

THE EARTH IN THE 21ST CENTURY: GEOLOGICAL OBJECT OR SUBJECT?

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Care for the Environment with responsibility towards the poor is already a major consensus shared by 180 nations in the AGENDA 21. As soil, river and ocean life systems becomes more and more exploited with the misuse of science and technology and our own habitat vanishes, Society will demand a major rupture with the past and build up an ethical based modernity for sustainable development. In such scenario, science and geological knowledge, in particular, shall be tools for the purpose of serving Life and Earth - not just for serving the technology of power owners and to satisfy market demands. Earth scientists may then exercise their overall social and environmental responsibility towards the sustainability of future generations. Environmental geoscience is a pleonasm that reflects the fragmented way geology has gone as it broke apart from all Life sciences and disregarded the overall human dimension. Geology is an environmental science and geologists must know why, for whom and for what purpose are they working. They must also be aware of the consequences of their work before becoming blindly specialised. They must keep transdisciplinary wisdom as they become involved in geologic analysis. It is time geologists join the overall effort of building up a science for the Earth and understand our subject-object relationships with Mother Earth. Methodological constraints to achieve this are discussed in the light of the complexity theory of Edgard Morin and of the pioneer work of Hutton, Vernadskii, Teilhard de Chardin, James Lovelock, Linn Margulis, Edward Wilson and Hans Jonas.