<u>ПРИРОДНЫЕ И ПРИРОДНО-АНТРОПОГЕННЫЕ</u> <u>СИСТЕМЫ</u>

Francesc Bellaubi,

PhD Natural Sciences Associate researcher, Universidad Iberoamericana Puebla (México) Member of Silene (Catalonia, Spain)

«SACRED» GEOMORPHOSITESAS A PLACE OF ENCOUNTERING THE HUMAN AND THE GEOSPHERE IN THE ANTHROPOCENE

Abstract. Science and technology paradigms are not value free, but anchored in ontological cosmovisions and archetypes in how humans perceive, conceptualize and experience the World. Values are rooted in different beliefs that sustain ideologies interacting with historic, territorial identities as Human-Geosphere constructs and manifested through cultural expressions and technocratic artifacts. The Noosphere is presented as a metaphysical concept bridging science and religion, culture and Nature, a hermeneutic concept that allows us to explore the relation between technocratic artifacts and the underpinning of spiritual values in relation to a geospheric place, and thus the relation between humans and the Geosphere. Geomorphosites highlight the sacredness of landscapes and landforms.

Keywords: Geosphere, Noosphere, Anthropocene, Geomorphosites

"is the earth that we touch a part of ourselves, or has it become just a thing we walk on, like a pavement?"

Charles Morgan

1. Confronting the Anthropocene

Climate change is the latest of a series of apocalyptic manifestations of the Anthropocene era, which has an exponential trend, meaning that during a certain time, at the early stages, it seems controllable, but it reaches a tipping point when the course becomes irreversible with uncertain outcomes.

The Anthropocene disrupts biogeochemical cycles altering geodynamic processes and will surely bring human mutations as a biological evolutionary adaptation to the new climate conditions¹. Thus, the profound on-going changes on Earth can be understood as a co-evolutionary process that takes the form of ecological wars (Yanitsky 2020). Being part of the Biosphere, human beings are interlinked and co-evolve with the Geosphere in a way that their encounter with the Creation discovers the darkest and brightest sides of a revealed Nature ².

If science and technology are not going to reverse the Anthropocene, as they are at the core of current development trends and part of the existing environmental problem, then our rationales and old philosophic, epistemological frameworks need to be rethought. It is not sufficient to deconstruct the reality because the reality, as it is known now, becomes unknown. The knowledge about reality and the way in how we think about it is to be put into question.

This short essay is both a retrospective and prospective interpretation to explore how the remaining pieces of an era are resisting in hope confronting the ongoing Human-Geosphere changes in a World that agonizes.

2. Visual imaginaries

Photography is the image of an image, a landscape painting of the World or the reality of things that, according to the Orthodox tradition, functions as an iconic symbol of divine things, a place where God manifests and revels, a mirror of the eschatological Kingdom (Chryssavgis and Foltz, 2013). The Geosphere is the place of encounter between human and the World and, therefore, the geospheric space becomes, first, with the Creation and, after, through the incarnation of Christ, a place of reconciliation between the human beings and God, the mirror that revels, and the eschatological window that redeems, a geophany. The photography constitutes a pre-iconic outline of reality, a conceptual representation that allows giving sense and meaning to a reality. This representation does not have to be even a truth, but rather a narrative of the observed reality. Indeed, photography captures an instant in a spatial moment, making a place lasting in time, but only from that photograph prescriptive. The image acts as a timeless memory and develops a mystical dimension, as the great film-maker Tarkovsky would say, towards the World. This timeless dimension allows us to travel within the photography and explore that meaning of reality.

The silence of photography creates a mystical space that stages the union with the human and Geosphere; it is not reproduced in the piece of art, but in the deep sensations, sentiments and feelings it provokes. Art becomes an experience of the

¹ According to LaTour (2018), climate is meant here in the general sense of human relationships with their material conditions of existence.

² Human beings are a constitutive part of Nature (or Biosphere). Geosphere refers to the manifestations resulting from the interaction of water, soils and rocks, and air cycles (hydrosphere, lithosphere, and atmosphere cycles) in the form of mountains, rivers, lakes.... Geosphere is not only the substrate for biological but also spiritual life (Bellaubi, 2021a).

sacred that cannot be reproduced because silence is unique in each of the spectators in a place, a "momentum"; art is, therefore, an exclusive and universal experience, partial and totalizing, immanent and transcendent.

Florensky (1996) Iconostasis theory distinguished between what he calls the human face (litzo) and what he terms the human countenance (lik). The "mystical game" of photography is twofold: on the one hand towards transcendence, through immanence. The photographic image plays an intermediary, portraying the iconic face of the World, the mirror reflecting the Geosphere that unfolds and opens as a window to put us in contact with the transcendent divine. Photography appears as an element to explore the spiritual relation of the human being with the Geosphere in the times of the Anthropocene. Can photography constitute a way that enlivens our relation of contemplation of the Geosphere as the way to the transcendent, as St. Gregory the Theologian suggests?

This "artificial" contemplative mysticism of the visual imaginary of photography of nature represents a time and a space, a geospheric place in relation with a human culture in the evolution of human beings in their relationship with the Geosphere. The spirituality of cultural identities shows the power of space and the space of power of the land as symbolic space, which is transfigured in the form of technocratic artifacts in the human relation with the Geosphere.



Fig 1. Crystallographic modifications (Photo A. Baygusheva)



Fig 2. Body showing human mutations
(Photo A. Baygusheva)

Photographic visual imaginaries reflect on the new global biogeochemical conditions by exposing us to the co-evolution of living matter where humans and the Geosphere mutate to adapt; molecules look for a new crystallization matrix (Fig. 1) and the human body is drastically transformed in a symbiotic process (Fig. 2). But, in the end, that doesn't matter much because what the photographer projects is only a part of reality. The photographer becomes a mediator who, through performing a photographic liturgy, exposes the union between the human and Geosphere, and the photography as an imaginary becomes a silence, an inner journey that transcends and becomes an ecological mysticism.

3. Lost lands of resistance

The current co-evolving apocalyptic reality of the symbiosis between the human and Geosphere confronts the materialistic utopian fetishism of the mutant global World with a local spiritual ecological mysticism; two different ways to understand the uncomfortable era we are living. This ecological mysticism unfolds in attitudes of spiritual resistance expressed as identities of belonging to a place. Identities transmit values that transformed in ideologies through technological artifacts and their technocracies (Bellaubi 2021b).

A beautiful example is the irrigated valley of the Ebro River in Southern Catalonia (Spain) surrounded by the olive trees at the foothills of the Tortosa-Beceit mountain range, shaping the distinct landscape of the lowlands in the Ebro River Basin (Terres de l'Ebre). The Ebro River (Lo Riu) and the Tortosa-Beceit mountain range (Lo Port), are presented as manifestations of the Geosphere, worked by ditches and irrigation channels (sequias), diversion dams (azuds) and water lifts (senias). These technocratic human artifacts scattered all around the territory constitute a meshing of hydro-social relations impregnated by the spirituality feeling of identity. Thus, the resulting landscapes and landforms appear as the face of the Geosphere, representing the continuous dialogue through labor between the human and the Geosphere. The Land stages the union between the human community, represented by the Church Body of Christ, and the Geosphere as geophany, the countenance of the icon, the participated image of God. The Land is the essence of the human itself, an Eucharistic union of the mundane with the divine, a liminal place that stages the never-ending transition between past memories reflected by the mirror and an eschatological window, where human communities resist in hope as a kind of messianic sign of an antechamber of the Kingdom of God.

Terres de l'Ebre is a powerful Land that holds the memory of identity values and transmits the remembering of ancestors to future generations through rich spiritual folklore and imaginary narratives. Whilst the global World mutates, this pocket of resistance becomes a reliquary of the past that fights tirelessly, almost in vain, keeping the hope of reconstituting the union of the human with the Geosphere. A strong sense of identity fills the souls of the local dwellers that feel the river and the mountains as a part of themselves, as belonging to each other, a *perichoresis* at the core of the mystical ecologic relationship (Fig. 3).

Ecological mysticism and transfiguration of values

An expression of spiritual resistance is a standing monument at the highest point of the Tortosa-Beceit mountain range (Caro Peak, 1447m o.s.l.), almost as an imperceptible expression of human consciousness. The monument is a small statue of *Mare de Deu de la Cinta* (Our Lady of the Girdle, patron of Tortosa) erected in 1955 by *Unio Excursionista de Catalunya* (Trekking Club of Catalonia) in a setting that dominates the large Ebro River Valley up to the sea. The Caro Peak constitutes a geomorphosite, a symbolic place of cultural identity values that stands for the spiritual resistance of the people of *Terres de l'Ebre*. Geomorphosites¹, as a pre-iconic visual imaginary, highlighting the sacramental aspect of the Geosphere.

In Tortosa and the lowlands of the Ebro River, the expression of identity values related to the Land is embedded in religious beliefs. The devotion to the *Mare de Deu de la Cinta* is largely grounded in the people's hearts, minds and the culture along *Les Terres de l'Ebre*, thus protecting and blessing believers and the inhabited Land (e.g. a pregnant woman used to wear a blessed girdle around her belly). Devotees to the *Mare de Deu de la Cinta* automatically become "Tortosins" and socially acquire the local dweller's identity status. Indeed, "Tortosins" profess strong spiritual feelings that tie them with a geospheric place in a kind of ecological mysticism. These are identity feelings of belonging to a place, open to the Whole through religious rituals and liturgies. Thus, religion is no longer an intangible, but a historical reality manifested through the Land.

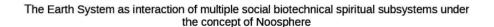


Fig 3. View of the Lower Lands of the Ebro Valley from Caro Peak (Photo A. Baygusheva)

¹ Geomorphosites are geomorphological landforms that have acquired a scientific, cultural/historical, aesthetic and/or social/economic value due to human perception or exploitation. They can be single geomorphological objects or wider landscapes which may be modified, damaged, and even destroyed under the anthropogenic pressure (Reynard et al. 2009)

4. From the Anthropocene to the Anthropophany, through the Noophere

An interesting concept that puts together both material and spiritual dimensions of the Human-Geosphere relationship is the concept of the Noosphere. The concept of the Noosphere was framed by V.I. Vernadsky (1945) and P. Teilhard de Chardin (1956) in the mid XXth century and although they had divergent views, both interpretations are complementary. Whilst Vernadsky saw the Noosphere relating to how human mind evolution disrupts the biogeochemical cycles of the Geosphere that allow the sustainability of the Biosphere, Teilhard de Chardin had a more spiritual interpretation. Teilhard de Chardin (1956) saw, in the non-material dimension, the justification towards the eschatological evolution of the human in the Noosphere. However, Vernadsky's idea that the sphere of the human mind develops in the energy of the human culture connects with that of sobornost (Bischof 2007) formulated by the slavophile-orthodox Russian philosophers at the beginning of the XXth century, and where the emergence of human self-awareness or the human consciousness is rooted in a collective unconsciousness of belonging to the whole Earth, an idea that certainly recalls the work of C.G. Jung (1964).



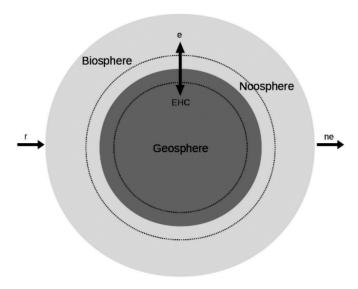


Fig 4. A representation of the Noosphere and the energy interchange between the Biosphere and the Geosphere: entropy (e), the energy of the human culture (EHC), external radiation (r) and negative entropy (ne)

The concept of the Noosphere (Fig. 4) may be revisited as a co-evolutionary concept that allows understanding of socio-biotechnical spiritual systems as

representational lived spaces (Lefebvre 1991): the Land. The Land constitutes a spiritual empirical reality, interpreted as a symbolic union between the human and the Geosphere, seeing the Geosphere as a radical alterity, a divine icon and manifestation of the divine that can be apprehended by the soul in a human act and shared by a human community defining human identity. Thus, through technocratic artifacts and technocracies (human physical objects and processes), the human relationship with the Geosphere is underpinned by beliefs and values, and the concept of the Noosphere embodies a spiritual dimension that may explain how and why values evolve. In this sense, the Noosphere could unfold in a new global, ecological and spiritual ethics (Khairullina et al. 2019; Sikorskaya et al. 2016), to pedagogically liberate and transform the Old Human, a Problem-Creator, in the New Human, as the Priest of Creation (Chryssavgis and Foltz 2013), the Anthropophany (Cortazar 1963).

Marked by the predominant Anthropocene, and its ecological wars, the question is if the "dark side" of the Geosphere orientates our actions or if humans manage, control and dominate the "fruitful" Geosphere. The concept of the Noosphere represents a coexistence embedding the instrumental materialistic and intrinsic values, resulting in the meaning of a constitutive dimension, in the relation between the human and Geosphere. Facing the reality marked by the prevailing Anthropocene, geomorphosites as pre-iconic representations of reality, in a similar way to photography or complex mathematical ecological models (Bellaubi, 2021b), serving us as a way to interpret realities from lived experiences, exposing ourselves to the radical otherness of the World.



Fig 5. A new Human in the Geosphere, the Anthropophany (Photo A. Baygusheva)

5. Conclusions

Geomorphosites are of significant importance in inspiring cultural narratives of human communities on Earth. The scientific, cultural or spiritual character of geomorphosites are able to transform human views on nature. Geomorphosites hold powerful meaning for very diverse cultures and, at the same time, pose great challenges in terms of management and governance (Verschuuren et al. 2021). The current ecological crisis fosters humans to look for places of contemplation that allow the encounter with nature, themselves and the divine. There is a growing interest in places of significant symbolism that are able to inwardly transform people and reconnect them with Nature in different ways, so they may perceive reality through a different lens.

Geomorphosites hold multiple stories of our ancestors in how they related to Nature with a more respectful and grateful attitude, including a sense of stewardship towards nature. Geomorphosites unveil a relationship between local communities and the Geosphere that is beyond utilitarian values, forging deep meaningful feelings of identity and a sense of belonging to a place. Geomorphosites are privileged landscapes and landforms that manifest the sacramental of the Land, and the iconic character of the Geosphere, reveled as a geophany, enabling the contemplation of the divine through the created World (*Theoria physike*). We think one way to face the current ecological crisis is to rethink how we relate to the Geosphere as way to understand the human presence in the World. The spiritual dimension of the geomorphosites is one of the means by which this deep transformation may take place.

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