

Bill Fontana *River Sounding* is edition #1 in a series of publications to accompany key works in the creative programme of Sound and Music. This volume documents the creation of a brand new public artwork by one of the world's leading sound artists, Bill Fontana.

The installation *River Sounding* returns the Thames to Somerset House, taking you on an acoustic journey in which the river once again flows through the Great Arch and into the underground lightwells surrounding the courtyard, immersing you in airborne and underwater sounds and revealing contemporary and historical connections.

This book profiles the work of internationally renowned sound sculptor Bill Fontana and offers an insight into the creation and context of this major new installation.

BILL FONTANA RIVER SOUNDING

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Bill Fontana
River Sounding



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Image on preceding spread
View of the Thames from Gravesend Pier
Image: BP

*'The Thames is the great London referent:
metaphor and fact. Without the khaki,
sediment-heavy river, our city would have no soul.'*

Iain Sinclair*

* *The Guardian*
Saturday 5 February 2005

SOUL MUSIC

Bill Fontana's work occupies a place somewhere in between metaphor and fact. He plots a course that avoids both documentary and simple interpretation. By recording and assembling the plaintive sound of the whistle buoys, the vibrations of the Millennium Bridge and Kew Bridge Steam Museum, and by transposing them in time and place to Somerset House he makes us, the listener and watcher, do the work.

This is not the Thames of grand arcs and sweeps, fireworks and floating dignitaries. This is the Thames of aquatic micro-worlds, barely audible resonances, and obscure navigation machines. More evocative perhaps of a state of mind than of great events.

Centuries on from Handel and JMW Turner, and decades on from Panufnik, Vaughan-Williams and Henry Mancini, artists continue to be fascinated by our khaki river. As well as Bill Fontana's own works, composers Max Couper and David Toop and the wondrous Bow Gamelan Ensemble have made important work on (and often in) the River in recent years. Is Bill Fontana's whistle buoy still 'answering' the tug hooters and sirens from David Toop's *Siren Space* some eight years on?

If there is a grand arc in play with *River Sounding*, then it is that of Bill Fontana's extraordinary body of work; his continuing exploration of both sound and the act of listening; and his playful deconstruction of both natural and architectural space. At a time when much that is celebrated as 'site specific' or 'immersive' has faded in the mind by the following day — then Bill should be seen as the real thing.

It is a privilege to have Bill Fontana's *River Sounding* at Somerset House as the first project in my tenure at Sound and Music.

John Kieffer

Creative Director, Sound and Music



London Bridge and the City from Somerset House
 Attributed to Francis Smith (fl.1763–80)

SOMERSET HOUSE: AWAKENING THE PALACE ON THE THAMES

Somerset House is an architectural masterpiece. Situated on the north bank of the river Thames on the site of a royal palace, it lies half-way between and within sight of Westminster Abbey and St Paul's Cathedral.

The original palace was built by the Duke of Somerset in the sixteenth century and then passed to the Crown, following his beheading in 1552. In the seventeenth century it became the residence of the mostly Catholic Stuart Queens, with a republican interlude during the Civil War when the building was used as headquarters by General Fairfax, for the 'Sale of the King's Goods' and for the lying in state of Oliver Cromwell.

By the mid eighteenth century the palace had fallen out of favour and was dilapidated. George III agreed with the government of the day to exchange it for Buckingham House. The buildings were demolished and replaced by a new Somerset House that could house several important government departments in one fit-for-purpose building—a rare example of fine town planning in the ragbag of London. Sir William Chambers was commissioned to design a building that should be 'erected in a plain manner rather with a view to convenience rather than ornament'. The work was to be executed with the 'strictest attention to the business of the Public offices, but likewise with an eye to the Ornament of the Metropolis and as a monument of the taste and elegance of His Majesty's reign'.

Construction of these new buildings started in 1785 and was completed in 1803. The learned societies (the Royal Academy, Royal Society and the Society of Antiquaries) which had been meeting in the old palace were given apartments in the north wing of the building. The largest government offices in Somerset House were originally designed for the Navy Board, the body responsible for administering and supplying the requirements of the Navy and the building reflects the fundamental importance of the Navy to a nation at the crest of its imperial power. Chambers were built out into the Thames so that the Navy barges could have direct access to the dockyards and warehouses down river. In addition to the Navy Board the building housed tax collecting offices which increased in size and importance throughout the nineteenth century. In 1836 the General Register Office, created to record every birth, marriage and death in the country, was housed at Somerset House.

In the early nineteenth century Somerset House had the appearance of a series of town houses in four wings ranged around a fine courtyard. A further wing was added to the west, facing onto the new road giving access to Waterloo Bridge. In 1864 the Victoria Embankment was constructed alongside the river to carry a new road below which were installed much needed sewers and a new railway line. Although this radical engineering project improved communications, transport and sanitation for the city, it cut Somerset House off from the river and compromised the waterfront design of the building.

By the twentieth century Somerset House had been entirely taken over by the Civil Service and the public was largely excluded. A spirited campaign was mounted in the 1970s to 'wake up the sleeping palace on the Thames', and by the new millennium much of Somerset House was accessible to Londoners and visitors to the capital. Somerset House Trust was established in 1997 to maintain and conserve the buildings and to run an arts and cultural centre. If the role of Somerset House in the nineteenth century was as a centre for the administration of a global empire, in the twenty first century this magnificent building, which looks like a palace but cleverly conceals the fact that it was built as offices, is assuming a new role in creating a cultural community. Artists and designers are also colonising the building; stimulating creativity on the site and bringing the building to life.

The re-invigorated Somerset House is a cultural destination where people can experience a broad range of artistic activity, engage with artists, designers and makers and contribute to a genuinely creative forum.

At Somerset House we encourage artists to respond to our site in some unique way, to explore the intersection between art, architecture, design and technology. Artists who have engaged with us in this venture have included Jenny Holzer, Langlands and Bell and Nick Knight. We were delighted when Bill Fontana accepted our invitation to create a work in response to Somerset House's historic relationship with the river Thames. We are particularly pleased to be working with Sound and Music to bring Bill's vision *River Sounding* into the building where it belongs.

Gwyn Miles

Director, Somerset House Trust



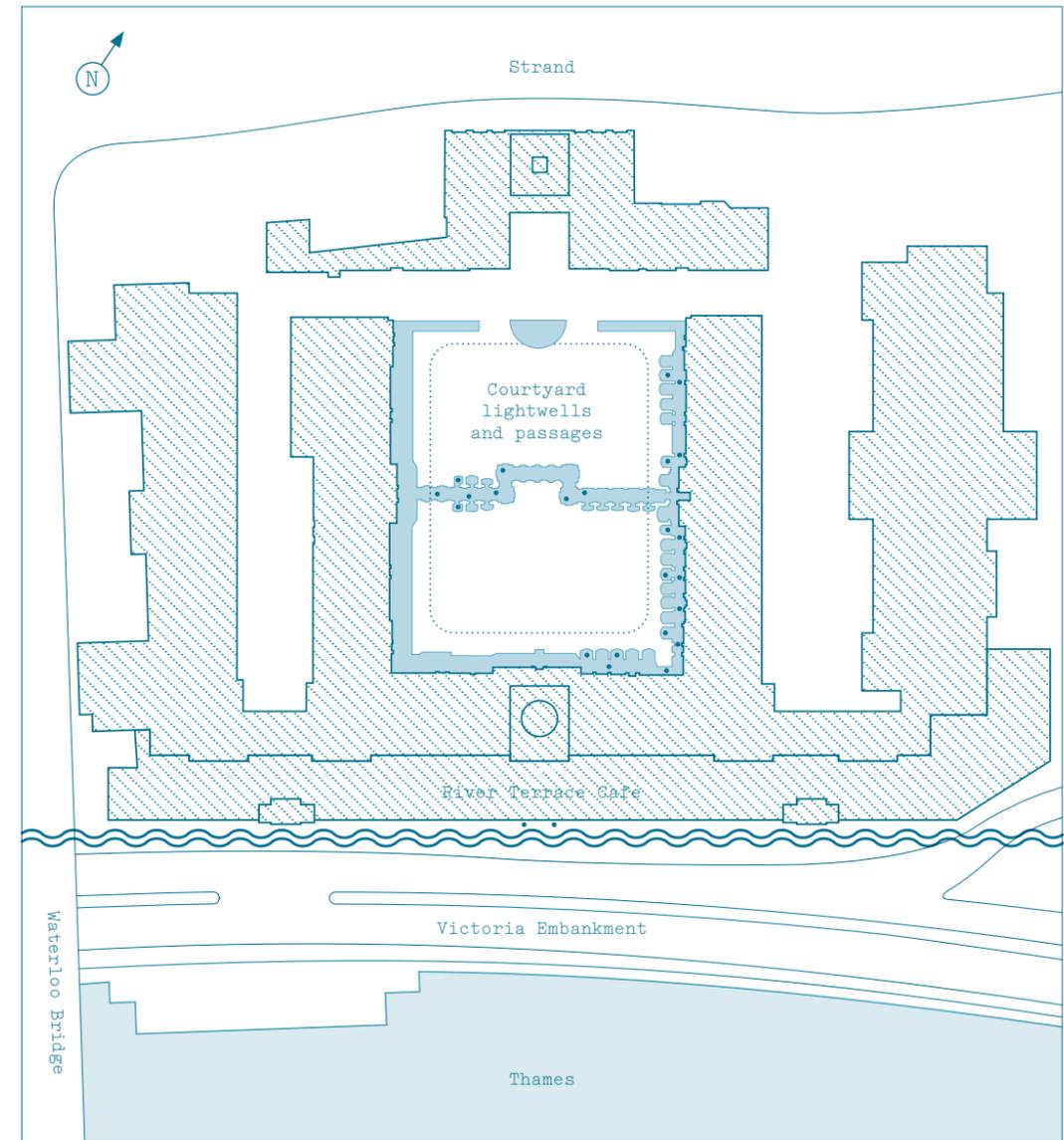
View of Somerset House on the Thames River
William Daniell, c.1802-1806

©Historical Picture Archive / CORBIS



Aerial view of Somerset House
2002

©English Heritage / Heritage-Images / Imagestate



~ indicates position of river in 1800; see p007

• indicates River Sounding installation

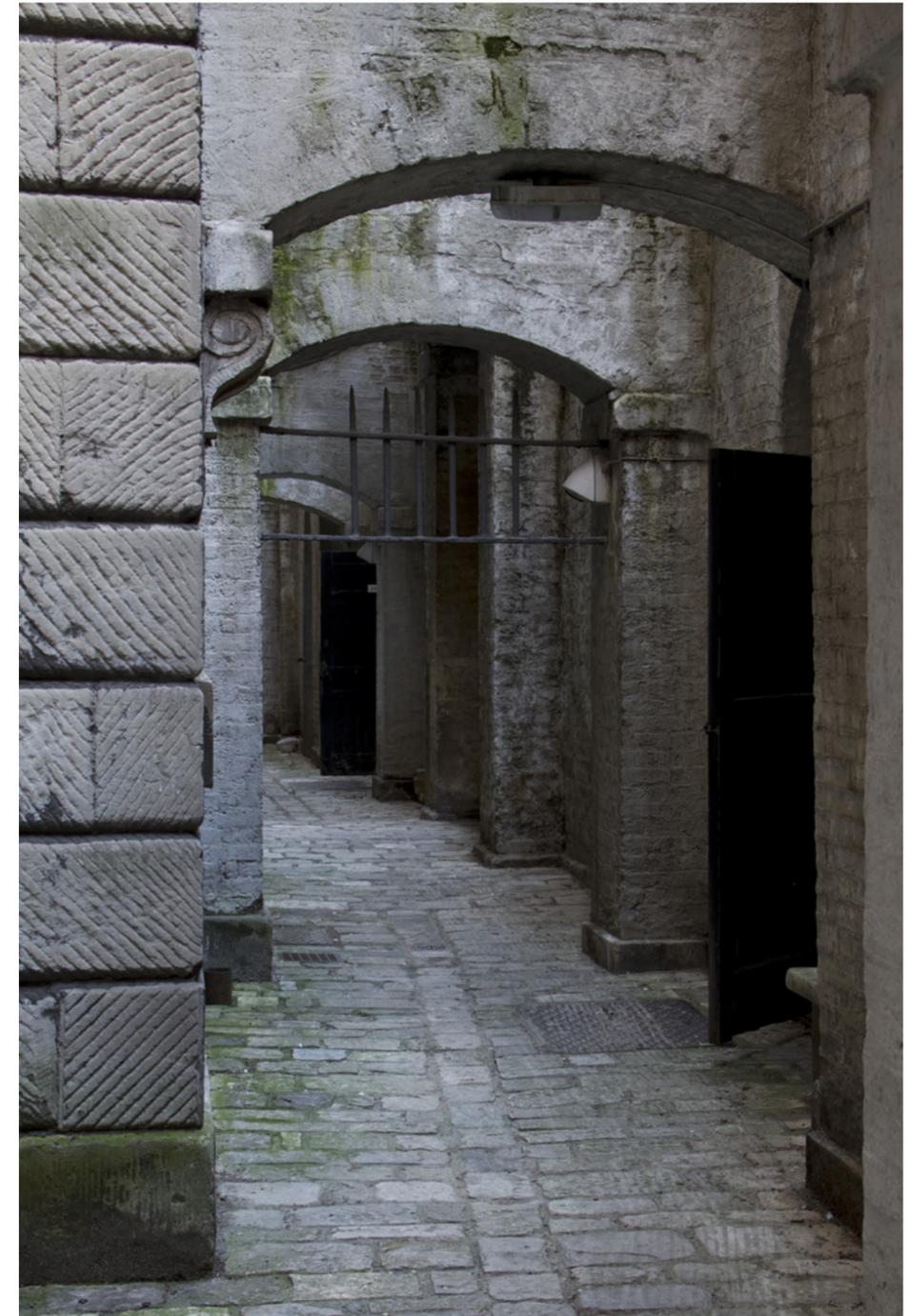
Plan of Somerset House showing installation siting



^ Somerset House lightwells
The installation of loud-
speakers and projections fill
the deserted lightwells that
surround the courtyard.
Image: MA

> Light reflections on river Thames
Image:BF





◀ Light reflections on river Thames
Image:BF

◀ Somerset House
The atmospheric and imposing alley-way like
lightwells, the setting for *River Sounding*
Image: MA

RIVER SOUNDING

The sounding of the river Thames is a subject that could take a lifetime to fully explore. This sound sculpture is a beginning; and while not encompassing all the sonic possibilities of this historic river, the work expresses a sense of what these possibilities are.

Before the creation of the Embankment in the nineteenth century, the river Thames flowed into and along Somerset House and ships could enter through the Great Arch. This sound sculpture will return the river Thames into this building by creating an acoustic journey, that becomes an architectural one, in which the river again enters under the Great Arch and flows into areas of Somerset House that are at the same level as the Thames — the lightwells.

River Sounding is a hybrid sound sculpture that combines a large-scale sonic mapping of the lightwells with a series of discrete video installations in various chambers off of these beautiful subterranean passages. A choreographic mix of sound elements I recorded from various locations, from the Thames Estuary to Teddington Lock, is projected into the upper and lower levels of the lightwells using a large-scale multi-channel loudspeaker system. These sound elements are flowing and moving through the lightwells and are audible on the edges of the plaza, mixing with the white noise of the fountains.

All sound that we hear is a description of the space it is sounding in* and in this case *River Sounding* will use the many voices of the Thames to sonically describe the lightwells, with echoes that evoke the presence of the river in both its historical and contemporary life.

In some of the coal holes, video projections with sound become focused extensions of the moving layers of the sonic choreography; visual meditations on the sounds that are moving through the lightwells. The projected images always gazing at a sounding situation that is also moving outside in the lightwells. These videos are portals to listening and are intended to make the onward journey a more engaged experience.

An acoustic landmark of Somerset House is the historic clock, which rings every quarter of an hour. A microphone is placed in the clock tower and transmits the live sound of the clock bell into the sonic choreography. This live sounding clock is treated with the same interactive musical extensions that I had explored with Big Ben in *Speeds of Time*. Every stroke of the bell is multiplied with time delays that softly cascade and echo with itself through the lightwells and courtyard of Somerset House.

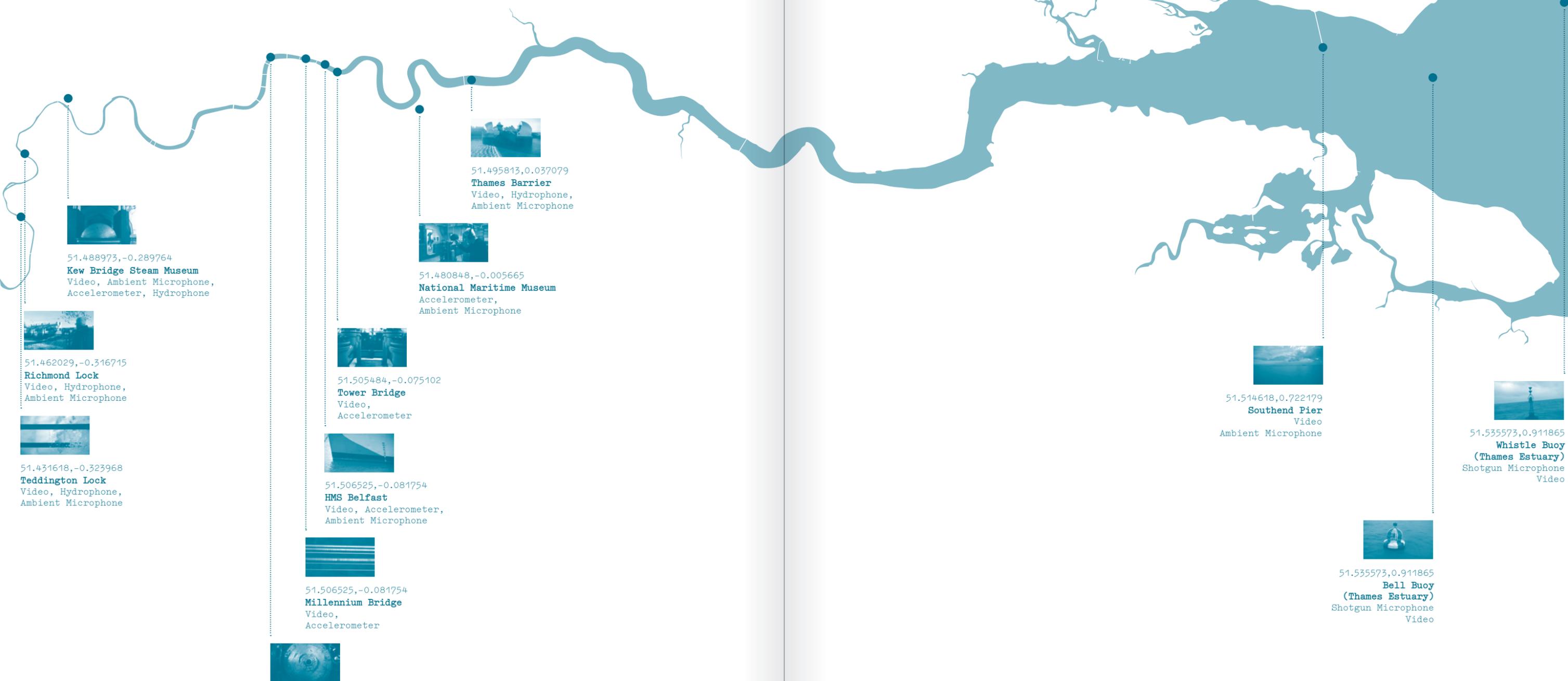
The musical and visual vocabulary of this project is the Thames, from Teddington Lock down to the Estuary. The Estuary offers up recordings of bell and whistle buoys recorded from the bow of a Trinity House patrol boat and from the end of the mile-long Southend Pier a fog-horn and signal bell. The voice of the moving river is heard by acoustic microphones and hydrophones placed under the water as the Thames moves fast, then slow, with different rhythms and textures. The underwater river has the filtered sounds of ship engines, which are high and harmonically pitched, sounding like ghosts as the river filters out the low frequencies of their engines. Structures along the river also react to the movement of water such as the violent energy of Teddington Lock and the mysterious harmonic echoes in the hull of the HMS Belfast recorded with accelerometers. Two famous bridges, Tower Bridge and the Millennium Bridge, are both aurally and visually stunning. Accelerometers on the roadway of Tower Bridge listen to the percussive rhythms of traffic while a camera gazes at parts of the bridge, while accelerometers on Millennium Bridge pick up harmonic oscillations from the wind as a camera gazes at the harp like cables on the walkway. Historic steam turbines in Tower Bridge and at the Kew Steam Museum produce amazing mechanical rhythms and textures while a camera gazes at the repetitive mechanical movements of these machines.

Historic bells from HMS Belfast and from the National Maritime museum will sometimes ring in the lightwells as will some historic clocks from the National Maritime Museum's collection.

It is my intention in *River Sounding* to create an immersive journey through the lightwells that creates many different experiences of place, time, memory and the relationship of the visual to the aural.

Bill Fontana

*If you step into an anechoic chamber, a space created to have no sound reflections and is therefore a silent room, and make the loudest sound you can, you discover that without sound reflections, it is almost nothing.



51.488973,-0.289764
Kew Bridge Steam Museum
 Video, Ambient Microphone,
 Accelerometer, Hydrophone



51.462029,-0.316715
Richmond Lock
 Video, Hydrophone,
 Ambient Microphone



51.431618,-0.323968
Teddington Lock
 Video, Hydrophone,
 Ambient Microphone



51.495813,0.037079
Thames Barrier
 Video, Hydrophone,
 Ambient Microphone



51.480848,-0.005665
National Maritime Museum
 Accelerometer,
 Ambient Microphone



51.505484,-0.075102
Tower Bridge
 Video,
 Accelerometer



51.506525,-0.081754
HMS Belfast
 Video, Accelerometer,
 Ambient Microphone



51.506525,-0.081754
Millennium Bridge
 Video,
 Accelerometer



51.505484,-0.075102
Somerset House Clock
 Live Feed
 (Ambient Microphone)



51.514618,0.722179
Southend Pier
 Video
 Ambient Microphone



51.535573,0.911865
**Whistle Buoy
 (Thames Estuary)**
 Shotgun Microphone
 Video



51.535573,0.911865
**Bell Buoy
 (Thames Estuary)**
 Shotgun Microphone
 Video

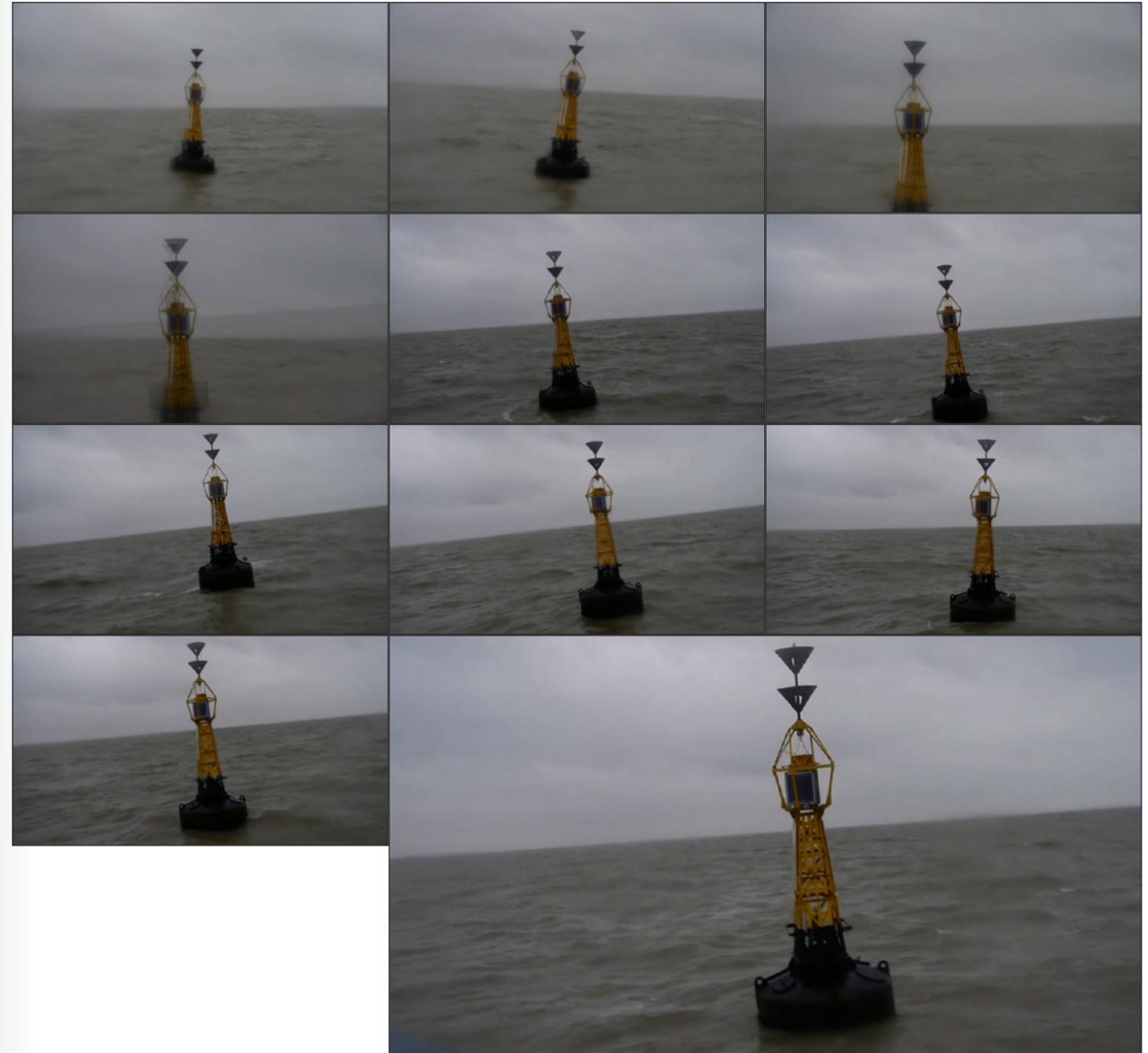


Image sequences from
Thames Estuary Whistle Buoy Video Series, HD Video with Sound
Image: BP



Image sequences from
 Thames Estuary Bell Buoy Video Series HD Video with Sound
 Image: BF



BILL FONTANA: SOUND SCULPTOR

There are times in our lives when things just fit. When the chance encounter of influence and circumstance strike a chord of clarity that although new to us is completely recognisable. Picasso famously said, 'I do not seek. I find.' And when we find such moments of clarity they can moor us to an aesthetic purpose that determines every creative decision we make from that point on. For artists, such moments are revelations. Like being taught how to see or how to listen, they become elemental to our being, like water.

For American artist Bill Fontana, such a moment came at a formative time in his artistic career. As a graduate of the Cleveland Institute of Music, Fontana moved to New York City in the late 1960s to study at the New School for Social Research under the influential artist and composer John Cage. To Cage, composition was a living and sonorous experience; so that, for example, the sound and movements of inner city traffic are a streaming and continuous composition structured only through space and the limits of our perception.¹

By the time Fontana enrolled in Cage's 'Experimental Music Composition' class, many of Cage's signature pieces such as *4'33"* (1952) and works for prepared pianos (beginning in 1940) had been widely received. In choosing to study under Cage, Fontana was deliberately inserting himself into a lineage of young composers, writers, and artists such as Dick Higgins, Allan Kaprow, and Jackson Mac Low who were at the forefront of the New York avant-garde.

It was with this Cageian appreciation of sound that Fontana first encountered Marcel Duchamp's sheaf of concepts entitled *The Green Box* at *The Machine as seen at the end of the Mechanical Age*, guest curated by Pontus Hultén for the Museum of Modern Art in 1968-69. Hultén, who was once described by Niki de Saint Phalle as having 'the soul of an artist'² was one of the most innovative and visionary curators working in Europe (and occasionally the United States where he helped to instigate the Experiments in Art and Technology or E.A.T. evenings at which Cage performed his *Variations VII*). Following the example of Alexander Dorner's (1893-1957) belief that museums should aspire to *Kraftwerke* – an institutional phenomenon capable of spontaneous change and 'going beyond art'.³ Hultén curated shows that were a fluid mixture of laboratory, studio, workshop, and theatre.⁴ Integral to this approach was the prevalence of artists' documentation within the exhibition. The literal and previously considered secondary record of ideas as they develop into artworks.

Witnessing *The Machine as seen at the end of the Mechanical Age* prompted a sea change for Fontana on a number of accounts. Firstly, the exhibition catalogue's foreword, as written by Hultén argued for a critical and creative embrace of the technological devices Fontana would come to rely on throughout his career. Hultén wrote,

*'Technology today is undergoing a critical transition. We are surrounded by the outward manifestations of the culmination of the mechanical age. Yet, at the same time, the mechanical machine-which can most easily be defined as an imitation of our muscles-is losing its dominating position among the tools of mankind; while electronic and chemical devices-which imitate the processes of the brain and the nervous system-are becoming increasingly important.'*⁵

Fontana, as evidenced in the production of Somerset House's *River Soundings* and numerous compositions throughout his oeuvre often navigates and reconciles this nuanced relationship as described by Hultén between the working remains of heavy industry and the more delicate, sensitive devices that convey Fontana's work.⁶

The Machine as seen at the end of the Mechanical Age also signalled for Fontana the potentiality for a lineage that connected his own developing aesthetic concerns to the authored canon of art history. For example, this exhibition was the first to show a video cassette recording courtesy of the Korean Fluxus artist Nam June Paik and also included a number of alumni from Cage's class in experimental composition. Drawing from a range of historic and sociological references such as Buckminster Fuller's *Dymaxion Car* and Lumière Brothers films, *The Machine as seen at the end of the Mechanical Age* provided Fontana an historic foundation from which to further develop his ideas of creating artworks that were compositions (composites) of sound and sculpture.

Central to Fontana amongst the exhibition's influential works was Hultén's inclusion of Marcel Duchamp's *The Green Box* (1934). This collection of notes, photographs and sketches was made to accompany Duchamp's 'incompleted' *The Bride Stripped Bare by Her Bachelors, Even (The Large Glass)* (1915-1923). And in keeping with Hultén's respect for what other curators might have sidelined as ephemera – he exhibited many of the notes and images from *The Green Box* as Duchamp had expressly intended. 'I didn't have the idea of a box as much as just notes. I thought I could collect, in an album like the Saint-Etienne catalogue [a department store circular], some calculations, some reflexions, without relating them.'⁷ And this was how Fontana perused Duchamp's ideas, as one might select from a mail order catalogue. It was in this spirit of browsing that, by chance, Fontana came across a written note included in *The Green Box*, which would come to perennially shape his practice.

*'Musical sculpture. Sounds lasting and leaving from different places and forming a sounding sculpture which lasts.'*⁸

Embedded within Duchamp's definition of 'musical sculpture' are a number of key elements that when combined with Cage's consideration of music as having no beginning or end (like water), inform recurring motifs within Fontana's artistic methodology.

Many of Fontana's compositions are made from sounds found in different places, collected like field recordings, or in a Duchampian sense as ready-mades. When heard together these sounds build to form a musical structure and when heard separately are ambient noise. In *River Soundings* these individual noises are taken from various points along the Thames including sites at which the course of the river is controlled by locks or crossed by bridges. Fontana describes his methodology of collecting and context as follows:

'Influenced by Duchamp's strategy of the found object, I began to realize that the relocation of an ambient sound source within a new context would alter radically the acoustic meaning of the ambient sound source. I conceived such relocations in sculptural terms because ambient sounds are sculptural in the way they belong to a particular place [...] In both my field recording and sound sculpture, sounds are not isolated from their contexts; in relocating sounds, I have been concerned with the contexts in which the sounds are placed and with the sculptural/spatial qualities of the sound source. For me, the richness and beauty of ambient sounds come from their interaction with a living situation.'^{9,10}

Fontana's recurring use of ambient noise (often resulting from the confluence of the mechanical with the natural) as the fundamental compositional element within his work echoes the rallying cry of the early twentieth century painter and composer Luigi Russolo. Russolo, an Italian Futurist, in his landmark manifesto *The Art of Noises* written in 1913 (the same year Duchamp made his first ready-made *Bicycle Wheel*) called for a widening aesthetic appreciation of found mechanical noise to reflect the modernity of life in art. Russolo's historic text outlined a new consideration of noise that embraced the clamour of the Industrial Revolution and heralded the cacophony of the First World War. In Russolo's *The Art of Noises*, which was written as a letter to fellow Futurist Francesco Balilla Pratella, he finished his manifesto with eight conclusions, the last being a call to arms for future generations to take up the purpose of integrated noise into aesthetics.

Russolo wrote:

*'We therefore invite young musicians of talent to conduct a sustained observation of all noises, in order to understand the various rhythms of which they are composed, their principal and secondary tones [...] This will afford not only an understanding, but also a taste and passion for noises. After being conquered by Futurist eyes our multiplied sensibilities will at last hear with Futurist ears. In this way the motors and machines of our industrial cities will one day be consciously attuned, so that every factory will be transformed into an intoxicating orchestra of noises.'*¹¹

Fontana can be seen as continuing the work of the Futurists. Many of the noises used to comprise *River Soundings* were similar to sounds Russolo considered in his early 20th century composition *Corale*. For example, the fountain like bursts of white noise in this arrangement echo those created by the Thames Teddington Dock, completed in 1904 and recorded by Fontana in 2009 for inclusion in *River Sounding*.

*Water, like sound, is everywhere differently.*¹²

Fontana brings the Thames back to Somerset House, but importantly this sonorous work does not 'play' the building as an instrument, but rather the light wells and coal holes cradle Fontana's Thames like a vessel. Going below the surface of Somerset House, underneath the white noise of the fountain and into the light bathed subterranean channels one becomes immersed in Fontana's visceral composition of the Thames. We are no longer separate from this water. We are water.

Robert Blackson

Curator of Public Programmes, Nottingham Contemporary

- 1 John Cage, *Compositeur*, New York. 2-4-1991, <http://www.youtube.com/watch?v=pcHnL7aS64Y> (accessed February 2010).
- 2 Hans Ulrich Obrist, 'Pontus Hultén', *A Brief History of Curating* (Zurich: JRP, Ringer, 2008), p.32.
- 3 Alexander Dorner etc... 'everthing is inbetween' <http://www.thing.net/eyebeam/msg00373.html> (accessed February 2010).
- 4 Hans Ulrich Obrist, *A Brief History of Curating*, p.45.
- 5 K.G. Pontus Hultén, 'Foreword,' *The Machine as seen at the end of the Mechanical Age* (New York: Museum of Modern Art, 1968).
- 6 It could be considered that perhaps unsurprisingly the premise for the duality implicit within this exhibition, which has been so influential to Fontana came from a Swiss understanding and it remains in Europe that the majority of Fontana's commissions take place.
- 7 TJ Demos, *The Exiles of Marcel Duchamp* (London: MIT Press, 2007), p.36.
- 8 Conversation with Bill Fontana, February 2010.
- 9 Bill Fontana, 'The Relocation of Ambient Sound: Urban Sound Sculpture' <http://www.resoundings.org/Pages/Urban%20Sound%20Sculpture.html> (accessed February 2010).
- 10 Crucially, this relational interest between sound and site separates Fontana from Cage's embrace of music as non-meaning in the Kantian sense and Duchamp's celebration of the 'retinal' in visual art. By introducing history and narratives of place into his works, Fontana is as much a bricoleur of sounds as he is of their associative meanings.
- 11 Luigi Russolo, *The Art of Noises*, 1913 <http://www.unknown.nu/futurism/noises.html> (accessed February 2010).
- 12 This closing thought is indebted to Roni Horn's *Saying Water* (1999; Art Institute of Chicago) http://ubu.artmob.ca/sound/horn_roni/Horn-Roni_Saying-Water_1999.mp3 (accessed February 2010).

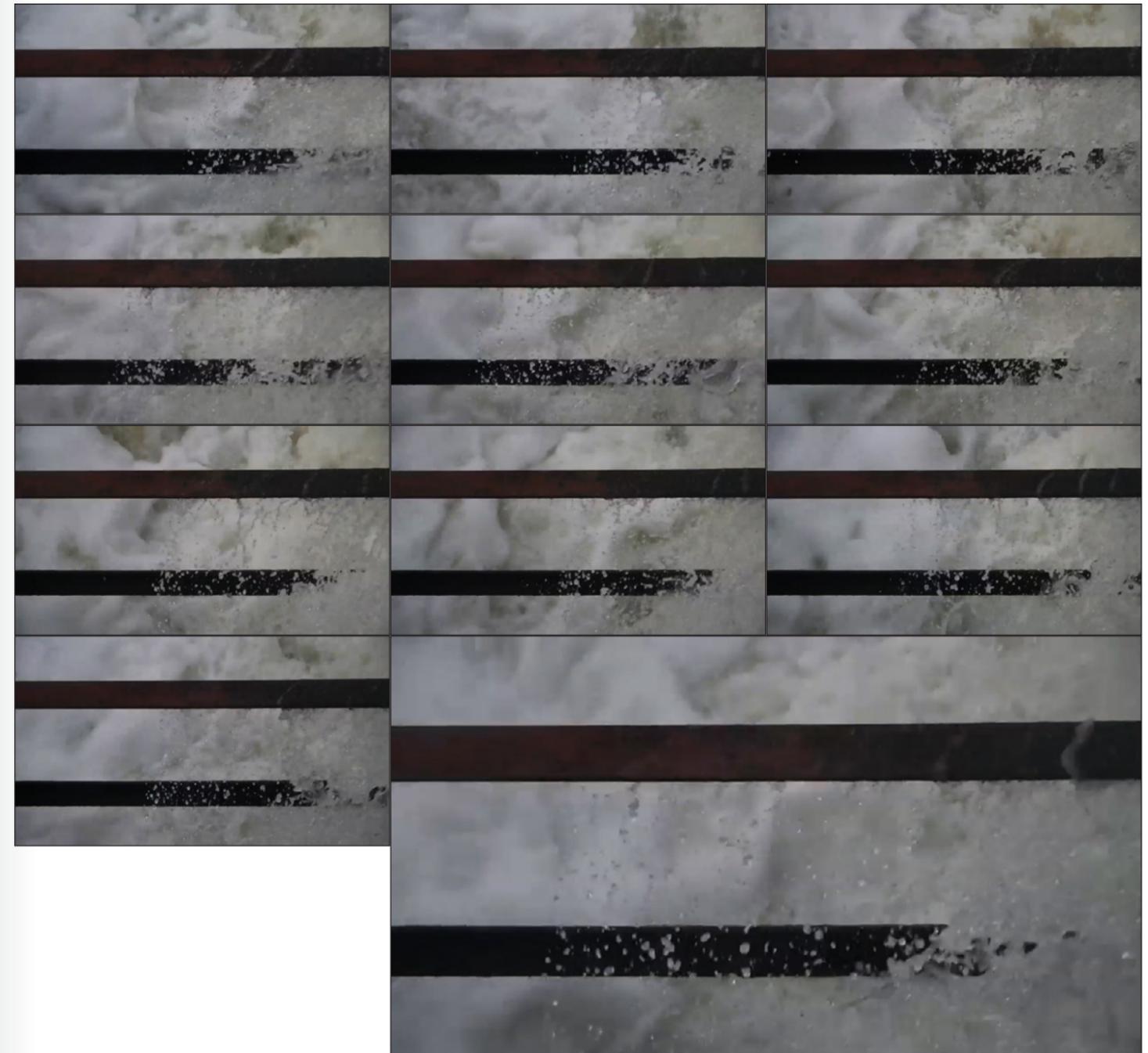
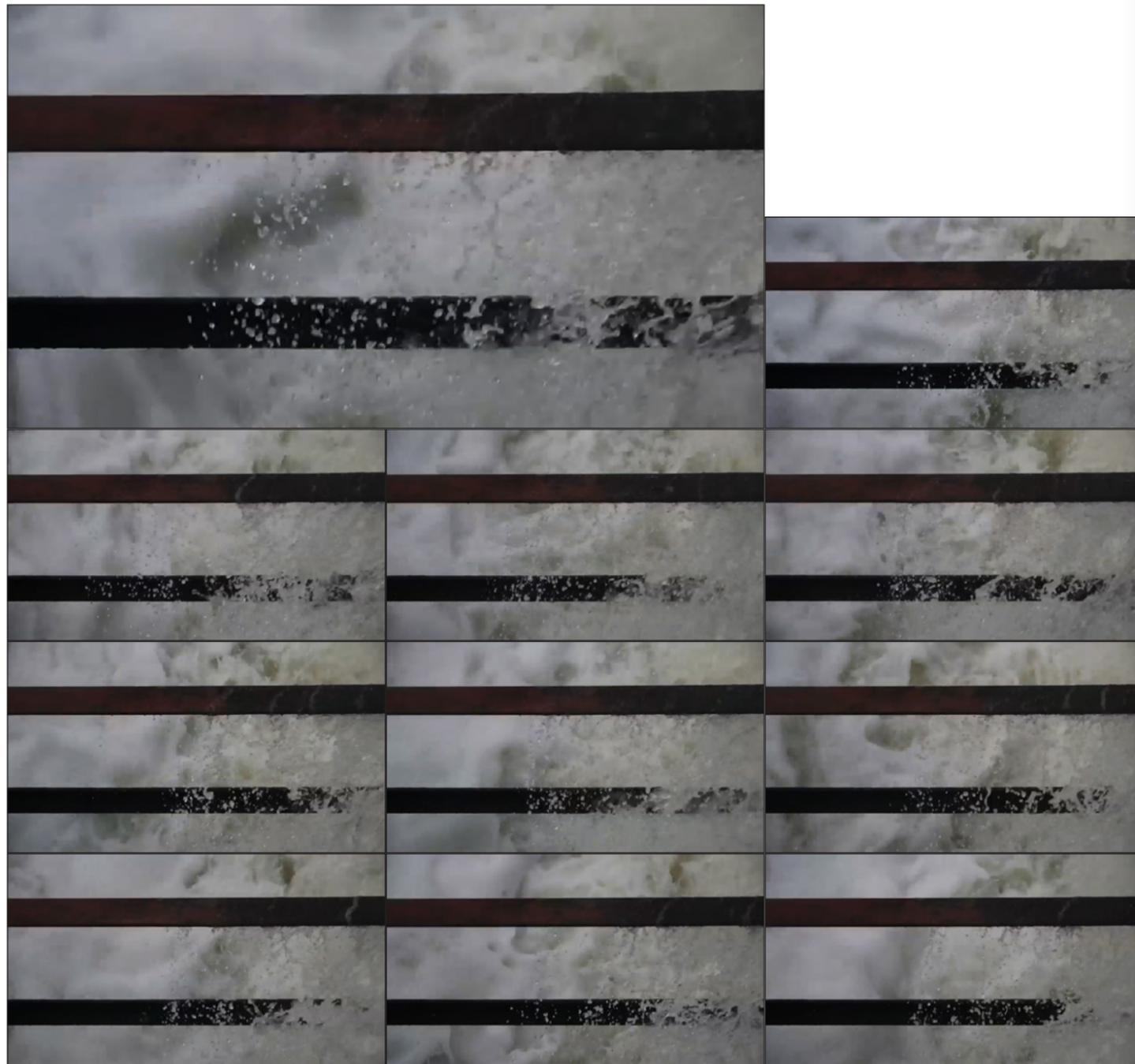


Image sequences from
Teddington Lock Video Series, HD Video with Sound
Image: BP

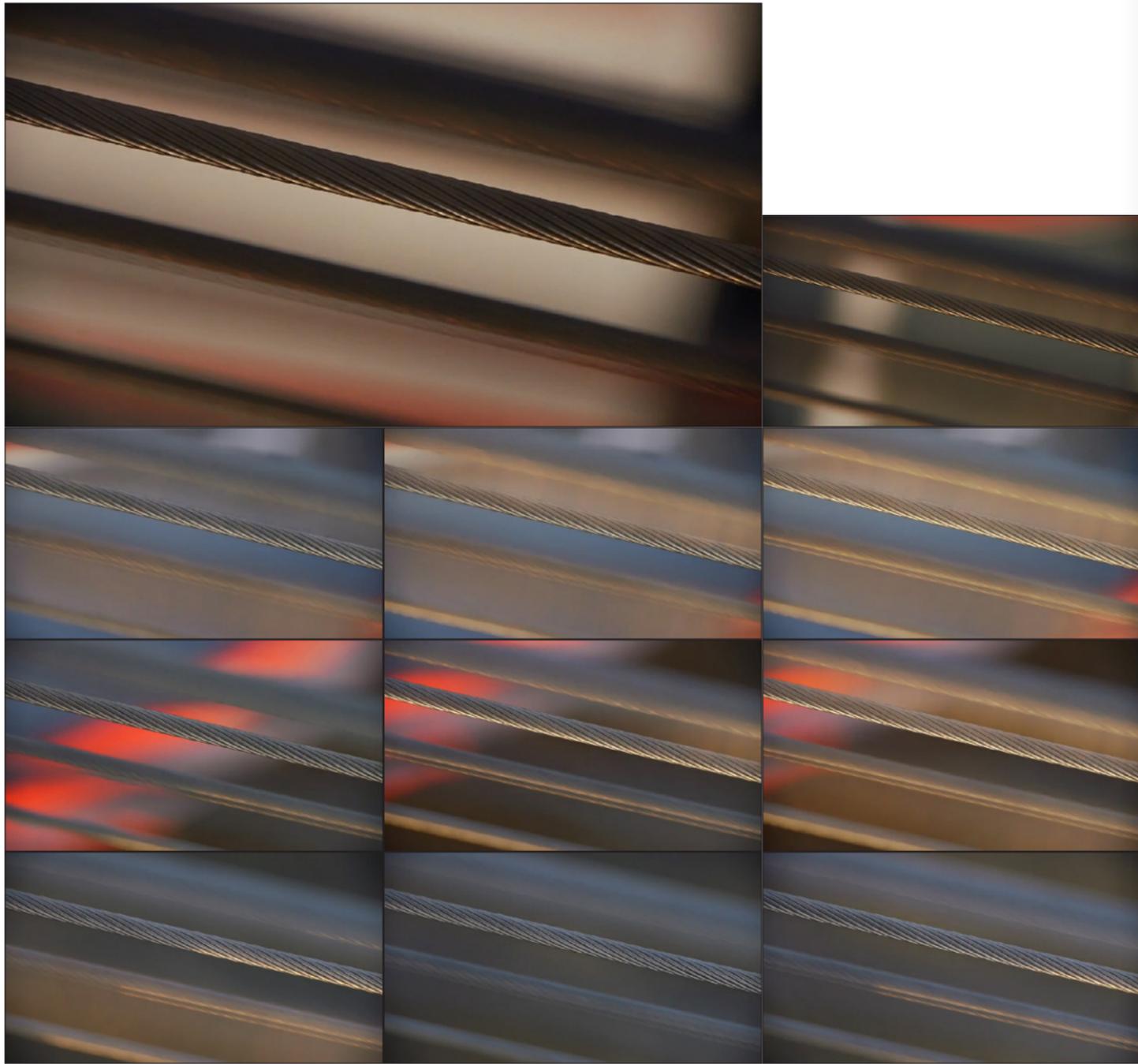


Image sequences from
Harmonic Bridge Cable Studies, HD Video with Sound
Image: BP

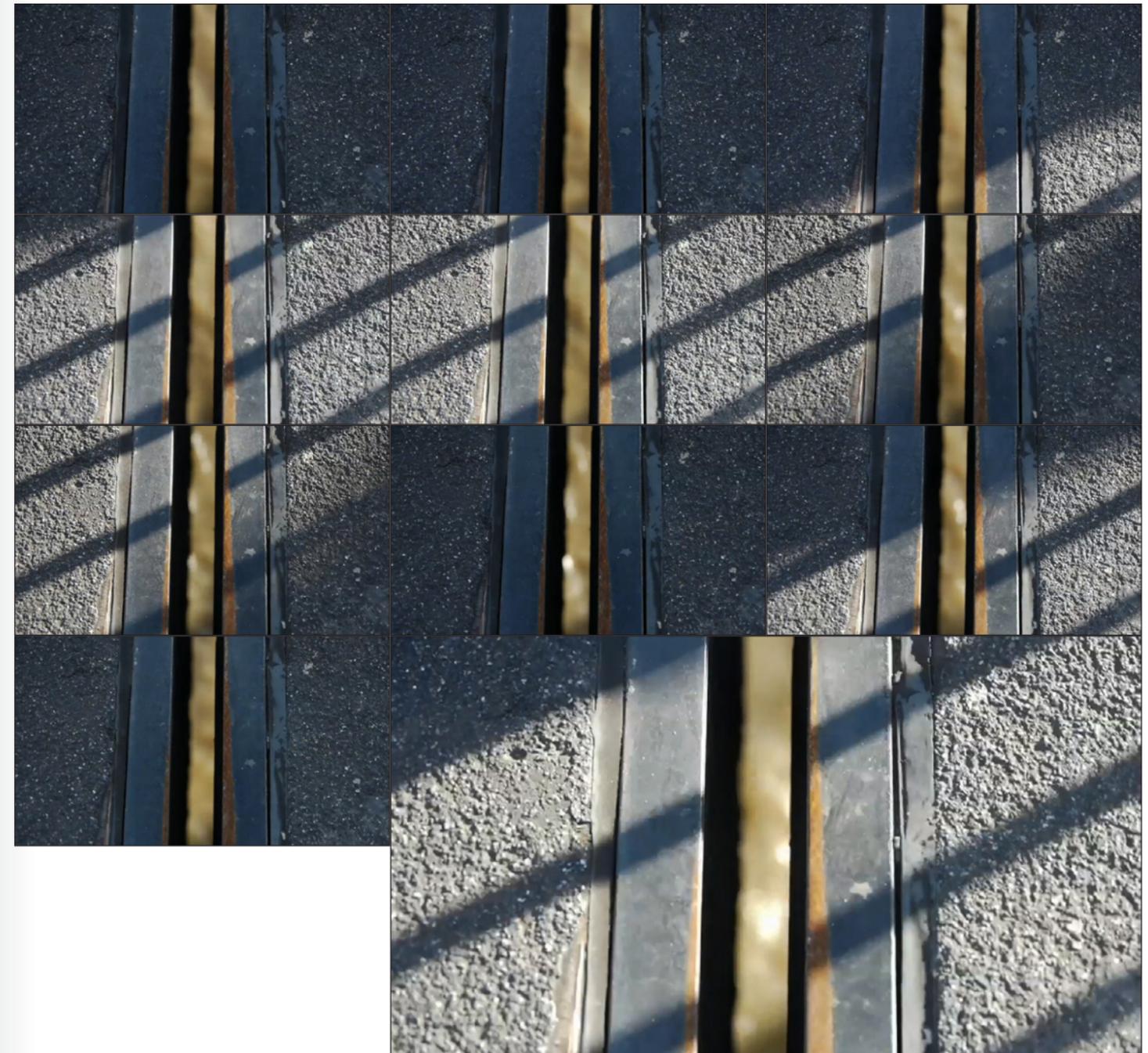


Image sequences from
Tower Bridge Road Gap, HD Video with Sound
Image: BP

CAPTURING THE RIVER

The precise starting point of Bill Fontana's *River Sounding* is probably as difficult to identify as the source of the Thames itself. One could refer back to Bill Fontana's past works in London such as his *Harmonic Bridge* (2006) project amplifying the Millennium Bridge, his Big Ben piece *Speeds Of Time* (2004) or *Wave Memories* installed in Trafalgar Square (1999). Indeed, Bill has become such a frequent visitor to London in recent years that he is by now on first name terms with all of the staff in his hotel of choice in Covent Garden.

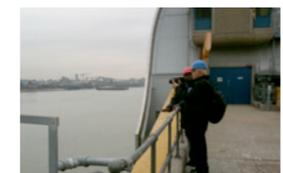


Millenium Briier
View towards Tate Modern.
Image: BF

Alternatively, one could look to Somerset House Trust's desire to further open up its spaces to the public by presenting and commissioning work that places the building firmly at the centre of their activity. The Trust's strategy of positing this listed site as a location to be engaged with by both artists and the public invites redefinition and a reimagining of the space; using architecture to draw parallels with other practices, such as the relationship between architecture and fashion, or architecture and literature. In 2008, Somerset House Trust invited Bill Fontana to propose a soundwork in response to the building. His response was *River Sounding*.

Sound and Music's tenancy at Somerset House began in April 2009. Our desire to work with and in our home building, combined with our mission to present leading sound based artwork to the widest possible audience, drew us naturally into the project and led to my production work with Bill. This work began in earnest in November 2009 when we set out to collect the sound and image material for the realisation of the project. This was the point when *River Sounding* really began to rise from the page.

Working alongside Bill during these expeditions gave me a unique insight into his working practices. I found him fascinated by the people and places that we visited: the story of our Ugandan host at the Thames Barrier, the journeys of the Navy engineer



Thames Barrier
Filming and recording
before entering
the service tunnel.
Image: RW

who aided our descent into the bowels of HMS Belfast and the complexities of the buoy and lighthouse management carried out by the staff of Trinity House were all revealed by Bill's questions. He seemed as excited by these discoveries as by the stunning recordings that were captured on his equipment — sonic discoveries that he was keen to share with myself and our hosts. This was a process whereby the river and those who work on it or beside it started to flow and merge into the work. These stories of people and place are the background fabric of Bill Fontana's documentary approach to field recording. Although their traces might not be directly perceptible in the finished work, I am in no doubt that they form a foundational context to the composition.



Thames Barrier
Recording in the
service tunnel.
Image: RW



**Accelerometer recording
on HMS Belfast**
Like contact microphones,
accelerometers are sensitive
to the vibrations within
objects. In *River Sounding*
they have been used to listen
in to and record the sounds
hidden within architectural
structures. Microphones
measure pressure or velocity
(rate of change of pressure
in respect to time), acceler-
ometers measure acceleration
(rate of change of velocity
with respect to time).
Image: RW

Bill Fontana is primarily known as an artist who works with sound. Increasingly, however, his works have come to use still images and video with *River Sounding* continuing this development. During our site visits I noticed many parallels between his approach to both sound and image harvesting. Expansive views of, for example, Southend Pier from the shore are comparable to his deployment of ambient microphones placed to pick up every detail of a sonic environment. Such wide-angle perspectives are contrasted with observational details such as a close-up shot of the Thames, as viewed through the slim crack between the arms of Tower Bridge. These intimate views can be compared to his use of accelerometers to reveal the hidden details of sound within structures. Both sonic and visual material tends to be collected, when possible, in blocks of at least ten minutes, a duration that leaves enough time for the artist's hand to draw back from the canvas and for the sounds and images to breathe.



Teddington Lock
Image: RW



National Maritime Museum
Recording a Harrison
Chronometer with
a surround microphone
Image: RW

Though the moment of recording in front of the microphone or camera lens is affected by chance, the choice of location for collecting material was carefully planned. A range of sites, from the locks of Richmond and Teddington in the West, to Southend and the estuary beyond in the East, were identified prior to production. Locations such as the Kew Bridge Steam Museum and National Maritime Museum were chosen for their historical connection to the river as well as for their potential for yielding interesting materials. At the National Maritime Museum, Bill used an accelerometer to record the inner workings of a selection of John Harrison's chronometers — timepieces famously



^^ Southend Pier
Image: BF

^ Tower Bridge
Looking at the Thames through the gap in the road.
Image: BF



Watergate at Teddington Lock
Image:BF

used to solve the longitude problem and cement Britain as a major naval power. A vibrant inner sound world of rhythmic clicks and whirrs was revealed in amazing detail. From the tiny sounds of these intricate machines, we moved up-river to witness the industrial muscle of the huge Grand Junction 90 inch engine at the Kew Bridge Steam Museum. Here we were able to capture the sound of tons of roaring water being propelled up and around us by the world's largest working beam engine.

On a cold November afternoon we stepped into the mouth of the Thames, at the deserted end of Southend's mile long pier. We collected foghorn sounds, recorded the waters lapping against the wooden structure, shot video of the tankers passing across our view of the Isle of Grain and then caught the last pier train back to the mainland. By now we had penetrated the river's surface with hydrophones, eavesdropped on the sounds leaking into its surrounding structures with accelerometers, and listened through ambient surround sound microphones to the soundscapes accompanying the river's flow. Beyond this point was the North Sea and the lonely sounds of the buoys that Bill had been enthusing about since our correspondence began.

This final mission would have to wait. In the meantime, Bill was working through the huge amount of material he had gathered during our excursions. Sounds and images would arrive via the Internet from his California studio; combinations of material, palimpsests of observations and perspectives. These sketches revealed a hands-on working method: a compositional approach to video and sound that played freely with sound heard and sound thrown into relief though its absence. One combination presented a static view of Tower Bridge, heavy traffic, tourists and hard hats bobbing by. Its soundtrack, recorded with an accelerometer placed on the bridge structure, captured only the vibration of wheels on tarmac with pinhole accuracy. This aural equivalent of an extreme close-up in high-resolution photography was strangely at odds with the mute cacophony of the scene.



Kew Bridge Steam Museum
Image:RW



Kew Bridge Steam Museum
Making an accelerometer
recording of the Grand
Junction 90" Engine.
Image:RW



Southend Pier
Bill Fontana recording
with a surround microphone
from Southend Pier Train.
Image:RW



Accelerometer recording
on Tower Bridge
Image:RW



Tower Bridge Museum
Image:RW



Harwich
The T.H.V. *Alert* waiting
for us in the harbour.
Image:RW



Thames Estuary
Leaving Harwich
on the T.H.V. *Alert*.
Image:RW



Recording a whistle buoy
with a Shotgun micro-
phone from the port side
of T.H.V. *Alert*.
Image:RW

In February 2010, Bill Fontana, sound engineer Scott George and I at last headed for Harwich. From here Trinity House had arranged for us to travel out into the North Sea, the final destination of the Thames, to find and record whistle and bell buoys. On a foggy day we travelled out on a maintenance vessel and after some hours we came across these beautiful and lonely sounds. Here, at the most remote location visited, the calling and rhythm of the buoys rose and fell with the waves. The rich breathy quality of their tones was made more poignant by their isolation and continuous unanswered beckoning into the grey void.

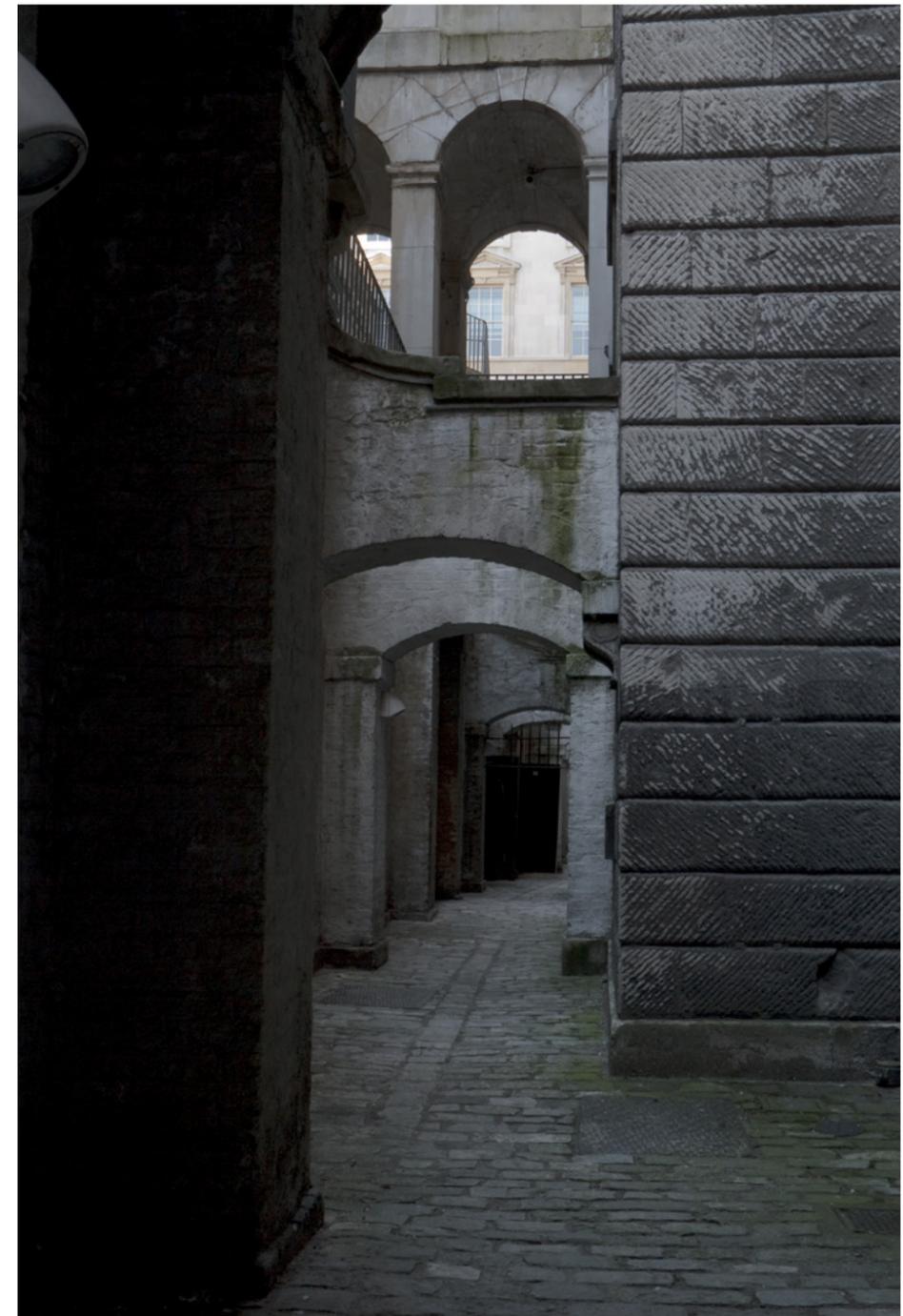
All of this material leads back to Somerset House and to the lightwells, to the reunification of river and building. Joseph Bazalgette's Victoria Embankment of the 1860s drove a concrete wedge between the Thames and a building specifically designed to afford direct access to the river. Somerset House was the great loser in Bazalgette's visionary scheme that channelled the stink of London away from the city. Prior to this grand municipal scheme, the Great Arch on the river-facing façade of the building provided a landing site for the King's Bargemaster. The eighteenth century equivalent of blacked-out Limousines would ferry the officers of the Navy Board back and forth to the warehouses and dockyards of Deptford and Greenwich. The brief for the construction of Somerset House, as appointed to Sir William Chambers in 1775, was to create a grand civic building that would inspire national pride, a suitably prestigious building for a Navy almost constantly at war. The lightwells were a result of this scheme, with Chambers creating a building that would appear as only three stories high by concealing two levels below ground and one in the roof. Originally reserved for administrators of the lower ranks, the twilight rooms on the lower floors were not without their detractors. Self-styled architectural critic Anthony Pasquin made an unflattering reference to conditions in these basement offices when he wrote:



Somerset House during the construction of the Thames embankment
Photo by the London Stereoscopic Company circa 1865

*'In these damp, black and comfortless recesses,
the clerks of the nation grope about like moles,
immersed in Tartarean gloom, where they stamp,
sign, examine, indite, doze, and swear.'*

Anthony Pasquin



Somerset House

The subterranean passageways that surround the fountains and courtyard

Image: MA



Southend Pier Bell
Image:BF

Through its staging *River Sounding* draws the visitor through both levels of the lightwells and into the Deadhouse, a subterranean passage linking the two wings of the building, so called because of the seventeenth century gravestones that line its walls. In this non-linear journey, visitors are able to freely explore these usually inaccessible areas of the building and to create their own narrative paths through the work. The video sections of the piece are presented in the coal holes of the lower level, creating isolated and focused spaces in contrast to the flowing sound composition in the passages. A live radio link with the bell in the West Wing clock tower is used to draw its chiming down into the flow of sound. This live soundmark joins with the historic ringing of ship's bells recorded on HMS Belfast, at the National Maritime Museum and at Southend Pier. These are joined by the lonely voice of the bell buoy out in the furthest reaches of the Thames Estuary. As a coda to the piece, the sounds of the river are projected up towards the listener in the Great Arch. This denouement functions as an act of acoustic archaeology, recreating a sound environment lost to the building in its orphaning from the river.

River Sounding is an artwork composed for Somerset House by Bill Fontana. Material has been collected, edited and combined and technology installed on site in preparation for the artist's engagement with the space. Fontana layers sound into the lightwells responding with his ear to the architecture. Like the Thames, sound is a fluid that spills around corners, down walls and wraps around objects. The *River Sounding* visitor navigates acoustic currents, eddies and undertows. The building both absorbs and sends sound rippling outward and upward to combine with the ambience of the courtyard. One possible journey amongst many is from the dark riverbed of the Deadhouse, rising, as through water, to the broad open space above.

River Sounding invites us to imagine the Thames as an unfolding cantus underpinning the changing soundscapes of its banks. During the river's long seaward journey it accompanies the rural idylls of its upper reaches, the sleepless roar of the City and the industrial wastelands and wild places of its estuary. Here is an opportunity for reflection on the sounds within, above and surrounding this cold artery, sounds travelling now and ever through air, stone, metal and water.

Richard Whitelaw

Producer, Sound and Music



Somerset House
Detail of a gravestone embedded in the wall of the Deadhouse below the courtyard.
Image:JK



Somerset House
The inner workings of the West Wing Clock Tower.
Image:BF



National Maritime Museum
Bill Fontana at the National Maritime Museum's offsite storage archive filming an 18th century ship's bell.
Image:BF



HMS Belfast
Ship's bell.
Image:BF



Southend Pier
View towards mainland from the end of the pier.
Image:BF



Underside of Tower Bridge
Image:BF



Speeds of Time
Sound sculpture, 2004

Courtesy Haunch of Venison & the artist Image:BF

BIOGRAPHY

Bill Fontana is internationally known for his pioneering experiments in sound. Fontana's work is interested in examining the nature of the acoustic environment and uses the physical environment as a visible source of musical information. Using eight channel recordings to render site specific 'sound sculptures', the artist says, 'my artistic mission [is] the transformation and deconstruction of the visual with the aural'. If art at the beginning of the twenty-first century is often about ways of seeing, Fontana asks if we have ways of hearing our environment as well.

Though trained as a composer, since 1976 Fontana's practice of sound installation has not employed electronic or instrumental aids (save for bells at times), but rather, focuses exclusively on the sculptural quality of ambient noise. Between 1974 and 1978, Fontana was privileged to have the opportunity to work for the Australian Broadcasting Corporation on a project which sought to understand the 'sound' of the country. The artist describes two experiences from this period as formative to his work. The first - the acoustic effect of a total eclipse of the sun in 1976 - confused and muted the natural environment. He states, 'All available species were singing at the same time during the minutes immediately preceding totality... When totality suddenly brought total darkness, there was a deep silence.' The audio effect of what is traditionally conceived of as a visual event was a revelation for the artist. 'This led me to not only become interested in the musicality and compositional wholeness of environmental sound, so that the act of listening to its compositional sound recording equalled music, but rather, that the visual space that was sounding equalled sculpture and architecture'. Resulting in a method that Fontana calls 'sculptural thinking', in the same year the artist completed a project at Kirribilli Wharf on the Sydney Harbour which involved the separate simultaneous recording of the percussion of the sea over eight holes in the floating concrete pier. The resulting eight channel 'sound sculpture' was installed in a gallery and played over eight speakers. 'The recording was seminal for my work because it was the first time that a conceptual analysis of a natural process resulted in a live recording that was as genuinely musical as music and because of the spatial complexity of eight channels answering each other from eight points in space, it also became genuinely sculptural', he says.

Often breaching vast distances and more often than not installed in urban environments, the artist's work seeks to explore the imaginary potential of the audio with his sound sculptures. Of the projects to which Fontana has applied such thinking is *Sound Island* (Paris, 1994). The piece was installed at the Arc de Triomphe and composed of 48 speakers concealed within the monument's façade which superimposed the sounds of the ocean at the beaches of Normandy onto this urban space. The result was both a technical and creative accomplishment. Fontana explains, 'The presence of the breaking and crashing waves gave the illusion that the cars were silent... The sound of the sea is a natural white sound, and has the psycho-acoustic ability to mask other sounds. Not by virtue of being louder, but because of the sheer harmonic complexity of the sea sound.' This overlay of the acoustic environment of one site upon another enacts, for the artist, a poetic deconstruction of the visual environment, as the evocative quality of sound conjures alternative visual imagery in the mind of the listener. Sounds evoke sights, for Fontana, and by this means, have the power to transform space, not just inhabit it.

Bill Fontana was born in Cleveland, Ohio and now lives and works in San Francisco. The artist graduated with a Bachelor of Arts from the New School for Social Research, New York in 1970 and from the Cleveland Institute of Music in 1967. Fontana has presented sound sculptures at the Venice Biennale, the Reina Sofia in Madrid, The Whitney Museum of American Art in New York, The Museum Ludwig in Cologne, and The San Francisco Museum of Art. In 2004, *Primal Soundings* - a permanent installation - was unveiled at Leeds City Art Gallery. Most recently, the artist has rendered a work for Haunch of Venison London, entitled *Speeds of Time* (2005), which on 18th March 2005 examined the acoustic inner works of the iconic Big Ben from 10am until 10pm, transferring the resulting sound to the gallery space. In 2006, Fontana also had the opportunity to create an installation for the Turbine Hall, Tate Modern, entitled *Harmonic Bridge* (2006), exploring the acoustic qualities of London's Millennium Bridge using accelerometers to measure the vibration within the structure due to weather and footsteps, raindrops and the passage of ships.

He has done major radio sound art projects for the BBC, the European Broadcast Union, the Australian Broadcasting Corporation. His exhibition *Silent Echoes* was in place at the Haunch of Venison, Burlington Gardens, throughout May 2009 and marked Fontana's first use of video in his work.

He was awarded the Prix Ars Electronica in Digital Music for *Speeds of Time* at the Ars Electronica Festival in 2009.

More detail on Fontana's work can be found on his website www.resoundings.org
Text courtesy of Haunch of Venison & the artist

Following spread
The inside of a whistle buoy at Trinity Wharf
Image: BF



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Initial project development by Bill Fontana with Jenny Waldman, Linda Bernhardt and Sara Ellen Williams

River Sounding Producer for Sound and Music: Richard Whitelaw

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Key to photography credits:

BF = Bill Fontana
 MA = modernactivity
 RW = Richard Whitelaw
 JK = Jeff Knowles





Sound and Music promotes fresh and challenging new music and sound through a range of live events, learning projects and digital content. Its focus is on growing the stature and appreciation of contemporary music, and its significant scale enables it to make a major impact on public perceptions.

Sound and Music launched in May 2009, as a result of the merger of the British Music Information Centre, Contemporary Music Network, Society for the Promotion of New Music and Sonic Arts Network. Building on the work and legacy of its founding organisations, it acts as an influential voice and support in building audiences for new music and sound in the UK and beyond.

River Sounding forms the launch event – SAM #1 – of Sound and Music’s new creative programme. This publication is the first in a series that will accompany key Sound and Music projects and explore ideas and contexts that feed into them.

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