

# Riot! 1831 is back: What's new?

In the last few years, there has been an explosion in immersive, location-based experiences. From the monumental success of Pokémon GO to more cerebral experience like our own [Lost Palace of Whitehall](#) – a piece of audio theatre that brings to life the history of a Royal Palace that no longer exists – apps that use geo-location, storytelling and gamification techniques are becoming more nuanced and clever than ever.

Step back to 2004, however, and these experiences were purely theoretical. Calvium's founders, then a part of HP Labs, were fascinated by the potential of tech to help tell stories in different ways. And they found kindred spirits in the University of Bristol and among local artists all intrigued by these possibilities. The results of this collaboration was Riot! 1831: an immersive, geo-location triggered experience based on the Queen Square riots. This was [digital placemaking](#) before the term was even coined. In fact, it was an app experience before we all had smartphones in our pockets.

14 years on, a lot has changed. One element that remains constant, though, is the involvement of our very own [Jo Reid](#), who was at the heart of the original project – and its relaunch for [Bristol Open Doors](#) 2018. We caught up with her to explore what's changed, and the learning we've taken from the experience's original launch.

## The concept

In its new iteration, the concept of Riot! 1831 remains the same. Bristol residents and visitors use technology to immerse themselves fully in the [Queen Square reform riots of 1831](#), through sound files that bring the past into the present. As they walk around Queen Square, visitors trigger audio vignettes: the saber charges of the Dragoon Guards, the flames licking the

buildings, the rioters' shouts as they plunder the square's buildings.

In 2004, Jo explains, Calvium didn't exist: the business was part of HP Labs, and the project was part of a government-backed initiative called Mobile Bristol. "We were spearheading the idea of working more closely with people in the creative sector to view tech not just through the lens of work and productivity", she says. "It was inspired by some of the stuff that Joe Pine and James Gilmore were doing around the [experience economy](#): saying, 'Well, you know, what if you start to think about technologies to enable experiences?'"

*Look at this golden nugget we found in the archives! [@salchall](#) on [@BBCBristol](#) talking about Riot 1831 starring our MD [@JosephineReid](#). 14 years later and the app remake of Riot is being launching this weekend in Queens Square. <https://t.co/QyMeNFN32t> ? <pic.twitter.com/mWgd0Qa2RO>*

— Calvium (@calvium) [September 13, 2018](#)

The team collaborated with writer Ralph Hoyte and filmmaker Liz Crow who researched the riots and told the stories, while [Mobile Bristol](#) created the authoring framework and designed the technological side of the experience. The result? Over 700 people visiting Queen Square to immerse themselves in the riots – essentially, a hyperlocal period drama.

But while the project's original stories and recordings have been retained, there's been plenty of change in the last 14 years...

## The technology

Three years before the first iPhone, the mechanism for the Riot! 1831 experience needed some careful planning. What we came up with was the idea of loaning everyone who took part a small rucksack to wear on their backs: each contained huge HPI battery packs, microcontroller boards, a GPS unit and a pair of headphones.

"We instrumented the application so that we could track everybody's GPS location," says Jo. "I conducted follow-up interviews with selected people: we were just trying to glean as much as we could, from a research point of view. Now, of course, all this tech is in a small device."

- **You may like:** [Beyond the smartphone: Innovation in material technology for digital placemaking](#)

Riot! 1831 ended up being a landmark research project, culminating in around 240 different interviews and a few hundred GPS logs, which could be used to analyse the behaviours of those taking part. "It ended up being the main input that drove the initial publication of our [Experience Design Guidelines for Situated Mediascapes](#)," says Jo.

The 2018 version, though, is all about the mobile app. Ralph had lamented the fact that the original work was no longer being used, and wanted to do something with it. Independently, he'd carried on with his own company – [SATSYMPH](#) – to use the AppFurnace platform to create new experiences.

"He did a few of his own pieces, but he always yearned to do something with Riot!," says Jo. "Finally, he got funding from UWE through heritage professor [Steve Poole](#) to redevelop it, and bring all the original content into AppFurnace." Calvium supported the project – waiving publishing fees and helping Ralph to get it to the AppStore, as well as marketing it once launched. It was the swansong for AppFurnace, which closed down on September 30th. "It's the first thing that set AppFurnace off, and it's the last thing now, but at least it's now on the app stores", says Jo. "It will be there for at least the next year or so, so if people want to have a go,

they can head to Queen Square and enjoy it”.

## The content

The original content produced for 1831! Riot was based on extensive research by Ralph and Liz. “I still remember their excitement at the stories they unearthed and the amazing people who were there”, says Jo. “It was all based on real events and real people, but obviously dramatised.”

The content came from court and other reports that were filed at the time of the riot, and featured a total of 101 different sound files, giving users the feeling of eavesdropping on conversations while they were there. “The other thing I liked were the celebrity cameo appearances, which they used in their vignettes”, says Jo. “There was Brunel, who was a special constable at the time, as well as Madame Tussaud who visited Bristol around that time, and Miss Vigorsm a lady from a church school who was trying to avert the children’s eyes from the bad behaviour.”



The content, for Jo, is the best thing about resurrecting Riot! "You invest your life and soul into these great things, and it's a shame if all you've got are memories and photos", she says. "The content was always fantastic, and still today, after all these years, I can't reference another dramatic GPS-triggered historical drama like it."

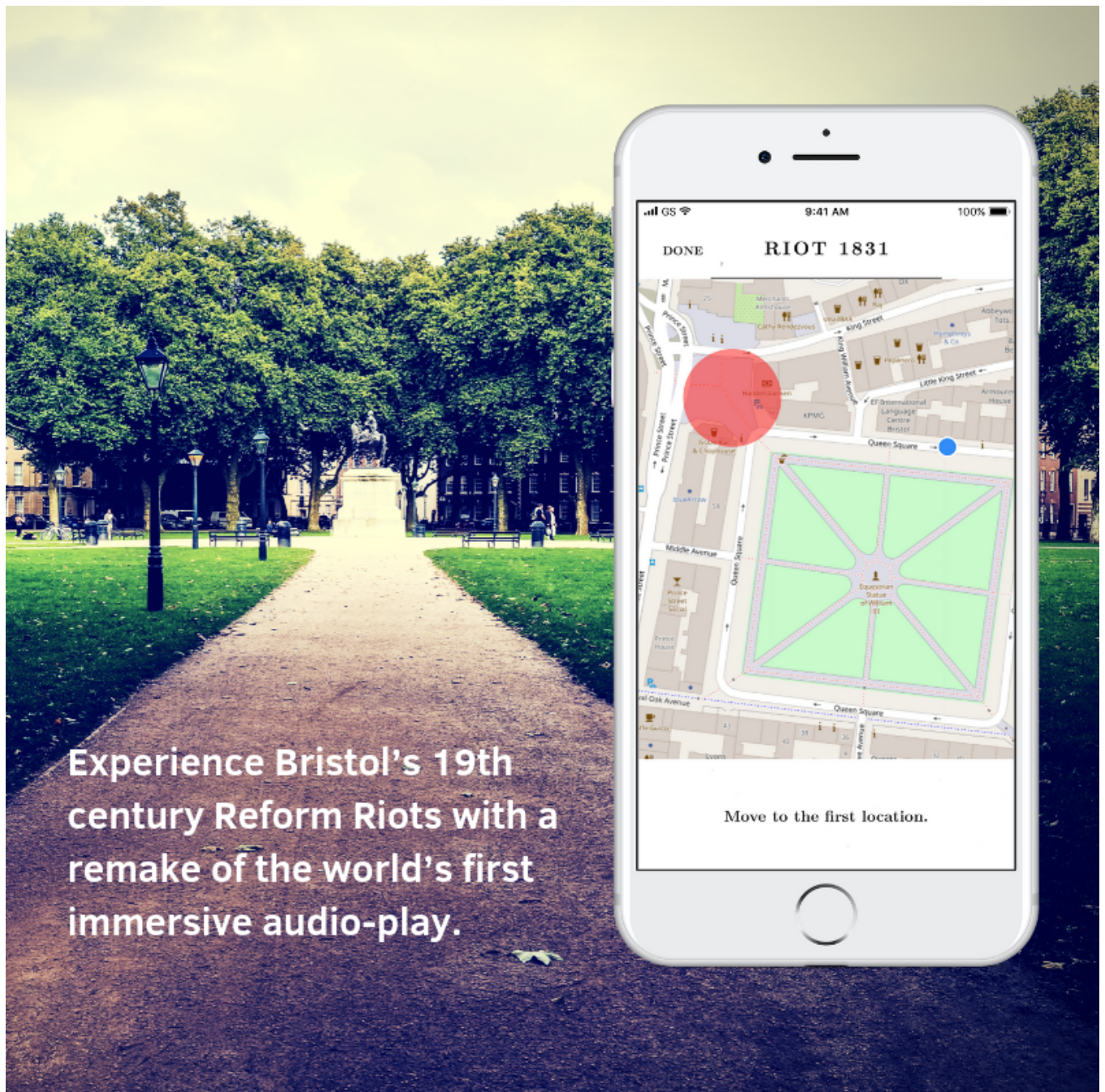
## The thinking

The original project was designed to take place completely within the confines of Queen Square, but there was no specified route: individual vignettes were played based on the user's exact location. But while we wanted to give users the freedom to move around as they wanted, we also needed to ensure they weren't hearing the same thing over and over again.

“Ralph and Liz divided the square into quadrants”, says Jo, “taking two quadrants each to write for.” The challenge? To encourage users to move around and emulate the atmosphere at the height of the riot (with a 3,000-strong crowd occupying Queen Square), while not repeating content, and while still delivering the Dragoon Guard charge finale at the end.

Depending on where each story region was, should it cut off if someone walked out of it? Should it carry on? “They wanted it to be cut off”, says Jo. “They wanted it to be randomised, so that in principle, if you came back and did it again and went to the same spot, you wouldn’t get the same things.”

The result was four quadrants with 52 stories in each. “Within that, there were different kinds of story zones, and within the story zones, three different stories would randomly play – except for those that had a continuity (there were some that cut across different zones).”



The experience was originally designed so that, when leaving the equipment tent, the user walked into the square and would experience a piecing together of rough voices. After 15 minutes the finale would kick in: the charge of the mounted Dragoons, who were told to draw their bayonets and charge through the diagonal, slashing as they went.

On 15 minutes, the user always heard the Dragoon charge. "It was quite interesting", says Jo. "When we were originally designing it, I thought, 'Well, fifteen minutes will be all people will walk around for'. The most

common feedback after the initial lot of people was, 'I keep hearing this long piece'. It's because some people had stayed out for up to two hours because they wanted to hear all of it. So we had to change the logic, so that the charge wasn't the end."

The current app version features around 106 sound files layered over the square, but broken down into 14 mini plays that each has its own timeline and resolution, meaning users can come to their own conclusions about who was right and who was wrong, and create their own personalised experience based on their exact movements.

14 years on, it's great to see the eight or nine months of original hard work being brought back to life: people, place and technology combining once again to create a truly immersive storytelling experience. "For us, a big part of Riot! 1831 was building up that know-how of how to collaborate successfully with people from the creative industries", says Jo, "meaning we could produce unique and bespoke experiences that utilised newer forms of technologies".

The first time around, Riot! 1831 was about how to be new. This time, the focus was on honing that craft and perfecting the user experience. "It's not just about technology being sexy anymore", says Jo, "it's actually just down to pure, good content experience, and great delivery that is sustainable in the longer term.

It's one way of connecting story with place – it will be interesting to see how things develop in the future, and what else can be done when sites make that investment in the concept of technology and place. "One difficulty, still, is justifying investing in digital placemaking", says Jo. "With a more rounded context of the technology-mediated space and place that has rich layers of cultural history and more, that becomes a much better economic proposition. I'm excited for that future for our digital placemaking work."



*Looking for other examples of how technology can bring historical sites or situations that no longer exist to life? [Read our white paper on our The Lost Palace project.](#)*

