global dimensions of epidemics are certainly critical, but local factors contributing to the new epidemiologic transition also need to be better appreciated. Although the image of an outbreak of Ebola hemorrhagic fever is frightening, it must be realized that the instances of possible airborne transmission is restricted to very close contact with patients in the late stages of this disease (Garret 1994). In fact, each of the re/emerging disease has their local dimensions which play decisive roles in the spreading of epidemics. Sexual practices and gender relation are critical factors in the case of HIV/AIDS. Expanding of agricultural fields and residential housing bring population into closer contact with pathogens, vector, and animal reservoirs. The practice of combined swine-duck agriculture in Southern China as well as commercial swine and turkey farming in the United States is thought to contribute to the genetic adaptability of

flu viruses. The practice of feeding cow with cattle feed containing the remains of sheep is also thought to contribute to BSE outbreaks.

Building on the experience and practice of anthropological involvement in public health program, it is clear that one of the strengths of ethnographic approach is on creating the understanding of local practices pertaining to risk, preparedness, and responses. With the aims of enhancing local capacity to response to the new epidemics, a few areas of local knowledge could be readily identified as crucial in enhancing local action:

- Local perception of risk and vulnerability

How local communities perceive risk and vulnerability has a determining effect on raising awareness and preparedness. While sensitivity to and awareness of risk contributes to preparedness, excessive sensitivity could distort perception of risk and hyperbolic reaction. Understanding local perception of risk and vulnerability would help in effective implementation of prevention and control program.

- Behavioral practices pertaining to risk

From poultry farming to cooking, various economic and cultural practices play a part in accentuating risk. Knowledge of such local practices could be useful in identifying risk behaviour and appropriate educational programs.

- Individuals and community response

The ways individuals and groups react to various stages of epidemic need to be understood within local context. Strength in coping and adapting as well as weakness could be identified and assessed. Response of public health institution and medical professions which could inadvertently worsen the situation is also important.

- Local sources for healing and recovering

Preexisting moral and religious practices could be pivotal resources for healing and recovering from catastrophic experience. Human response to disaster often involve the confrontation of difficult existential question, involving the moral and ethical concepts of justice, sin, retribution, causality as well as the existence and nature of the divine. Culturally acceptable forms of explanation for the disaster are crucial for regaining emotional stability and reducing the feeling of guilt among survivors. Cultural expression of grief and mourning as well as other forms of social support are also essential in the aftermath.

New Global Contexts: Global Health Politics and the Agro-Industrial Capitalism

The fact that most of the avian flu victims were local villagers who contracted the disease from their own backyard fowls should not blind us to the non-local forces that could increase the risk as well as accelerate the suffering. While the richer nations could use poor nation to provide an epidemic firewall, rich countries failed to come forward with adequate financial and medical support. As Mike Davis points out, part of the shortfall of aid was most likely due to lobbying by Western poultry industry (Davis 2005:166). The obstruction of assistance in public health and veterinary measures resulted in the culling of 120 million chickens in Vietnam and Thailand which could well trigger the plummet of the countries' poultry industry.

As the situation worsened, the WHO executive board meeting on January 25, 2005 was informed that vaccine development had not advanced "with a speed appropriate to the urgency of the situation." Representative of the United States and France, however, seemed more concerned to protect their pharmaceutical industry profit than to increase the availability of vaccines and antivirals. When a Thai delegate proposed that the poor countries on the frontline of the avian flu battle should be allowed to override drug patents in order to produce affordable quantities of Tamiflu, the American and French delegates vehemently objected and ultimately forced the meeting to adjourn without a vote (ibid: 167).

Just as the global expansion of cosmopolitan medicine has provided an opportunity for global dominance of transnational pharmaceutical industry, the Livestock Revolution has also created a platform for the domination of global agro-industrial capitalism. To the interest of agrobusiness, governments around the world have covered up outbreaks and concealed illnesses and death. While millions of small farmers' chickens were being culled, the huge livestock multinationals, with their crony ties to government have exploited the crisis to restructure poultry production to their selfish advantage. The two-pronged global dominance of transnational pharmaceutical industry in global health politics and the new regime of economic accumulation has become the new contexts in which response and impact of the third epidemiologic transition must be understood.

Conclusion:

Toward an Ethnography of the Third Epidemiologic Transition

Understanding how communities work is vital for strengthening capacities to cope, to survive, and to recover from catastrophic events. Strengths and contribution of anthropological study in public health and epidemic control were evident since the Second World War. However, one has to keep in mind that human misery is created as much by the failure of local intervention as by the non-local factors. The third epidemiologic transition which took place in an accelerating globalizing process and intense global politics has necessitated that ethnography be put into practice within a wider perspective. While we need to localize global crises in order to be more effective in maintaining preparedness, managing emergency situation as well as delivering humanitarian aids and facilitating healing for those whose lives were shattered by catastrophic devastations, we are at the same time called to account for global forces that accelerate the epidemics, retard the containment, or deepen human suffering. Examining Thai situation, this paper reveals two major global contexts in which the ethnography of epidemiologic transition must take into consideration: Global agro-industrial capitalism and the global health politics in the international health organizations. The case of Thailand thus poses a question of how ethnographic practices could be reinvented to account for the reality of global-local interlace of the third epidemiologic transition.

References

- IATA. 2003. *IATA annual report 2003*. IATA Headquarter.
- Barrett, R., C. W. Kuzawa, T. McDade, and G. J. Armelagos. 1998. Emerging and Re-emerging Infectious Diseases: The Third Epidemiologic Transition. *Annu. Rev. Anthropol.* 27:247-71.
- Davis, M. 2005. *The Monster at Our Door, the Global Threat of Avian Flu*. New York and London: The New Press.
- Garrett, L. 1994. *The Coming Plague: Newly Emerging Diseases in a World Out of Balance*. New York: Farrar Straus & Giroux.
- Lederberg, J., R. Shope, and O. S. Jr. Editors. 1992. *Emerging Infection: Microbial Threats to Health in the United States*. Washington DC: Inst. Med., Natl. Acad. Press.
- Lewis, K. 1994. Multidrug resistance pumps in bacteria: variations on a theme. *Trends Biochem. Sci.* 19:119-23.
- Moldea, D. E., and D. Corn. 2000. "Influence Peddling, Bush Style," in *The Nation*, October 23, 2000.
- Morse, S. 1995. Factors in the emergence of infectious diseases. *Emerg. Infect. Dis.* 1:7-15.
- Pasuk Pongpaichit. 2003. *Corruption, Governance, and Globalisation: Lessons from the New Thailand* Corner House Briefing #29. London.
- Pinner, R., S. Teutsch, L. Simonsen, L. Klug, G. JM, and e. al. 1996. Trends in infectious diseases mortality in the United States. *J. Am. Med. Assoc.* 275:189-93.
- Satcher, D. 1995. Emerging infections: getting ahead of the curve. *Emerg. Infect. Dis.* 1:1-6.
- Walsh, B. 2004. "A Sickness Spreads," in *TIME Asia magazine*. October 2004.

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