The human dimension of seismic vulnerability. Case study: Bucharest Municipallity

I. Armas and E. Avram
University of Bucharest, Bucharest, ROMANIA (iuliaarmas@yahoo.com)

Vulnerability is a concept that evolved out of the social sciences and was introduced as a response to the purely hazard-oriented perception of disaster risk in the 1970s (Birkkmann, 2006: 11). The current literature encompasses more than 30 different definitions describing vulnerability, but in this study we accept vulnerability as an intrinsic predisposition to be affected by a natural hazard, and to be susceptible to damage (Cardona, 2004).

The importance of studying the relationship with the natural hazard events from a psycho-social perspective is fundamental by the experience with past disasters as much as by the research in the field that proved that the people’s psychologic structures may constitute a starting point for risk reduction.

Human vulnerability encloses tendencies, orientations, feelings about the implications of the earthquake risk, structured in psycho-comportamental sets, relative to certain subjective evaluations on the personal situation and the probability of the event. Each person relates to the consequences of a seism catastrophe, in accordance with the way the individual evaluates their place in the context of the risk. The interpretation depends on the urban lifestyle, meaning the existing life conditions perceived more or less subjectively. The psycho-comportamental models of the great cities’ inhabitants comprise contents regarding the seismic risk. The choice of a home, the preference for a certain area of the town etc., constitute a cognitive structure that contains the seism-preventing element. As an example, the tendency of reducing as much as possible the vulnerability to risk is one of the characteristic aspects of certain transactional decisions.

At the subconscious level, the citizens perceive the probability of the seismic risk and live with the feeling of preparing for an eventual catastrophe. The life quality is
affected by the perception of the seismic risk and the implied feelings of vulnerability and insecurity. The descriptive data have shown which are the support factors that the citizens rely on in the case of the existential crisis consequent to the seisms, so these factors may be strengthened as a part of previsional social strategies.

Inferential analysis has lead to pointing out several vulnerability patterns that imply the expected support in case of necessity, emotions as the feeling of safety, protection, as well as cognitive and comportamental models.