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The Victims' Dilemma: When Doing Good may be Doing Wrong

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A day before Hurricane Katrina hit New Orleans on August 29, 2005, Mayor Ray Nagin issued a "Mandatory Evacuation Order." Six months later, when asked if he had any regrets, he said that he had wished he had issued that order earlier. At first it had appeared that New Orleans had dodged "the bullet," but the levees collapsed without having been over-topped, flooding 80% of the city. The world then watched as the suffering of those who had not evacuated unfolded and civil order broke down. Since then, few have questioned the evacuation order; arguing only that it was late and that too many residents were left unable to care for themselves. This story reveals a most critical problem that needs to be addressed – how best should the city and its residents have responded to the risk, and how could they have better prepared to deal with the aftermath.



Damage from levee break in Lower 9th Ward, New Orleans after Hurricane Katrina.



Relief group house in Lower 9th Ward 6 months after Katrina.

As Mayer Nagin said, he had expected Federal and State help immediately following the storm. In fact, the governmental agencies all proved ill-equipped to deal with the situation, and days went by before people were rescued. It took months before any normal functioning of the city was restored, and much may never be recovered. Mayor Nagin also has said that he "now knows that the "cavalry" will not be coming, and they will have to "learn to fend for themselves."

That insight may be the most valuable lesson of the disaster – but the question that remains is how can one possibly fend for oneself if (1) the risk of staying through the storm is significant, as it was, and (2) there is such a great need for workers trained and empowered to help with the response and recovery, rather than be in the way of it. Compounding this dilemma during the months that have unfolded since the hurricane, there has been increasing conflict between the city disaster management authorities and some of the displaced members of the flood damaged neighborhoods over the plans to proceed with widespread demolition of damaged and ruined houses – without communicating with the displaced owners. The

population is spread across the country, making this a difficult process – but many view these demolitions as an assault on all that is left of the world that they had known.

New Orleans is just one striking example in disaster management history, and it is not even the most recent one. The human tragedy that has befallen Kashmir, where the harsh winter followed upon the earthquake for the tens of thousands who have lost their homes, came only a month after Katrina. Here many of the people have refused to leave their mountain villages, both the base for their livelihood and for their sense of attachment to place. Often governments and relief organizations have sought to remove populations from disaster-affected areas, giving them new houses, and insisting that only then will they be safer – but almost as often, such efforts have collided with sentiments among the dispossessed to stay on their ancestral lands and rebuild on their own.

There exists a conflict between a paternalistic approach to relief and long-term recovery, and one based on empowerment of citizens and the rebuilding of self-reliance. One example of well intentioned plans which have not turned out as intended that will be discussed will be drawn from the reconstruction efforts after the 1980 Campano-Lucano earthquake. In the outskirts of the damage district in Naples new settlements were constructed following the requirements of Italian Law 219 of 1981 (thus they were commonly referred to as "comparti 219"). These were designed to re-house people whose houses were damaged. The majority of the people came form the historical quarters in the centre of Naples.

The idea underlying such an intervention was twofold: (1) to "temporarily" locate people in more sanitary housing than they had been uprooted from, and (2) to try to remedy pre-existing social problems that had plagued downtown Naples. A total number of six "comparti" were constructed in established agricultural villages. In order to speed up the construction, the buildings were prefabricated and of only rudimentary design, and the clusters were laid out with little consideration for town planning or integration with the existing settlement. These "comparti" were intended only to be temporary, to be replaced in the following years with more adequate and permanent solutions. The subsequent building campaign never materialized and the "comparti" soon evolved into veritable "ghettoes" with little interaction with the surrounding villages. Today, the "comparti" have become one of the major social problems in the Naples region with extreme social, housing and hygienic degradation in areas that lack basic social services (police, emergency, etc) and even grocery stores. The crime rate in these quarters is one of the highest in Italy; so much so that even entering the quarter without the accompaniment of a known resident is a risk.



San Giuliano Di Puglia, 2002 showing original town on hilltop on right and temporary "New Village" on hillside on left which, for reasons of "safety," was deliberately located too far from the village to make walking between the two impractical.

An Italian example of an on-going earthquake recovery effort can be found in San Giuliano di Puglia (see photograph), a rural community that was uniquely affected by the Molise earthquake of 2002 when their school collapsed killing 27 school children (an entire age cohort) and their teacher. Following the earthquake, teams of government relief personnel, firemen and police descended on the town. An early decision was made to close the central area of the town, where the maximum damage was sustained, evacuating most of its 1,100 residents to temporary quarters in resort hotels (then empty because of the season) along the coast. This evacuation was followed by a recovery plan that included the construction of a tem-

porary village some distance away of wooden barracks-like houses, and wide-spread demolition of the earthquake-damaged buildings. The village people were only allowed back into their village under police or firefighter escort.

The impact of this policy on the residents will be analyzed, based on the experiences of co-author Dusi, who spent a year as a consulting structural engineer for the *commune*, including quotes from the displaced residents themselves. During the first year following the earthquake – the period under study – the evidence clearly showed social distress and increasing levels of conflict among the residents, and between them and the recovery and reconstruction leadership. Some of the social fabric of this community began to unravel during this process. The focus of the analysis will be on the efficacy of what was very much a top-down paternalistic approach to disaster recovery, where the affected town was small, and therefore the assistance was provided mainly by outsiders.

Another example will be the disaster recovery process in several villages affected by the 2000 Orta earthquake in central Anatolia, Turkey. As elsewhere, the disaster affected relatively small rural communities, but it was broad enough to be able to draw comparisons between the recovery trajectories in several of the affected villages – one that had younger farmers actively engaged in farming where the residents elected to repair and return to their traditional houses, and two where the population was older and farming activities had declined, where the residents accepted the government's offer to rebuild the villages in new locations. In the case of these second two villages, the government had presented technical reasons for relocating the villages to sites that their scientists claimed were safer sites.

For the two towns undergoing relocation, in the half-decade since the earthquake, the relocation has not been fully consummated. In one case, the village of Elden, fewer than 10 of the 80 new houses were occupied as of 2005, and of those, some had been occupied and then abandoned. In the other, Yuva, more people have moved, but many in the village expressed regret at the decision to move, and hoped to maintain their original residences, even though the government is now insisting that the old houses be demolished. In both cases, but in particularly Elden, the new village was located without regard to anything other than a seismologist's assessment of the geology of the land, as there was little access to water, and no access to arable land for animals or provisions for the animals in the way of paddocks and barns. The houses were placed too close together to allow for such facilities. In addition, the mosque and community center remained in the old village.



Traditional house in Yuva with repairable damage that was condemned by government engineers after the 2000 Orta earthquake.



New house at a remote site constructed to re-house residents of Yuva – constructed of unreinforced hollow block masonry.



Elden "New Village" with 80 houses, almost all of which were never occupied – as they are remote from the fields, barns and mosque.

In all of these cases, the outside analysts and government engineers have arrived without understanding the nature and even the technical attributes of the pre-modern traditional construction of timber and masonry and have condemned the old houses, and persuaded the occupants they would be safer in new houses. Ironically, as will be shown, the new houses are in fact not as earthquake resistant as the older houses. The track record for the older houses can be verified by looking at the performance of similar structures in the much large 1999 Marmara earthquakes, while the newer ones of hollow clay tile masonry and concrete have a demonstrably poorer record in large earthquakes.



Villagers of Aşagi Kayi in a tent photographed one day after the 2000 Orta earthquake damaged their house.



Village elders of Elden still living in their damaged houses 5 years after the earthquake, rather than in the new houses in the "New Village" shown above.

What these examples show is a tragic failure to understand the importance of balancing subtle and often unarticulated human needs of the local population with the findings from scientists and engineers -- who often have failed to understand the human geography and ecology of the settlement patterns and how the settlements are lived in by their residents. Instead, they began the process by coming into the villages and condemning the damaged houses of traditional construction, most of which had no significant structural damage, only damage to their plaster finishes. As a result, the value of the culture and human associations was missing from the planning process. These older residents, who after the earthquake were vulnerable, found the idea of getting new buildings in exchange for old damaged ones attractive. Later, they found that the reality was different than what was promised or expected. Thus, the recovery process had been taken out of their hands by their early, ill-informed agreement with the proposed plan. As in San Giuliano di Puglia, it was an example of a paternalistic approach that was not responsive to the unspoken true needs of the affected people.

In the case of the third town, Aşagi Kayi, the active adult population was younger and still actively farming. This village provides an example of a place where much of the government assistance was rejected, and partly as a consequence, the recovery has been much more rapid. The residents for the most part have undertaken the repairs themselves and have moved back into their houses, moved their animals back into the barns, and resumed their lives as before. It offers a positive contrast to the experiences in the other villages, serving to reinforce the value of allowing and encouraging the affected populations to be in charge of their own recovery process.



Interior of the house owned by the family in the tent shown above photographed one day after the earthquake.



The same room photographed a year after the earthquake after the family had repaired and moved back into the traditional farm dwelling.

What is needed is a way to balance the responsibilities of disaster management – between paternalism, where the primary effort is to protect the victims from further risk and provide them with what they most need immediately, and an approach that treats residents as survivors, rather than victims, empowering them to undertake much of the recovery process themselves, even when such an approach may be more complicated and involve additional risks.

Give a man a fish and you feed him for a day. Teach him how to fish and you feed him for a lifetime.

Common Proverb

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Randolph Langenbach has degrees in Architecture from Harvard University, and Building Conservation from Institute of Advanced Architectural Studies in York, England. Until recently, he worked for the United States at the Federal Emergency Management Agency (FEMA) where he was responsible for technical analysis for the rehabilitation of significant historical buildings and large complex structures, including university buildings and hospitals. He has published numerous works and received a number of awards for his work on traditional buildings in earthquake areas, including the 2003 National Endowment for the Arts Rome Prize Fellowship at the American Academy in Rome. He is co-author with Alberto Dusi of the Paper: "On the Cross of Sant'Andrea: The Response to the Tragedy of San Giuliano di Pugpublications lia", Earthquake Spectra, EERI. Spring. 2004. His can be found at www.conservationtech.com.

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Alberto Dusi is a Structural Civil Engineer graduated from the University of Pavia (Italy), He has worked on many EU funded projects, and now currently acts as an expert and advisor to the EC. He was an engineering consultant for more than six months in San Giuliano di Puglia, acting as a consultant for the Municipality and the Italian Civil Protection for the emergency shoring and reconstruction activities. He is author and co-author of more than 40 papers and is lecturer for several university courses on Structural Design of Buildings and Seismic Engineering.

This paper has been slightly re-edited following the conference with more illustrations added to make it suitable and informative for publication on the web.