

COMMUNICATING THE INVISIBLE: PUBLIC PERCEPTIONS OF SUBSURFACE BRITAIN

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INTRODUCTION



Public and expert understanding of geology



'Mental Models' of subsurface geology



Implications for geoscience communication

earthquake

mountain strata

rocks

interesting

glacier erosion
geography

structure
paleontology

planet
resources

water
mining

time

fault
ground
fieldtrip

evolution

dinosaur

science

sediment

volcano
tectonics

environment
igneous
hammer

landscape

oil

Earth

sedimentary

mineral

history

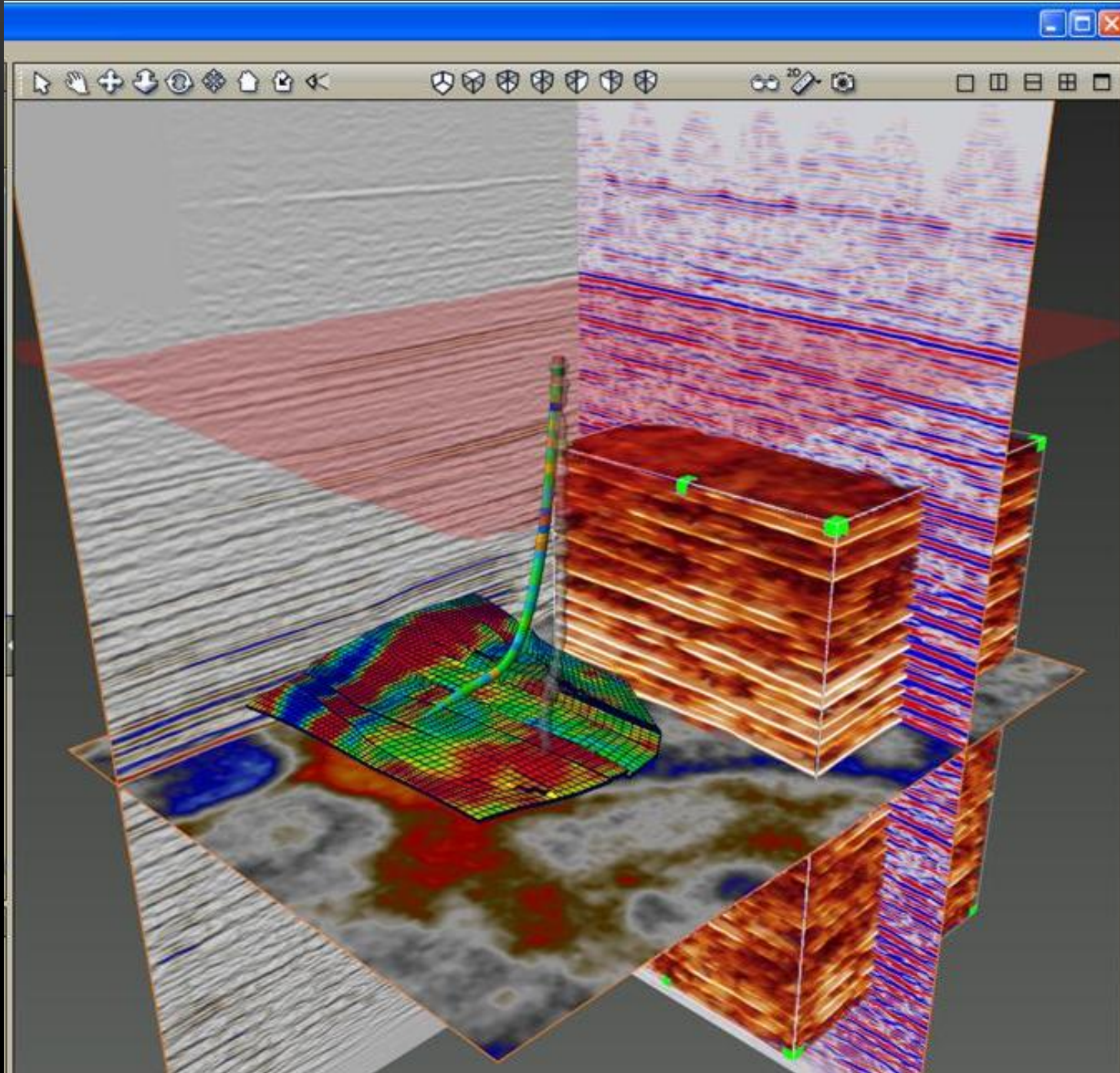
outdoors

fossil

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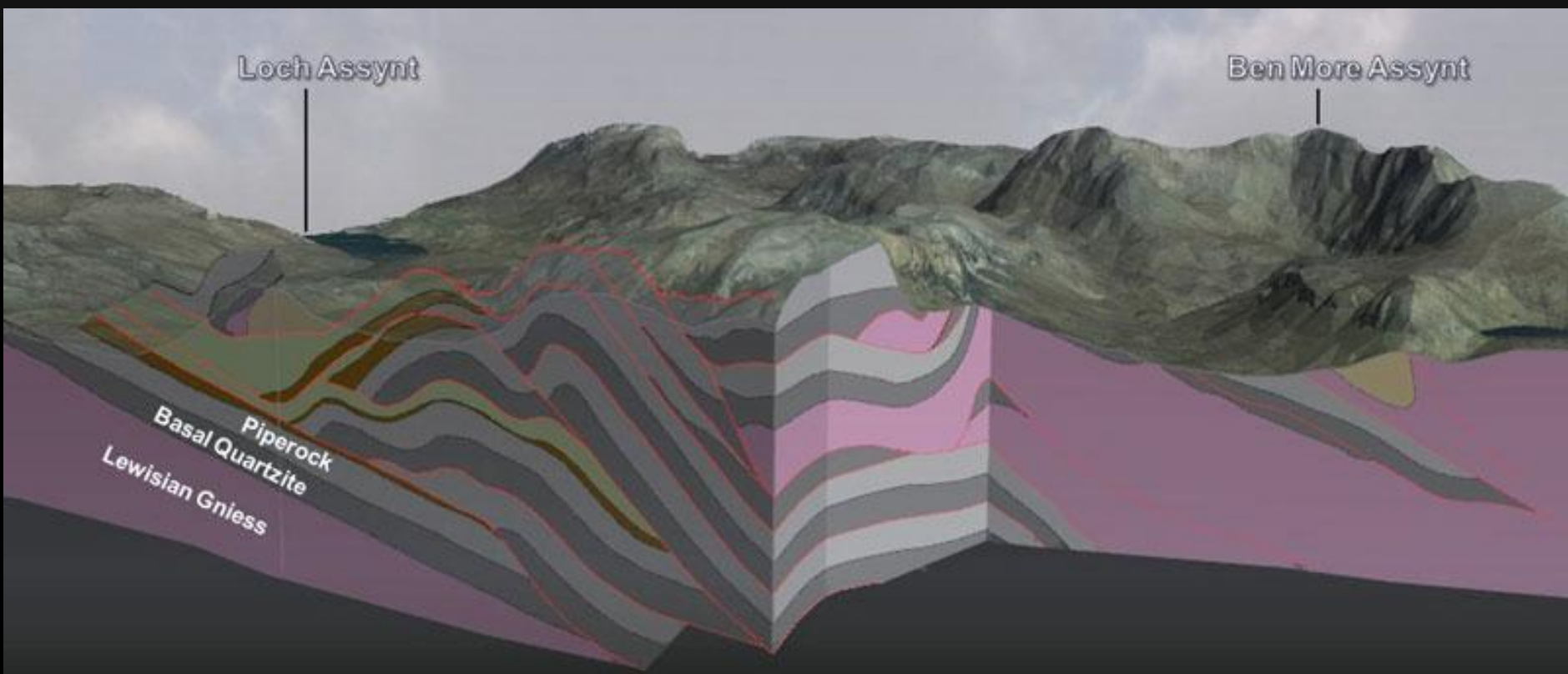


Locheam sinkhole, Baltimore Sun newspaper (2013)

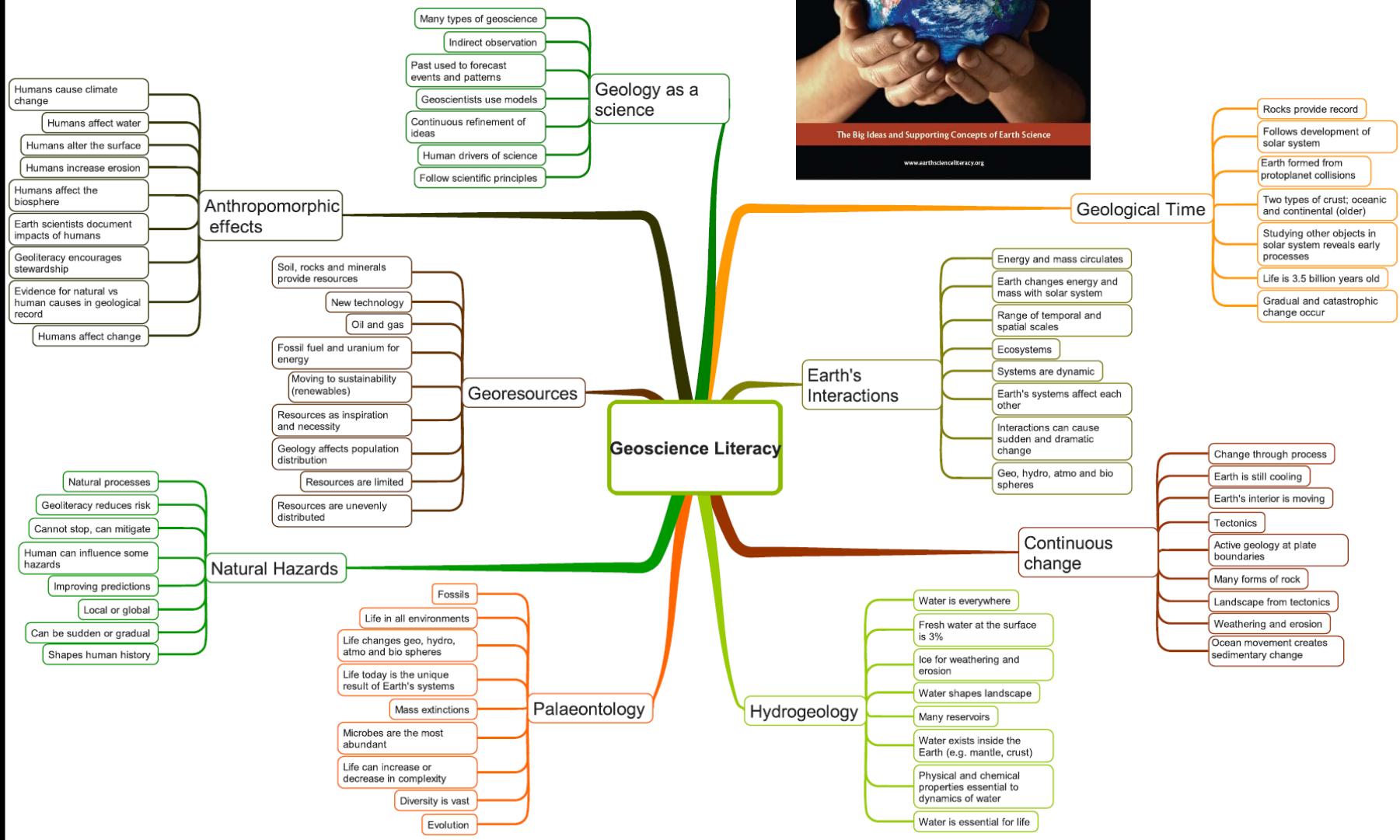
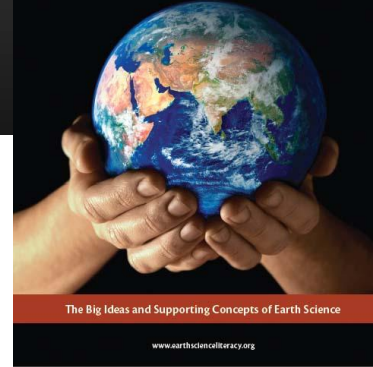


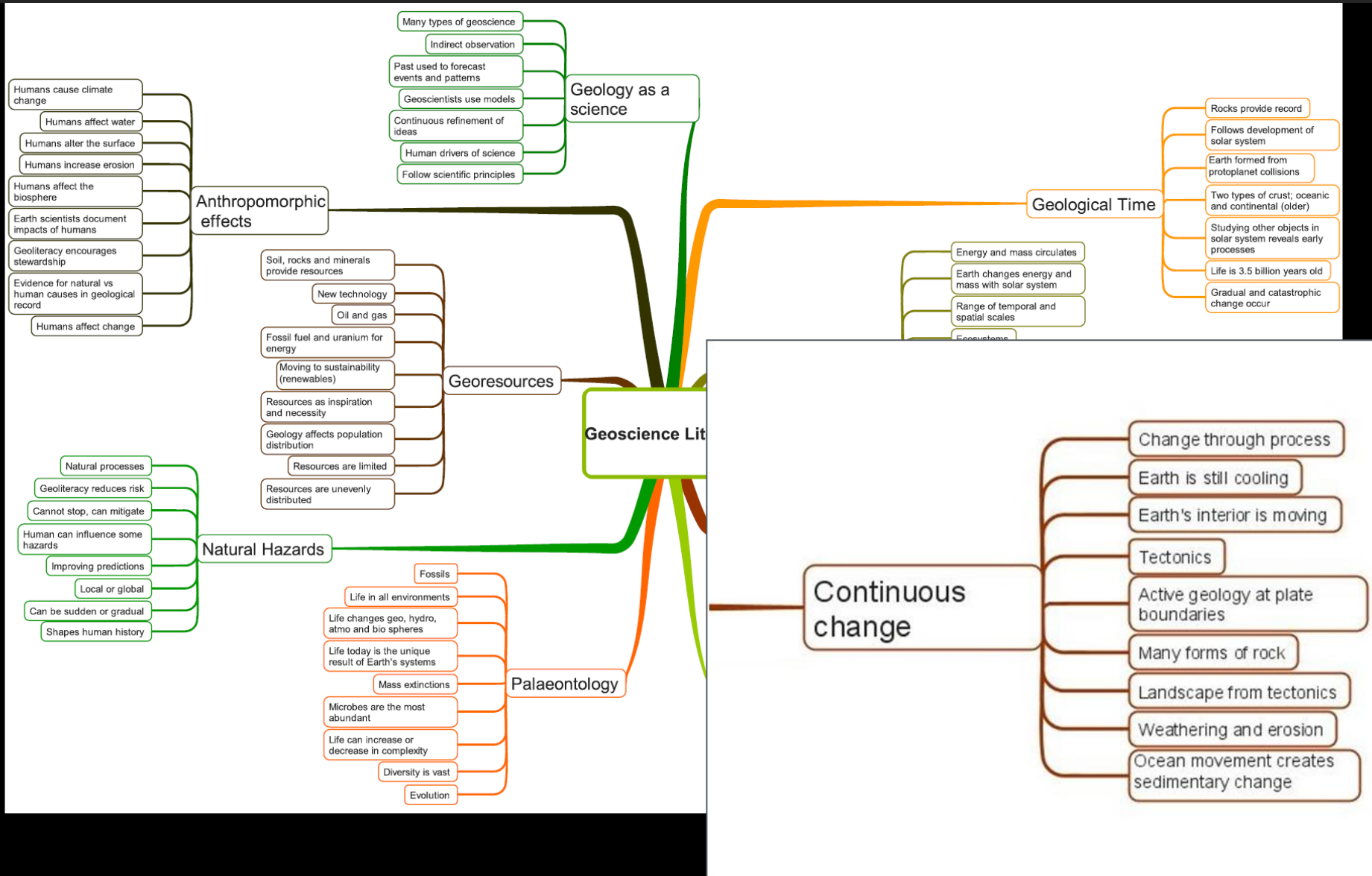
Loch Assynt

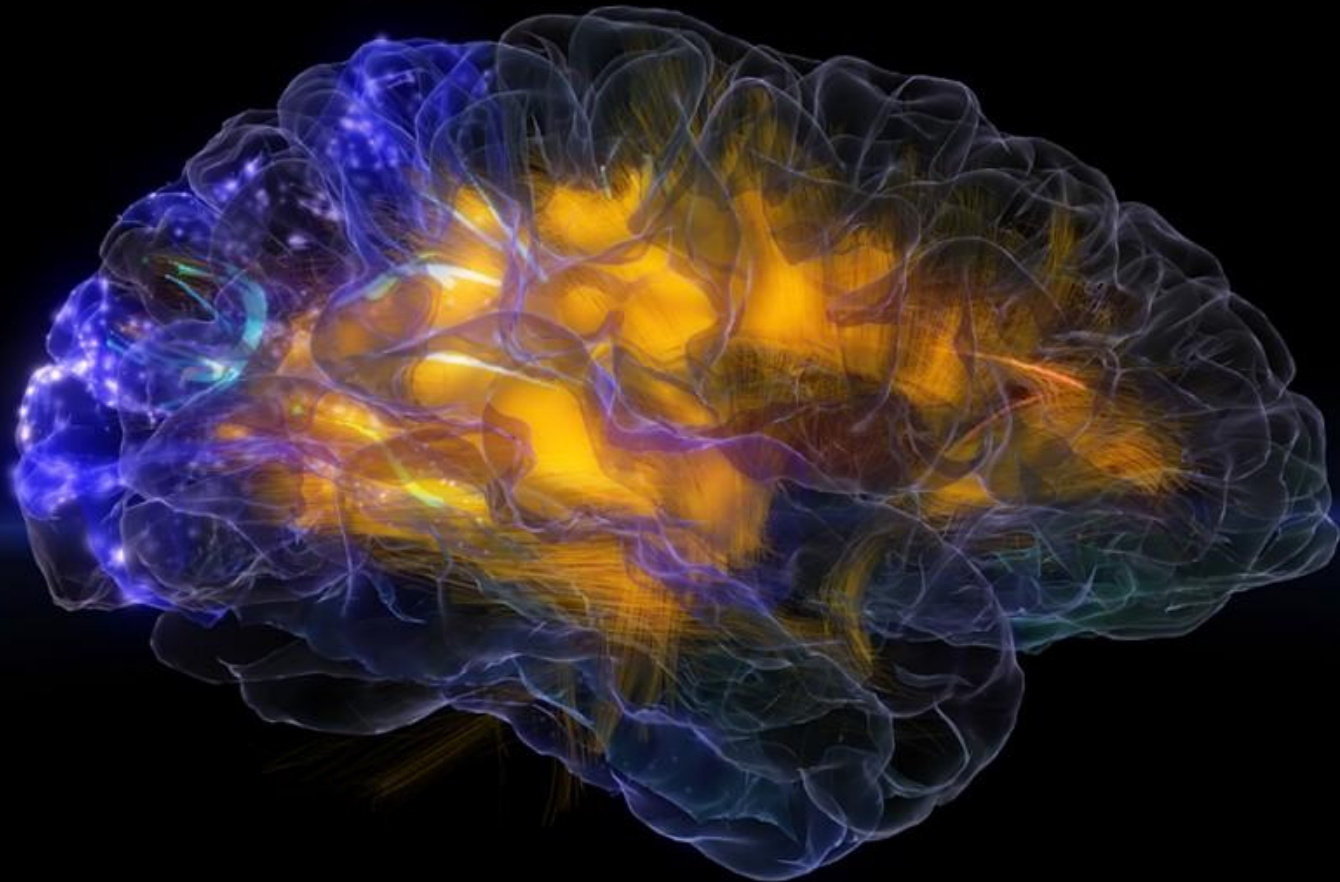
Ben More Assynt



EARTH SCIENCE LITERACY PRINCIPLES







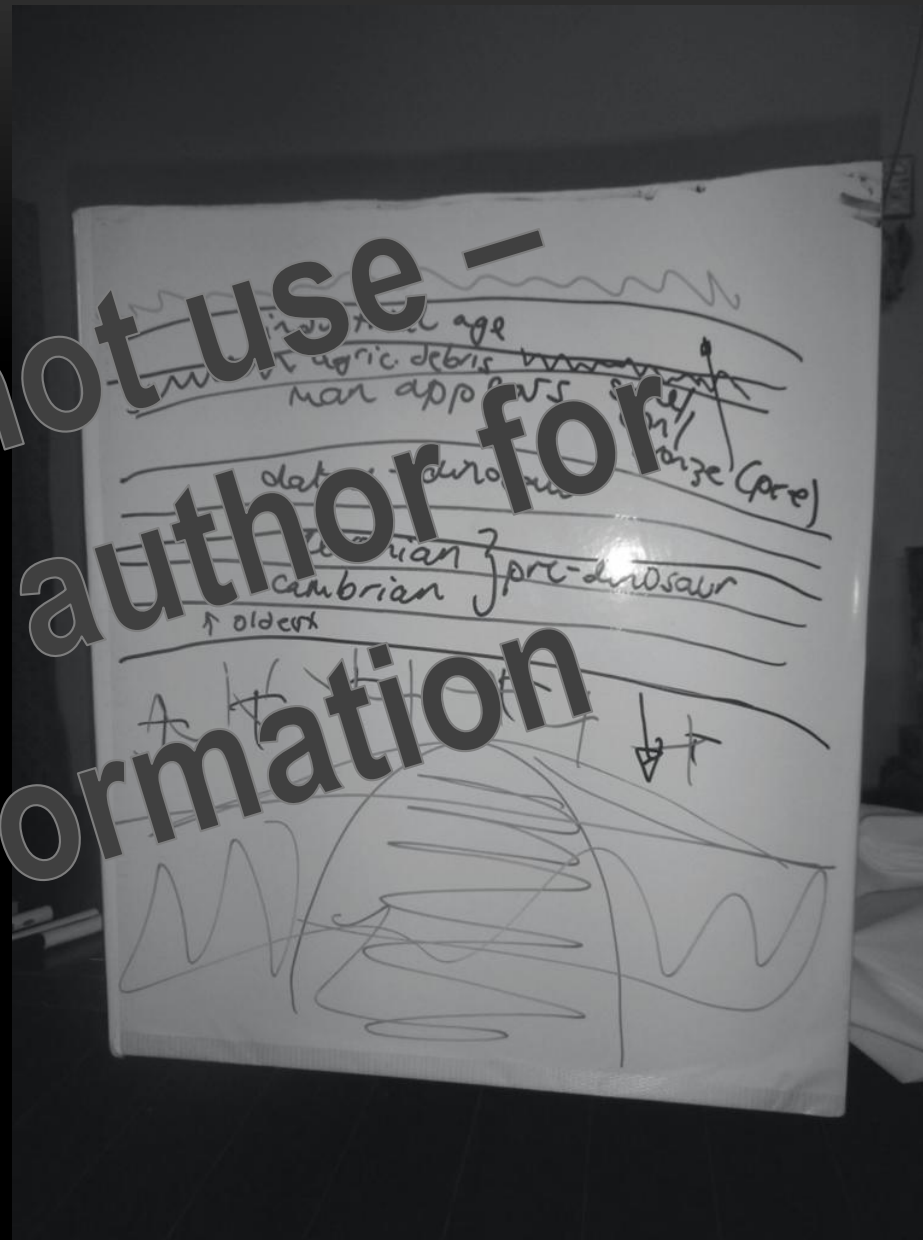
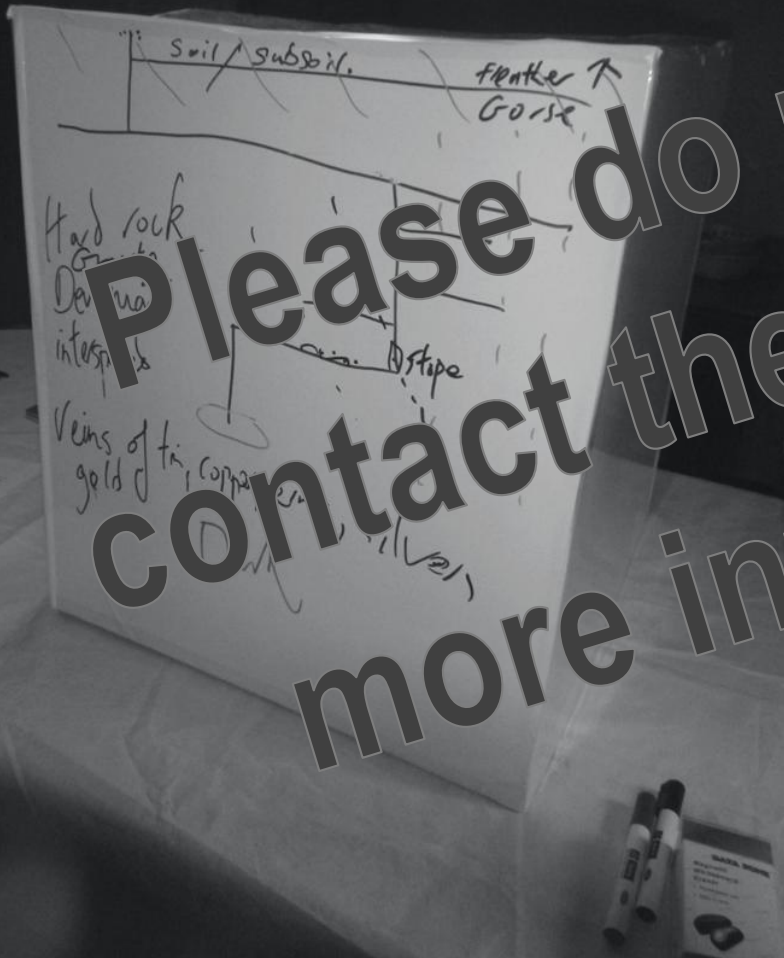


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75 km

Granite

Expert mental model of subsurface –
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Expert and non-expert mental model
of subsurface –
please contact the author for
more information.

Expert and non-expert mental model
of subsurface, with details of matches
and mismatches between data –
please contact the author for
more information.



Consider the impact of public models when communicating subsurface concepts



There is a non-expert disconnect between surface features and subsurface geological structures



Experts need to take anthropocentric perspectives into account