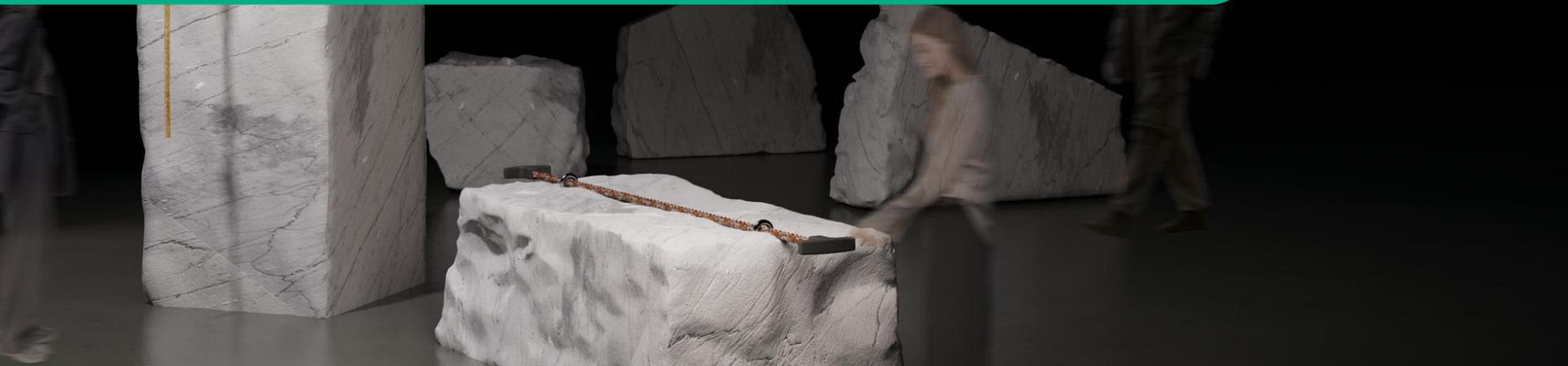


S-TOOLS - The sound of the quarry

Regione Toscana - Comune di Minucciano (Lucca)



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Project Overview

S-TOOLS aims to revive the roots of the quarryman's craft, telling its story through **sound** – the environment and the traditional operations of the quarries as they were once performed. From this intent, the idea arose to create **two installations** for the community which, through the sounds of quarry work, such as block cutting with a helical wire and squaring the marble, would narrate the story of the quarrymen.

To further strengthen the connection between these pieces and the history of the craft, the designers imagined a **unique path in which urban furnishings alternate with historical storytelling stops**, accompanied by reference points that help form a mental image of the surrounding landscape. This landscape is deeply connected to the narrative being presented.



Problem Statement

Promoting sustainable tourism and cultural vitality around the Gramolazzo Lake and the surrounding quarry landscape requires new ways to make the quarrymen's craft legible, meaningful, and accessible to residents and visitors. Despite recent public investments, the area remains under-activated for cultural engagement and everyday use.

Turbulences

- Paths, viewpoints, and lakeside areas are not yet organised into a coherent visitor experience, limiting opportunities for meaningful encounters with the quarry landscape.
- The specialised skills, songs, and working gestures of quarry workers are at risk as intergenerational transmission weakens and younger people move away.
- Installations must respect the landscape and craft traditions while using durable, site-appropriate materials and interaction modes that do not compromise ecological or cultural integrity.

Bold Vision

To create a sequence of site-sensitive sound and sculptural installations that narrate the quarrymen's work, frame key views, and reactivate the lakeshore and surrounding path as a story-rich public realm. Two interactive sculptures will embody the "filisti" and the "quadratori" - reproducing the helical-wire cutting and chiselling gestures through sound, material presence, and tactile interaction - while a series of framed totems and urban furnishings will guide visitors along a curated route that highlights Mount Pisanino, Lake Gramolazzo, and the Museum of Identity.

Where We are Now:

The S-TOOLS concept is authored by Jacopo Fillini and Simone Giannini, two students at the Department of Architecture of the University of Florence (DiDA)

At the NEB Festival held in Gramolazzo on 14 June 2025 the idea was ranked 5th among all participants.

Pilot status: now in its prototyping phase

How did we get here?

II semester 2024:

- a B4M local node was created in Minucciano, with the involvement of 4-Helix stakeholders.
- thanks to an agreement between the Tuscany Region and DiDA, a group of international students was engaged in an idea contest, after a study visit onsite.

I semester 2025:

- all concept designs were presented to the local population in a public event and then voted by a jury of experts (weighted 60%) as well as by the citizens themselves (weighted 40%) through a combined online and offline polling system.

II semester 2025:

- private funds were mobilised to support the prototyping phase.

What if...

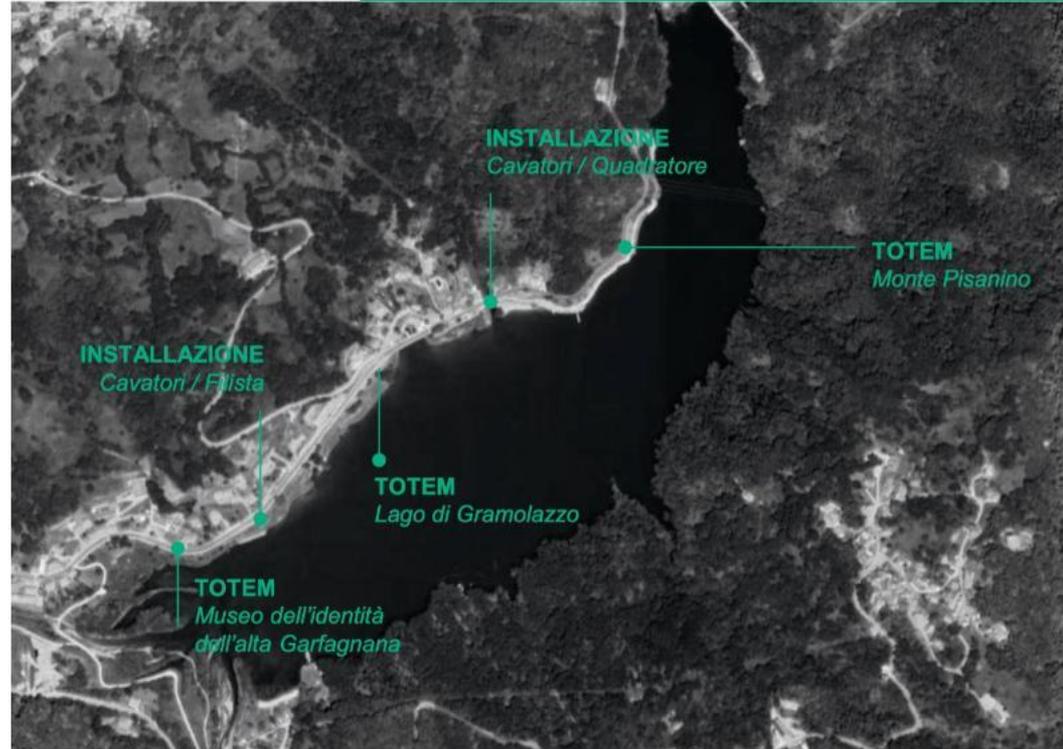
What if...

As a Visitor

I could experience the quarrymen's world any day of the year, not only through memories or museum displays

With interactive sound sculptures, narrative stops, and landscape frames that reveal how marble was cut, shaped, and moved

So that the craft, its gestures, and its atmosphere become tangible, immersive, and part of my encounter with the territory.



Who will benefit?

Target Groups

- **Urban planners** could deploy a coherent system of sound-based installations and narrative totems that link sites, viewpoints, and stories across the quarry landscape and the lakeshore.
- **Heritage custodians** could rely on a tangible, interactive pathway that makes quarry knowledge accessible, supports interpretation, and strengthens the transmission of local memory.
- **Tourists** could encounter the quarrymen's craft through immersive sounds, gestures, and landscape frames, gaining a deeper understanding of the town's identity as they move through the territory.
- **Local residents** could reclaim the lakeside and quarry surroundings as meaningful public spaces where stories, skills, and community identity are shared and celebrated.
- **Designers, artists and makers** could experiment with marble, sound, and interaction to create site-specific works that translate traditional gestures into contemporary forms.
- **The Municipality of Minucciano** could activate a culturally rich route that strengthens territorial identity, supports sustainable tourism, and enhances the everyday experience of the area.
- **Tourism operators** could offer curated, low impact experiences that connect visitors with the quarry's history, the landscape, and the community's living heritage.

Key Learnings

The project shows that heritage-driven design can activate a landscape in ways that conventional infrastructure cannot. By translating quarry gestures and sounds into interactive installations, S-TOOLS demonstrates how intangible knowledge can shape public space and strengthen territorial identity.

It reveals that successful cultural transmission requires interpretation, not replication. The project transforms the work of “filiisti” and “quadratori” into contemporary forms that respect tradition while making it accessible to new generations and visitors.

Planned installations highlight that material authenticity matters. Using marble and site-specific forms anchors them in the landscape, ensuring that the narrative remains coherent with the territory’s history and craft culture.

The project leverages storytelling routes to reconnect fragmented places. By linking installations, totems, and viewpoints, it creates a continuous narrative path that strengthens the relationship between the lake, the quarries, and the community.

NEB Values

Beautiful – Ambition: To Reveal

- S-TOOLS transforms the quarrymen's gestures, tools, and sounds into sculptural, site-specific installations that make the craft's material and symbolic richness visible.

Sustainable – Ambition: To Respect

- By activating existing paths and viewpoints rather than introducing intrusive structures, S-TOOLS supports a low-impact approach to tourism and territorial regeneration.

Together – Ambition: To Reconnect

- The installations act as shared touchpoints where residents, visitors, and younger generations can gather, listen, and interact with the sounds and stories of the quarry.



NEB Working Principles

Participatory Process **Ambition: To Engage**

- 4-Helix Stakeholder Involvement
- Consultation of the Local Population
- Heritage-driven Design

Multi-Level Engagement **Ambition: To Liaise**

- Local B4M Node as starting point & network hub
- Regional Government as prime motor (with B4M)
- Now building links with the European NEB hub

Transdisciplinarity **Ambition: To Merge**

- Craft knowledge with sound studies
- Young and seasoned designers
- Tradition with modernity, industry with tourism

Common Themes

- Living with landscape and material identity
- Sounds, memory, and collective storytelling
- Craft, symbolism, and contemporary reinterpretation
- Outdoor sociality and the culture of shared public space
- Heritage-led regeneration and territorial resilience



Lessons Learned



- The project revealed that heritage driven design carries significant social and territorial weight, especially in rural contexts where symbols, gestures, and craft memory shape collective identity as much as physical infrastructure.
- It highlighted that material choices influence narrative credibility, reinforcing authenticity and strengthening the link with the community's history.

Sharing for the Future

What knowledge can contribute to the B4M Toolbox

Place-based design knowledge

- How to translate quarry gestures, tools, and working rhythms into contemporary installations that respect the depth of local craft without reducing it to folklore.
- How to work with marble, wood, and traditional fabrication methods in ways that honour heritage while enabling new forms of interaction and public engagement.
- How to design open air experiences where sound, material, and landscape guide people through a narrative that unfolds across paths, viewpoints, and community landmarks.

Heritage as a driver of regeneration

- How a single symbolic action- cutting, chiselling, or framing a view- can activate memory, identity, and belonging across generations.
- How to pair physical installations with narrative programming that encourages micro-rituals, seasonal gatherings, and shared learning moments rooted in the quarry tradition.
- How to involve quarry workers, elders, artisans, and cultural custodians in co-design processes that strengthen authenticity and ensure that intangible knowledge remains alive.