A SLIGHTLY CURVING PLACE
BRAHMA AMBISONIC MICROPHONE

I had known about ambisonics from 1975. I had been building microphones, in particular array microphones, from 1983. The two came together for me only in 2001, after my third visit to Ranigumpha. I had been using binaural measurements and sine sweeps. Now I needed a low-cost but reliable ambisonic microphone to record the test signals on four channels. The patents had expired and I knew the theory, so I decided to build my own. In early 2007 I was still struggling to make tetrahedral arrays when Zoom Japan released the Zoom H2 Handy Recorder. Eureka! Here was an inexpensive recorder which I could modify. It had reasonable though oddly arranged microphones built in, but if I could remove them and construct a true ambisonic array on the wand instead, I would have a good portable system for my acoustic measurements. I designed and made a stem and a not very good holder for the four capsules, and mounted it with a five-pin DIN connector on top of the recorder. The name Brahma popped up almost immediately! He’s the creator god and has four heads currently (he had a fifth, but Shiva cut that off—you can find that whole story in Ka).

DODECAHEDRON SPEAKER

We cannot have a loudspeaker that has a perfect frequency response and is also perfectly omni-directional. The nearest we have is an array of 12 speakers arranged on the faces of a dodecahedron. This speaker is often used in acoustics research to play a sine sweep into a space with mechanical precision, using its large frequency and dynamic range to expose the sound of a space. Paired together, the ambisonic microphone and the dodecahedron speaker comprise an acoustic researcher’s measurement tools. As the speaker sings, its song and its echoes are recorded.
One use of an ambisonic microphone is to measure the acoustic properties of a space, to consider its potential for performance, for instance. What could be done with such a measurement? In principle—insofar as the mythology of technology goes—a dry studio recording can be processed to sound as if it were resonating in that specific location. Can one space be put inside another? Like an archaeological site into an exhibition? Can you be in open air but have your ears tell you you’re in a cave? A kind of transportation across time and space, a listening for theatres in past landscapes.

This audio play takes up Umashankar’s practice of listening to premodern performance spaces and stages itself as an exhibition (within an exhibition). Generated through a series of relays between script and voice and sound and movement, it extends the notion of an archaeological site to include text and technologies and the fields of recording. Writers produced narrative and conceptual scripts. Performers performed them. Sound designers approached the recorded material through their various understandings of sound as matter, meaning, and music. With each, a defined location emerges with no visible boundaries present.

This is a map of time. A sign in the space tells you when you are in the audio play.
1 Burrowing

The Travelling Archive
Text: Moushumi Bhowmik
Voice: Moushumi Bhowmik and unnamed singers
Sound design: Sukanta Majumdar

5 It Is Abandoned

Text: Alexander Keefe
Voice: Mojisola Adebayo
Sound design: Hugo Esquinca, Farah Mulla

2 Tuning a Cave

Text: Alexander Keefe
Voice: Arunima Chowdhury, Janardan Ghosh
Sound design: Robert Millis
Site: Sita Benga

6 I Hear Her Master's Voice in Three Dimensions

Moushumi Bhowmik, the Mitra Thakurs, Oliver Weeks
Sound design: Sukanta Majumdar

3 Meditations on Ranigumpha

Text and concept: Anurima Banerji
Voice: Bani Abidi
Music: Madhuri Chattopadhyay, RENU
Dance: Katie Ryan
Sound design: RENU

7 Site VII A

Text: Alexander Keefe
Voice: Sukhesh Arora, Padma Panjatan, Ayaz Pasha
Sound design: Tyler Friedman
Site: Anupu

4 Digging

The Travelling Archive
Text: Moushumi Bhowmik
Voice: Moushumi Bhowmik, the Mitra Thakurs, Oliver Weeks
Sound design: Sukanta Majumdar

8 Towards a Meaning

The Travelling Archive
Text: Moushumi Bhowmik
Voice: Sukanta Majumdar, Keramat Ali, Lal Miah Boyati
Sound design: Sukanta Majumdar

Total length: 90 minutes

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Minister of State for Culture and the Media
Federal Foreign Office
Burrowing  R5 ×  D3 →

Tuning a cave  R2 ⊗  S2 ⊙  S5 ★

~ 5:09  ~ 18:03
It is abandoned

I hear Her Master’s Voice in three dimensions.