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Abstracts from the panel

Envisioning the future by learning from the past:
Arts and memory in interdisciplinary disaster
risk reduction research



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How did we get to this? Understanding social construction of risk and capacities from the neighborhood history

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Risks cannot be managed without understanding the path that leads to the moment for the occurring disaster and lays on the root causes producing such disaster. An integrated Disaster Risk Reduction (DRR) research and practice requires exploring practices, reasons and knowledge surrounding the everyday experience of people living with disaster risk. This perspective considers risk as a process of social construction that is built overtime. It puts people at the center of the investigation, and recognizes that while people might generate disaster risk to achieve their basic needs they can also act to prevent and reduce it. In this context, the participatory work of the Quito's Tomorrow's Cities Hub done at the neighbourhood scale with local communities has demonstrated the power of working together with communities to rebuild their past, understand their present, and dream about their future, as well as to explore the challenges of participatory work in particular in pandemic times.

The methodology applied to reconstruct the history of the neighbourhood will be presented as a strategy to approach local communities and create trustful relationships with them, and as a mechanism to provide insights about the community capacities to manage their place and solve their needs. Through in-depth interviews, we built life stories of the first people that arrived into the neighbourhood. By doing so, we explore both the conditions of vulnerability that locally contributed to risk accumulation and the capacities to contrast such risk in the context of urban growth. Thus methodology provides a valuable knowledge about the neighbourhood and its functioning from an interdisciplinary perspective. Results from this research were then shared with the local community in a simple and illustrative way by rebuilding the settling process of the neighbourhood through storytelling. We created a tale of the neighbourhood history as a strategy to record local memories and strengthen social cohesion and local organization. The experience with this methodology shows the importance of prioritizing the voice of those living in the neighbourhood, to have a better understanding of DRR at the local scale. Indeed, this methodology can become a trigger of social participation, by opening the doors of the community and building trustful relationships within and outside the neighbourhood, to share common goals towards DRR.

Interdisciplinary public history interventions in DRR in Museums and schools in Quito

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In this talk we will discuss the role of historical memory and art based imagination tools (art installations, podcasts, public history) in visualising the complexity of how risk is built for educational purposes. Formal and informal education normally targets the idea of preparedness in case of an event (earthquake, tsunami, volcanic eruption, etc.). We think there is a big opportunity for impact, if DRR education is targeted from an interdisciplinary perspective, with a narrative that draws from history and memory and that uses art (visual, musical, theatre) to communicate and visualise the past to imagine the past. The GCRF Tomorrow's Cities Hub in Quito has partnered with the museums of Quito (Fundación Museos de la Ciudad) for this work. They are pioneers in adapting their activities towards different vulnerable communities that may be the most affected in the event of a disaster; they work with social, neighbourhood and community organisations, women's groups, the elderly, children and adolescents, the educational community, people with disabilities and members of sexual dissidence and the GLBTIQ community. On the one hand, we will discuss how, through collaborative work and interdisciplinary dialogue, we have proposed interventions in the permanent exhibits that adapt to the thematic of each of three museums. In the Museo del Carmen Alto we approached risk from a dialogue with the religious culture of the city, the role of feminine figures of care and protection, and a reflection on political responsibility. In the Museo de la Ciudad we discuss the long history of human settlements and disaster risk in the Quito territory, and how through the city development we have managed, reduced risk or built more risk. Finally, in the Museo Interactivo de Ciencias, we discuss through maps, artistic interventions on soil core (in Spanish "testigo" or "witness") and the physics behind building codes, the relationship between the development of the city and its subsoil. On the other hand, we will reflect on the opportunities that multimedia interactive digital platforms can have in schools together with the exhibits in the Museums to discuss risk and propose ways to avoid building more risk in the city we live in. Through a work with pilot schools we have developed a digital tool for use in schools so that teachers can use it for discussing risk in different subjects (history, social, mathematics, natural sciences, as well as art and language/literature).

Co-creating an online platform on disaster risk reduction with highschool students in Quito, Ecuador: Lessons from Evaluation

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We present here the co-creation process that led to the design of “Reducir Riesgos en Quito”, an outreach platform focusing on multi-hazards and resilience in Quito, Ecuador. The platform, launched in June 2021, is primarily intended for students who are about to complete their secondary education. It was built in a partnership involving students from two schools in Quito, The Sindicato Audiovisual collective, academic partners from the Tomorrow’s Cities research hub, and the Fundación Museos de la Ciudad. The platform also creates strong links between Disaster Risk Reduction and public history. It encourages its users to visit local museums such as the Museo del Carmen Alto, Museo de la Ciudad and Museo Interactivo de Ciencia, where exhibitions on Disaster Risk Management were curated in partnership with the Tomorrow’s Cities Quito research hub. The platform and museum exhibitions are complementary, exploring how the entangled themes of memory, disaster and resilience could engage citizens into a reflexive process around the nature of risk and its political underpinnings. This paper focuses on the evaluation of the outreach platform, and the reflexive process it generated. The evaluation fulfilled two main objectives: to shape the co-creation process with the students, and research how successful it was at reaching the desired impact, which is for students to understand the social and political dimensions of risk. Students were involved at the design stage through initial workshops in November and December 2020, in which they explored concepts such as resilience and memory, disaster and risk. Initially, the evaluation activities focused on accompanying the creation and design of the platform, and enabled reflexivity as we interrogated our assumptions to adapt to the students’ language, interests, and learning needs. Through discussions with the students and surveys conducted in December 2020, March and June 2021, we obtained detailed feedback from the students at every step of the way, and modified and adapted the platform design to ensure greater relevance to Ecuadorian teenagers in 2021 and beyond. We present practical examples of this co-creation process here, with implications for the visual language and content of the platform, such as the creation of the platform’s main character ‘Andesita’, the inclusion of memes, videos and trivia as well as accessible and interactive scientific information. In a second stage, we escalated these insights to weave evaluation into the platform, so that future users may also share with us the ways in which the platform changed their perception of risks and mitigation strategies. The platform’s pedagogical guide includes a participatory evaluation activity: the users are actively involved in the creation of narratives reflecting their own understanding of risks in their neighbourhood, what they have learnt and how they can act. This takes the form of a podcast creation activity aimed at school groups across Quito, which they are encouraged to share with project managers in Quito. Smaller surveys, inspired by the responses we received from the pilot schools, were also implemented within the platform. These evaluation activities will be launched in July 2021, and preliminary results may be shared during the session. This paper therefore focuses on the reflexive role played by evaluation in the co-creation of the online platform, and presents preliminary evaluation results from the intersection between public history, disaster risk reduction and the digital future.

Disaster Passed: a singing, flashing and sobering glimpse into coping with volcanic eruptions

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We all experience and understand volcanic eruptions differently. It is in the intersection of these experiences that the most effective knowledge for future disaster risk reduction is generated. Scientific responses to eruptions have the potential to improve understanding of subsurface magma movement and anticipate volcanic impacts on communities and the environment. Social and cultural responses have the potential to help communities learn, respond and adapt to the eruption. As a mechanism to bring together and celebrate these different knowledges the Disaster Passed Project created three interactive mobile exhibits designed to convey the lived experience, scientific monitoring and cultural responses to past eruptions on St. Vincent and Montserrat. This partly consists of two volcano-shaped mobile exhibits ('Soufrière Blow' and 'Mountainaglow') covered with panels that display images and information about past eruptions, including poetry, calypso lyrics and prose. For MountainAglow we pushed this concept further by creating a ~2m length tube of some 2,000 LEDs to create the audio-visual experience 'FLOW' and a smaller breakout exhibit 'NEST'. FLOW has seven audio-visual modes designed to recreate the gentle incandescence of the lava dome, visualise the movement of hot batches of magma within the volcano, contrasted by periods of songs and interviews that relive the experiences of different phases of the eruption of Soufrière Hills Volcano on Montserrat. NEST uses three ash-strewn communication devices (a telephone, a walkie talkie and a radio) to play on demand memories of the eruption as both spoken word and calypso. Soufrière Blow has been exhibited in multiple sites on St. Vincent, and MountainAglow was previewed at the Norwich Science Festival, and exhibited at the Little Bay Museum and National Trust on Montserrat. Disaster Passed was a dynamic design process, and at the time of writing, the primary schools of Montserrat are re-designing the panels and audiovisuals of MountainAglow in collaboration with the Montserrat Volcano Observatory; to reflect their own learning about the volcano. In this presentation we propose to explore how the visual arts combined with other disciplines can act as a mechanism to entwine critical risk messages with lived experience, and in so doing further enrich everyone's understanding and actions towards disaster risk reduction. We will also use this presentation to reflect on the challenges and successes of this dynamic design and collaborative approach. We will share how it influenced our own disciplinary ideas and the outcomes of our evaluation of the process.