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New methodology for rescue in hazard conditions, stairway that change into slope

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Cince a natural disaster is most of the times unpredictable and sudden, it can cause loss of life and property damage. Here our Oconcern is life of the populations, so the solution leads to reduce the number of victims and damages of a disaster with a simple solution. While a natural hazards or disaster happens, the moments after the occurrence time (better to call: scape time) is partly more important than the disaster itself. Former literatures has shown, 25% of the victims or injures of a natural disaster happened at the "scape time". So with this prologue, the populations' behaviors at scape time worth to be design. The aim of this paper is, to minimize the number of victims and damages of the disasters with a creative solution based on making daily-use products, convenient to use in hazard conditions. The methodology of this paper is based on analytical-functional procedure. Such as: survey of observation, geometric assessment of related devices and people behavior in ventures. At the moment of disaster, everyone who settle in an apartment or working in an office building try to come out of the buildings, with the elevators shutting down and with lights off, every one tend to use the stairs specially emergency stairs. Also there might be some old, injured or handicapped people in the crowd, so making the stairs convenient to use is expected. This paper proposes a design process and a new methodology, which could minimizes the damages of disasters by designing the emergency stairs or conventional stairs in a way to change into slope. The specific of this idea is to enable people to leave the buildings much faster rather than descending the stairs. The conclusions of this research were conducted to a new methodology and it consolidates the position of design in saving human's life and decrease the number of damages. Also it's a new idea to connect the hazard products and daily useable products and improves the efficiency and possibility of utilization of hazard products.

Biography

Hossein Morvaridi Farimani has completed his Bachelor's degree in Industrial Design from University of Tehran (2012-2016) and is serving as an Industrial Designer dominates on hand sketching, rendering and 3D – 2D software like Catia, SolidWorks, Rhinoceros, Sketch-up, Coreldraw, PS and etc. Also, he has achieved several courses and licenses in materials and manufacturing processes. He cooperates with several industrial companies as a Designer, like Mapna locomotive, Saipa motor company (Exterior design and prototype modeler), IranKhodro (as trainee), etc. He has experiences in management of design projects from concept creation and development through determination of manufacturing processes and final assembly details. Since November 2013, as the Head of industrial design group, he began working on the Iranian humanoid robot SURENA III, and currently he is working on the next generation of humanoid robot SURENA.

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