

# Shared Visions in Erith Park

## Investigating ecologies of screens to support the building of new communities

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### Context & Rationale

Population growth in tandem with space and cost constraints has led to a drive for new affordable housing<sup>1</sup>. Creating sustainable local communities and social wellbeing is also a key concern for government<sup>2</sup>. Neighbourhoods with a high concentration of social housing often enter a downward spiral of poor reputation and low demand<sup>3</sup>. As such, new developments are often mixed-tenure with diverse residents, including the vulnerable. ***We propose to use a timely opportunity to understand how a nascent community develops in such circumstances, and how this could be encouraged and sustained through activities around innovative, community-based screen ecologies.***

We will work closely with ORBIT Housing association, who look after 37,000 affordable homes, and see “building communities” as their role. We will integrate research with their regeneration of an unpopular estate that suffered from crime and antisocial behaviour: Larnar Road. The regeneration involves demolition of old tower blocks and the creation of a new development: Erith Park. ORBIT’s ambition is to not only prevent this from following the path of its predecessor, but to create a place that people aspire to live in, where residents feel invested in community management. Developing this proposal, our discussions with ORBIT have focused on the (re)development of housing; residents share space, but not necessarily a sense of cohesion or tools to create this. Varied drivers exist, such as challenges with moving in, living harmoniously, resources such as parks or streets, shared interests such as childcare, and desires for meaningful local place-making. Together we feel that ***situated screens with community-level infrastructure can provide a platform for the activities of residents and of groups such as ORBIT.*** Our rationale, based on prior work, is that these screens hold strong potential to make place-related activities highly visible. Such technologies could also promote digital inclusion, another focus of current government initiatives<sup>4</sup>.

### Aims

The aim is to ***investigate the roles of shared, situated screen technologies in creating positive and effective new residential communities.*** We will explore how social, political, and place-based characteristics of residential areas can be reflected in linked screens at sites such as a community rooms, on street, communal areas in buildings, and devices in homes. By co-creating technologies, we will ***increase knowledge of how to support community building through screen ecology infrastructure and provide the groundwork for further projects to explore new directions in community-level computing.*** We envision a local environment where screen ecologies support broad participation and awareness, and allow community ownership of the technology and content to emerge. This fits the aims of the call as research that engages with a new community and major industry actor, resulting in grounded innovation.

### Format

In working with ORBIT and Erith Park, we have a great opportunity to research from ‘day zero’ as the community is established. The project is composed of three work packages as follows:

#### **WP1: Understanding the Emerging Community (Lead: Dr Alex Taylor)**

We will document the requirements of a fledgling community from the stakeholders that are most invested in its success: Residents and ORBIT. Residents will begin to move in over an extended period from November 2014. ORBIT is already testing new ways to engage with Erith Park’s future residents, for example via a blog and Facebook page. We will apply our knowledge from a recent project (Communities in the Clouds<sup>5</sup>) on residential community forums, to help shape this strategy. In addition, we will integrate a cultural probe into the Welcome Packs provided to new residents. By developing this with ORBIT staff, we will leverage enthusiasm to document moving in to a new home, learn about the area, and share with other residents. Activities such as taking photos or responding to questions will provide data to a) understand avenues for community building, and b) use as initial content for WP2 prototypes. We will discuss probe results at community events (e.g. coffee mornings) as a further point of contact with residents, and with Francois Jensen (Community Officer) and Caroline Field (Regeneration Manager). From these activities, design ideas will be developed for WP2. Direct discussions and interviews with ORBIT staff will lead to a deeper understanding of the organisation’s aims and aspirations. A linked Horizon CDT practice-led student project is also planned to coincide with this, to analyse online media from Erith and other residential forums.

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<sup>1</sup> <https://www.gov.uk/government/policies/increasing-the-number-of-available-homes>

<sup>2</sup> Sustainable Communities Act: <http://www.localworks.org/pages/the-sustainable-communities-act>

<sup>3</sup> Hills, J., 2007, Ends and Means: The future role of social housing in England. ESRC Research Centre for Analysis of Social Exclusion

<sup>4</sup> <https://www.gov.uk/government/publications/government-digital-inclusion-strategy/government-digital-inclusion-strategy#executive-summary>

<sup>5</sup> [www.upintheclouds.org](http://www.upintheclouds.org)

## **WP2: Introducing and Evaluating Screen Ecologies (Technical Lead: Dr Tom Lodge, Design Lead: Dr Tim Coughlan)**

Initial low-fi prototypes will be used to prompt discussion and idea generation around the potential uses of screens in situ. An event will be run around these, to capture feedback around how screens could be used. Following this, deployments will appropriate and build upon technologies and activities created in prior projects (Screens in the Wild<sup>6</sup>, Tenison Road<sup>7</sup>) to support identified activities. Novel design ideas will be identified, and one will be chosen and developed, decided on by the community. Locations and types of screens to install will be derived through the research, but our existing resources would support the reuse of large screens and a variety of smaller screens, with potential for various means of interaction (e.g. vision, touch, MSR's Bullfrogs, WiFi Hotspots, iBeacons). We will run discussion events at the screen sites, to elicit understanding of their impact and ideas for development. This process will lead to the 1-2 month deployment of the developed screen ecology and community generated content. Interactions will be captured, analysed and reflected back as part of a showcase event.

## **WP3: Dissemination and Development of Research Collaborations (Lead: Dr Holger Schnädelbach)**

Project outputs will continuously be disseminated on the most appropriate platforms the Erith community already use, including the existing blog and Facebook page. Material generated through this process and through the evaluation forms the basis for project reporting and broader academic and non-academic dissemination. As this pilot project develops and concludes, the focus will move towards sustaining and building upon initial achievements. ORBIT and the research team will develop a plan to sustain the integration of screens on site, owned and managed by the community. Alongside knowledge developed through co-design, collected data will direct our outputs and next steps in evolving the use of technology towards a template for other new housing communities. The project also presents strong potential for collaborations with other sectors (e.g. residential management companies, councils, planners, architects), as a demonstrator for the value of in the wild research and development.

### **Outputs**

The combined outcomes from this work will provide deeper insights into how technology can play a transformational role in mixed-tenure residential communities. Specific outputs in each work package are as follows:

**WP1 Outputs** will feed into the design work in WP2 as well as follow-on proposals:

#### *1.1 Knowledge of resident's interests and requirements:*

This is a compilation of material gathered from on-site fieldwork, interviews and discussions at coffee mornings. Emerging themes will be presented back to the community for feedback and further discussion.

#### *1.2 Understanding of the knowledge and aims of ORBIT housing:*

This output will document ORBIT's substantial pool of experience and knowledge that has grown from supporting residential communities over the years. It will focus on understanding the processes that they currently employ to encourage community formation and their objectives for these communities.

**WP2 Outputs** will present an examination of the potential of screen ecologies in expediting the creation of positive and sustainable residential communities. There are two parts to this:

#### *2.1 Community driven design ideas for use of screen ecologies*

We will draw together materials (sketches, observations, ideas) from the design exercises and present them online. Erith Park residents and staff will be encouraged to use this to extend their ideas, propose others and offer feedback. Emerging from this will be a set of common themes around requirements for residents as they become established.

#### *2.2 Deployment and evaluation*

We will gather together material from fieldwork (observations, interviews) and deployment data to evaluate the impact of our screen ecologies upon the quality of community engagement and participation levels. All new code developed to support the deployment will be open source and made publicly available.

#### **WP3 Output** will be *3.1 Groundwork for future investigation*

We will undertake a critical reflection of the process of working at Erith Park, in order to generate guidelines to help support future work of this kind, both within Edith Park and other residential communities. A showcase event will occur at Erith in the final month of the project, in which the results will be presented to academia and industry, and next steps will be defined. Residents and ORBIT staff will be invited, to ground discussion in their experiences. Discussions to develop collaborative projects around Erith Park are already underway with members of Newcastle University Culture Lab, and UCLIC. Collaborators on related projects include CCNetwork+ members Ben Bedwell, Ava Fatah, and Anne Adams, and we will work with them to engage with the network and explore the broader potential for technologies that engage and sustain communities.

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<sup>6</sup> <http://www.screensinthewild.org>

<sup>7</sup> <http://tenisonroad.com/>