The semiosis of the Anthropocene geological era. Reflections between geoethics and semiotics starting from Peirce's triangle

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Abstract

This paper presents the first formulation of a theoretical proposal which aims to reconcile, or better, to work together, two different approaches: geoethics and the semiotic tradition of Peirce, on the basis of some important affinities.

We will refer to geoethics, discipline that deals with the ethical, social and cultural implications of geological and geographical practice, at the intersection of Geosciences, Geography, Philosophy, Sociology and Economy.

The proposal of this work is to try to explain the new processes of the Anthropocene (Crutzen, 2005) era through geoethics and semiotics, using as a "translator mechanism" one of the key notions of Peirce semiotics: the semiotic triangle. On the one hand, we employ the geoethical paradigm as a possible interpretative framework for such processes (in other words, we identify in the geoethical paradigm a significant exemplification of hippocratic type, according to some scientists); on the other hand, we use the triangle geology / geography - planet illness society, as a metaphor of the principles and the processes inherent Anthropocene era, able to return them in a particularly random way through the semiotic triangulation of Peirce.



Fig. 1. The philosopher Charles Sanders Peirce

Methodology

The intervention of the geoscientist on the territory and the planet, therefore, has important points of parallelism with the role of the physician towards the patient and, more generally, the health of the population (Matteucci et al., 2012), and it is arranged according to the pattern of the semiotic triangle of Peirce.

society (Fig. 3) has significant parallelisms with the semiotic triangle of Peirce (Fig. 2). In fact, the relationship between the society and the Earth illness, visible in the triangle (Fig. 3), which corresponds, in the semiotic triangle (Fig. 2), at the relationship between sign and object, is causal. The consequences in terms of human lives and / or material damages to the society are a sign of planet illness, or of any natural disaster. But also the planet illness is the index of the negative impact of society. Or better yet the planet illness instead of being the immediate object inside the semiotic triangle, could be considered, in our opinion, as the dynamic object that is knowable through unlimited semiosis and the continuous change of subject / habitus, intended as a regular arrangement to act. The habitus, according to Pierre Bourdieu and Charles S. Peirce, is a set of generator principles of practices, a system of perception patterns and provisions, of potentialities, of ways to stand against the social situations of which the homo sapiens is part, but is also the "structured and structuring structure", that is linked both to the objective relations in which the agents are immersed, both to the individual perceptions through which each of us incorporates knowledge and social situations in which lives and, at the same time, acts inside (Canzonieri, Gallo, 2011).

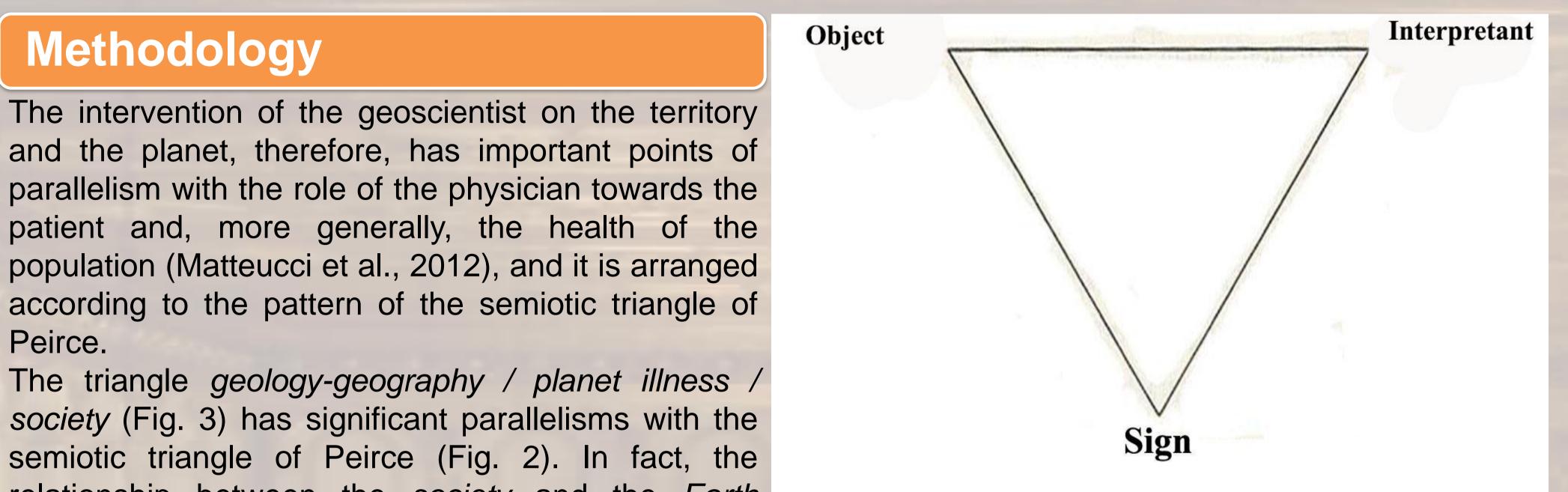


Fig. 2. The Peirce semiotic triangle. Source: Fadda, 2013

Results

The use of the word catastrophe is symptomatic of the unique consequentiality nexus which identifies natural event and damage to the anthropogenic component: hurricanes, landslides, avalanches, drought, floods are natural events that take the name and the representation of catastrophe whenever have a strong impact on man and his activities, capable of causing a radical change of the earlier arrangement. The term "catastrophe" would then be connected to human activity, as it relates to the consequences in terms of human lives and / or property damage suffered by the community, following the occurrence of natural disasters. However, some of the literature on the subject that mainly referred to geography of risk and the latest geoethics, has developed an alternative approach to the subject in which greater importance is placed to the incidence and the direct responsibility of the human factors (social, political and economic) in such calamitous events (Tecco, 2011), establishing thus a nexus of consequence between the society and the planet illness.

Conclusions

The interpretant, in the proposed triangle (Fig. 3), is the geology / geography that have, therefore, important responsibility towards society, from which, in turn, the importance of ethics of their actions is derived. A scientifically correct approach can reduce, or at least help to avoid many of the serious consequences that arise continuously through the irresponsible use of the land by man. Although geoscientists and geographers have limited power to impose the correct choices on decision-makers, their moral obligation is to propose and to denounce the actions and the wrong behavior. Therefore, the parallelism between the "Hippocratic obligations" of a physician against the society and that of geoscientists is evident. It is equally clear that the proposed triangle (Fig. 3) follows the logic of Peirce semiotic triangulation.

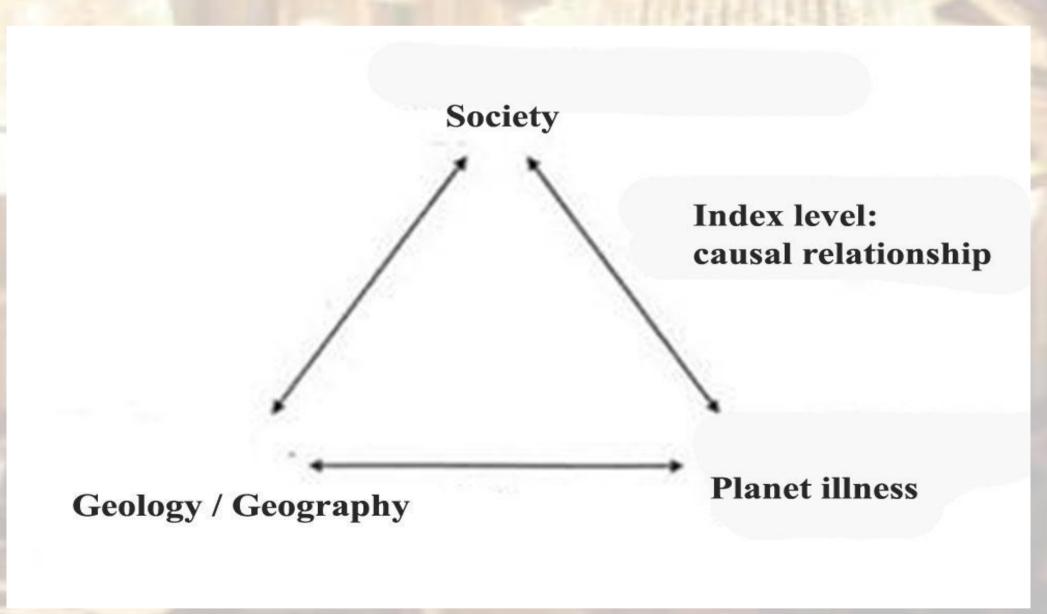


Fig. 3. The representative triangle of relations between Geology-Geography / Planet Illness / Society

Carocci, 2011, pp. 308-320.

Canzonieri A., Gallo G., I segni dell'esperienza, Roma, Carocci editore, 2011. Crutzen P. J., Benvenuti nell'Antropocene!. Ed. A. Parlangeli. Milano, Mondadori, 2005 Fadda E., Peirce, Roma, Carocci, 2013.

Matteucci R., Gosso G., Peppoloni S., Piacente S., Wasowski J., A Hippocratic Oath for geologists?, Annals of Geophysics, 55, 3, 2012; doi: 10.4401/ag-5650, pp. 365-369. Tecco N. Educazione geografica, resilienza e catastrofi naturali. In: C. Giorda, M. Puttilli (a cura di), "Educare al territorio, educare il territorio. Geografia per la formazione", Roma,