

# Communicating Geologically-Underpinned Issues: Drivers and Mechanisms

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Geologists can offer key insights in regard to several high profile environmental issues that are faced today. At the same time, like scientists in most other disciplines, many geologists are not naturally adept at communicating in an effective manner with non-geologists. This paper firstly identifies the more subtle facets of topical major issues (the drivers) where geologists can contribute important perspectives. Next, the detractions to effective communication are identified, along with the recommended means to overcome them (the mechanisms).

If one reflects upon news clips from the usual popular media outlets, pressing issues that are faced by humankind include geohazards, species-at-risk, implications of the climate debate, and environmental degradation in general. Geohazards, such as those associated with volcanic activity, earthquakes and tsunamis, can be pictorially dramatic events that, by virtue of their inherently dangerous and telecast-ready nature, are highly seductive in capturing journalistic attention. In terms of Earth-bound geologic events, surely there cannot be many more spectacular, photogenic occurrences than a volcanic eruption unfolding in real time. Great press and colourful real time television footage!

Journalists must indeed be enamoured by the current climate debate, where the respective pugilists have taken diametrically-opposed positions that sometimes approach ideological proportions in their fervor. It is important to note that this paper strives to avoid taking sides on such contentious topics. Instead, the intent is to identify areas of scientific contribution that are unique to the insights that geologists can bring to leading issues, and how to communicate these in an effective way. Indeed, many topical issues are in fact geologically-underpinned (e.g. obviously, geohazards), so geologists ought to have something meaningful to say. By the same token, if geologists have difficulty communicating with other scientists, how can they possibly hope to communicate with journalists and with the public at large?

The communication challenge is further compounded by insidious detractions posed by agendas that are not necessarily of a scientifically-based nature. For instance, the term "climate debate" is used above rather than "climate change". In terms of communication, the former term avoids taking sides, recognizes that journalists in quality media outlets generally give a balanced portrayal even when one side is more likely the correct one. In any case, Earth's climate has, of course, fluctuated substantially throughout deep time, so climate change is an expectation. The debate aspect then ought to address the extent to which specific anthropogenic activity affects Earth's climate. Proper scientific contextualization is an ideal starting point, but this fundamental framing step does not always suit protagonists who have non-scientific agendas. Thus, geologists not only have to convey their science (geology) in an understandable way, but to do so in a truly effective manner must recognize and take into account possible predispositions that their audience may have.

## References

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