Examining the Bomb Sight augmented reality app for exploring location based historical data

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The digital age has impacted how historical artefacts such as texts, maps, personal narratives and pictures are digitally recorded, enhanced, enriched, analysed, utilised and disseminated. Digitised historical artefacts and associated digital tools and methods provide new opportunities to support researchers, teaching and learning communities by offering contextually situated information outside of libraries and archives. The result is more widely accessible archival data, combined with other forms of historical information, conflated within novel, interactive and user-friendly interfaces across a range of devices.

With the now almost ubiquitous nature and use of geo-enabled technology and data, driven by the likes of Google Maps, Open Street Map etc. we are now in the era of digital interactive maps, used across a range of application areas including digital humanities projects. In this paper we present a case study describing the design and development of an augmented reality application for users of Android mobile devices. The application, Bomb Sight, enables users to view historical bomb census maps from WW2, for London during October 1940 to June 1941, previously only accessible in the map reading room of The National Archives, Kew, London, together with an overlay of the bomb locations on top of the present day London cityscape.

Harnessing the power of the modern (Android) smartphone platform, the Bombsight AR app makes use of geo-location technology and the smartphone camera to overlay digital objects, the historical bomb census information, over the present day real world, see figure 1. The augmented reality view shows the

user markers hovering over where bombs fell, scaled to show closer locations with larger markers and smaller ones for those further away. For added context, street name labels issued from the historical records are added to each marker where available. By clicking on the marker, the user can view further information about the bomb type, and how far away it is from the users location. There is an associated radar plot highlights the bomb location in in relation to others.
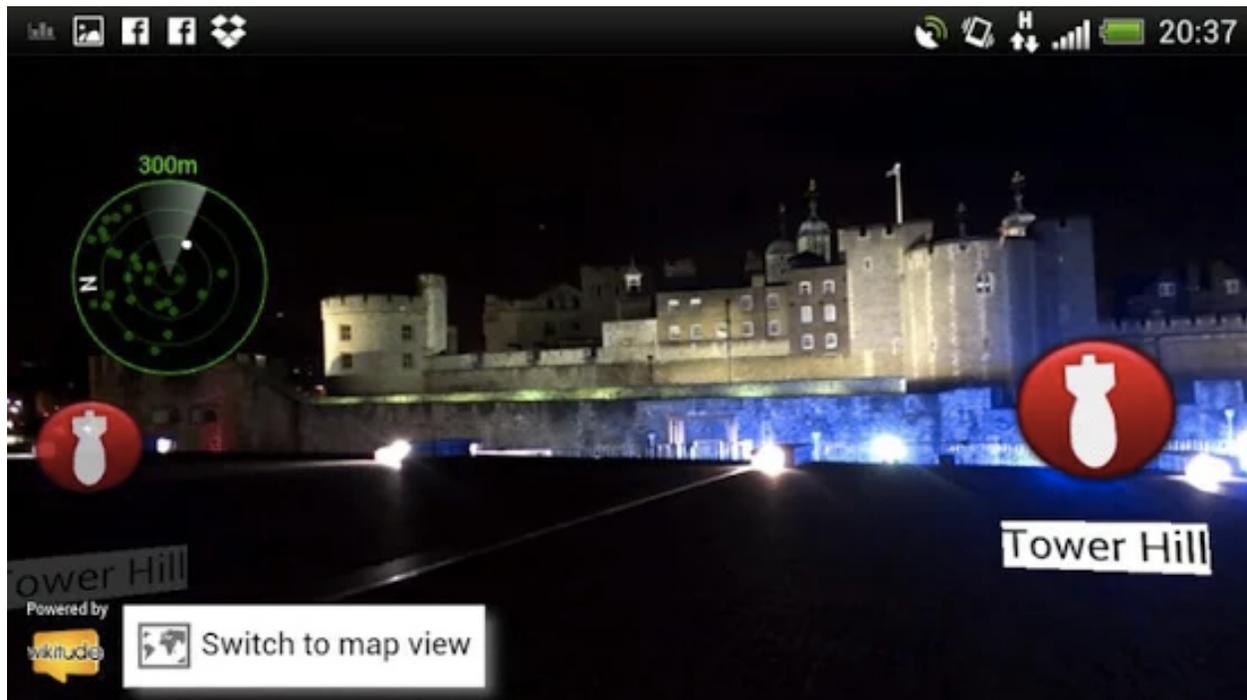

Figure 1: Augmented reality view of the www.Bombsight.org app.

The project is a successful case study how to open up and make use of digitised archive data in the context of 20th century history, engaging new audiences through augmented and contextualised historic records. The AR application successfully projected historical information into the present world, situating historical information seamlessly in relation to time and place, offering a window into the past through a smartphone display.

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