THE IMPACT OF THE JANUARY 2025 SOUTHERN CALIFORNIA FIRES ON THE BUILDINGS OF HARALAMB GEORGESCU IN LOS ANGELES

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Overview

- 1. Quick overview of the teaching work
- 2. Overview of the work related to the research project

THE COURSE PROTECTION OF LOCALITIES AGAINST RISKS

Part of a module in the "Urban design" masters at the Faculty of urban planning at my university

The course starts with an overview of the disasters in mythology, an approach followed by some other projects dealing with images/illustrations of disasters, which have been mapped in conjunction with historic photography of which I will talk.

The students had to do an essay about a disaster and how urban planning helped to mitigate the effects.

Recently by the professor, who was also my doctoral advisor, a doctorate was concluded on fire. However, it deals more with fire from earthquakes than with wildfire.

OVERVIEW OF THE MASTER STUDENT WORK OF CALIFORNIA WILDFIRES 2003 BY MADALINA SBARCEA (2013) (by permission)

In the course Protection of localities against risks

Other works on wildfires dealt with wildfires in Australia or wildfires in Portugal in 2003 as well

CALIFORNIA WILDFIRE 2003

INFLUENCE FACTOR

- WILDLAND/URBAN INTERFACE
- TYPE AND QUANTITY OF COMBUSITION
- TOPOGRAFY
- CLIMATE

CONTEXT AND SHORT DESCRIPTION
THE 12 FIRES
FIRE PROTECTION IN CALIFORNIA
CRISIS MANAGEMENT
PARTICIPANTS AND THEIR ACTIONS

Research in frame of the project FUTURE ON THE PAST

List of California wildfires

List of California wildfires - Wikipedia

Eaton and Palisades (2025) are the 2nd and 3rd most destructive wildfires, 5 and respectively 9 deadliest, but not among the largest 20

Cedar (2003, San Diego) is the 6th (at its time it was the 2nd) most destructive, 7 deadliest, 10 largest

The 2025 Southern California fires

Why it is different?

More damaging at the wildland urban interface (WUI)

The vulnerability is given also by constructing next to the urban forest, a natural heritage seeked to build next to. It should be a nature based solution for example for better mental health, sought for during the pandemic. Yet climate change and the triggered disasters affect adversely mental health. This is something we deal with now in the CliMent COST action.



Review of literature on California wildfires (1)

2006: Climate change and wildfire in and around California (fire modelling and loss modelling)

Westerling, A., & Bryant, B. (2006). Climate Change and Wildfire in and Around California: Fire Modeling and Loss Modeling. *UC Berkeley: California Institute for Energy and Environment (CIEE)*. Retrieved from https://escholarship.org/uc/item/49v0n1n2

Lessons from 2007 Southern California wildfires

Jon E. Keeley, Hugh Safford, C.J. Fotheringham, Janet Franklin, Max Moritz, The 2007 Southern California Wildfires: Lessons in Complexity, *Journal of Forestry*, Volume 107, Issue 6, September 2009, Pages 287–296, https://doi.org/10.1093/jof/107.6.287

2011: Climate, Santa Ana winds and autumn wildfire in Southern California

Westerling, A. L., D. R. Cayan, T. J. Brown, B. L. Hall, and L. G. Riddle (2004), Climate, Santa Ana Winds and autumn wildfires in southern California, *Eos Trans. AGU*, 85(31), 289–296, https://doi.org/10.1029/2004EO310001

2013 - special issue on wildland-urban interface fires (mentioning Australia, Greece, Portugal, Spain and the USA - 2003 Cedar and 2007 fires)

Manzello, S.L. Special Issue on Wildland-Urban Interface (WUI) Fires. Fire Technol 50, 7-8 (2014). https://doi.org/10.1007/s10694-012-0319-0

Review of literature on California wildfires (2)

2017 Southern California fires

Nauslar, N. J., Abatzoglou, J. T., & Marsh, P. T. (2018). The 2017 North Bay and Southern California Fires: A Case Study. *Fire*, 1(1), 18. https://doi.org/10.3390/fire1010018

Large California wildfires: 2020 fires in historical context

Keeley, J.E., Syphard, A.D. Large California wildfires: 2020 fires in historical context. *fire ecol* 17, 22 (2021). https://doi.org/10.1186/s42408-021-00110-7

2020 California fire season (a year like no other or a harbinger of the future?)

Safford, H. D., Paulson A. K., Steel Z. L., Young D. J. N., & Wayman R. B. (2022). The 2020 California fire season: A year like no other, a return to the past or a harbinger of the future? *Global Ecology and Biogeography*, 31, 2005–2025. https://doi.org/10.1111/geb.13498

April 2024: increase of wildfire damage and decrease of property price in Southern California

Conlisk, E., Butsic, V., Syphard, A. D., Evans, S., Jennings, M., & Vadrevu, K. P. (2024). Evidence of increasing wildfire damage with decreasing property price in Southern California fires. *PLOS One*, 19(4), e0300346. https://doi.org/10.1371/journal.pone.0300346

Review of literature on urban forests

A history of urban forests and trees in Europe

Forrest, M., Konijnendijk, C. (2005). A History of Urban Forests and Trees in Europe. In: Konijnendijk, C., Nilsson, K., Randrup, T., Schipperijn, J. (eds) Urban Forests and Trees. Springer, Berlin, Heidelberg. https://doi.org/10.1007/3-540-27684-X_3

Defining urban forestry - a comparative perspective of North America and Europe

Konijnendijk, C.C.; Ricard, R.M.; Kenney, A.; Randrup, T.B. Defining urban forestry—A comparative perspective of North America and Europe. *Urban For. Urban Green.* **2006**, *4*, 93–103 https://doi.org/10.1016/j.ufug.2005.11.003

Own article on the forest in Karlsruhe and Carei

The presence of the forest in the city of Karlsruhe, Germany and Carei, Romania – occasion for cultural events

Doctorate about the forest in Karlsruhe

Tran, M.-C. (2008) <i>Stadt und Wald : Vom stadtplanerischen Umgang mit dem stadtnahen Wald dargestellt am Beispiel der Stadtentwicklung Karlsruhe 1870-2000</i> Karlsruhe: KIT Scientific Publishing. Available at: https://doi.org/10.5445/KSP/1000008778.

Own work on the urban forest in Riga, with a specialist from Portugal as well

<u>Urban green infrastructure: The role of urban agriculture in city resilience</u>

Reforestation

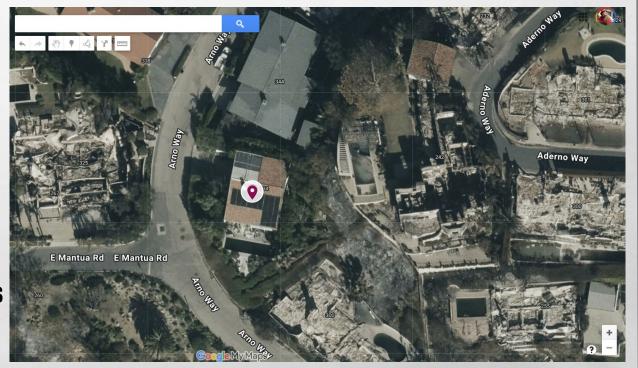
A tree to remember

Planted one in Nicola Watershed, BC

A Tree to Remember | Support Reforestation through Memorial Trees

Review of the news

- Architecture houses burned in the Los Angeles fires (ex. Neutra)
- Beverly Hills 90210 survived the fires
- Architects explain why some houses survived
 a good source to refine the ontology
- Contacted LA conservacy and found out that the building of Haralamb Georgescu in the Palisades was left intact unlike its neighbours



Map data

Network of sensors for California wildfires

Los Angeles County Current Wildfires

For my map I used California current wildfires

Fires in Los Angeles 1984-2020

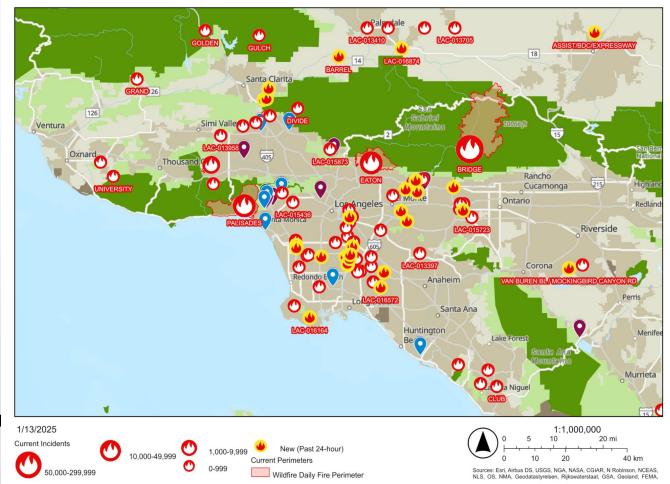
Wildfire: City of Los Angeles

3D scene in arcGIS of Southern California fires

CALFIRE - Southern California Fires January 2025 - Overview

The map of LA Conservacy shows only the Palisades and Eaton areas and for example it is not possible to see what happened in Beverly Hills (ex. Pasinett house)

Haralamb Georgescu and Los Angeles Fire



THE CULA AS INSPIRATION FOR MODERNIST ARCHITECTURE IN ROMANIA

CULA BUJOREANU RÂMNICU VÂLCEA (19TH CENTURY)

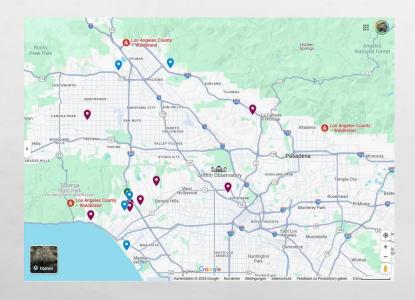
HORIA CREANGĂ ARO BUILDING 1931-33 BUCHAREST, MANIFESTO OF MODERNISM



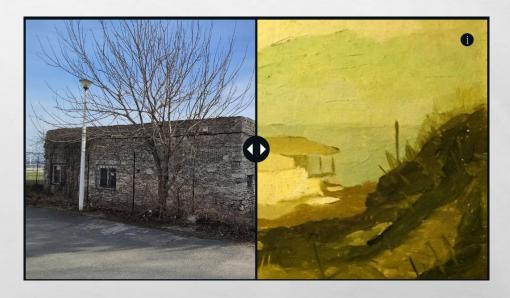


HARALAMB GEORGESCU, A PARTNER OF HORIA CREANGĂ CASA HURMUZESCU IN MANGETHE LAST BUILDING IN ROMA

BUILDINGS OF HARALAMB GEORGESCU IN LOS ANGELES



CASA HURMUZESCU IN MANGALIA, THE LAST BUILDING IN ROMANIA BY HARALAMB GEORGESCU, AFTER THE MODEL OF THE CULA

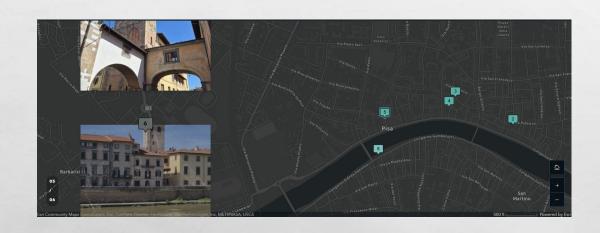


painting by Stephan Eleuteriades. Source. Stephan Eleutheriades, UAUIM Documentary Exhibition Center (Museum of the School of Architecture) (https://centrulexpo.uauim.ro/Eleutheriades/p13.html

MEDITERRANEAN TYPOLOGIES AND UTOPIAS FOR THE URBAN SPRAWL OF LOS ANGELES

TOWER HOUSES, AS FOUND IN PISA (CASA TORRE) BUT ALSO IN PAVIA AND BOLOGNA IN THE NORTH OF ITALY, RELATED ALSO TO THE CULA AND TO THE SVANETI IN GEORGIA (UNESCO HERITAGE), SERVING, LIKE SAN GIMIGNANO, AS MODEL FOR SKYLOTS OF HARALAMB GEORGESCU

MEDITERRANEAN CLIFF HOUSING AS MODEL FOR SKYLOTS BY HARALAMB GEORGESCU (IN THE THAT CASE POSITANO, HERE CINQUE TERRE). THIS HOUSING IS ALSO FOUND IN THE CYCLADES, WHICH SERVES AS MODEL FOR LE CORBUSIER, ADOLF LOOS AND ALVAR AALTO FOR MODERNISM, FOR EXAMPLE IN SANTORINI





Building the ontology

Participation to COST Firelinks (focused on wildfires) and publication of work on the ontology as for decision in the Springer volume. In that volume: the taxonomy

Building also a Gephi on the fires in the Canadian Centre for Architecture photographic database.

From the USA there are

- The great Chicago fire
- The Portland fire 1866
- The Boston fire 1872

All these are not wildland fires. They are city fires. Besides, the project dealt also with building fires (like during restoration in Glasgow, Oradea, Bucharest for Art Nouveau buildings, but most notably recently at Notre Dame Paris)

Jesús Rodrigo-Comino Luca Salvati *Editors*

Fire Hazards: Socio-economic and Regional Issues





The fire ontology and the works of Haralamb Georgescu related to the cula-s

The ontology is based on the taxonomy and has two parts:

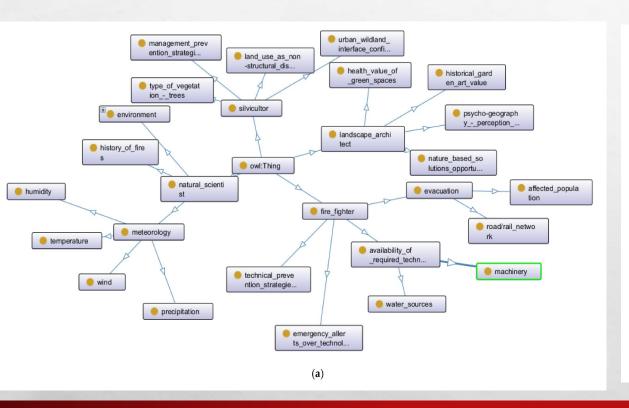
- The ontology of the decision system at the wildland-urban interface
- The ontology of the decision system at building level

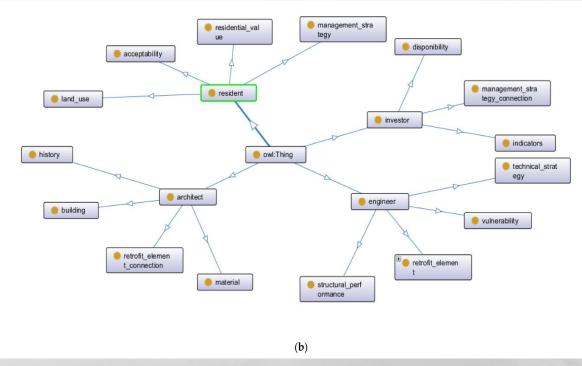
Different stakeholders and their criteria are involved.

A journal article

<u>Digital Humanities for Increasing Disaster Resilience in Art Nouveau and Modernist Buildings</u>

The ontology





Discussion and outlook

Fire is a dual element, both spending and maintaining life and destroying it, like in the mythology.

Archetypal landscape approaches and building fire have been dealt with in a former EGU poster (2 years ago) and the article

<u>Architectural Heritage and Archetypal Landscape Approaches Facing Environmental Hazards</u>

Which also refers to fires in the Cyclades.

Urban forests may protect from some disasters but render vulnerability to others, not only to fire but also to winterstorms (ex. I documented the Lothar in Karlsruhe in 1999 and the Atlantic one in Lisbon in 2013).

Further work includes:

- Review of the literature (both scientific and news) in order to refine the ontology
- Looking to more local culture in the origins of the buildings (Balkans, Svaneti)
- More work on climate change related hazards such as storms and wildfires, both with forest related damage

Thank you for your attention!

Questions?