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Croyde, Braunton



From classical music to emergency services: **Building a global addressing system**



**Chris Sheldrick, Co-founder
and CEO of what3words**

People often ask me how I came to create what3words, a new global addressing system that has given every 3m square of the planet a unique 3 word address. Like all good

stories, the answer is a series of seemingly unconnected events and fortuitous circumstances. Far from being a geographer, mathematician or technology expert, I trained as a classical musician at King's College London and the Royal Academy of Music. I suffer from a sleep condition, and one night a serious sleepwalking accident left me with nerve damage in my left wrist, which spelled a devastating end to my career as a performer. Determined to stay connected to music, I started a business organising live music events around the world.

Working in events, a huge part of my day-to-day was spent trying to get bands and equipment to the right place, on time. It was far more difficult than I'd ever imagined, and it became clear to me that street addresses and postcodes are totally inadequate for directing people from place to place – unsurprising when they were designed well over a century ago to deliver post. I am incredibly lucky to count Mohan Ganesalingam, an award-winning mathematician and

Cambridge Fellow, among my oldest friends and together we decided to tackle the problem of poor addressing.

Looking at existing coordinate systems, we realised that long numbers, or combinations of letters and numbers, may work for machines, but they're simply not human friendly – too hard to remember, easy to mishear over the phone and prone to errors when typing. This insight led us to create **what3words** – a simple way to communicate accurate locations. We worked out that to assign a unique combination of three words to every 3m square of the world – nearly 57 trillion squares – you only require a list of 40,000 words. Our solution, **what3words**, divided the entire world into a grid of 3m squares, and gave each square a unique 3 word address. Using the free **what3words app** or online map, people can locate a specific 3m square of a field in York using the 3 word



address `///kite.chats.dine` or a specific entrance to London's Hyde Park at `///comb.teeth.shaky`



In the six years since its creation, **what3words** has gone from strength to strength, opening offices in Mongolia, South Africa and the USA, expanding into over 30 languages and developing a voice input solution. It's being used in travel guides like Lonely Planet Mongolia and Time Out China, and by ever-larger companies from travel and logistics to automotive and mobility. In the latter, we've made huge steps forward in the last year; **what3words** is available in Mercedes-Benz's MBUX infotainment system in English, German and Chinese to date and in many Ford vehicles via AppLink, meaning there are millions of cars on the road today in which drivers can say 'Navigate to grab venue glass' to get directions to Tabac Bar in London.

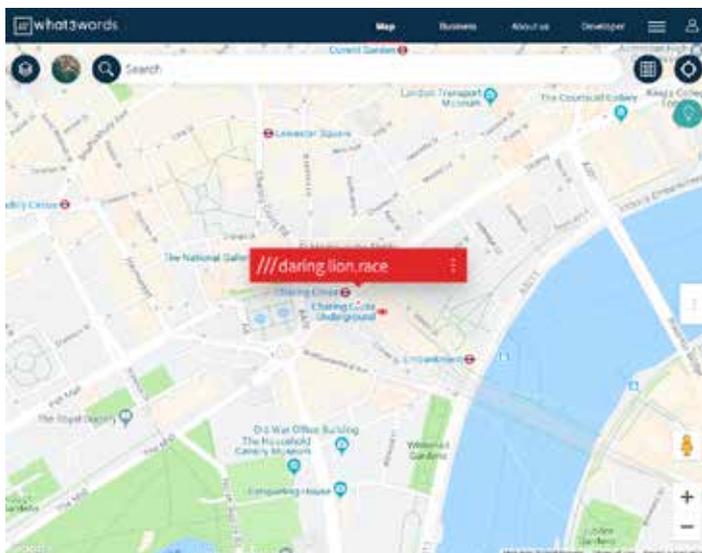
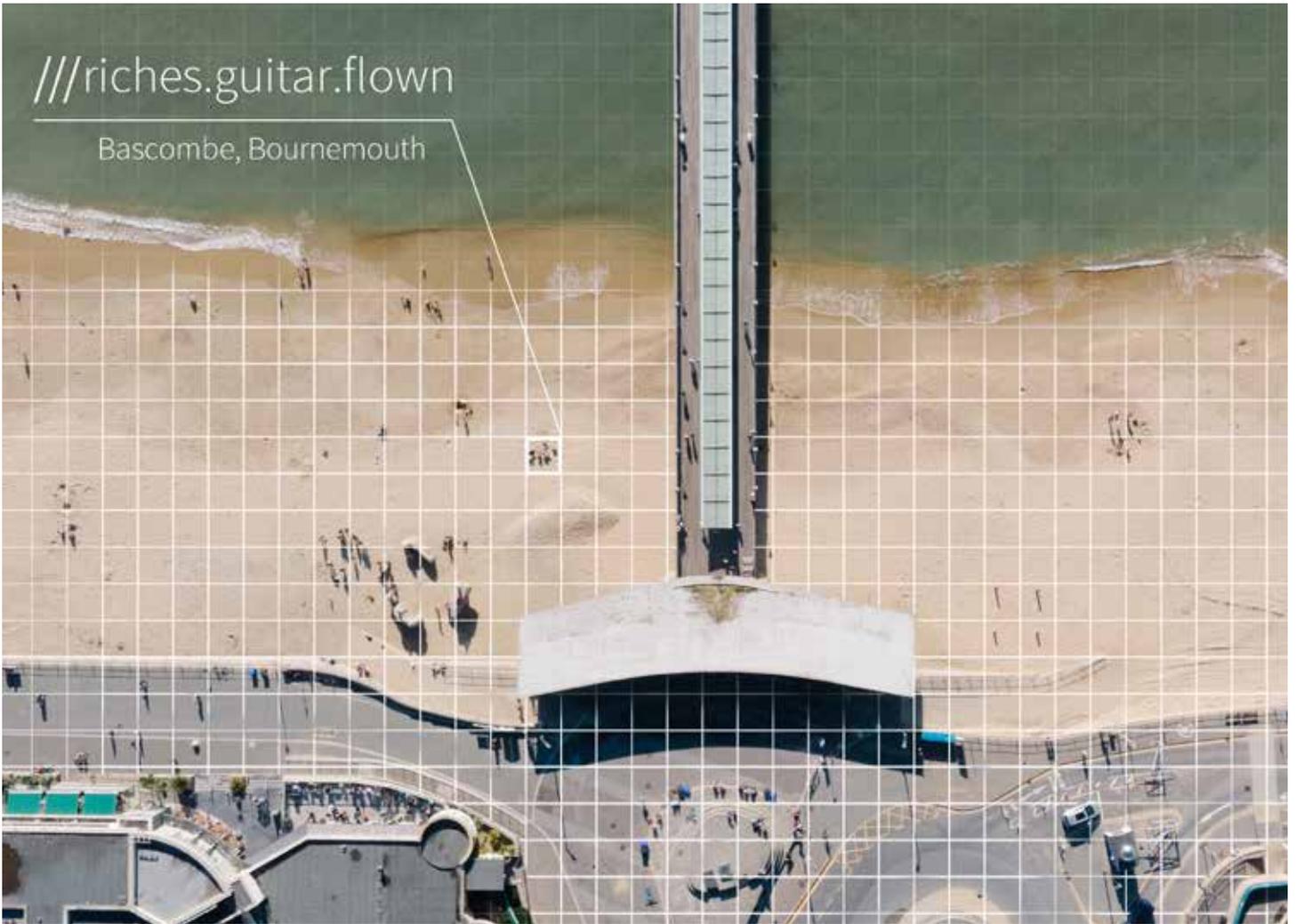
what3words is providing today's drivers with a smooth, accurate and user-friendly destination input, and it's also a truly future-facing solution. The automotive sector is betting big on autonomous vehicles and, without a driver to speak to, passengers will need to specify exact drop-off points to arrive at the correct entrance or parking spot. And with voice assistants on the rise in home and cars, **what3words**

is ready to adapt to consumer demand for better voice services. The system was designed with voice in mind; each address is unique, homophones have been removed, and similar 3 word addresses have been placed far apart in the world, for example `///toffee.branched.pyramid` is in the UK, while `///coffee.branched.pyramid` is in India. An intelligent AutoSuggest feature helps users to identify and correct mistakes, enabling industry-leading speech recognition accuracy for entering locations. Car companies are embracing the opportunity to make the driver experience smoother and more enjoyable when it comes to navigation.

In an equally exciting development, this year has seen us supporting a very different navigation use – emergency services. It emerged there was a powerful use for **what3words** to offer a simple way of describing locations that the general public can use easily when they call 999 or report an incident. Day-to-day, people often communicate where they are using smartphone pins, but these are locked to their devices – they can't be spoken over the phone when they call 999, or communicated between response teams by radio. They also only work if there's a data connection. And while poor addressing is frustrating in day-to-day life, when it's emergency services trying to find someone, every second wasted can mean the difference between life and death.

We've been working closely alongside UK emergency services, and I'm so excited to say that so far this year **what3words** has been officially adopted by 28 UK emergency services so far, across police, fire and ambulance as well as search and rescue. Reports coming in from **what3words**-integrated services are incredibly positive. Humberside Police used a 3 word address to find a woman held hostage, while Avon and Somerset Police located a





aren't familiar with their surroundings, or able to describe where they are accurately enough.

The most exciting thing about the **what3words** journey is that new uses and opportunities are emerging all the time, from helping to develop the future of our transport and mobility systems to helping ambulance drivers find a person in need. As awareness of **what3words** increases, we're giving people more ways to use our system, and getting closer to our goal of becoming a global standard for communicating location. It's a big mission, but one myself and my team strongly believe in. If this piece has piqued your interest, please download the free **what3words app** and next time you meet up with friends, or need to tell someone where you are, you'll be able to do it by saying three simple words.

mother and daughter whose car had gone over a hedge. what3words helped find a man who fell down a railway embankment in South Yorkshire, and a glider pilot stuck in a tree in Norfolk.

Without **what3words**, many of these cases may have triggered heavy resource such as helicopter fly-overs or multiple units searching for the incident location. And while we're seeing that **what3words** can be particularly effective in rural locations like farms, coastline and moorland, even in well-addressed towns and cities, it can help callers who

