

3 x 4

Exploring metaspaces for inclusive future cities

An interactive telepresent public video installation designed for site-specific user interaction between audiences in Delhi and London, for the UnBox Festival Delhi, 12 to 14 December 2014

By Paul Sermon, Claire McAndrew and Swati Janu

Funded by the Arts and Humanities Research Council
as part of a broader collaboration between UnBox, British Council and
Science & Innovation Network

<http://www.ahrc.ac.uk/News-and-Events/News/Pages/UnBox-Future-Cities-LABS-follow-on-awards-announced.aspx>

<http://www.unboxfestival.com>

Contact:

Professor Paul Sermon

College of Arts and Humanities
University of Brighton
Grand Parade
Brighton
BN2 0JY

Email: p.sermon@brighton.ac.uk
Mobile: +44 (0)7753 167726
<http://www.paulsermon.org>

PROJECT CONCEPT

In megacities such as Delhi and Mumbai - and within one of the fastest growing cities within the world, Ahmedabad - more than 50% of the population live in informal urban settlements. 3 x 4 metres is the plot size often provided in resettlement colonies, a government initiative which relocates people within informal inner-city settlements to vacant land on the periphery. In a collaboration between Professor Paul Sermon at the University of Brighton, Dr Claire McAndrew at The Bartlett, UCL and Swati Janu a Delhi-based Architect, this project looks at informal settlements differently where informality is not viewed as a problem, but a promising new model of urbanism for the global south. 3 x 4 will use an immersive telematic networked environment to provide a playful, sensorial exploration of new hybrids of digital space as the boundaries of space shift. Merging two 3 x 4 metre room installations in Delhi and London through mixed-reality, this transnational dialogue intends to set an aspiration for developing metaspaces platforms in megacities of the global south. It builds upon practice-based research conducted as UnBox LABS 2014 Fellows in Ahmedabad, India; which used an immersive installation to explore the qualities and values built through self-organised communities that are lost in the resettlement process.

See 3 x 4 documentary video for more information: <http://vimeo.com/paulsermon/3x4>

TECHNICAL DESCRIPTION

Using a live telematic videoconference connection, the installation functions between two geographically distant audiences located in separate 3 x 4 metre blue-box room installations in Delhi and London. The audience groups in these two blue-box spaces are captured on camera and brought together through a system of live chroma-keying and are placed onto a computer-generated background image. The complete composited image is then displayed simultaneously on large LCD video screens in both locations. As the merged audiences start to explore this shared telepresent space they encounter the digital background environment they now both coexist within. These background scenes will directly reference their combined social setting, ranging from informal settlement dwellings and Delhi environments to contemporary compact interior designs, micro living solutions and virtual worlds. In addition to occupying digital 3D models and photographed living spaces audiences will be provided with chroma-key blue fabric and invited to bring objects and props into the 3 x 4 room to further explore their telepresent coexistence in this new metaspaces platform.

INSTALLATION PROPOSAL

The 3 x 4 installation in Delhi will be situated in a central location at a public intersection that reaches the broadest possible audience demographic, providing equal access to all participants, ranging from the inhabitants of informal settlements or urban villages to home owners in planned colonies and commercial businesses. The connected 3 x 4 installation in London will be equally situated in a public space that encounters a broad cross section of public that inhabit and pass through it daily. Spanning five time zones the installation will be connected 6 hours a day from: 10.00am to 4.00pm in London and 3.30pm to 9.30pm in Delhi, combining two cities not just spatially but temporally, from the start of one person's day to the end of another's. The opportunity for the audience participants in Delhi to decorate and customize the interior of their 3 x 4 space will play a pivotal role within the installation. Items of furniture, domestic objects and a means of self-construction will be introduced and made available to explore how subjective design interventions influence the user experience and their creation of multi-dimensional spaces. The networked convergence of these two physical 3 x 4 metre structures and their urban locations will allow these diverse public audiences the opportunity to explore networked spaces as new mixed-reality hybrid environments. It will make it possible to experience, not only the presence of geographically distant participants, but also a sense of coexistence with them. Using the embodied platform of open interaction as an alternative networked communications protocol, will enable them to define the context and narrative of what follows.

EQUIPMENT AND MATERIALS

DELHI AND LONDON INSTALLATION:

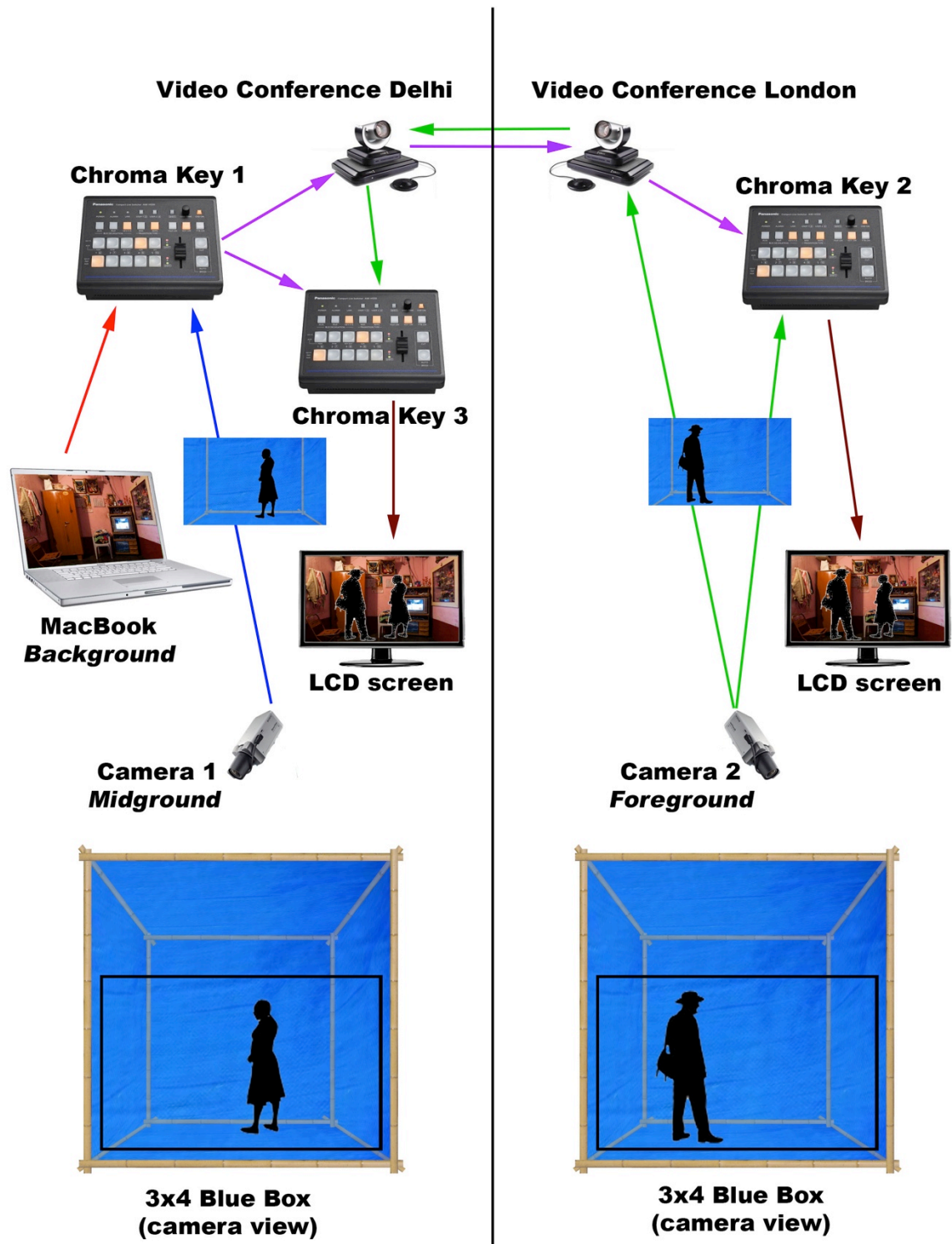
Delhi Location:

1 x 52" HD LCD Screen with HDMI input	Hire/ or loan from venue
1 x 18" HD LCD Screen with HDMI input	Hire/ or loan from venue
1 x VHS or DVD recorder with composite video input	Hire/ or loan from venue
1 x Panasonic AW-HS50 Video Mixer chroma-keyer	Provided by 3 x 4
1 x 3CCD HD video Camera	Provided by 3 x 4
1 x LifeSize Express 220 HD Video Conference System	Provided by 3 x 4
1 x Blackmagic HDMI to SDI	Provided by 3 x 4
1 x Blackmagic Ultra Recorder	Provided by 3 x 4
1 x Atlona AT-HD560	Provided by 3 x 4
1 x HDMI to Composite scaler	Provided by 3 x 4
2 x HDMI splitter	Provided by 3 x 4
1 x Wall mount/bracket for camera	Provided by 3 x 4
1 x MacBook Pro	Provided by 3 x 4
Cables: HDMI, SDI DVI etc.	Provided by 3 x 4
Blue tarpaulin sheets and strings	Provided by 3 x 4
Bamboo installation construction on location	Provided by 3 x 4
Broadband Internet Connection (public IP address) (Bit Rate: 10 Mbps minimum)	Provided by venue

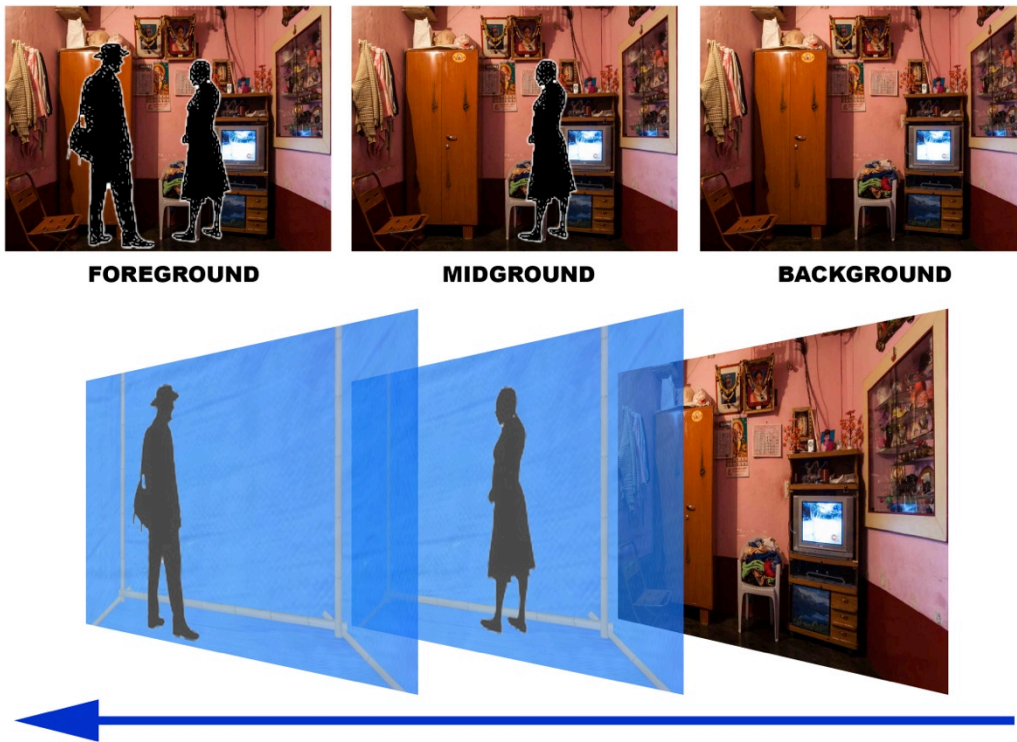
London Location:

1 x 52" HD LCD Screen with HDMI input	Hire/ or loan from venue
1 x 18" HD LCD Screen with HDMI input	Hire/ or loan from venue
1 x Panasonic AW-HS50 Video Mixer chroma-keyer	Provided by 3 x 4
1 x 3CCD HD video Camera	Provided by 3 x 4
1 x LifeSize Express 220 HD Video Conference System	Provided by 3 x 4
1 x Blackmagic HDMI to SDI	Provided by 3 x 4
1 x Atlona AT-HD560	Provided by 3 x 4
2 x HDMI splitter	Provided by 3 x 4
1 x Wall mount/bracket for camera	Provided by 3 x 4
Cables: HDMI, SDI DVI etc.	Provided by 3 x 4
Blue tarpaulin sheets and strings	Provided by 3 x 4
Bamboo installation construction on location	Provided by 3 x 4
Broadband Internet Connection (public IP address) (Bit Rate: 10 Mbps minimum)	Provided by venue

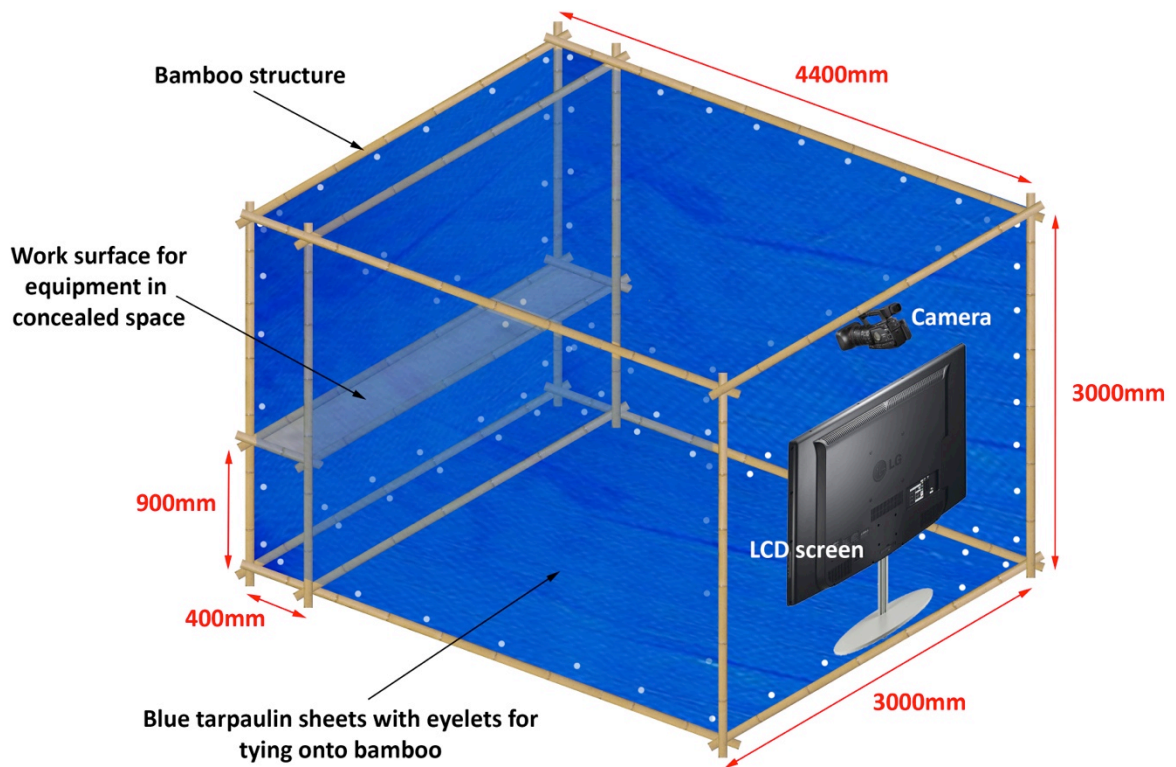
VIDEO FLOW DIAGRAM



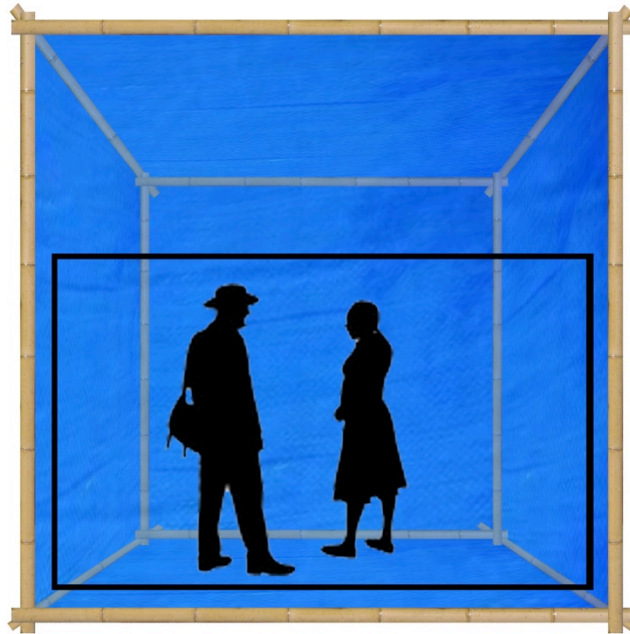
VIDEO CHROMA-KEYING SEQUENCE



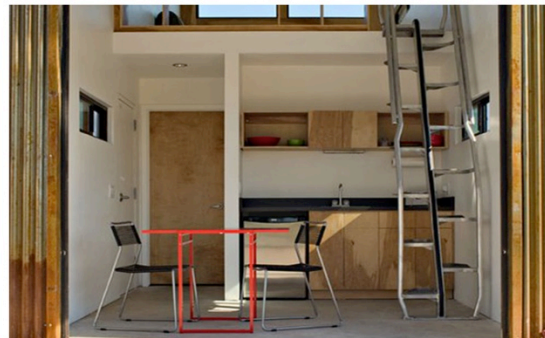
INSTALLATION CONSTRUCTION



CAMERA VIEW AND BACKGROUND SCENE EXAMPLES

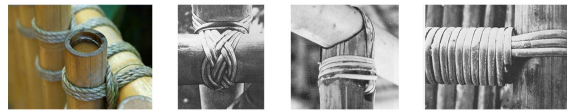
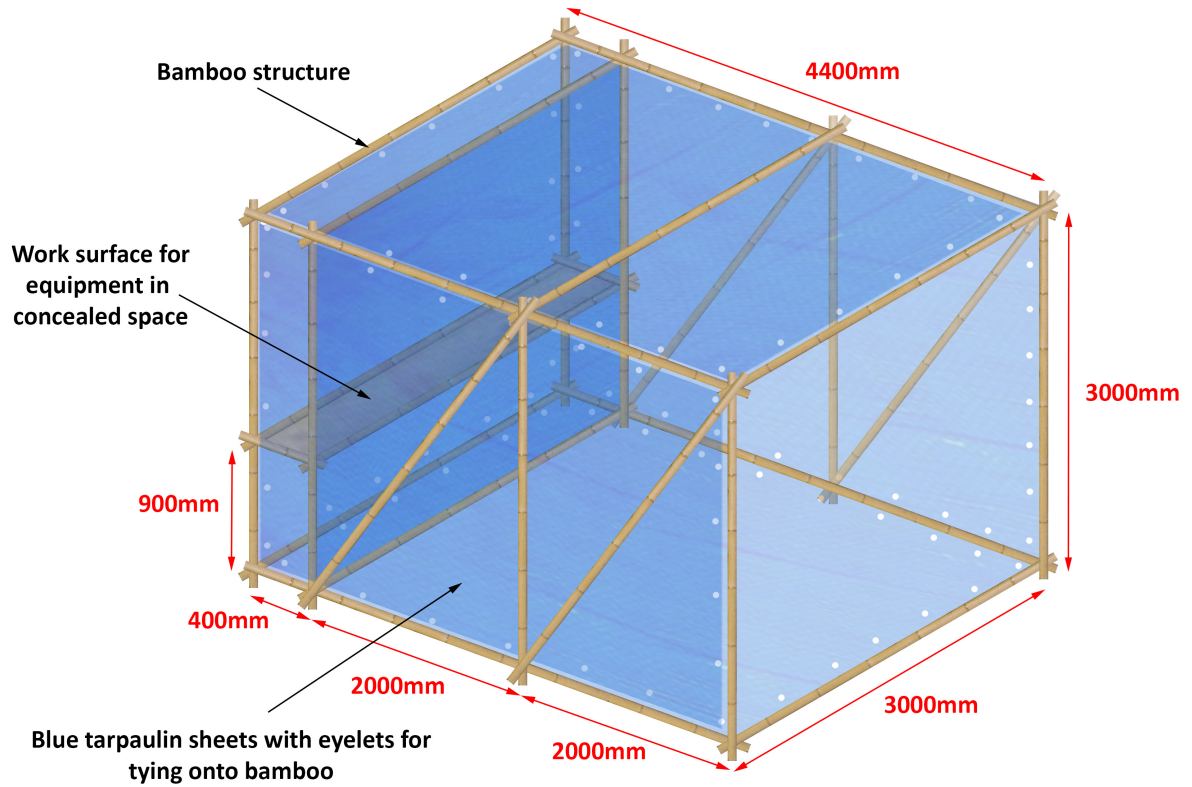


Camera view



Background image examples

BAMBOO STRUCTURE DESIGN



Bamboo lashing examples