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# Ambiances of Anthropocene on Thessaly Territory, Greece: A Critical Dictionary

Yorgos TZIRTZILAKIS<sup>1</sup>, Afroditi MARAGKOU<sup>2</sup>, Yorgos RIMENIDIS<sup>3</sup> Abstract. In 20th century, at Thessaly region a series of paradigmatic metamor-phoses took place that transformed both the spatial and environmental aspects of this landscape. Focusing on Thessaly's environmental and spatial peculiarities and exploring the region's human footprint this paper proposes a methodology that underlines their significance in the context of Anthropocene. The methodological tool is an ongoing dictionary of terms - textual & visual - exported from the specific territory and contributing to a wider observatory of Anthropocene. The methodol-ogy of the dictionary is applied not only as an accredited tool of terminological mapping, but also as a critical interpretation mechanism through which we will be able to perceive current and future changes of our living environments.

Keywords. Anthropocene, Thessaly, Dictionary, Ambiences, Countryside

#### Introduction

Bruno Latour in his lectures on "the religion of nature" explores what it means to live in the age of Anthropocene, when, what has so far been purely a decorative element in human history, is now the protagonist of this story. The crucial for Latour Gaia (Latour, 2017), is now understood not as a system but as something that has its history, and mobilizes everything within this geo-history. In that sense, if something determines the politics of place, it is the soil, the land, the localities, it is what everyone is working on by building, using energy, using means of transport and with their lifestyle choices. Therefore, the importance of studying a locality and its geo-history can contribute to the establishment of a wider framework for analyzing and interpretation of Anthropocene. At the same time, the redefinition of research tools, which goes beyond the strict framework of geological and environmental sciences, is considered important in order to be able to understand and interpret the crucial symbiotic relationship between mankind and ground.

The region of Thessaly is comprised of four medium-sized cities and a number of smaller residential formations, but also includes the largest section of Greece's arable land as well as a significant part of its overall production activity. This paper perceives Thessaly region as a unique "city-territory" condition, as an expanded metapolis with density variations and hybrid urbanity characteristics. The urban tissues constellations extend beyond the city's boundaries to sparse rural areas with certain infrastructures (roads/highways, bridges, dams), smaller-scale building structures (agricultural cooperatives, warehouses, gas stations, shopping centers) and a vast patchwork of culti-

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vated areas. This hybrid character of Thessaly region, a result of two broader transformation processes: modernization and globalization, is defined by networks in which the above heterogeneous entities are related in various ways, create spaces and emerge atmospheres crucial for study. These atmospheres summarize the paradigmatic transformations, geological and environmental, that the region of Thessaly has experienced and can contribute to the Anthropocene context.

The landscape of Thessaly was the main territorial field for the modernization acceleration of the 20<sup>th</sup> century in Greece. As the main "productive engine" of the country, Thessaly was characterized by the modernization of agricultural practices, the intensification of agricultural production and the use of increased quantities of inputs (fertilizers, machinery, etc.). At the same time, it was a field of implementation of major technical and land improvement projects, diversion of rivers, dams, drainage of lakes, modification of crops and expansion of monocultures. Therefore, this dominant vision, especially of the 1950s, 1960s, highly modernizing, created an intensified anthropogenic landscape, with a critical geo-spatial and environmental footprint.

Within this research framework, this paper records, in the form of an ongoing dictionary, the local atmospheres produced by the environmental entity of the region of Thessaly in order to contribute to a wider observatory of the Anthropocene. Specifically, seven of the main dictionary entries of this ongoing research are presented here, as an extract. The structure of the dictionary is not only a methodology for recording definitions but also a critical interpretation mechanism. Each entry contains its own internal analysis and structure (Williams, 1983). According to Bataille, "A dictionary begins when it no longer gives the meaning of words, but their tasks" (Bataille, 1929). In this way these tasks can emerge the ambiances of Anthropocene on Thessaly territory.

[...]

#### Campos

Campos (in greek  $\kappa \dot{\alpha} \mu \pi \sigma c$ ) is the Greek word which in order to be sufficiently attributed in English we shall use the words: fields, valley and countryside (Koolhaas, 2020). It is an extensive, wide region with small fluctuations in altitude differences and low altitude. Campos is defined by the surrounding mountains and the sea. It is mainly a region with low vegetation through which a river system flows. The Thessalian campos is understood as a unified, lowland, arable area, is the largest part of the agricultural land of the prefecture of Thessaly and is delimited within the area defined by the largest mountains of the country. Due to this special geomorphology, in the Thessalian campos is developing the highest temperature of the country during the summer months, a fact that is aggravated by the weak presence of winds, resulting in the creation of a very locally characteristic, dysphoric atmosphere. The main feature of the Thessalian campos is the monocultures: cotton, corn and cereals in vast areas compose a unified landscape, which changes seasonally and into which the largest percentage of water resources in the area is channeled. The continuous watering in the summer months is intensified by private water drilling, drying the underground aquifers and at the same time increasing dramatically the percentages of surface moisture that emerge from the arable land.

#### Hyper-Humidity

Hyper-humidity (on the contrary of desertification; see entry *Quasi-desertification*) is defined as the increased percentage of moisture that emerges from the arable land during the summer months due to extensive watering. Most private water drillings are

located in Thessaly, which pump the largest volume of water from non-renewable reserves, thus draining the underground aquifer. The image of the campos (see entry *Campos*) is particularly characteristic, where dozens of irrigation systems with the method of artificial rain (injectors) irrigate the areas. The increased humidity in combination with the high temperatures that are developed, create a feeling of discomfort and suffocation.



Figure 1. Hyper-humidity, Yorgos Rimenidis, 27.06.2020

#### Liquid Urbanity

The liquidity that characterizes Thessaly is located in the vague spatial boundaries between the organized units. The formation of contemporary Greek cities (especially in the region of Thessaly) does not depend on tabula-rasa-type of conditions, as is the case in other countries or territories. It rather depends on accumulation, fragmentation, juxtaposition, polyarchy and superimposing. In this sense we could describe the region of Thessaly as a city-territory, where the high density of urban centers expands with gradual dilutions to the campos (see entry *Campos*), while at the same time in the extensive arable land of the campos are incorporated small unbounded residential settlements.

#### **Mega-Machines**

Mega-machines are the technical modernization projects that have shaped and continue to shape the landscape of Thessaly. The infrastructure projects, the dams and even the built environment of the industrial units were designed, constructed and operate as "production machines" (Varnelis, 2008) having as primary goals the coveted development and prosperity of Thessaly. But the relationship of this mega anthropogenic landscape with the territory comes in an invasive contrast, in a borderline condition with a double outcome: On the one hand we have the ubiquitous, dispersed presence of these megastructures in the landscape including the produced visual atmospheres, sound ambiences and micro-environments, and on the other hand their environmental footprint in the landscape of Thessaly.

#### **Meta-Lakes**

Meta-lakes are the demarcated areas of stagnant water whose creation is based entirely on human intervention. The main feature of these areas is their changing human-made condition where a piece of land is transformed from a plain into a lake or vice versa. At 14,037 km<sup>2</sup> of the total area of Thessaly there are seven recorded lakes, five of which are active. The two inactive (Askourida, Nessonis) dried up during the first decades of the 20<sup>th</sup> century, in order to be converted into arable land. Of the five actives, only two are natural lakes (Zerelia, Tyrnavos Lake). The other three (Karla, Plastiras Lake, Smokovos Lake) are artificial lakes that were created mainly for the irrigation of the crops of the Thessalian campos. Particular interest is found in the two largest of them. Karla as a natural lake in its original state was significantly influenced by human intervention during the second half of the 20<sup>th</sup> century. The lake goes from its initial state to drainage and later to its reconstruction. It was drained in 1962 in order to make the land available for cultivation, thus achieving the increase of production, however the erosion of the ecosystem and the changes in the microclimate of the wider area, led to the decision of its reconstruction in the first years of the 21<sup>st</sup> century. Plastiras lake was formed in 1959 as a flood and irrigation project, and today its reserve is used for water supply of Karditsa city, for the irrigation of the campos and for electricity generation. In addition, in recent years the lake turned into a tourist attraction, with activities on and around the lake.



Figure 2. Lake Karla (detail), Yorgos Rimenidis, 05.02.2020

#### **Micro-Machines**

A micro-machine is defined as any kind of small-scale built structure and machinery that is used supportively in agricultural production. Micro-machines are integral and iconic elements of the microenvironment of every arable area of Thessaly, every road that runs through them (either rural or main road) as well as many residential areas of the region, since the liquidity (see entry *Liquid Urbanity*) of space and activities is present. From the rural warehouses that protect the private water drillings and the agricultural vehicles (tractors) with their accompanying machinery to the very recent drones that have been recruited for the development of precision agriculture, the landscape of Thessaly is shaped and characterized from those. Whether static or mobile, micro-machines are a unique reality and compose an additional artificial microenvironment.

### **Quasi-Desertification**

Desertification is a process of land degradation that occurs over time in intensively cultivated areas. It affects the earth's ability to produce the services of an ecosystem, such as food production and hosting of biodiversity. The concept of desertification is part of the research studying the context of Thessaly due to the increased use of water resources that takes place, mainly during the summer months, for the irrigation of arable land. This extensive pumping, since at the same time the renewable stocks due to climate change are shrinking, leads to the depletion of the stocks of underground aquifers. As a result, soils go into a critical condition of infertility and the phenomenon of desertification makes the ecosystem unsustainable. Desertification is not currently directly visible in the Thessalian landscape, however studies<sup>4</sup> show that it is in a state of quasi-desertification, with the first symptoms becoming apparent from the progressive change of the color palette at the sight of a dynamic map (from green to yellow) as well as in the close observation of individual parts that appear cracked-earth phenomena.

[...]

#### Conclusions

Felix Guattari in his book *The Three Ecologies* states that "Today more than ever nature cannot be separated from civilization and we must learn to think 'transversely' about the interactions between ecosystems, the mechanosphere and the social and individual spheres of reference [...]" (Guattari, 2000). The proposed dictionary of Thessaly can also contribute to such a transverse reading. The ongoing recording of critical entries and their interpretive meaning derived from the above locality, can be on the one hand a database, loaded with its own geo-history, and on the other hand an open field of completion, an interpretation framework of wider recordings of an entire era.

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See: https://sustainabledevelopment.un.org/content/documents/dsd/dsd\_aofw\_ni/ni\_pdfs/NationalReports/greece/Greece\_II\_Drought\_Desertification.pdf (Access: 05/09/2020).

#### References

Bataille G. (1929), Formless, (trans. Stoekl A. et al.) Documents 1, p. 382.

Guattari F. (2000), *The Three Ecologies*, (trans. Pindar I., Sutton P..), London and New Brunswick, The Athlone Press.

Koolhaas R. (2020), Countryside, A Report, Köln, Taschen.

Latour B. (2017), *Facing Gaia: Eight lectures on the new climatic regime*, (trans. Porte C.), Cambridge, Polity Press.

Rimenidis Y., Tzirtzilakis Y. (2012) Athens Minutes, in *Collecting Architecture Territories - Phase One Report*, New York, GSAPP Books, pp. 132-141.

Varnelis K. (2008) Introduction, in K. Varnelis (ed.), *The Infrastructural City: Networked Ecologies In Los Angeles*, Barcelona, Actar.

Williams R. (1983), *Keywords. A vocabulary of culture and society*, New York, Oxford University Press.