Politecnico di Torino

Honors Thesis

Master's Degree Architecture for Sustainability.

Abstract

Landscape Pyrography.
Fire and the Production of a New Mediterranean Landscape

Tutor/Correlator

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Candidate

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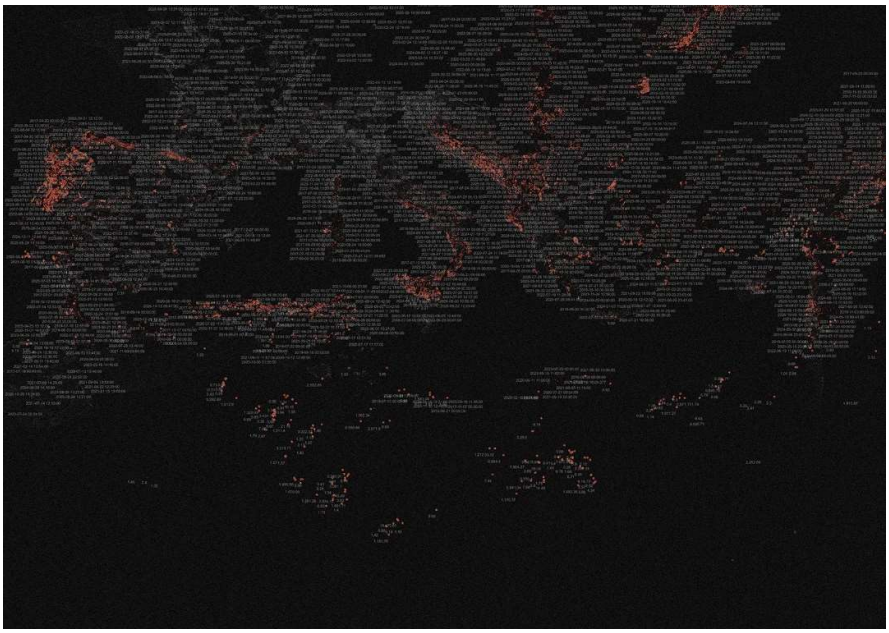
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How do we inhabit a planet increasingly engulfed by fire? While (wild)fires are direct manifestations of fire on land, other 'embodiments of fire', such as energetic extraction and warfare lead to territorial ecocide. Amid global pyroscapes—landscapes characterised by fire—the thesis recognises fire as the 'architect of landscapes', rethinking architecture, not as an agent of creation, but as a practice of inhabiting fire, meandering through flames, and reinterpreting residue and ashes.

Focusing on Cyprus's largest wildfire in the last half-century (120 km2, rural Limassol, July 2025) the thesis develops a speculative design project through 'The Museum of Pyrophytes' and 'Landscape Pyrography'. It reinterprets territorial structures and ecological mechanisms as architectural strategies proposing a continuous framework of pre-fire protection, resilience, and post-fire adaptation beyond emergency responses.

To understand fire as an agent of landscape production, the research explores its ambivalence through chemistry and alchemy, inspired by W. Benjamin. Fire's chemistry concerns its material composition, while alchemy interrogates the relations—ecological, social and political—that ignite it. Traversing their interconnected timelines, the research examines different territorial manifestations and aftermaths of fire engaging with S. Henni, A. Malm and M. Marder.

The research territorialises in the Mediterranean through multilayered instrumental cartographies. From geological origins to the agricultural revolution, fire reveals territorial 'fatigue and legacy' (S. Pyne, 2009) while extraction, technofetishism, and militarisation render the Mediterranean a terraqueous, hostile territory, a flaming sea.



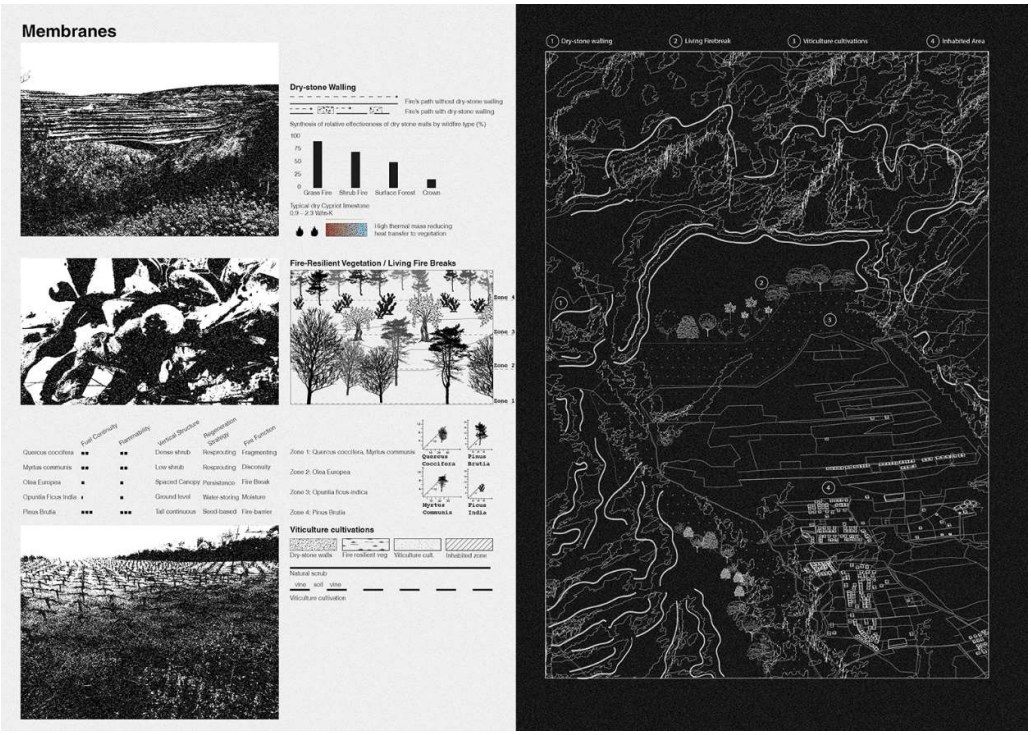
Mediterranean Pyrocartography: Dates and hectares of burnt land around the Mediterraneo in the last decade.

This leads to Cyprus, a pyroscape shaped by multiple embodiments of fire, intensified by its Eastern Mediterranean position. The island is stratified through its 'Mediterraneanity', climatic conditions and water scarcity, alongside colonial legacies, landscape-exploitative policies, and recurrent patterns of 'Cheap Nature' (J. Moore, 2016). Understanding these mechanisms informs ways of inhabiting pyroscapes without reproducing extractive systems.

Through site investigations, interviews, photographic documentation, and archives, the research explores the 2025 wildfire area, engaging with residues, soundscapes, and vernacular architecture. These inform two interconnected projects.

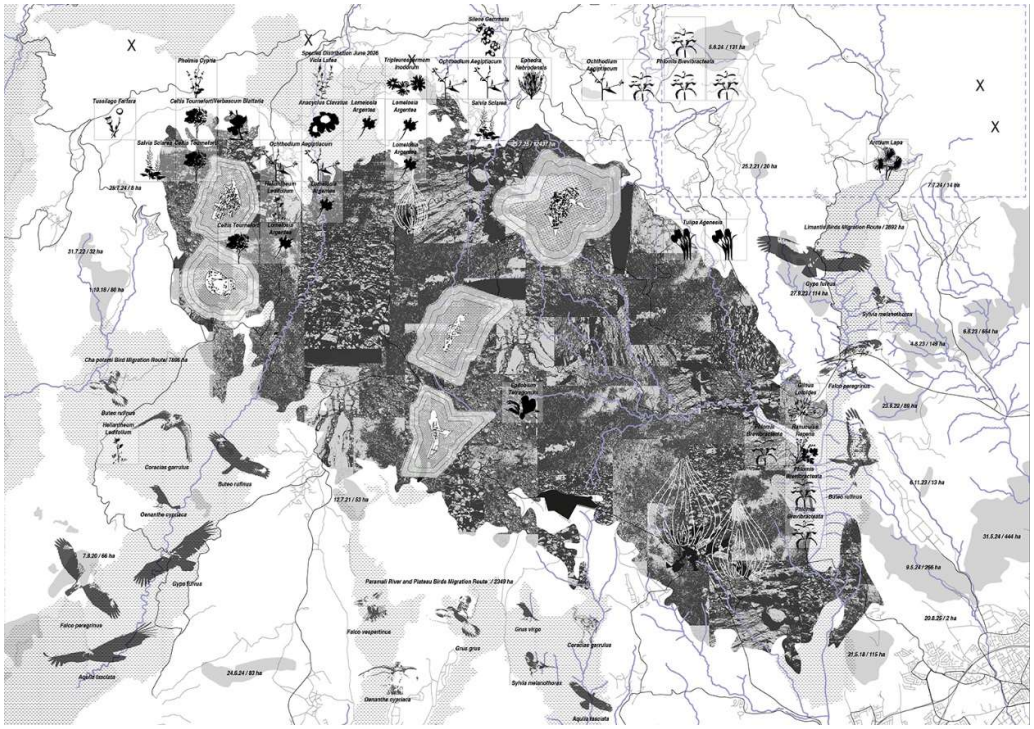
'The Museum of Pyrophytes', inspired by A. Tondeur and M. Marder, dissolves the museum into the post-disaster landscape as a living archive. Its 'Fire Herbarium' comprises species that have resisted or succeeded after fire. The ruptured surface and altered geomorphology inspire the 'Landscape Pyrography', the recurrent reconfiguration of the pyroscape through ignition, redrawing territories. Inspired by the 'Fire Herbarium's anatomical defence mechanisms, pyrography operates through two spatial strategies: bulbing and rhizoming.

Bulbing proposes shielding through three place-based membranes: dry-stone walls, viticulture mosaics and fire-resilient vegetation. Rhizoming embraces spontaneity and temporality, drawing on the autonomous, web-like propagation of rhizomes amid chaparral cycles (Deleuze and Guattari, 1983), allowing ecological succession rather than prescribing territorial "salvation" within a Mediterranean fire-adapted territory.



Bulbing strategy and the membranes of shielding.

Ultimately, the research develops tools for reading "damaged" or "ruined" territories beyond narratives of repair, productivity, and profitability, recognising their abundant ecosystems. Rejecting notions of emptiness, destruction, and endless development, it acknowledges fire as the architect of landscapes, while architecture learns from vegetal mechanisms and pyro-cartographies. Bulbs become refuges, rhizomes Mediterranean turbulence, informing an architecture that resolves, dissolves, and reconstructs over time, inhabiting the "destroyed" and "imperfect" territories through continuation and coexistence.



Inhabiting turbalence and imperfection: an architecture that dissolves over time.

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