

Cool Noons: a bottom-up approach to climate change adaptation for sustainable tourism

For Special Session S79: Viable Solutions Towards Sustainable Tourism in Mediterranean Tourism Destinations [026b9305234f40a198271542b550bfab](#)

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Second Abstract (1345 words)

Summer 2022: Lisbon 43°C - Athens 45°C - Syracuse 48°C... Experts agree that summer 2022 offers us a foretaste of the future Mediterranean climate: a climate with more extreme conditions and where heat waves are set to increase. Under these conditions, how can we imagine, conceive and realize public spaces adapted to the reality and the projections of climate changes?

Thanks to the Cool Noons project, five pilot cities (Marseille, Lisbon, Imola, Budva and Dubrovnik) will be developing and testing solutions to improve thermal comfort for residents and tourists while at the same time redesigning urban spaces with the goal of better adapting to climate challenges.

As climate change adaptations and challenges concern all of us, how do we ensure the consideration of all? What kind of tools to measure and integrate inhabitants' points of view?

In 2017, the Mediterranean received 289 million visitors (76% of which in the countries of the North of the basin including Turkey) reaffirming the position of this area as the largest single tourist destination in the world (UNTWO 2018).

At the same time as the tourism sector provides benefits, it also causes harm for territories and people. Overgrown, overcrowded or mismanaged destinations are generating negative impacts such as depletion of natural ecosystems, saturation of resources and spaces and protests from residents who feel they are losing control over the place they live.

The special session topic will tackle the question of **participation, especially of the local communities, in a sustainable and adaptable project.**

With a bottom-up approach, the Cool Noons project emphasizes inhabitants' and users' involvement at each step of the planning process from the initial concept, the planning, the testing and finally the implementation. Surveys, Workshops, Online

picture competition, will further enhance the project's intention to reflect on the residents' and tourists' perspectives.

Focus on the data collection

The data collection process will be completed in two stages reflecting the goals of the project. Firstly, data will be collected to assess the visitor experience and perception of coolness based on in situ questionnaires. Secondly, through thermal data and thermal images, absolute temperature data will be collected in order to assess and better evaluate the experiential results against the absolute temperature improvement. Based on data collection and a common framework for analysis, the project also creates conditions for comparison and transferability.

The first phase of data collection occurred during summer 2024 and the first results are under process of analysis by University of Coimbra and American College of Greece.

As part of the results, the thermal data were collected and will be compared, with a spatial and temporal comparisons in order to measure the efficiency of the implemented solutions and of the cooling effect of the “cool noons paths”.

Another part of the results consists in the process of data collection through surveys and questionnaires that faced some difficulties. Surveys and questionnaires needed specific spatial and temporal conditions in order to make people comfortable enough for answering the forms. Personal interaction led to an increased level of participation/engagement, however it needed a real implication from the project manager in terms of time and efforts, which could sometimes not be possible. Partnerships with tourism local boards, and the printing of QR codes to crowded and waiting places are advises given by University of Coimbra in order to support the data collection within the pilot cities.

Focus on the workshops

Workshops were completed during Autumn 2024. A key success factor for the Cool Noons project is facilitating participatory workshops, which were essential for pilot cities. These cities benefited from a design thinking workshop during the kick-off meeting to expand their toolkit for a co-design approach. In the participatory workshops (around 3 per pilot city), a large target audience was invited, including local authorities, environmental NGOs, trade representatives, universities, cultural centers...

Despite this large participation, we are missing a specific attention to the most exposed and vulnerable people to the heat. As lead partner of the project, I considered this as a limit for the quality of this citizen consultation. Universal design principles remind us of the need for an integrated, equitable and inclusive approach. Users' perspectives differ completely according to social, psychological, physical, abilities. Sensitive cartography is a methodological tool developed in geography

studies that reveals the subjectivity of perceived and lived space. In the same way, urban sociology shows inequalities and promotes an equal “right to the city”. Finally, behavioral sciences proves that humans have bias when it deals with decision-making.

Indeed, while heat affects the whole population, it also reveals vulnerabilities. The elderly, children, the sick, people on low incomes (whose state of health is more fragile) and outdoor workers or those in arduous occupations are the most exposed. According to a study by the Banque de France¹, people on low incomes don't have the means to take refuge outside the city during heatwaves (in a rental or second home). Their homes are more often poorly insulated, with little control over the thermal situation. In 2003, living under roofs quadrupled the risk of death.

The question that remains, is how to “recruit” a more representative panel? Indeed, it can be complex : no time for project managers, information not received about the citizen consultation for the large public, feeling of illegitimacy and inadequate tools to address to some parts of the population, ... Therefore, a set of solutions could be imagined:

- Targeting NGOs/representative groups that would provide information to their members (parents' association, retirement's homes, LBGT-centers, National Employment Agency, ...). For example, in Imola, Metropolis of Bologna decided to particularly focus on youth participation and involved students in the focus groups.
- “Casting” directly in the street, in the public space
- “Mobile concertation” : Itinéraire-Bis, a design agency for public interest, has imagined devices for mobile concertation to reach the public that usually do not come in participative processes

By co-conceiving solutions with a large representative panel of population, including socio-economico-psychological abilities, feasibility and impact are high to find both more innovative and more inclusive solutions, taking into account the variety of public spaces' uses. This combined with Universal Design principles will lead to more wellness, feeling of appropriation and togetherness.

Focus on the Online Picture Competition

Culture is a reflection of our times. As a vehicle of history and memory, it seems essential to consider photography as a witness to climate and societal change, as well as to methods of adaptation/reduction/anticipation of its effects. The aim of the

¹ [Urban Heat Islands and Inequalities: Evidence from French Cities | Banque de France](#)

international photo competition is to showcase the solutions implemented in the 5 pilot cities of the Cool Noons project: Lisbon, Marseille, Imola, Dubrovnik and Budva.

Inspired by Gaze magazine's photographic competitions and the public commission “Les Regards du Grand Paris” by Ateliers Médicis and CNAP (Centre National des Arts Plastiques)², the selected photographs will enable an encounter with the territory deconstructing myths and preconceived ideas on the habits of citizens and users of the public space, while highlighting the complexity and richness of the Mediterranean context. The photographs taken in these 5 cities will be published in a comparative and aesthetic approach to the theme of urban heat, to show the diversity of solutions and concrete actions possible to cool down in a scorching Mediterranean city. It will fuel broader reflection on the living environment within the five pilot cities. The initiative of a picture competition also aimed to foster greater awareness and connection among visitors to their living environment. We are expecting the launch of the competition by July until October 2025.

Conclusion

Since the challenges of climate change are complex, responses, far from being simple and one-size-fits-all - the “monoculture of thought”³ - must be exploratory, collective and creative. The presentation wants to address the results of the Cool Noons project and reflect on perspectives for the building of the culture of ecological transition and sustainable tourism: “involving the citizen, from the vision to the end-use”, through tools like surveys, workshops and online picture competition. The ecological transition and sustainable tourism implies a cultural shift from all, as much as the culture and the tourism fields need to shift to the ecological transition.

² — [Regards du Grand Paris](#)

³ Vandana Shiva, Vandana Shiva, an Indian physicist, environmentalist and activist renowned for her work on biodiversity, sustainable agriculture and peasants' rights, conceptualizes the “monoculture of thought” to describe a situation where a single way of thinking or approaching problems dominates. This often manifests itself in agricultural, economic and political systems that privilege industrial practices to the detriment of diversity and traditional practices.