

TECHNICAL AND ETHICAL REFLECTIONS ABOUT THE VERY CRITICAL INSTABILITY OF A CONSTRUCTION IN VARESE, ITALY

Federico Bartolozzi
Civil Engineer & Independent Researcher
Varese, Italy
ciuciuzza@iol.it

The building – subject of study in this paper – is a construction for dwelling consisted of five floors with twenty four living units and it is in Varese, Italy.

This building was constructed in the first years of 1970 and it has a bearing structure in reinforced concrete.

The very critical state of instability, which struck the bearing structure and which is pointed out from a general state of splitting, is the effect of unjustifiable design and operational insufficiencies.

The cause of the phenomenon is put down both to the shortage of steel reinforcement and to the considerable problems of laying of the structures. A so worrying structural situation unavoidably causes ethical reflections too with respect to the human behavior and the responsibilities of the directly involved professional figures.

Indeed, the design incompetence of the structure calculating man, as well as the great technical and professional superficiality of the work manager, of the building firm and of the structure tester emerge clear and incontestable.

The very serious pathological state of the structures – pointed out, as already report, by a general and considerable state of splitting and confirmed by the advice of qualified technicians, in addition to the physical breaking of glass sighting states – induced the running assembly – after varied doubts, obstructionisms and other vicissitudes, including serious and arbitrary illations towards some scrupulous technicians – to find the only practicable way in cases of this sort, that of a radical cure of structural consolidation with a massive and targeted laying of carbon fibre lamina, in order to prevent the increase of a emergency state, become during the last days more worrying due, luckily, to an earthquake of modest magnitude, which was declaredly feared by the author of this paper.

Detailed and interesting considerations – equipped by a photographic documentation of the initial emergency state and of the following stability restoration – would be reported in the final paper.

References

[1] F. Bartolozzi, “Opera Omnia: Earthquake Isolation & Soil Mechanic Systems”, *Die Blaue Eule, Essen, Germany*, 361-365, 2005

Keywords: Construction, Instability, Splitting