The Economist

Geolocation

Addressing the world

How to find anywhere on the planet

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LAST year, a brush fire threatened the home of Ganhuyag Chuluun Hutagt, who lives in Mongolia's capital, Ulaanbaatar. Instead of giving the fire brigade his address, though, Mr Ganhuyag had to guide them to the blaze by describing a series of landmarks along the way. That was because, like most buildings in Mongolia, his house does not have an address. Road names and building numbers are so sparse there that fewer than 1% of Mongolians do. But Mr Ganhuyag, who is on the board of the country's post office, Mongol Post, proposes to do something about it.

Thanks to his urging, Mongol Post is adopting an ingenious new system of addresses that can locate any place in the country—and, indeed, in the world. Instead of house number, street name, town, province and so on, or the unwieldy co-ordinates of latitude and longitude, this system, the brainchild of Chris Sheldrick, boss of What3Words, a firm based in London, divides the Earth's surface into nine-metre-square blocks. Each block is then given names consisting of trios of randomly selected, unrelated words. One patch of Siberia, for example, is called, in English, "mirroring.surrendered.epidemics". But it also has nine other names, in other languages, including Russian.

Divvying up Earth's surface into nine-metre-square blocks requires nearly 57 trillion addresses (to

be precise, 56,764,364,951,858 of them). That sounds a lot, but Mr Sheldrick realised that 40,000 words would be enough to do the job—indeed, more than enough, since that number actually yields 64 trillion three-word combinations. Moreover, places that are at sea have only English addresses. The other languages, restricted to the land, thus require a mere 25,000 words each. When drawing up a list in a new language, What3Words' linguists toss out homophones, and also any words that may create offence, such as "fondle", in English, or, in Arabic, words for alcoholic drinks. Otherwise, words are selected based on their familiarity and frequency of use.

A way with words

Besides nailing down locations in Mongolia, Mr Sheldrick's system is also proving useful in the *favelas* of Rio de Janeiro. That city's government has, according to Sila Vieira da Silva, failed to generate addresses fast enough to keep up with the new shacks and alleyways appearing in these shanty towns, and does not bother to bring post into at least 11 of them anyway. Mr Vieira da Silva is one of the owners of Carteiro Amigo, a company that has delivered letters in Rio's *favelas* since 2000 by compiling directions to residents who pay for the service. Now, using software licensed from What3Words, Carteiro Amigo is converting to three-word addresses.

Rich countries, too, can benefit, says Peter Atalla, the boss of Navmii, a London firm that has folded What3Words' software into navigation apps for motorists. One search in ten that uses Navmii's app is for a What3Words address. Not only are they easy to memorise, type out and communicate by phone, Mr Atalla says people also like the precision of directing others to, say, a specific entrance rather than an entire building, or to a picnic spot instead of the whole park. Direct Today Couriers, another British outfit, reports that converting standard addresses into What3Words ones has reduced the number of missed deliveries by 83%. Watch.this.space.

From the print edition: Science and technology