Audience: artists, educators and community groups

Number of Participants: can vary

**Duration:** 12 years

Themes: activism, more than human (water, energy), place-based learning, social and

community practice

# Active Energy: Bringing Local Knowledge into The Public Realm

Loraine Leeson

Intelligent practice builds on the collective wisdom of people and organizations on the ground ... which is then rationalized in ways that make a difference globally. Nabeel Hamdi<sup>1</sup>

### **OVERVIEW**

"When electricity prices prevent older people from heating their homes, and the River Thames is just down the road, why aren't we using it to power our city?" A member of the Geezers, an East London senior men's group, posed this question in 2007, launching *Active Energy* a twelve-year project that finally concluded in 2020.

This question arose at the culmination of a research project by Queen Mary University of London, which had asked why the life experience of older people was failing to inform new developments in technology. A series of residencies managed by the arts group SPACE<sup>4</sup> invited artists to respond to this research, and led to my encounter with the Geezers. The group recollected experiments in tidal and wave power several decades previously, which they were surprised had scarcely been developed. Since then we have enlisted professional engineers, investigated how turbines might function on the Thames Barrier, developed designs in a university prototyping laboratory, tested a small-scale turbine in the Thames opposite the Houses of Parliament, and installed floating water wheels in the Lower Lea. Along the way we have run renewable energy workshops for a secondary school, produced a wind-driven lightwork for an AgeUK center, held exhibitions in the UK and the US, contributed to university research, presented at conferences, supported a seniors' group in Pittsburgh to initiate their own project, and provided inspiration for three new projects in India.

While the aim of my practice is to support social and environmental change, the tool for such change is art, and the content comes from those who know.

# **RATIONALE**

Active Energy commenced through an artist residency at the tail end of a university research project questioning why the life experience of older people was failing to inform new developments in technology, and developed over the years with a patchwork of funding and seized opportunities. Through the residency, I encountered the Geezers and asked what developments in technology they thought would be most beneficial for

<sup>1</sup> Hamdi, N. 2004, Small Change, Earthscan, London and Sterling, VA.

<sup>&</sup>lt;sup>2</sup> The question was raised by Ted Lewis at my initial meeting with the Geezers in 2007 at an AgeUK center in Bow, East London.

<sup>&</sup>lt;sup>3</sup> The self-named Geezers run a club at an AgeUK center in East London to mitigate the effects of isolation and loneliness on senior men.

<sup>&</sup>lt;sup>4</sup> http://www.spacestudios.org.uk

themselves or their community. I was surprised when this turned out to be tidal power, and discovered that this was for very good reasons. In a situation where older people were finding it hard to afford energy prices, the Geezers asked why the River Thames was not being used to provide energy for their community, as had been the case in previous centuries through water wheels and tidal mills. Given that the river has been the source and mainstay of London's capital since Roman times, it is perhaps not surprising that its value in this regard is still recognized by its riverside communities. Out of their direct experience, this group not only identified an issue of personal significance, but also raised an important and hitherto overlooked practical question about this tidal river. These questions led to a series of initiatives exploring how renewable energy could begin to provide power for that community.

## **METHODOLOGY**

# Combining Skills to Address Local Needs

In my experience as an arts practitioner, the best participatory work is collaborative, one in which each party brings their own expertise and pools this with that of others. *Active Energy* has involved an artist, engineer, social scientist and, above all, the Geezers with their in-depth knowledge of local needs and practical skills learned from working-class trades. Together we found ways of combining and adapting our various skills towards a series of shared goals. Through this we were able to address some of the key ecological issues of our time within a particular local area.

#### The Role of the Creative Practitioner

Initiatives such as these are more likely to commence with small amounts of finance, rather than through major project funding. Throughout my career I have raised money and sought the kind of support that will enable initiatives to develop in an organic and sometimes tangential way, albeit within a given framework, allowing meanings to emerge over time. My role as a creative practitioner has been to follow and guide this process. The forces at stake in these kinds of projects, unlike in the making of more traditional artworks, are people and ideas, and the result formed from a tapestry of interwoven multiple agendas. In this project, these have included the Geezers' intention to power their locality, the engineer's interest in creating sustainable resources through community involvement, the original researchers' desire to have artists respond to their findings, the commissioning art organization's expansion of their local engagement program, and my own interest in using the arts to enable knowledge held at a community level to feed into public discourse. If the combination of such different positions is carefully managed, their confluence can create an energy that drives such projects forward.

# Interactive Listening to Draw Out Ideas and Vision

The approach exemplified in this project is one that I have developed over forty years through art practice with communities.<sup>5</sup> My working process is initially to employ interactive listening to draw out ideas and vision. If there is a problem to solve in the wider social or environmental sphere, those closest to its effects are not only most likely

<sup>&</sup>lt;sup>5</sup> I develop these ideas further in my book *Art: Process: Change - Inside a socially situated practice*, Routledge, 2017.

to recognize the issue, but also best placed to develop solutions. A process of creative facilitation that tracks back and forth between dialogue and research can help to unearth and develop these ideas. Further consultation with specialists then informs understanding of what is required and leads the way towards further investigation. Out of this process we pulled together coherent proposals, and tested prototypes that will draw attention to the issues at stake.

# **OUTCOMES**

Active Energy became a long-term project through the processes described above, progressing in stages while we developed ideas and raised funds or seized opportunities. Towards its concluding phase we found resources through the *Hvdrocitizenship*<sup>6</sup> research project, and focused on a tidal basin where the Thames joins the River Lea. Although there was not sufficient flow to drive a turbine, we discovered<sup>7</sup> that one of the challenges for the Lea is the survival of fish when sewage causes oxygen levels to fall. Through a series of interdisciplinary group meetings involving the Geezers, myself, the project engineer, environmentalists, and academics, a concept developed of a floating water wheel that could be driven by the outflow from the mill pond and in turn drive an aerator to pump oxygen into the water. The floating wheel was more suited than a turbine to the river's extreme tidal range, and could be constructed at low cost from aluminum sheeting. The engineer created a replicable design, 8 and the Geezers participated in its assembly. The finished wheel was transported by boat and moored to the mill's foundations where it would catch the optimum flow as the mill pond emptied with the falling tide. In 2019 a similar wheel was constructed for the Queen Elizabeth Olympic Park where it acted as the focus for a series of community education workshops and a public event.

[insert Leeson\_Aug18.jpg (B/W) here] Loraine Leeson, *Water Wheel in Situ at Three Mills*, 2017. Photo credit: © Loraine Leeson.

There have been multiple outcomes from *Active Energy* since 2007, from the large-scale visualization at SPACE gallery showing how tidal turbines could function on the Thames flood barrier, to projections of the Geezers talking about renewable energy and the need for the community to embrace this. Subsequent phases of the project developed according to availability of funding and opportunity, but always with the underlying goal of exploring renewable sources of power to benefit that community. When the energy in a project such as this is flowing, it seems to create a vortex that attracts others, and as such we benefitted from the input of many skilled individuals and organizations. Interestingly, what has caught people's imaginations has been the groups' senior status, turning on its head the otherwise marginalized position of these senior working class men.

## **CONCLUSION**

<sup>&</sup>lt;sup>6</sup> *Hydrocitizenship* was a research council funded project involving seven UK universities that investigated the relationship and responsibility held by citizens regarding water in their locality. I was involved as artist consultant through my employment at Middlesex University. https://www.leevalley.org

<sup>&</sup>lt;sup>7</sup> This discovery came through consultation with the environmental group Thames21; https://www.thames21.org.uk

<sup>&</sup>lt;sup>8</sup> Available on the project web site; http://active-energy-london.org

Interdisciplinarity and collaboration are key to this work. The arts are an excellent means of celebrating, communicating, and consolidating ideas, but artists can only do so much, do not know everything, and can work to greater effect in conjunction with experts in other fields. These might be local people in touch with the needs of their community, professionals in other disciplines, or groups and institutions that offer contextual knowledge. Collaboration creates insight, where each witnesses a multiplication of their own skill sets and experience as part of a team. A function of the artist's role in this situation is to nurture and facilitate this process allowing for the diversity of expectations and enabling each party, including themselves, to achieve their goal.

## **BIO**

Dr. Loraine Leeson is a visual artist particularly known for her work with East London communities from the 1980s *Docklands Community Poster Project* to *Active Energy*, which received RegenSW 2016 *Arts and Green Energy* award. Her book *Art:Process:Change* is the first on the subject of socially engaged art by a UK practitioner. Loraine teaches social practice at Middlesex University. www.cspace.org.uk