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**EARLY WARNING FOR COWARDLY LIONS:
RESPONSE IN DISASTER AND CONFLICT EARLY WARNING**

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Introduction

The title of this paper is inspired from William Zartmans's *Cowardly Lions: Missed Opportunities to Prevent Deadly Conflict and State Collapse* (2005). In most early warning systems, the Lions do not roar.

In this paper, we contend that most conflict “early warning” systems serve as much use as the “Emperor’s New Clothes”: they adorn international organizations with self-styled hubris and weave tall tales to donors who shell out to remain *à la mode*. To be sure, these early warning systems are fashioned for the quixotic catwalks of Western capitals and seldom heard of in disaster and conflict risk areas. Thus the dictum that “an ounce of prevention is worth a pound of cure” begs the following two questions: Prevention for whom and prevention by whom? To redress the field of conflict early warning requires that we heed some of the lessons learned from the disaster management field. To this end, we identify best practices in the disaster literature and draw on these conceptual insights to correct some of the myopia that vexes the conflict early warning community.

Lessons Learned

The disaster early warning field is still emerging from a shift in paradigm that has radically altered the field’s conceptual understanding of natural disasters. Ironically, the German philosopher Karl Popper was the first to foresee this shift more than half a century ago. In *The Poverty of Historicism* (1944), Popper distinguishes between two kinds of predictions:

We may predict (*a*) the coming of a typhoon, a prediction which may be of the greatest practical value because it may enable people to take shelter in time; but we may also predict (*b*) that if a certain shelter is to stand up to a typhoon, it must be constructed in a certain way... (38).

The first type of prediction, which we term “hazard forecasting”, is strictly a scientific exercise based on quantitative models, remote sensing technology and dynamic data. The second type of prediction assesses risk. The purpose of “risk forecasting” is to gauge how a system is likely to interact with a given hazard. An earthquake is a hazard and only becomes a disaster when it impacts a social system. Thus the recent 7.7 magnitude earthquake in Eastern Russia did not lead to a disaster since the area was hardly inhabited. There were virtually no communities at risk.

The disaster literature defines risk as being the product of hazard, exposure and vulnerability (some divide this product by resilience which is a function of capacity):

$$\text{Risk} = (\text{Hazard} \times \text{Exposure} \times \text{Vulnerability}) / \text{Resilience}$$

Both hazard and risk forecasting are integral to the field of disaster management. While hazards such as tsunamis cannot be prevented, limiting exposure and vulnerability while increasing capacity can still minimize risk and save lives (Cardona 2004, 38). In sum, improving the accuracy of hazard forecasting provides more time to take shelter while risk forecasting identifies the sources of vulnerability within a social system.

Herein lies an important shift in paradigm: the source of the disaster risk is no longer viewed as being external to the social system but rather internal.¹ “Phrases such as a ‘disaster hit the city,’ ‘tornadoes

¹ Natural disaster research is a product of the Cold War when US government institutions provided research funds to study the reactions of people to possible air raids. “Disasters were viewed as situations likely to elicit the reactions of human beings to aggression and to allow an adequate test of them” (Gilbert 1998, 12). This focus on air raids led to a conceptual understanding of disasters and being exogenous to society. “Bombs fitted easily with the notion of an *external agent*, while

kill and destroy,' or a 'catastrophe is known by its works' are, in the last resort, animistic thinking (Dombrowsky 1998, 21). The vulnerability and resilience of a given system lies no longer in the future. Social vulnerability is the product of *past* political, economic, social processes (Hilhorst and Bankoff 2005, 3). "The role of vulnerability as a causal factor in disaster losses tends to be less well understood, however. The idea that disasters can be managed by identifying and managing specific risk factors is only recently becoming widely recognized" (Dilley et al. 2005, 19). This recent shift has placed vulnerability studies at the forefront of disaster research.

Vulnerability and Resilience

The focus on vulnerability "gets rid of the overwhelming notion of agent" since the spotlight is now on multiple interdependent *processes* interacting at different scales (Hewitt 1998, 81). These interactions give rise to complex behavior, which explains why evaluating vulnerability is not a trivial task. In addition, the consequences of human-induced climate change "emphasizes the *mutuality* of hazard and vulnerability to disaster due to complex interactions between nature and society" (Hilhorst 2004, 53). So vulnerability is a product of interacting complex systems at different scales.

Seen in this light, it is little surprise that such complexity casts a shadow on our understanding of the causal pathways that link vulnerability and disaster. In response to this complexity, scientists have developed more sophisticated early warning systems. These require "geologists, seismologists, meteorologists and other scientists who can monitor and predict hazards, while social scientists are brought in to explain people's behavior in response to risk and disaster and to develop early warning mechanisms and disaster preparedness schemes" (Hilhorst 2004, 52).

Recent vulnerability models draw on increasingly fined-tuned tools and instruments. But what management purposes do they serve? "Are they indicative of a disaster management approach that wants to 'control' complexity by combating it with ever more intricate models and measurements?" (Hilhorst and Bankoff 2005, 8). Anyone versed in the basics of complexity theory will caution such assumptions: sophisticated technology alone will not detect and prevent disaster.

To conclude, we see an interesting parallel between the two types of predictions identified by Karl Popper. As scientists have drawn on more advanced technology to improve the accuracy of *hazard* forecasting, this technology-oriented mindset has spilled over to inform the development of *risk* forecasting techniques and hence vulnerability assessments in general. This contagious drive for technological nirvana has unfortunately created more haziness than clarification. Ironically, it was another philosopher who foresaw the role that technology was to play in society's future.

Technology and the Political

The origins of early warning "mechanics" can be traced back to the dawn of the 13th century. This period saw the linearization of time with the first mechanical clocks appearing on public buildings. That same century saw the development of double-entry bookkeeping, the adoption of Arabic numerals and accurate map-making. These tools reduced time to a number and enabled (some) individuals to profit from abstracting the world. Merchants could keep stock of assets and liabilities, managing demand and supply. They could for the first time anticipate and quantify the outcome of a venture (see Campbell and Meier 2006).

people harmed by floods, hurricanes, or earthquakes bore an extraordinary resemblance to victims of air raids" (Gilbert 1998, 12).

At the close of the 13th century, human ingenuity had developed abstract instruments that allowed it to objectify the universe and in turn exert a level of prediction and control (Peat 2002). “The metaphor for that universe was that of clockwork” (Peat 2002) and supporters of the Enlightenment in the 18th Century claimed that scientists would soon “be able to look into the future and see what course of action is best for humanity” (Wilson 1998). This hubris is embedded within the “general discourse of capitalist modernity where nature and society are seen as separate, and nature is considered a commodity that can be appropriated and controlled through expert knowledge and modern administration” (Hillhorst 2004, 58).

Developing technology-driven solutions to complex problems necessarily requires expertise. Treating hazard and risk forecasting as specialized challenges leads to a monopoly of discourse that is appropriated by highly skilled individuals. In *Toward a Rational Society* (1970), the German philosopher Juergen Habermas describes “the colonization of the public sphere through the use of instrumental technical rationality. In this sphere, complex social problems are reduced to technical questions, effectively removing the plurality of contending perspectives” (Pulwarty, Broad and Finan 2004, 95).

To be sure, machine-mediated technical systems translate human concerns into cryptic technical languages (Hewitt 1998, 88); so that which is inherently political becomes depoliticized and mechanized. As a result of this technological drive for pole position, “an obvious concern exists due to the separation of risk evaluation and risk reduction between science and political decision” (Cardona 2004, 51). This may be “fortuitous” for some seeing that “for many countries and donors, vulnerability reduction is too political” (Heijmans 2004, 117) even though “vulnerability is the result of political processes” (Hilhorst and Bankoff 2004, 7). In fact, “vulnerability, with emphasis on physical and economic vulnerability, is addressed only in aspects that are susceptible to technical solutions. It is regarded as politically neutral” (Heijmans 2004, 117).

This is somewhat problematic, to say the least. Indeed, “if most disaster management agencies and governments ignore the social and political origin of disasters, how can disaster risk reduction ever be accomplished?” (Heijmans 2004, 117); “What, then, shall we do with a disaster sociology that sees solutions only through technocratic systems and strategies... ?” (Hewitt 1998, 86). William Zartman’s latest book on conflict prevention is aptly entitled: *Cowardly Lions: Missed Opportunities to Prevent Deadly Conflict and State Collapse* (2005). In most early warning systems, the Lions do not roar.

In sum, the problem often becomes cloaked as a technical issue dressed as a question of cost benefit analysis; international organizations like the World Bank play a pivotal role in framing this discourse. To be sure, “non-academic definitions of disaster are a function of organizational interests; that is, they ‘strongly reflect the preoccupations and circumstances of whoever is doing the [defining]’” (Stallings 1998, 131). It is hardly surprising to learn that as result “the reduction of risk in terms of reducing exposure to economic loss becomes confused with the reduction of societal vulnerability” (Pulwarty, Broad and Finan 2004, 95).

This begs the questions posed in the introduction: early warning for whom and by whom? Are we just warning ourselves? Or are we warning those at risk? If the former, then both the disaster and conflict early warning fields are doing very well. If the latter, then we have to ask ourselves whether the Emperor is indeed wearing any clothes.

Warning for Whom?

A recent study—possibly the only one of its kind in the recent conflict early warning literature—sheds some light on this question. “Perhaps ninety-nine percent of what we read about conflict early warning refers to regional or international mechanisms. They are egocentric in that they are primarily built by outsiders to be used by outsiders” (Barrs 2006, 1). Like missionaries we see ourselves as the protectors of “primitive societies”; little surprise then, that the “personification of the ‘noble savage’ was the product of the 18th-century Enlightenment” (Bankoff 2004, 31).

The noble savage is described as living in a state of nature. Protection, it is affirmed, can only be sought from the Leviathan who stands above and outside this sea of chaos. The Leviathan has the power (through technology) to protect (but not the responsibility to protect), which singles out “expert systems as alone able to probe and domesticate these further reaches of environmental and social ‘wildness’” (Hewitt 1998, 80). While the old idiom of savages and primitives has been removed from the discourse, “their ghosts perhaps linger in the choice of which societies are selected to be the subject of ethnographic [and early warning] study” (Bankoff 2004, 32).

The missionary-savage dichotomy is reflected in the relationship between the *problem solvers*, that is the West, and the *problem owners*, the governments of developing countries. The rhetoric labels the communities at risk as “the *intended beneficiaries*; but, in practice they [are] not the *real clients* of early warning activities” (Stephen 2004, 106). As problem solvers, “we are the rescuers; aid does not start until we arrive” (Barrs 2006, 1); and note that “Western intervention continues to be known as ‘relief’” which suggests that the discourse is still managed by the problem solvers (Bankoff 2004, 33). Are the techno-savvy Leviathans the most appropriate actors to sanction early warning and “relief” in this game of life and death?

Our perusal of the disaster management literature presents interesting insights that may be of some importance to the conflict early warning field. To be sure, vulnerability is not specific to natural disasters but man-made disasters as well. In the second part of our paper, we identify and explain the implications of these insights for conflict early warning.

David and Goliath

Time, in early warning, is of course of the essence. To be sure, “the question of time becomes crucial if vulnerability is to be considered essential to the definition of disaster” (Oliver-Smith 1998, 187) and the question of “how we can arrive in time (if at all) creates immediate problems (Barrs 2006, 1). Indeed the measurement of success for early warning is not accurate prediction; it is effective preparedness and mitigation which both require an element of time.

What contributes to failed response resides in part within bureaucracies—or Leviathans (See Campbell and Meier 2006). Certainly, organizations like the UN and its agencies promote community-level conflict prevention programs. “But efforts at conflict *prevention* are entirely different than efforts at conflict *preparedness*. When the former fails—as it very often does—the latter is needed” (Barrs 2006, 2). Needless to say, Leviathans may not always be well placed to provide early warning and preventive measures. And while prevention may be distinct from preparedness from an operational point of view, the former necessarily reinforces the latter.

More often than not, early warnings are “wired vertically” to Leviathans since they are the keeper of technological solutions. To be sure, “today’s prominent systems for warning about violence are designed to trigger this response from the outside to a growing crisis” (Barrs 2006, 2). This presents several constraints since disaster or minimum “conflict preparedness” is a function of knowledge. “When knowledge is adequate, no external force can produce a disaster; ships ride out storms,

buildings shake but do not collapse in earthquakes, flood levees hold, etc. When knowledge is inadequate, disaster results” (Stallings 1998, 129).

Communication of knowledge is a fundamental element of any early warning system. In fact, “disaster is first of all seen as a crisis in communicating within a community—that is, as a difficulty for someone to get informed and to inform other people” (Gilbert 1998, 16). The question is whether to warn the David, Goliath or Leviathan on the block. While provocative, this question nevertheless deserves an answer. David in this scenario is the (Western) non-governmental organization (in Darfur), Goliath is the national government with the responsibility to protect (Sudan), and the Leviathan is the international organization (United Nations or perhaps a superpower like the US).

Of these three actors, which is more motivated and likely to respond? “Who is best positioned in terms of local knowledge and tactical options to react to warnings immediately?” (Barrs 2006, 1).

Three Blind Mice?

The Leviathan (or UN) is plagued with issues of political will, sovereignty, lack of transparency and accountability. A recent study revealed that the UN’s early warning systems are not even geared towards the organization’s existing decision-making structures, which largely accounts for the gap in warning and response (Campbell and Meier 2006). “These agencies are mostly centralized hierarchies that do not adequately incorporate local power bases, such as municipal governments, community organizations or other expressions of civil society” (Cardona 2004, 50).

Add to this the limitations imposed by overlapping UN mandates, inter-agency competition over limited funding and challenges in knowledge management across and within agencies. The outcome is often “disaster pornography, the exploitation of tragic images and heartrending words by officials and media for the promotion of their own organization...” (Hewitt 1998, 87). From where, one asks, can effective action for conflict prevention and preparedness emanate?

Complexity theory provides valuable insights here. Basic principles suggest that hierarchical or centralized organizations are unlikely to successfully manage the complexity of their environment very well due to path dependence and institutional inflexibility (see Meier 2006). Communication of knowledge in most international organizations is fundamentally limited by the hierarchical and centralized structure of these organizations. “The disaster community and field has taken shape largely as a response to the recurring failures of centralized safety measures and social control” (Hewitt 1998, 89).

A comparison with private companies demonstrates that horizontal organizational structures are more adept at reacting to and anticipating change in a fast paced environment (Gladwell 2005). This is in part due their networked organizational structures that, like the Internet, provide for direct communication and intense competition for market share (Meier 2006).

The feedback mechanisms within successful private sector companies are well developed. This allows them to solicit or monitor customer feedback in order to modify their product and meet the needs of a changing market in a timely manner. The communication network in these companies enables market research to feed in directly into design and production. The time between “warning” and “response” is minimized and regularly evaluated. Failure to manage this complexity leads to profit losses and sometimes bankruptcy with the company being forced out of the market.

Hierarchical organizational structures, however, do not make for ideal feedback loops. They tend to organize themselves around their initial success and in the long-run take on a defensive nature toward of competitors. “Thus, the operation of organizations tends to turn into a hedgehog position” (Wolf 1998, 22). With time an organization’s preoccupation with self-preservation becomes a priority “with the original reason for its establishment being turned into a subordinate, accessory matter” (Wolf, 1998, 22). Unfortunately and unlike the private sector, a better “product” does not replace an international organization that is no longer “competitive”. This monopoly-like structure discourages risk, transparency and innovation. Demand for a more satisfactory product is thus shelved as are demands for reform.

Blind Leading the Blind?

Most of the arguments identified above hold true for nation-states with perhaps one caveat. Governments kill people. As the original Westphalian “product”, the nation-state was meant to serve as protection for citizens willing to sign on the dotted lines of the Social Contract. The two World Wars and subsequent violence that ensued during the Cold War suggests certain signatories may have discarded the contract. The shift from international wars to internal conflicts has produced a parallel shift in casualties: from military casualties to civilian deaths. While sovereignty might be understood by some as being conditional on the responsibility to protect, many governments are still in the business of doing quite the opposite. Thus while,

Modern institutions, in particular the state, have ever-increasing control over everyday affairs. This ... increases the risk of disaster since the experts who run these institutions are not up to the task while, at the same time, the people who are exposed to risk have less and less control over the direction of public affairs. It is the lack of accountability of the institutions of the modern state that causes disasters (Stallings 1998, 130).

The nation-state’s monopoly of public affairs however, has not gone uncontested. Indeed, while the nation-state still plays a pivotal role in geopolitics, the significant influence (not necessarily always positive) of non-governmental organizations is unmatched in human history. This trend towards thinking locally, however, has not been very well matched with the idea of also acting locally. This should be an important conceptual shift for the field of conflict early warning and response but “rarely have we invested in routing the alarm locally or ‘laterally’” (Barrs 2006, 2).

Non-Governmental Blindness

Investing locally may be counter to the mentality and survival needs of most NGOs. Much of what is called capacity building and peace building has not been shown to have the intended impact (communication with Cheyanne Church). In fact, project monitoring and impact evaluation is an exercise resisted by many wearing the Emperor’s New Clothes. Thus while auditing and certification is a regular practice in the private sector—and an opportunity to demonstrate viability and future prospects—NGOs have not embraced this equivalent practice in the non-profit sector.

Take, for example, the case of an international NGO based in Switzerland (which we will refer to as imply “the NGO”). This NGO runs an early warning system that uses local information networks comprised of locally trained field monitors to collect open source information. This data then becomes the exclusive property of the NGO and its paying clients, eg, international development organizations residing exclusively in the Global North. The NGO claims to provide conflict early warning services but to date there have been no independent or public “audits” to verify these claims

or any positive impact the system might have had. Indeed, there is even less reason to believe that any previous warnings have led to response, preparedness or mitigation.

This case study also illustrates other shortcomings common to the majority of first generation and second-generation conflict “early warning” systems. “In the first and second generations of early warning systems the risk assessments were carried out by Western think tanks and NGOs” (Enderagalle 2006, 25). More broadly,

The first and second generations of early warning systems gathered together very intelligent and technical methodologies for data gathering and analysis. However, these systems failed primarily on two counts. Firstly, they were too far removed from the conflict context to enable effective early response and serve as a preventive tool, and secondly, they excluded micro level conflict scenarios and the contributing factors for these, such as local perceptions. [...] Another limitation of the first and second generations of conflict early warning was that they did not have early response mechanisms as an integral part of their systems. The centers that collected information and delivered early warning were based in the West whereas the actual conflict situations were experienced [elsewhere]. This constituted another communication gap in the case of early warning and necessary early action (Enderagalle 2006, 25)

Drawing parallels with the colonial era may not be that far-fetched. During the scramble for Africa, for instance, colonial powers preyed on the resources of developing countries to fuel the West’s insatiable thirst for progress and technological innovation. First and second-generation early warning systems replicate a similar pattern. While not preoccupied with diamonds or coltan, these organizations hire locals to mine information (a resource no less precious) in conflict zones. This (previously free) merchandise is then shipped to the Global North along secure electronic channels. “If people and communities at risk act at all, they are portrayed as doing so in ignorance, or out of mere perceptions of the hazard since technical expertise, not common sense or being there, decides knowledge” (Hewitt 1998, 78).

The data and analysis is then sold to the “highest bidders”, not the populations at risk from whence the information originated but to the headquarters of organizations located at a comfortable distance from any possible mayhem and bloodshed. These include USAID, CIDA, SIDA, and ADA—an exclusive club where yearly membership fees to access (not necessarily use) early warning data often start at \$100,000. It is unlikely that populations at risk have ever heard of most early warning systems manufactured in the west. And still, “very few question the dominant view, or that solutions must and will be found in technical approaches” (Hewitt 1998, 90). Yet what is the added value of warning ourselves? Are the incentive structures within bureaucracies in line with those of at risk communities? Furthermore,

Do these early warnings ever serve to get endangered civilians physically away from danger? Alerts, bulletins, and reports are sent around the world in real time. Yet they rarely touch ground where killing happens. They fly through cyberspace, high over the victims’ heads. People at risk on the ground might never learn that the ‘demarches’ we write on their behalf even exists (Barrs 2006, 3).

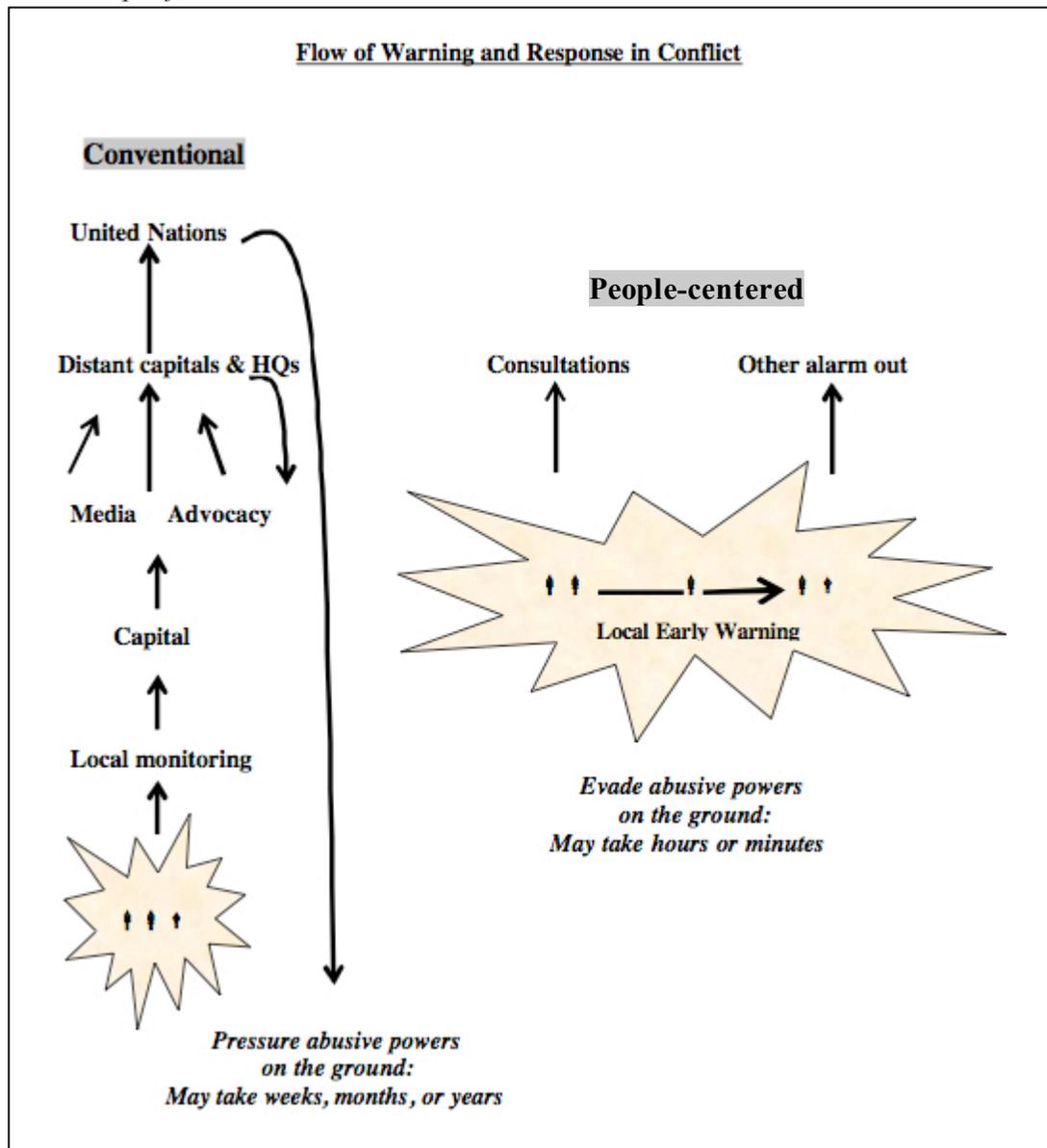
To its credit, the NGO is adopting the practice of “risk mapping” which has long been a component of disaster management and early warning. However, using more sophisticated technology such as Geographic Information Systems (GIS) without any link or input from local stakeholders is another

technological wet dream which “grows from a technocratic and fundamentally false assumption that once hazards are mapped in terms of their location, duration, frequency, severity and impact characteristics, then the risk assessment process is complete” (Davis 2004, 129).

Figure 1 below illustrates the basic difference between second-generation and third-generation early warning systems. “Regional and local interactions between early warning personnel and local people [are] largely non-participatory exercises used to elicit and extract information, not to engage” (Pulwarty, Broad and Finan 2004, 106) and government forecasts also run the risk of legitimizing the its leaders rather than the alert (Pulwarty, Broad and Finan 2004, 89). At the same time, “there is the question of whether responses to dangers can be reliable unless integrated into the fabric of social life” (Hewitt 1998, 81).

Figure 1: From “Center-Periphery” to “Periphery-Periphery” Early Warning

Source: Adapted from Barrs 2006.



People-Centered

While perhaps novel in the field of conflict early warning, the notion of “people-centered early warning systems” is a rising priority in the field of disaster management. “What is needed are systems that are tailored for local use and [are] generated on site” (Large 2005, 1-2). A “people-centered” approach to early warning, (i.e., early warning for the stakeholders), may exclude expert systems but will draw on local knowledge and response. A technology-centered approach tends to “crowd out” local knowledge. “The ordinary citizen’s opinion should be reintroduced into the analysis of disasters, instead of having it confiscated by the authorities—the administrative, political, as well as scientific, authorities” (Gilbert 1998, 97).

The Global Survey of Early Warning Systems (2006) commissioned by UN Secretary-General Kofi Annan defines the purpose of people-centered early warning systems as follows: “to empower individuals and communities threatened by hazards to act in sufficient time and in an appropriate manner so as to reduce the possibility of personal injury, loss of life, damage to property and the environment, and loss of livelihoods. [...] They involve national, district-level and community-based capacities and are only complete when the necessary capacities for warning dissemination and preparedness and response are in place. (2, 27)

Ironically, the West’s stronghold over the technological approach as *problem solvers* rather than *problem owners*, tends to render “culpable such populations (or at least their governments) who are blamed for their lack of adequate [technical] knowledge and preparedness. The idea that disasters are simply unavoidable extreme physical events that require purely technocratic solutions remained the dominant paradigm within the United Nations (UN) and multilateral funding agencies as the World Bank” (Bankoff 2004, 29).

The Global Survey on Early Warning Systems has recognized some of the shortcomings in the way warning and response is managed. Indeed, the survey acknowledges that, “the most important reason for people failing to heed warnings is that the warnings do not address values, interests and needs. Messages are often not sufficiently targeted to the users and do not reflect an understanding of the decisions stakeholders need to make to respond to warning” (20). These decisions won’t be captured through sophisticated remote sensing technology or news driven early warning systems.

Local Knowledge

Sophisticated early warning systems are developed to manage complex systems. Those familiar with the basic principles of scale in complexity theory might caution that “mechanical models of action and thinking will not meet the complexities of the linkages, chains, and open-ended processes of contemporary disasters” (Rosenthal 1998, 153; Meier 2006). While complexity theories can provide some insights into the behavior of complex systems, “they are far less clear about the required policies to overcome vulnerability” (Hilhorst 2004, 53).

This explains why a shift in scale from organizational/national scale to community/local scale is important. “The more technological and abstract our work environment becomes, surely it is the more important to go out into the field and confront our abstractions with evidence on the ground” (Hewitt 1998, 88). That is, the further we distance ourselves from the situation, the less details we notice or understand. For example,

An indication of the disjuncture between food aid/early warning analyses and the farmers’ position is the way in which early warning decision-makers conceptualize the scale of the problem. An issue that is seldom addressed in the debates about measuring vulnerability analysis and intervention may have the theoretical intention

of placing vulnerability at household level; but institutional and systemic constraints force users to apply them to higher geographical scales. As a result, a selected methodology may merely be an action through which the discourses within early warning are reproduced (Stephen 2004, 108).

So if we are to respond to disaster as a social disruption, we first need to identify the social unit: that means developing “more reliable social/behavioral measures, not measures of physical damage which guarantee post hoc explanations” (Dynes 1998, 112). There is also a need to move beyond the collection of statistics that reflect slow-changing macro-economic development. Political, economic and social processes, for example, are behavioral and change more quickly. Yearly statistics thus serve as poor proxies to monitor human behavior.

Again, the question is one of scale, temporal this time. “While one of the characteristics of the emergency period is the search for information, most of the *factual* information is not known until much later in the social process. In effect, response *precedes* the compilation of accurate information” (Dynes 1998, 114). This suggests that changes in behavior may provide a more accurate measure of ‘damage’ than do conventional measures (Dynes 1998, 114).

As an analogy, consider for a moment that we are more interested in measuring the immediate change in the weather (rather than the change in glaciers) to identify the immediate expected impact of climate change. This does not make the latter exercise useless—quite on the contrary. However this exercise must be complemented with the monitoring of short-term change (see Meier 2006). Local knowledge is more likely to capture short-term changes than the World Bank’s yearly country statistics. Unlike the Bank’s statistics, “local knowledge is the only resource controlled by the most vulnerable, is already present at a potential disaster site, and in many cases constitutes a viable operational strategy” (Bankoff 2004, 33). However, the potential for local knowledge to play a key role in early warning remains largely untapped for reasons explained above.

“The current emphasis on the importance of this local knowledge in disaster situations is a belated recognition that non-Western peoples have historically developed sophisticated strategies and complex institutions to reduce the constant insecurity of their lives” (Bankoff 2004, 32). For sure, local knowledge is not the sole solution to early warning and response. However, “reducing social vulnerability does not depend upon the precision of forecasts of particular hazards alone” (Pulwarty, Broad and Finan 2004, 83). Ultimately, what is required is “to find the proper balance between the need for external assistance and the capacity of local people to deal with the situation” (Bankoff 2004, 33). In the final part of this paper, we seek to redress the persistent imbalance that excludes or ignores the possibility of local response.

Local Response

Much of the discourse on disasters and conflicts is disempowering to local actors. The concept of vulnerability (as opposed to resilience), “still encourages a sense of societies and peoples as weak, passive and pathetic, and he compares it to other ‘social pathologies like, or derived from, poverty, underdevelopment and overpopulation’” (Bankoff 2004, 34). As a result, “the pattern of response then centers around the needs of the external agencies, rather than of the clients. In effect, the emergent systems are likely to be rather paternalistic” (Dynes 1998, 122; see also Uvin 1998). We therefore speak of “local” or “indigenous knowledge” instead of “indigenous technical knowledge” or “appropriate technology” (Bankoff 2004, 32).

In thinking of early response to either conflict or natural disasters, the local community is traditionally excluded. In fact, their presence is totally unnecessary to produce and deliver technological solutions. Either way, “in actual experience it would seem that higher levels of

government as well as other extra-community non-governmental agencies make a prior determination within their domains to provide assistance” (Dynes 1998, 120). This type of “pre-contingency planning” pays little interest to local resilience and capacity. Indeed, “the assumption is made that the local community is unable or incapable of dealing with the range of disaster demands. Thus, high levels of government *assume* that such communities have to be supplemented or ‘strengthened’” (Dynes 1998, 121).

These assumptions all too often become labeled as informed policy, which reinforce the notion that victims are vulnerable because of their lack of common sense. And yet, “what is interesting in the *empirical* studies of disasters is the surprising capacity of the reaction and self-organization of people outside any usual public or institutional structure. In other words, the notion of ‘victim’ here is very far from what is usually conveyed by the mass media, nongovernmental organizations (NGOs), or by major international organizations” (Gilbert 1998, 98).

For example, “it is well known that in case of earthquakes, such as the one that happened in Mexico City, the assistance to the victims comes first of all from the other survivors, with the means used by the authorities contributing to the emergency only to a very little extent” (Gilbert 1998, 98). In fact, estimates suggest that, “no more than 10 per cent of survival in emergencies can be contributed to external sources of relief aid” (Hillhorst 2004, 62). This may come as a shock to some, but “people who live with the daily threat of disaster have frequently evolved certain strategies or coping practices for dealing with their effects that are quite successful” (Bankoff 2004, 35). And so,

In over 25 years experience of disaster situations, we have observed that in most disaster situations there is a tendency for all concerned to exaggerate the scale of damage and dislocation and to greatly underestimate the capacity of the affected population to resolve their own problems (Davis 2004, 131).

So when early response at the international, national, and NGO levels fails—which is, lets face it, fairly routine—we, or rather those at risk rather, deserve a better insurance policy. To this end, people-centered early warning “seeks to inculcate a situational or security awareness within high-risk communities as it builds on local capacities to address and reduce their vulnerabilities in a sustainable way. [...] This approach differs from the traditionally more ‘remote’ and ‘vertical’ monitoring...” (Bond and Meier 2006, 1).

The choice to focus on the *real* stakeholders is important because “early warning signals appear most clearly to those immediately around the disputants” (cited in Bond and Meier 2006, 2). Furthermore, military history demonstrates that “success in counter-guerrilla operations almost invariably goes to the force which receives timely [local] information” (Thompson 2002, 52). This is where the usual Western rhetoric regarding lack of capacity starts to sound like a broken record.

When facing escalating violence, there simply is no time to write a grant proposal, apply, wait, receive the funds and implement the project (let alone measure its impact). Structural development is not an appropriate or logical response to early warning. So any arguments regarding the provision of external capacity is a moot point.

Besides, “survivor testimonies from around the world show that civilians frequently do not prepare themselves for danger even when forewarned” (Barrs 2006, 6). This generally happens for two reasons. First, at risk communities may not believe national “rumors” of escalating violence to be true; “to the Hitlerian technique of the Big Lie we must add that of the Horrendous Truth—a truth so awful that one can hardly credit it” (Rubin 2002, 139).

When We Fail

When conflict prevention fails, as it typically does, local action is the only insurance policy remaining. What type of insurance is possible? Simple training such as a variation of the standard UN-escorted “Go and See” visits may be an option; but in this case the message might be that is not safe to stay home, could make an important difference between life and death (Barrs 2006, 6). This type of exercise requires neither external capacity nor on-site presence of external actors. Communicating this type of “best practice” is not impossible, even in conflict zones. Radio broadcasts and grassroots organizations are an obvious entry point for the dissemination of local information.

Second, communities at risk may hope to appease or accommodate belligerents (Barrs 2006, 6). This may certainly prove to be their safest option. But knowing how to resist can also make an important difference. To this end, two types of actions are available: evasive or strategic non-violence. With respect to the former,

[Communities] can, for example, learn what dispersed and hidden livelihoods look like. They can be shown how they might ‘dismantle their village homes and build temporary huts near their fields’ as the Vietnamese sometimes did in the face of American airpower. Or see crop colors and canopies that are less noticeable from the air, as Salvadoran peasants sometimes planted’ (cited in Barrs 2006, 7).

Herein lies the value of drawing on local knowledge and complementing this with local “best practices” from other regions of the world. This is only the tip of the iceberg. The field of non-strategic violence is vast in practice and rich in lessons learned. And there is certainly no shortage in the literature on evasive survival strategies—including those originating from manuals developed for Special Forces. Asymmetric non-violence, whether evasive or resistant, may be the most logical response to conflict early warning.

Next Steps

The two questions posed in the introduction to this paper were: early warning for whom and by whom? We have argued that early warning must be for those people at risk and managed by those people at risk. This people-centered approach common in disaster early warning is one worth considering for improving response to conflict early warning. The impact that integrating strategic non-violence with early response will have remains to be seen.

As for the conventional approach to conflict early warning and response, the “Cowardly Lions” have had their chance and the Emperor has pranced about long enough.

“But he has nothing on at all,” said a little child at last. “Good heavens! listen to the voice of an innocent child,” said the father, and one whispered to the other what the child had said. “But he has nothing on at all,” cried at last the whole people.

Hans Christian Anderson, 1837

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