## The Triangle of Life: An Eastern Caribbean perspective

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Doug Copp's recommendation of the 'Triangle of Life' is presented as a definitive strategy for protecting oneself during an earthquake and is often circulated widely on the internet following an earthquake. Scientists at the Seismic Research Centre do not support the 'Triangle of Life' recommendation and is compelled to respond to this article which at the very least can be misleading for our region.

Doug Copp claims to be a Rescue Chief and Disaster Manager of the American Rescue Team International (ARTI) - a private company not affiliated with the U.S. Government or other agency. In his article, he discourages traditional 'duck and cover' earthquake safety measures such as going under a desk or bed. Rather he states that:

"...when buildings collapse, the weight of the ceilings falling upon the objects or furniture inside crushes these objects, leaving a space or void next to them. This space is what I call the "triangle of life"...Cats, dogs and babies all naturally often curl up in the fetal position. You should too in an earthquake. It is a natural safety/survival instinct. You can survive in a smaller void. Get next to an object, next to a sofa, next to a large bulky object that will compress slightly but leave a void next to it." (Trinidad Guardian, Page 44, 01/11/05).

In the Eastern Caribbean, most dense occupant buildings (e.g. schools, commercial buildings, hospitals, etc.) are made in conformance with a building code. Many residential buildings however, do not adhere to building codes but the dominant type of construction in this category is single to double storey structures with roofs made out of pliable and relatively light material (e.g. galvanize). Hence large scale 'pancaking' or crumbling of buildings (both residential and non-residential) in this region, which would crush occupants as described in the 'Triangle of Life' theory, is not expected.

Additionally, while we do not doubt that Mr. Copp sees these empty triangles in collapsed buildings after the earthquake, it is unknown if during the earthquake these "triangles of life" are impacted in any way which may make them unsafe areas, There is, therefore, a need for a proper scientific study into the matter by civil engineers, seismologists and the like before the "triangle of life" can be a recommended strategy for use during an earthquake, in which structures crumble.

As evidenced by the earthquake which occurred north of Martinique on 29/11/07, citizens should be aware that we lie in an area that is prone to earthquake activity. As such, we should take the necessary precautions to ensure that homes, schools and workplaces are 'earthquake safe' such as securing heavy furniture, removing pictures or mirrors that could

fall on a bed, anchoring tall furniture to wall studs etc. We emphasize, however, that 'Earthquake Safety Tips' are not a magic wand to be used blindly. Scientists continue to advise that people should remain calm and alert, eyes wide open, protect their heads and faces during an earthquake and to use reasonable judgement for personal safety. Additionally, earthquake safety should be practiced regularly through drills at home, work and school.

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