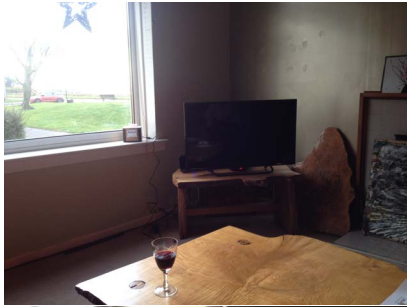# Non-conventional TV interactions for political debates

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Abstract

Social Printers are physical devices that create a pseudonymous social network between households during televised political debates. These objects were used in two studies around the Scottish Election and the EU Referendum in 2016. They were used to understand how physical devices could be used to engage viewers with televised political debates. We observed that by displacing the social interaction from conventional social networks the printers were successful in encouraging the participants to share their thoughts and create a personal social experience. In this paper we will present how non-conventional TV interactions may affect the TV viewer.

Introduction

Second screens are personal devices, such as smartphones, tablets and laptops, used to alogside a television broadcast. In this context, the 'first' screen is the television, which delivers the main content and drives the contextual use of the device [6]. In the context of political engagement, the public has naturally adopted second screens to gauge the public's opinion, enrich the experience and to share their thoughts [3].

While the role of social media in this context is relatively well understood, technology continues to develop. In the home environment, new developments in the coming years will likely include connected products and the Internet of Things, like Amazon's Alexa. Research into connected products from the past ten years has already developed a rich understanding of the relationships between people, their environment and technology [1, 7]. For example, household-messaging systems placed in the homes of different families showed the emergence of playful behavior [5]. Furthermore, physical devices, such as an automated radio called the Energy Babble, have the potential to construct publics around issues, by forming a concentrated account of current discourse around a topic [2].

However, although connected products in the home are a relatively recent development, there is already precedent for the use of physical objects alongside TV content. For example, the 1987 TV series Captain Power and the Soldiers of the Future used a light gun toy, which allowed viewers to shoot at the screen during battle scenes to gain points [8]. More recently, the Universal Control Dalek was a prototype toy created by the BBC that would react to episodes of Doctor Who, exploring how emerging technologies could be used to offer new viewing experiences in the home [9]. While these examples relate purely to entertainment, the degree to which second screens and social media have become central to political programming lead us to explore whether such connected products might bring value to political programs as well.

Social Printers

The design of the Social Printers was influenced by existing design-led work including technology probes and research products: inquiry-driven, in-situ, finished and independent research artefacts [7]. The use of such research tools has shown to stimulate reflection, and speculation in participants [1]. The Social Printers were designed to provide a new way for viewers to engage with each other and political debates, while prompting reflection on the role of a physical device in the home. In taking this simple form, we intended to capture some of the enchantment of connected products without becoming too engrossed in specific aspects of the design.

The Social Printers [4] were intended to be situated alongside the television in participant's living rooms for the duration of the Scottish Election and again during the EU Referendum. Each object housed a thermal printer and Electric Imp controller in a simple case made from laser-cut MDF and an acrylic top. Every household had a unique URL printed on the front of the object leading to a simple text entry form, which they used to write their messages. Messages submitted through the web interface were broadcast to the entire network and printed in every other household. Each household was identified by a colour to make the network pseudonymous.

In each study, five households were asked to take a printer into their home for 25 to 35 days. Each study had a prearranged schedule of eight TV programs, which the participants were asked to watch.

Challenging conventional second screens

By displacing the social experience from the personal device, the Social Printers encouraged an intimate experience with high levels of direct engagement. Over time the printers became more effective as tools for good quality discourse, as the community strengthened and the debates became more heated. By the end of the second study some of the participants even called each other friends. There is ground to believe that a physical tool for political discourse can effectively engage the whole living room.

The Social Printers fostered discussions, speculation, reflection, and social interaction. Having this dedicated physical stream of chat during the debates was beneficial to the emergence of these behaviors. Although the participants still used their personal devices to write and send the messages, the paper was the only data output and hosted all of the discourse. The physicality of the paper and the printer stimulated a novel and engaging experience.

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