



Geoethics Proper and geo-Humanities – a Research Agenda

Martin Bohle (1,6), Eduardo Marone (2), Silvia Peppoloni (3), Giuseppe Di Capua (4), and Nic Bilham (5)

(1) European Commission, Research and Innovation, Brussels, Belgium (martin.bohle@skynet.be), (6) Ronin Institute, Montclair, USA (martin.bohle@ronininstiute.org), (2) FUNPAR/IOI, CEM-UFPR Curitiba, Parana, Brazil, (3) Istituto Nazionale di Geofisica e Vulcanologia, Rome, Italy, (4) Istituto Nazionale di Geofisica e Vulcanologia, Rome Italy, (5) The Geological Society, London, United Kingdom

Geoethics is about responsible geosciences. Geoethics is an emerging way of thinking within the international geoscience community. Nowadays, the notion of 'geoethics' refers to i) the responsible behaviour of professionals and researchers in geosciences, and ii) the societal and cultural relevance of geosciences. In view of inquiries into 'wider geoethical thinking', this essay explores what notion (geo-Humanities/Geosophy [1]) could complement the notion Geoethics.

Geosciences, including Earth system sciences, refer to a range of applied and fundamental research fields, as well as related engineering disciplines and commercial undertakings. Together, they address the functioning of Earth systems, the intersections of Earth and human systems, as well as the extraction and use of (non-living) natural resources. In view of this application case, scholarly inquiry into the interfaces between geosciences and the social sciences and humanities is germane.

Initially, Geoethics was about professional ethics in applied geosciences, that is, 'geo-professional ethics'. This core of geoethical thinking was documented in peer-reviewed publications and statements of professional organisations. Subsequently, this core was expanded to tackle: i) intra-professional concerns that are common to all geosciences; ii) inter-disciplinary features of global issues that involve geosciences; and iii) general societal and cultural relevance of geoscience professions. These matters of 'enriched geo-professional ethics (and action)' contribute to the wealth of modern Geoethics, as outlined in the Cape Town Statement on Geoethics [2].

In turn, the inquiry into 'enriched geo-professional ethics' triggered questions of 'wider relevance of geoethical thinking (and action)' including for anthropogenic global change, and the historical process of building a 'human niche'. Issues to consider include: i) the day-to-day functioning of modern societies that intensively apply geoscience knowledge; ii) governance issues and quests for shared normative frameworks that geosciences may underpin; iii) participatory practices and principles for research and applications, and iv) giving meaning to human action with reference to features of societies and bio-geophysical systems.

The realm of 'wider geoethical thinking (and action)' exhibits a composite structure. The first contribution is the values that geoscientists adopt as the base of the intrinsic nature of their professions. Further contributions are the professional ethics that geoscientists apply in their dealings, the societal and environmental concerns that directly stem from geoscientists' activities, and a wide range of environmental, societal and cultural considerations that any geoscientist should share with other citizens.

Such a realm of 'wider geoethical thinking (and action)' may facilitate a fruitful mutual exchange between geosciences, social sciences and humanities. Hence, a notion such as 'geo-Humanities/Geosophy' may be instrumental in distinguishing 'Geoethics' and creating a shared space for the cultural and social aspects of the geosciences. Therefore, this essay offers three research questions: To what subjects does the notion 'Geoethics' refer? What additional matters complement these subjects? What generic notion is appropriate to label inquiries into geosciences society interfaces?

[1] Shaw, Robert. 2017. doi:10.1080/04353684.2017.1311469

[2] IAPG 2016, Cape Town Statement on Geoethics, <http://www.geoethics.org/ctsg>