

[H-DS06_2AM1]Natural hazards: impacts on society, economy, and technological systems

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Fri. May 2, 2014 9:00 AM - 10:45 AM 422 (4F)

The last decade set a sad record in the number and scale of natural disasters and clearly demonstrated high vulnerability of human society and technosphere to their impacts. The most serious consequences have the so-called natural-technological disasters that have place when natural hazards trigger accidents at technological objects such as nuclear power plants, chemical plants, oil refineries and pipelines, etc. One of the most large-scaled natural-technological disasters occurred on March 11, 2011 in Japan as a result of a massive 9.0-magnitude earthquake off the northeast coast of Honshu Island that caused a more than 30-meter tsunami. A distinctive feature of natural-technological events, such as of the 2011 Tohoku earthquake, is their multihazard and synergistic nature with a disaster impact on the technosphere, resulting in simultaneous occurrences of numerous technological accidents. It is very difficult to deal with the consequences of such natural-technological accidents and disasters, because one has to cope not only with the primary aftermaths of the natural disaster itself, but also with the secondary effects of a number of technological accidents, which can be much more serious. These consequences are the more severe the higher are the population density and concentration of industrial facilities and infrastructure (especially hazardous and vulnerable objects) in disaster-affected areas. The main goal of this multidisciplinary session is to summarize case studies of relationships between natural hazards and technological disasters, their social and economic consequences; and to encourage a discussion about tools and methods to prevent disasters and to minimize their consequences.

10:20 AM - 10:35 AM

△[HDS06-P01_PG]Studies on the understanding of haiku composed by earthquake disaster of East Japan on 11. 3. 2011

3-min talk in an oral session

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Keywords:earthquake disaster of East Japan on 11. 3. 2011, haiku poet, understandings and deep impressions

Studies on the understanding of haiku composed by earthquake disaster of East Japan on 11. 3. 2011Aoki, Yoji (student of Open University of Japan), Chida Sosuke (Kurame Haiku Club), Jambor Kinuko (translator of Haiku International Association) and Hitoshi Fujita (Professor of Aomori University)The damage of the Fukushima nuclear power plant and the East Japan big earthquake, the east part of Japan received big impact on the March 11, 2011. Many haiku poet composed haiku poems to the impact of the nuclear power plant accident and the earthquake disasters. Of these haiku what was published in the magazine, 234 haiku on the home page were to be used in the data. Copies of haiku were shown to 19 people of the general public and the poet, and we asked whether they can understand them, or they are impressed by them. 2354 haiku was chosen in total. 124 haiku was chosen average.10.1 average people,

understand of haiku and the distribution of the two-peaked mountain with 8 and 13 people was observed. Haiku understood by more than half of people were relatively large and 132 (56.4%), so it was found that haiku is yet the useful means of communication of mind for the Japanese today. As for the impressive haiku, it has the maximum value in 0 and at 1.4 person average, and decreases the distribution of people. 91 (38.8%) haiku were impressed by more than two people. To convey the emotion equally to many people, it showed difficulties. Taking the correlation of the number of people impressed with the number of people evaluated, it showed weak association of 0.515. The results suggested that haiku could be understood by a lot of people, but could give the impression variously. According to the evaluation method in the Haiku Society, one point in haiku which was able to understand, to give two points to haiku that was impressed, we calculated the total score. Correlation of the number of people understood and the people impressed indicates 0.731, the stronger association was obtained. This is a result of the score added points. As it was not a very strong connection, so the individual differences affect the evaluation of haiku. By the principal component analysis in the factors respondents, six-axis was obtained with eigen value greater than 1.0. This indicates that there are many different preferences in the evaluation by the respondents. The axis with maximum eigen value has the largest explanatory power, and showed the severity of the evaluation. We estimate 5-axis remaining as the evaluator's preferences for haiku. The highest scored Haiku observed 2 haiku of 20 points. (1) Mud certification of graduation, mud portrait digging under the debris by Tsunami (Sinogo SONE)(2) Finding my mother in turning disaster's debris, light snow falling (Minu KASHIWABARA)(3) Children crying bright hopes for their future a graduation ceremony (Nagahiko KAMIGORI)(1) described the scenery that the photographs of deceased persons and the certification of diploma by deceased became muddy by the tsunami, people are digging them after the disaster in the damaged areas.(2) described the scenery that light snow was falling, while people are removing the disaster debris of earthquake to find their mother of missing, at the neighborhood home.(3) was praying for the pupil who were singing the graduation song with full of tears to be lighten We thought that both of them were touched deeply by sadness. Reference Haiku: <http://blog.goo.ne.jp/humon007/e/fcc6b3e8f8dc3ca1cbc6a2177d6d0637> Acknowledgments: Cooperation was obtained from Kuramae Haiku Club (Tokyo Institute of Technology) and Blue Ridge Haiku Association (Roanoke City, Virginia) for the investigation of haiku. The Haiku used in this study was introduced by the site.