

Null By Morse: Performing Optical Communication with Smart Phones

Tom Schofield

tomschofieldart@gmail.com

Digital Media, Culture Lab, School of Arts and Cultures, Newcastle University, Newcastle upon Tyne, UK.

Keywords: Mobile Art, Morse, Optical Communication.

Abstract: *Null By Morse* is an installation artwork incorporating a military signaling lamp and smart phones. A number of Morse messages are transmitted automatically by the signal lamp. A custom app for iPhone and Android uses the phone camera to identify the changing light levels of the lamp and the associated timings. The app decodes the Morse and displays the message on the screen on top of the camera image. The messages are taken from the 19th C development and testing of Morse code and its subsequent use in the military and in transport. I discuss theoretical implications of the work by locating it in a rich, material history of optical and telegraphic communication.



xCoAx2013



Computation Communication Aesthetics and X. Bergamo, Italy. xcoax.org

1. Introduction

The use of signaling lamps marks only one installment in the varied material history of optical communication. This history is tightly bound with the development of strategic military coordination. The development of the optical telegraph for instance allowed Napoleon's army to manage logistical resources across the expanding French military conquests (Standage 1998). Meanwhile, the birth of Morse code is imbricated with both art history and American Civil War as Samuel Morse's failed ambitions as a salon painter re-diverted his career into that of an inventor at a time when the rumblings of war between the North and South encouraged financial support of his new communication medium (Standage 1998, Gere 2006).



Fig. 1. NBM Documentation, (<http://www.flickr.com/photos/92328727@N03/sets/72157632547712877/>).

2. Performing Historicity

Morse code has been employed in a variety of situations which have gone on to fame and notoriety. The invocation of the Old Testament in Samuel Morse's early public transmission 'What hath God wrought' dramatically foreshadowed later uses where Morse succeeded or failed to save lives. Its history is closely entwined with the cataclysmic failure of technologies. The infamous broadcast from the Titanic 'We have struck an iceberg, sinking' is perhaps the cardinal example where Morse code is employed as call to rescue after technological hubris helped to cause disaster.

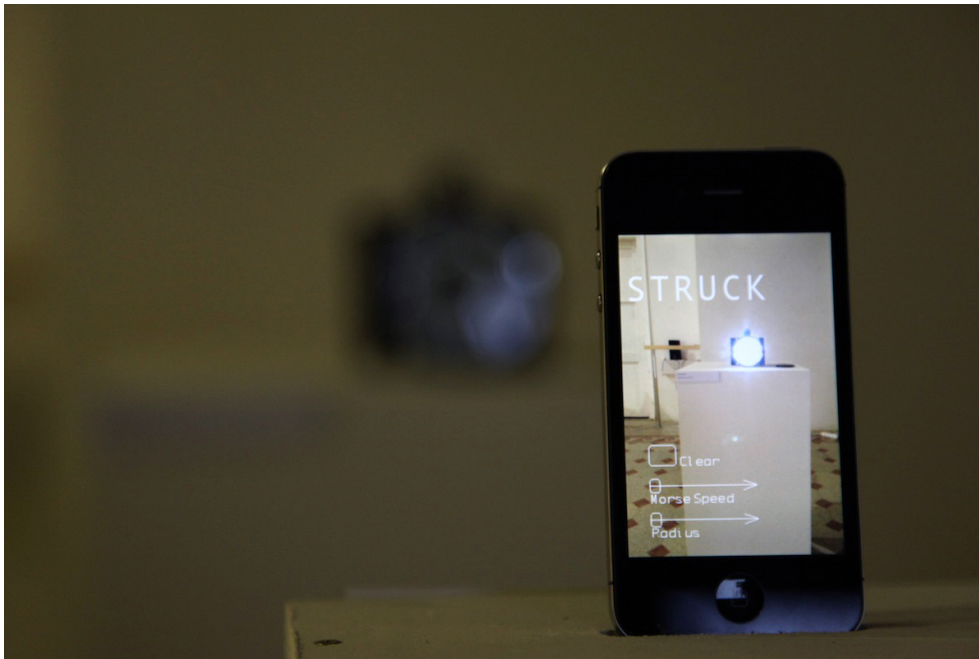


Fig. 2. The Null by Morse interface.

3. Dumb Phones

Morse code maintains an unusual and pervasive presence in civil and military histories. Its principle strength is that it can be transmitted in a variety of media (sound, light, radio, telegraph) and this led to its early adoption in radio, which in turn allowed it to be transmitted to aircraft. The versatility which allows Morse to exist alongside more complex communication devices provokes questions as to what other ‘side effect’ technologies are being produced alongside mainstream products such as smart phones. Null By Morse reduces the wide array of interaction possibilities of smart phones to a ‘dumb’ minimum. By doing so it critiques the futurism implied by such high-tech devices and locates them in a rich material history of communication.

References

- Standage, T.** *The Victorian internet: The remarkable story of the telegraph and the nineteenth century’s online pioneers*. London: Weidenfeld & Nicolson, 1998.
- Gere, C.** *Art, time, and technology*. New York, Berg, 2006.