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Global health risks: from emergence to interference

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Summary – Our societies are facing risks for which international organisations such as the WHO, OIE, FAO call for a new international health governance. This paper aims at analysing the confrontation between this governance and national specificities.
Our analysis is based on empirical research conducted in Vietnam in 2008. It focuses on the period beginning with the first outbreaks of Avian Influenza (H5N1) in 2003 and ending in 2008. We highlight two phases in H5N1 management by the Vietnamese authorities: a first phase based on past experience (i.e. SARS) and related to national issues such as the consolidation of the central power in relation to provincial authorities; a second phase more in line with international governance principles and devoted to diplomatic issues such as WTO membership.
This analysis concludes that international health governance should not underestimate the complexity of local situations, that taking into account national cultures of risk should not ignore local dynamics, and that focusing on constraints should not preclude opportunities associated with risks.

Keywords*: avian influenza, governance, health, risk, Vietnam,*

1. International organisations and global risks.

For thirty years the vocabulary used for qualifying health risks in the scientific and expert community has been considerably elaborated: one speaks of modern, major, industrial, collective, systemic, emergent, or global risks. This proliferation of terms reflects the profusion of works on the subject. It also reflects the renewal, and the widening of the conception of risk.

Within the international scientific research community: World Health Organisation (WHO), World Animal Health Organisation (OIE), Food and Agriculture Organisation (FAO), Organisation for Economic Cooperation and Development (OECD), this redefinition, despite the nuances, is based upon a wide consensus concerning the nature of these risks and how to deal with them.

These risks come out of a globalised environment of constantly increasing mobility and are present in areas of dense human population (OECD, 2003; WHO, 2007). This change of scale is necessary therefore, in the apprehension of risks, and is clearly defined in the content of the International Health Regulations (IHR) established by the WHO: the IHR (2005) introduces the concept of "public health emergency of international concern". It encourages to go beyond routine public health measures for international traffic at points of entry (airports, ports, …) and to adopt preventive measures at the source of contamination (WHO, 2007). Beyond their legislation, these regulations also call for enhanced coordination and cooperation between States to address an even wider range of risks (industrial accident, resistance to antibiotics, as well as the bioterrorism risk as outlined by the OECD, 2007). It is intended to show the way towards more internationalised modes of management, and to open the path to a right to international health interference.

The recognised systemic character of these risks causes the desectorialisation of the response to them. Furthermore, emerging diseases, and in particular the avian flu epidemic (H5N1), have brought about the collective strategy adopted by the OIE, the FAO, and the WHO in 2008: "Contributing to One World, One Health". This strategy, according to the director of the OIE, heralds "the sudden collective apprehension of the link between animal health and public health" (Bernard Vallat quoted in the Bulletin of the World Animal Health Organisation, 2009). More generally, problems of emerging diseases arise within a context of climatic, environmental, social, as well as economic change.

Established understanding has been overcome by incertitude. According to the document published by the WHO 2005 entitled "communication in the event of a global epidemic", we read (page 4): "the big unknown: why we are unable to provide a definite response to the questions arising…" as well as, throughout the text: "it could be", "we don't know", "we still don't know" , or "nobody can say". This acceptance of limited control has caused the abandon of the objective of progressive eradication of sanitary risks in favour of a scaled down management objective aimed at preparation.

A widening of the network of actors involved in the management of risk is occurring. The State has lost its monopoly on protection, and science is no longer its only advisor. On the one hand, international solutions, and global sanitary governance, reinforce the role of international actors such as the WHO. On the other hand, in this context of incertitude, decisions taken by governments for evaluating and managing health risks are no longer backed up solely by the research community, but are increasingly the result of coordinating action with the civil community, (e.g. the evolution of frameworks for risk analysis in the case of Codex and NRC Red Book, Milestone, 2009; Renn, 2008). The public are not only advised at the communication phase, but also via the political choices which orientate the management and evaluation of risks. In situations of incertitude, the collective community of actors affected by the risk remains open, and can be redefined at any moment. This cooperation tends to valorise accountability in the analysis process. Finally, this widening of the circle of actors has benefits for the private sector, agro-industrial companies, pharmaceutical industry etc, in a general privatisation of health safety. In the food sector, for example, norms and standards of food safety have proliferated (e.g. the Euregap reference used by European retailing groups).

These evolutions occurring at an international level reflect what some authors are calling the move from managing "risks" to managing "threats" (Gilbert, 2002), from the management of "conventional risks" to the management of "new risks" (Godard *et al.*, 2002), or even the management of "first modernity risks" to "second modernity risks" (Beck, 2001).

2. Global risk governance and national specificities.

The challenges of new risks such as global warming, or flu epidemics give rise to the promotion, by international organisations, of a new international cooperation based on new modes of management. Modes of governance vary from one country to another according to the local context, such as its organisational capacity, the political and regulatory culture, social climate and risk culture (Douglas and Wildavsky, 1984; Renn, 2008).
The strategic document "One World, One Health" postulates the existence of a consensus and a common, shared perception of these risks, regardless of political differences or conflicts of interests: this strategy, according to Scoones and Forster (2008), is dominated by a Northern perspective. It ignores the structural inequalities of access to resources and exposure to risk.

In such a context, examining national cultural differences and styles of management, and analysing how they influence each other, has become a subject for research according to Taylor-Gooby and Zinn (2006). Although this type of research is not yet highly developed, and until now, mainly focused on the developed countries, certain authors have noticed that countries policies of risk management have a tendency to converge as a result of globalisation (Löfsted and Vogel, 2001, referring to Europe and the USA) or as a consequence of the accrued power of the international research community; the members of an "invisible college" capable of metamorphosing local practices into global standards, shown by Demortain (2009) with the example of the HACCP framework (Hasard Analysis Critical Control Points) which has become internationally adopted.

The object of this paper is to contribute the arguments derived from our research into the management of the Avian Influenza (H5N1) and the risk of a pandemic associated with it, in the context of Vietnam, a relatively poor, developing country. The virus H5N1 reappeared in Vietnam in 2003, having first appeared in Hong Kong in 1997. We are mainly attempting to understand why Vietnam, a country relatively isolated twenty years ago, has been so cooperative as to become the "top of the class" in the eyes of the international community who have been trying to manage this epidemic, unlike China and Indonesia, for example. We hypothesise that this perception of exemplary conduct has less to do with Vietnams handling of the risk, and more to do with the way it responded to pressure from the international community.

We will begin by defining two distinct phases in Vietnams management of the H5N1 risk. Then we will demonstrate how these two phases reveal the change from a classical/conventional to a modern management of risks. This evolution corresponds with two distinct framings of the H5N1 risk and of the related issues.

3. Methodology.

This research, undertaken in spring 2008, draws upon the findings from interviews conducted with national and international experts working on the Avian Flu in Vietnam. Twenty scientists were interviewed; half of them working in public or private Vietnamese organisations (and representing the Ministry of Agriculture, the Ministry of Rural Development, the Ministry of Health, the Veterinary Services of several provinces, as well as diverse private sector representatives). The other half is composed of stakeholders issued from the international community sent to Vietnam (members of the FAO Avian Influenza team, experts in infectious and parasitic diseases working for the World Health Organisation, various representatives of foreign NGO's, of the French Hospital in Hanoi and of PAHI, the Partnership for Avian and Human Influenza).

We have also analysed a number of different official international government documents such as the "Red Book" or the "Green Book", and experts reports (from the FAO, Agrifood Consulting International, AFD, AVSF, etc.), the minutes of the PAHI committees as well as the official report from the French Embassy on the press coverage of Avian Influenza in the Vietnamese daily newspapers.

4. Results.

Before the emergence of the H1N1 virus in 2009, in Mexico, the major risk of a pandemic flu occurring was associated with the H5N1 virus. And in the military terms which are often employed to describe these scenarios, Vietnam was in the front line in the war against the virus. It was in Vietnam that the first human casualties of the H5N1 were officially recorded, after those which occurred in Hong Kong in 1997. So far, Vietnam accounts for 1/5 of human deaths due to H5N1 (since 2003 there have been 112 human cases of H5N1 contamination in Vietnam, of which 57 died, out of 471 people contaminated in the world of which 282 died, according to the World Health Organisation website, 2nd February 2010).
Today, Avian Influenza has become "endozootic": out of the 59 provinces in Vietnam, 27 had recorded cases of H5N1 contamination in poultry in 2008 (throughout 80 communes in total) and 18 provinces in 2009 (75 communes) according to the PAHI bulletin of January 2009 and 2010. The progress made against the virus in Vietnam thus appears to remain moderate.

Generally, the progression of Avian Flu is explained in terms of waves of outbreaks (as confirmed by Scoones and Forster, 2008) which distinguish three episodes defined according to the spreading of H5N1 in poultry flocks (Pfeiffer *et al.*, 2007). For our part, according to the nature, the intensity, the issues of the socio-political activities related to H5N1, we will distinguish two specific and radically different phases with different origins and implications. The first phase begins with the official notification of H5N1 outbreaks by Vietnam to the OIE, and the second begins with the arrival of the virus in Europe.

4.1. The management of the Avian Flu crisis by the Vietnamese authorities: a "two phases" management.

Phase 1.
The first phase began at the end of 2003, and the start of 2004. It was a consequence of the epidemic at local scale (in which up to 9 cases of human contamination per month were being recorded), as well as the number of infected flocks (as many as 25pc of the communes had contaminated poultry flocks). The disease of reference here is not the Spanish Flu, as in Europe, but the SARS (Severe Acute Respiratory Syndrome) which was the cause of 5 human fatalities in Vietnam in 2002 out of 63 people infected, and then went on to kill 774 people throughout the world, principally in China. The newspaper Thanh Nien, the daily newspaper edited by the communist youth association, published the following headline "a Flu epidemic even more dangerous than SARS" (cited by Guénel and Klingberg, 2010). The Vietnamese authorities, and the International Organisations had been criticised for their slow response to the SARS situation. In the case of H5N1, Vietnamese authorities were then supported by the international organisations for a prompt answer; they launched a massive culling operation (17pc of all poultry was culled in less than three months representing a total of 44 million individuals according to Delquigny *et al.*, 2004), as well as the restriction of all transport of poultry

across provincial and national borders. It was principally the VCP (Vietnamese Communist Party) who took the initiative at this time: publishing decrees and actively intervening in the preventative culling operation, mobilising the Army as well as the Patriotic Front which integrated youth movements, farmers movements, women's associations etc. (Guénel and Klingberg, 2010; Tuong, 2009). The network of actors mobilised closely resembles that which is normally seen in this country in the event of floods and typhoons.
At the same time, the developed countries were adopting national protective strategies of limited scope such as the production and stocking of vaccines and masks.
Vietnam estimated that eradication of the avian flu would take a matter of months, as had been the case with the SARS. Against the strong advice of the World Health Organisation who was advocating prudence, the government made a declaration in March 2004, that the virus had been eradicated in Vietnam. However, new outbreaks started to occur in the following weeks, substantiating the WHOs claims. In spite of everything, the political and media activity faded, and really only started again at the end of 2005.

Phase 2.
In the last three months of 2005, the global treatment of the problem was given a new impetus. This new impetus was not connected, as before, with events, such as outbreaks or human casualties in Vietnam but originated from outside. In fact, in 2005 the number of countries notifying H5N1 to OIE increased dramatically and the virus reached Europe. The pandemic threats became more menacing for Western countries.
The international community (and especially the Northern countries) agreed on new international health regulations in 2005 which brought about a change of strategy: the disease needed to be treated at source, therefore making more direct intervention by the international community in Vietnam legitimate. The WHO had already reinforced its presence in Vietnam at the time of the SARS, and now it was the turn of the FAO to widen the scope of its activity. Other cooperation formed in response to the virus: e.g. in the USA (Centre for Disease Control and Prevention, Atlanta) and in Japan (mainly involved in health communication) as well as cooperation in New Zealand. It is via these international organisations that the NGO's increased their presence in the field (Association Vétérinaires Sans Frontières AVSF, Academy for Educational Development, AED).

This change of attitude and strategy from the developed countries had a boomerang effect on Vietnam which illustrated the global dimension of the risk. Vietnam effectively came under increased pressure to formulate a plan of action which included a strategy for dealing with a global pandemic and which it was asked to present at the first international conference on financing the prevention of Avian Flu which was held in Peking in January 2006, and which obtained a portion of the funds which the international community committed to this cause (1.9 billion dollars in total).
Official government declarations became ever more frequent, and the number of articles addressing the problem of Avian Flu in the press reached a new peak. In the meantime there was no change in the local epidemic. The government applied a new series of measures: markets for live poultry in cities were forbidden, and for a period of several months only supermarkets were authorised to sell slaughtered poultry. City dwellers were asked to exterminate their caged birds.
Vietnam issued a declaration in which it proposed a restructuring of poultry farming in order to modernise the sector and make it safer (referring to the ever more current concept of "biosecurity") and it also attempted unsuccessfully to initiate a policy of relocalisation of poultry farming. More importantly, a vast, nationwide vaccination programme was launched.

4.2. Moving from a conventional management to a modern management.

The description given of the political evolution of the management of the Avian Flu crisis by the Vietnamese authorities between Phase 1 and 2 can be analysed along the following lines.

From eradication to management, from urgency to preparedness.

In the first phase, the objective is the eradication of the virus. To this end, poultry was culled on a very large scale (some experts talked about government panic). This large scale culling was the most unpopular of the measures undertaken by the government. The governments communication strategy, judged to be too "alarmist", also came under criticism. It amplified the economic consequences of the crisis by creating an aversion for poultry on the part of consumers. After 2005, the authorities adopted a new objective, no longer of eradication, but a policy of management of the virus which was endemic in Vietnam. Vietnam went even further in the scaling down of its ambitions with the elaboration of its plan for dealing with a global pandemic (the Red and Green Book). These measures were prepared under international pressure, and allowed a sort of stalemate, in that the eradication of the virus was no longer the objective.

The widening of the stakeholders network: Vietnamese Communist Party, peoples associations, and the private sector.

The preparation for an Avian Flu Pandemic engaged the Health Ministry in a large scale operation, as well as the Ministry of Agriculture and the Rural Development, who were already strongly implicated. The network of actors was also widened to include the private sector: having been more or less absent in the first phase of eradication of the virus, private enterprises now became more widely solicited. This phase was the opportunity to pursue another, ulterior goal, which was that of the modernisation of the Vietnamese poultry farming sector: if at that time 80% of the poultry market was supplied by small-scale farms, the government intention was to have 80% of the market supplied by safer, modern industrial poultry farms within the next ten years (MARD, 2006 as quoted by Agrifood Consulting International, 2007). Via new regulations, new hygiene standards, credit policy, and even local tax policies, the government consistently promoted the development of a modern industrial poultry farming sector. The State even passed the role of public health protection, normally its own responsibility, onto the private sector, by making a radio announcement by the Health Ministry in which people were told "If you don't want to catch the virus, buy your poultry at the supermarket". It also promoted contract farming, between farmers and agro-industrial firms to increase biosecurity and credit access.

Vaccination: governing uncertainty

Vietnam was one of the rare countries to opt for a programme of vaccination of poultry on a large scale. This decision to vaccinate, according to the policymakers who we interviewed, was one of the most difficult to take in this crisis. The international scientific community held divergent opinions on the issue; the World Health Organisation and the Food and Agriculture Organisation, in particular, disagreed. The Vietnamese authorities decided in favour of vaccinating, not only on the base of the scientific evidence, but also for the communication potential of such a programme: the government wanted to show the people and the rest of the world that they were taking active steps to control the virus.
However, once the decision had been taken, and publicly announced, Vietnam found itself confronted, on a yearly basis, specifically from the Finance Ministry, with a regular interrogation on whether to

continue the programme. Privately, the decision makers admitted their disappointment at not receiving the support of the international community in the decision to continue vaccinating.
The international experts opinions diverged, but they also explained that the effectiveness of vaccinating depended also on a number of other considerations which in turn implied a wider social decision making process which went beyond their mission..

National, International: two levels of legitimacy for the government.

The Vietnamese government has a communications tradition aimed at reassuring the population, and assuming a paternal, protective role: it is often heard amongst the population that the government may have to tell lies if it necessary to avoid panic and protect the people. On the subject of risk, it is accepted that the government may lie by omission. It is on results that the government will and should be judged.
At the time of the SRAS crisis, international organisations criticised the Vietnamese Government for dissimulating certain facts so as not to compromise their chances of hosting the South East Asian Games at the end of 2003. But today, the international community is unanimous in praising Vietnams cooperation in the issue of sanitary safety, and the rapidity with which contamination figures are communicated. Experts working at the World Health Organisation were astounded when Vietnam promptly communicated after only a few cases of contamination to the international community an outbreak of cholera in 2008. It appears that Vietnam has understood the importance of accountability in the international context, even if there is little political capital to be made by it at home.

4.3. From local to international issues.

The first phase of the management of avian flu appears essentially to reap benefits at a national power level: the virus became the impetus for the centralisation of power and promoted a nationalist project. Following deregulatory market reforms in 1986 (known as *Doi Moi*), provincial authorities gained new economic power and autonomy from the central government. Tuong (2009) shows how the management of the avian flu crisis became an opportunity for the central government to affirm its authority regardless of the local reality (such as with the authoritarian imposition of massive culling measures). H5N1 became for the Central authorities a pretext to blame local authorities for all malfunctioning in H5N1 management, pointing out the incompetence and the corruption of local authorities. The medias analyses of the crisis (Guénel and Klingberg , 2010; Tuong 2009) present victory over the virus as a question of national honour in which the government mobilised popular support behind the Party against a new, common enemy.

In the second phase, however, the virus appears to have put itself at the service of international issues for Vietnam policy. Vietnams reaction when prompted by the international community can be seen as a strategic response, intended to compliment a twenty year period of reintegration into the international diplomatic community. “Vietnam has come a long way” (Do Hien, 2007); in fact, following Cambodias invasion in 1978, Vietnam, already under a trade embargo from the USA since 1974, was boycotted by the international community after 1987. Vietnam also lost considerable support following the collapse of the Soviet Union in the same period. The domestic economic situation was a disaster, resulting in famines in 1989. To overcome these crises, Vietnam needed to widen the scope of its international partnerships, and get away from its dichotomous vision of the rest of the world in which countries were either friends, or enemies. At that time, “winning back the confidence of the international community was an almost impossible challenge” according to Do Hien (2007). But in spite of everything, Vietnam succeeded, and in a relatively short time. The country

started by repairing its relationship with China, following the end of the conflict in Cambodia, and then by intensifying its relations with its neighbouring South East Asian countries. Vietnam made an important gesture when it agreed to cooperate with the USA over the "missing in action" affair. This breakthrough led to the lifting of the trade embargo, after which Vietnam regained access to international credit (Asian Development Bank, International Monetary Fund) and it probably also contributed to Vietnams integration into the coalition of South East Asian countries, ASEAN (Do Hien, 2007). Then that led to the first step in a process of reintegration of Vietnam into other forums; the long term objective being integration into the World Trade Organisation. When H5N1 emerged, the USA appeared to be the last obstacle to Vietnams entry into the WTO. In 2005, the American government was strongly engaged in the struggle against Avian Flu (e.g. George Bush speech at the United Nations summit on 14th September 2005). There were successive visits by American officials in 2005 right up until the official visit by George Bush in person in November 2006, which shows that the Americans considered Vietnams entry into the WTO to be conditional on its successful handling of the H5N1 threat (Vietnam Net Bridge, 1st February 2006). In response to this pressure, Vietnam needed to present itself as a "good global citizen" in the international community: a virus should not be allowed to get in the way of twenty years of diplomatic reconversion.

4.4. *A forum for exchange:* the Partnership for Avian and Human Influenza.

The cooperation between Vietnam and the international authorities was facilitated by the establishment of a forum for discussion and negotiation: the Partnership for Avian and Human Influenza, PAHI.

In fact, to deal with the Avian Flu, the authorities re-activated the National Steering Committee, the NSC, which had been founded the previous year in response to the SARS outbreak. This committee allowed them to harmonise the activities of the different ministries involved in managing the virus (Ministry of Agriculture and Rural Development, Health Ministry, as well as the Ministry of Commerce, Ministry of Finance, and the Popular Army). The other challenge was to coordinate the plethoric activities of the international community. This came to be the role of the PAHI, created in 2005.

But the role of the PAHI was not only limited to this coordinating. The international organisations were excluded from the NSC in order to acknowledge Vietnams sovereignty. The PAHI was the forum for discussion between Vietnam and the other countries. The status of the participants (ministers, ambassadors or low-ranking representatives) as well as the frequency of the meetings, marked the pace during the crisis situation. Whilst appearing primarily to exist as an instrument of international coordination, the PAHI was also a place to build an international epistemic community (Haas, 1992) and a place for "translation" (Callon, 1986). The existence of the PAHI is testament to the accountability of Vietnam in the eyes of the other countries, whilst at the same time keeping them at a distance, and consolidating its own legitimacy. The Vietnamese representatives encountered during the proceedings were liable to underline the fact that Vietnam was not China (because it remained accountable) nor was it like Laos (because it had not relinquished its sovereignty when the avian flu broke out), and that it was not like Indonesia (because Vietnam had always shown cooperation).

5. Conclusion.

At the end of the study term, two distinct phases in the chronology of the Avian Flu crisis can be identified. The first phase, which began at the end of 2003 and continued until autumn 2005, is

characterised by the predominant role of the State apparatus, supported by popular movements (the Womens Union and the Farmers Union) as well as the Communist Party. The first goal is to eradicate the H5N1 virus, whilst simultaneously reinforcing Central power in relation with provincial authorities. The second phase began with the arrival of the virus in Europe at the end of 2005 and which is marked by the implication of other actors issued from the international food industry, NGO's etc. The risk becomes endemic and needs to be dealt with not only by the usual emergency measures, but by structural changes throughout the poultry industry. It becomes a known factor in the functioning of daily society. The management of the crisis is judged no longer on results, but on the means employed to contain the virus. At the same time, the virus became an instrument in the Vietnamese strategy of international diplomacy.

The example of Vietnam, and the way the Vietnamese authorities managed the Avian Flu crisis, reveals the specific Vietnamese characteristics in their management of risk and the issues involved. But it also shows that far from being stuck in a rigid cultural posture, the modes of local governance are highly dynamic, and capable of rapid evolution. The Vietnamese authorities adapted to the management of incertitude in a more accountable, and globalised system. Certainly, we accept that this apprenticeship occurred under constraints from the international community. But in spite of these constraints, Vietnam found a way to exploit a number of opportunities, both keeping the international community at a safe distance whilst at the same time adeptly navigating the unfamiliar path of international governance, then changing its image in the world from that of a carrier of a global health risk, to one of a good global citizen, and finally consolidating the Communist heritage at a local level whilst at the same time advocating greater public health control via the market.

This analysis concludes that the project of international health governance should not underestimate the complexity of local situations, that taking into account national cultures of risk should not ignore local dynamics, and that focusing on constraints should not preclude opportunities associated with risks.

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