

SONIC LAYERS

Understanding sound as a resource for future urban life

A method for reading and shaping acoustic qualities as part of urban transformation

Sound is the invisible layer of the city.

It moves between façades, trees, bridges and openings, gathers in courtyards and travels across distance, making us aware of presence, rhythm and movement.

A city is not only experienced through sight, but through the sounds that reveal where we are, who is nearby, and how a place is used. Acoustic quality shapes comfort, wellbeing and everyday urban life. In a healthy urban quarter, nature is not only visible in planting and water, but present through birds, wind, leaves and shifting seasonal sound.

This proposal explores how sound can become an active spatial resource in shaping a healthier and more liveable future urban quarter of OUH. Existing hospital infrastructures already create distinct acoustic differences across the site, which can inform future spatial character.

Idea / A city is heard before it is understood



Height – urban resonance /
Roof terraces and elevated platforms introduce wind, distant voices and a new acoustic relationship with the city.



Materials – acoustic comfort /
Textured and porous materials soften sound reflections, while hard metal and glass surfaces often amplify them. The way future façades meet each other will shape whether sound is absorbed, diffused or allowed to circulate.



Facades – wind, depth and sound /
Facade articulation helps reduce wind acceleration. Existing façades can be adapted through added depth, surface variation or planting, while new building volumes should avoid creating wind tunnels and seasonal wind noise.



Parking – quiet heart /
Parking at the perimeter reduces traffic and gives space to footsteps, voices, play and everyday urban life.



Tunnels – hidden acoustics /
Parts of OUH's underground tunnel system could host sound-intensive functions such as rehearsal rooms, repair workshops or shared cultural uses – placing noise where the city can absorb it.



Courtyards – everyday life /
When courtyards are kept free of waste and bicycle parking, they can become spaces for play, pauses and informal encounters, where quieter everyday sounds can emerge.



Water – soft rhythms /
Open channels, shallow basins and small water surfaces add soft background sound, reflect light and introduce changing rhythms to everyday urban life.



Former hospital routes – new rhythms /
Former circulation lines can become everyday urban routes where footsteps, bicycles and pauses create new sound patterns.



Green structure – living acoustics /
Trees, shrubs and layered planting support birds and insects, soften wind exposure, and introduce seasonal sound through leaves, canopies and changing weather.

LISTEN /

01 EVERY PLACE HAS A SOUND

The hospital site carries a distinct acoustic condition, where different sounds together create a particular rhythm.

Gulls and pigeons move above the roofs. Technical systems run constantly in the background. External blinds shift across façades as temperatures rise. An alarm is heard in the distance. Trains pass at the edge of the site, while cars circulate between buildings searching for parking. Occasionally, the pattern is interrupted by a helicopter landing on the central lawn.

This is not silence, but a layered soundscape shaped by operation, distance, technology and the acoustic scale of large building volumes.

Urban sound emerges long before it is designed. It is formed through materials, distances, spatial proportions, functions and movement.

As the hospital transforms into a neighbourhood, one rhythm gradually fades while another begins to appear.

The question is not only what will be built, but which sounds should define the next life of the area.

UNDERSTAND /

02 EVERYDAY SOUNDS CREATE IDENTITY

Canadian sound researcher R. Murray Schafer described cities as soundscapes in which certain sounds carry identity while others gradually dominate everyday experience.

This remains relevant in urban transformation. Sound shapes how places feel – influencing comfort, presence and the desire to stay more than planning often acknowledges.

We measure noise and define thresholds, but rarely discuss which sounds should remain audible in daily life.

Sound reveals how a place is used. Where people stay, different sounds emerge than where people only pass through: a child playing, a door opening into a courtyard, bicycles slowing down, voices gathering on a bench, birds moving through planting.

These small differences often determine whether an area becomes a route through the city or a place where people return, pause and stay.

SHAPE /

03 SOUND CAN BE SHAPED

Urban planning has a responsibility not only to reduce noise, but to work deliberately with acoustic quality.

The aim is not silence, but a healthier balance between sounds that disturb and sounds that support everyday life, comfort and wellbeing.

Designing for sound means deciding where calm should be protected, where urban life should remain audible, and where nature can shape the acoustic character of the area through wind, birds, leaves and water.

Small spatial decisions influence how sound moves through a district. Parking at the perimeter, planted courtyards, active ground floors and softer surfaces can create calmer inner spaces and more varied acoustic conditions.

Sound helps identify where urban life should intensify, where calm should be protected, and where existing spatial qualities already offer acoustic value.

As the hospital transforms into a neighbourhood, sound should become an active part of planning from the outset and help shape the district's future character. The spatial moves above suggest how this can be done through design.

The interventions above show how acoustic quality can be shaped through urban development

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