

## ***Interactive comment on “Hazard impact on settlements: the role of urban and structural morphology” by M. Bostenaru Dan and I. Armas***

### **Anonymous Referee #1**

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As this is an article about seismic risk, the title is inaccurate.

The abstract is a little too self-promotional for my tastes ("...This concept is highly original...").

Page 3291, line 6: the original development of scenarios concerned the economics of oil exploration, not military matters.

Page 3292, lines 16-17: "the shaping of the public space of the streets in organic cities that are not pre-planned in a fractal way" - I do hope fractals are not used to plan cities!

Section 1 of this paper is remarkably heterogeneous - I would say overcomplicated. It only gradually becomes clear that the paper is about depicting the potential for earth-

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quake damage - in as much as one can determine what it is about.

Pages 3292, lines 13-14: the ... "representation of the shape of the building considers the whole cycle of structural resistance and structural collapse as a macroelement" - this statement is, to say the least, opaque, and so is the next one: "...morphogenesis, which is seen as architectural language development, to the representation of earthquake resilient or earthquake vulnerable building parts in the macroelements". It all seems to mean that individual buildings may have components that are unable to resist earthquakes.

Page 3301, line 10: what are tension lines? This whole paragraph is too cryptic to be comprehensible.

Page 3304, lines 16-17: "A disaster smooths the urban surface, while (re)construction striates it" - what unmitigated twaddle!

I fail to see the relevance of either Lynch's perception studies or fractal geometry to this study. I suspect that they have both been misappropriated.

I have never been fond of research that does its best to complicate issues in order to make them seem fearsome and the solutions to be wizardry. It is a temptation to which architects all too commonly yield. Moreover, I have trouble understanding how throwing a series of inductive techniques together in a complex mixture actually throws any light onto the vulnerability of urban environments to earthquakes. This paper reminds me of some of the outputs of the RADIUS project (1990-2000). Some of the routines have been updated, but behind the dense technical language there does not appear to be much added value.

In synthesis, there is much in this article that is good, and much that is original. Unfortunately, that which is good is not original, and that which is original is not good.

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