Listening as a prelude to architectural design

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Architects are shapers of the inhabited environment. Form and space are their medium. They have scant leverage on the economic forces driving what is built but, through design, they do influence how they are deployed. Acknowledging this, architectural education always values the visual aesthetics of students' work. But the environment has many other dimensions to which architects must be sensitive. Particularly challenging are intangible influences on well-being, such as sensual, social, ecological and ethical ones.

Such influences are found on site before design begins. Architects can merely improve or degrade them. Faced with a new project, their first impulse should not be to reach for the sketch pad, but to give attention to what is already there. A tabular rasa is rare. They should ask themselves what questions the existing situation throws up and how they can act appropriately in response to them.

Key qualities that students of architecture should be helped to develop with respect to this enquiry are sensitivity and judgement. A project recently given to incoming students at the Welsh School of Architecture, RiverSonics, aimed to focus them on these qualities in advance of their long training in building design, by asking them to give prolonged consideration to the environment they live in. They were asked to investigate it in a way that was novel to most of them - by listening to it.

The region for the study was the River Taff in South Wales, from its source in the Brecon Beacons to its mouth in Cardiff Bay. Like many rivers, it is followed along much of its length by road and rail linking urban settlements. A preliminary walk along a transverse from river to road revealed a theme for this study: listening near the river, it was easy to give close attention to any sounds that arose; nearer the road, incoming sounds began to crowd out the mind and make attentive listening harder. In short, the zone either side of the river offered tranquility of mind. Based on this observation, it was decided to ask students in one phase of the project to discover where they could gain access to such zones - zones of tranquil access - and to map them all along the river.

Although the initial focus of their listening was on themselves and their state of mind, they were asked to shift their attention between that and the sounds around the zones which gave them their boundary and character. Thus the calm, subjective, act of listening opened a vista onto activity in the region surrounding the tranquil access zones, along which they could look for appropriate questions. To help them, we invited visitors from the community to see their maps and talk to them about what they had found.

The graphic tools devised for the project to help in their listening and mapping, were the basis for the first portfolio outputs. In groups, they arranged artefacts on circular, segmentally subdivided, tables 4 m in diameter in a visual characterisation of the soundscapes they found, and they made a plaster model of the zones of tranquil access along the river, being 40 m long at 1:1,500 scale, all of these making unique and compelling art works.

Students, who had arrived at the School from all over the world, were each given a piece of the local river to model and be custodian of. Primed by their listening, they moved on to the next phase of the project, which was to find out more about the communities around the river responsible for the soundscapes. The next portfolio outputs were short films about their pieces of river, which they made in groups of three or four. Although given tutorial guidance, they were very dependent on their own initiative for themes and technical knowhow. Yet the films they made were of high quality. Their listening and their encounters with the local communities had served to shape questions they wanted to address. From there it seemed a small step to expressing them through film.

This study used sound as a medium for exploring space and time. Sound is in motion. It is vibration; it results from activity; it speaks through variation; it travels and evolves. Through listening, one is able to eavesdrop on a dialogue between the river and the local community.