

Interactive comment on “Seismic Risk: The Biases of Earthquake Media Coverage” by Maud H. Devès et al.

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I really enjoyed reading this paper, which is a valuable analysis of the media responses to earthquake events and a considered appraisal of the media framing and key messaging that accompanies such seismic crises. It is fairly well written and concise, brings a strong interdisciplinary team to address the problem and sets the context well with a range of interesting background literature. The data collected is soundly analysed and well presented (I especially like Figure 4, a diagram which will probably be much used by risk communicators). To be honest, the paper is broadly fit for publication as is, but I would suggest that the authors might like to make revisions around the following considerations:

C1

Point 1: The thrust of the initial set up, not surprisingly, is the expectations of the media in disaster events. But the corollary is the expectations of the role and responsibility of seismologists and scientists in those crisis moments. In this regard, I am thinking of Michelle Wood's work on actionable risk messaging. In regard, I wondered how much of the media responses analysed by the team incorporated expert comment and did that substantially change the messaging. This is important because it challenges the value and urgency of scientific expert comment during disasters, an aspect which the paper seems to omit. It may be beyond the scope of this study, but thoughts on this from the authors would be welcome.

Point 2: Your identification of an exponential decay of media interest seems to me an obvious but important point. It made me wonder if you could tie it to the predictable exponential decay in aftershock activity. I don't mean to suggest they are the same, or related, but conceptually or metaphorically it suggests the waning energy of the earthquake disaster. Just something to consider.

Point 3: One issue that does not seem to emerge from the media narratives documented in this study is 'where next?'. If true (and I suspect it is), this seems to me to be an important omission because Coulomb stress triggering theory highlights the likelihood of transient dynamic stress being transferred to neighbouring faults and therefore increasing the probability (in the short term) of a triggered quake nearby. Although not without risks in terms of public panic, conveying the dynamic nature of earthquakes as evolving threat events would seem to be a media narrative that earthquake scientists could develop with the news media.

Point 4: I think it would help to clearly state why an appreciation of 'earthquake intensity' is better than an appreciation of 'earthquake magnitude'. Beyond the academic distinction, what is the utility for the public in those moments of crisis? Are we just being pedants about terminology, or is there a tangible public benefit in being explicit about using terms conveying energy and shaking?

C2

Point 5: I'd love it if the paper could conclude with some recommendations to scientists about the key actionable risk messages that they ought to be conveying the media in the various time windows as an earthquake disaster unfolds, i.e. minutes-hours; hours-days; days-weeks (perhaps tied into a modified reprise of Figure 4. Recognising the likely changing media environment, how can scientists take more control over the narrative, particularly in the aftermath of the search and rescue operations where interest is dying down but seismic risk is potentially still high on neighbouring seismic sources?

Finally, some very minor points:

You refer to 'the media' but essentially it is the 'news media' and possibly even just the 'broadcast news media" that you are considering (e.g. not long-form documentaries etc.)

I'm not sure I know what you mean by 'the concept of the seismic crisis'

Figure 5 – the caption ought to explain the percentages. Some readers will no doubt be expecting the columns not add up to 100% and will be confused.

None of these points are especially substantive - they probably reflect my personal perspectives on this topic - and should not hamper publication of the very nice paper. My congratulations to the authors.

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