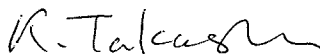


FOREWORD

In the year passed, the earth was not calm. Earthquakes hit some places in the world and brought us damage to property and loss of life. Loss of life, indeed, it is still unavoidable, even though so many achievements in seismology and earthquake engineering are obtained. Damages due to earthquakes always show different aspects, some of which are not anticipated. This is the reason why many scholars and engineers apply for damage-surveying whenever they hear of the occurrence of a big earthquake. My colleagues in ERS went to Erzincan(Turkey), Florence Ireland(Indonesia), and Cairo(Egypt) as a member of damage-surveying team and a member of the expert team dispatched by Japanese Government. They want to know the real cause of structural damage and find out new discoveries among many features of earthquake disasters.

It is often heard that prevention of natural disaster is solely depending on finance. Reports of damage-surveying, however, suggest to us that damages are not always due to a monetary problem. Especially in case of loss of life, we can find some evidences that we could avoid at least loss of life if a little more considerations on safety had been taken into design of structures. It is not caused by lack of modern technologies and insufficient information of recent achievements in earthquake engineering.

How can we provide careful earthquake resistant design then? The only way to accomplish this is by research and education. Only engineers who are well educated and well aware of local construction way and mechanical properties of construction materials can do it. Earthquake engineering is a polyphonic engineering. We must collect various kinds of informations and fuse them into a suitable technique which is able to be handled at a site. The education, therefore, must be conducted on research for earthquake resistant design. Real education can be accomplished not only by lectures in the classroom, but also by research works. Thus, the role of universities becomes more and more important. The members of ERS group are again reminded of this important mission by the earthquake damages of last year.



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