Lichen Beacons

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Statement

Whereas digital activism often echoes the frenzied pace and proprietary algorithms of social media, this installation proposes a different, slower politics of interaction and reflection. The cyclical rapidity of digital activism is no match for the slow moving disaster of anthropogenic climate change and new modes of activism are necessary. Responding to the emerging cultural politics of the anthropocene, Lichen Beacons seeks to generate a symbiotic ecosystem in which the symbiosis is modeled on the environmental significance of lichens. Lichens have for some time been recognised as monitors of air pollution, environmental beacons of the anthropogenic shifts associated not just with climate change, but also with sulphur dioxide, nitrogen, oxidants and pesticides. More recently, digital photography and smart phone technology have deepened the global network of lichenologists and activists, revealing a new symbiosis between digital imaging and the non-human environmental scale of lichens. Digital culture is changing human awareness of lichens. The small-scale ecosystems of lichens are nevertheless highly sensitive to the environmental damage inflicted by humans. This installation explores what might be involved in an activist politics of solidarity with lichen ecosystems, by attempting to create a lichenised digital environment that offers a sympathetic symbiosis of text and sound.

Central to the collaborative research that has gone into making a self-sufficient, non-proprietary digital environment has been a new model for using Raspberry Pi technology and digital Bluetooth beacons. Site-responsive, rather than site-specific, the digital environment of Lichen Beacons invites participants to carry a do-it-yourself portable plastic box containing a battery-powered Raspberry Pi with a small screen and headphones (Fig. 1c). Moving around the physical environment of the installation triggers images on the hand-held screen and sound-files in the headphones in relation to proximity to one of the nine beacons. The images offer digital photographs with textual fragments (Fig. 1a), while the sound files offer a sequence of symbiotic combinations of music, field recordings and spoken word. Both the musical environment and its co-existence with the recording of spoken-word files are stacked against the outdoor environment in which the spoken-word files were recorded binaurally. Participants can experience the sequence of image and sound-file combinations in any order, exploring their own environmental relation to the dissonances suggested between indoor and outdoor environments, and between digital and non-digital lichens.

This sound-art installation proposes, then, a new model for what, in her discussion of Marcel Broodthaers, Rosalind Krauss calls the 'post-medium condition' of contemporary art. Rather than suggesting a synthesis of multi-modal immersion, the activism required of participants in this installation is more awkwardly symbiotic and site-responsive, and awkwardly 'contained' within the virtual, ‘individualised’ isolation of a digital sound environment experienced wearing headphones. Critical of the consumption or appreciation of 'nature' for human aesthetics, this awkwardness draws attention to the generative differences between different modes of attention, different kinds of environment and the complicity of the digital in the making of anthropogenic environments that threaten the shared ecosystem of lichens and humans. The photographs offer images of lichens in different ecologies, including cities, car parks and a nature reserve. The spoken word text articulates the conditions of its own possibility by sounding out the language of lichen ecology and digital perception.

One compositional parameter of the spoken text reconfigures relations between nouns and verbs, and between adjectives and adverbs, offering compositional lichenisation of grammatical conventions that would otherwise separate words into different genera and species. The sonic environment in turn juxtaposes field recordings with its own musical environment written using SuperCollider. Working symbiotically in and around the spoken-word text, the musical part is diatonic, using only the seven white notes of the piano keyboard, but resisting the conventional sonorities of triadic chords (Fig. 1b), instead using common-tones for musical continuities. As part of this, the constancy of the note D sounds as a drone and throughout the musical design, both in the headphones and the installation space. The music is harmonically constrained but rhythmically free in its symbiosis with the spoken words. The dialogue between word and music develops a supporting environmental mutualism rather than a parasitic rivalry, and this ecology of solidarity with lichen symbiosis extends into the detailed constraints and freedoms of the installation. A plurality of musical, visual, textual and acoustic digital environments are stacked into the work's physical environment, and this digital stacking is site-responsive, turning the experience of site-specific immersion into questions about the politics of environmental solidarity. Lichens have been canaries of the anthropocene for more than a century: Lichen Beacons offers a model for a new kind of digital activism that might hear and act in solidarity with lichens.

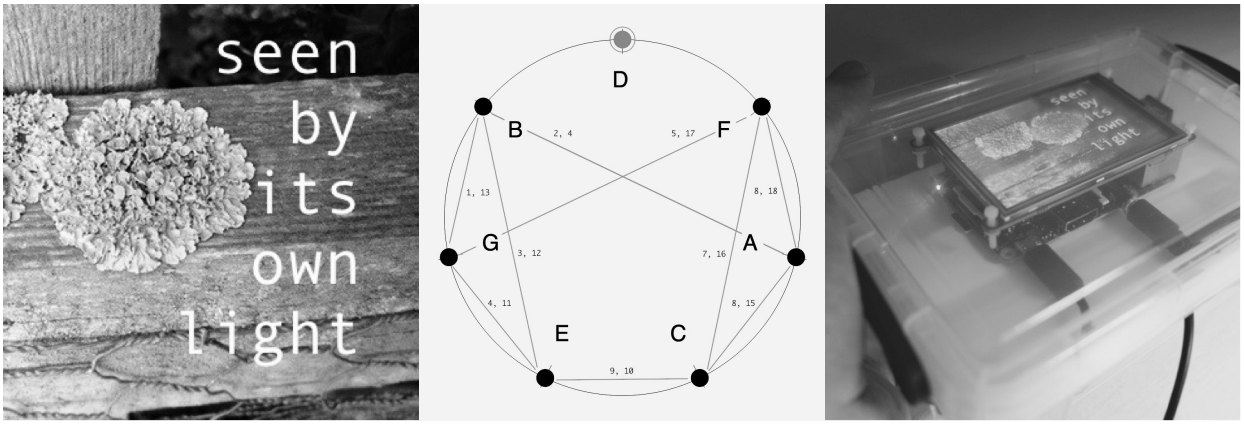

Figure 1. a) Lichen Beacons Section A screen image crop; b) music representation; c) Pi-in-a-box

Additional Information

Project homepage: www.ludions.com/projects/lichens/

Biographies

BARRY BYFORD has a background in electronics and creates software to automate electronic design. He is a STEM Ambassador and a regular participant at Raspberry Jams. He has run workshops on GPS and Bluetooth beacons and creates work using interactive physical systems across multiple platforms including the Raspberry Pi.

TOM HALL's music combines acoustic instruments with recordings and electronic sound, often in combination with composed, algorithmic and improvisatory elements. Much of his work uses multichannel sound sources or individually experienced mobile sound. Recent collaborative performances and installations share forms of digital notation with audiences and involve notions of flow and slowness. Tom is a lecturer in music technology at Anglia Ruskin University.

DREW MILNE's recent books of poetry include: equipollence (2012), the view from Royston cave (2012), Burnt Laconics Bloom (2013), and, with John Kinsella, Reactor Red Shoes (2013). Previous books include Sheet Mettle (1994), Bench Marks (1998), The Damage: new and selected poems (2001), Mars Disarmed (2002), and Go Figure (2003). Since 1997, he has been the Judith E Wilson Lecturer in Drama & Poetry in the Faculty of English, University of Cambridge.