

MAPS ALONE ARE NOT ENOUGH

GARY GALE
CTO WHAT3WORDS

ICANN56 Technical Day
HELSINKI, FI
60.176249, 24.933174
w3w.co/visit.bespoke.caring



HELLO, I'M GARY



@VICCHI



OPENSTREETMAP
CONFERENCE

WWW.VICCHI.ORG

what3words

UNIVERSITY OF APPLIED SCIENCES

THE LENOX GLOBE



HIC SUNT DRACONES





here

PlacesCollectionsTraffic

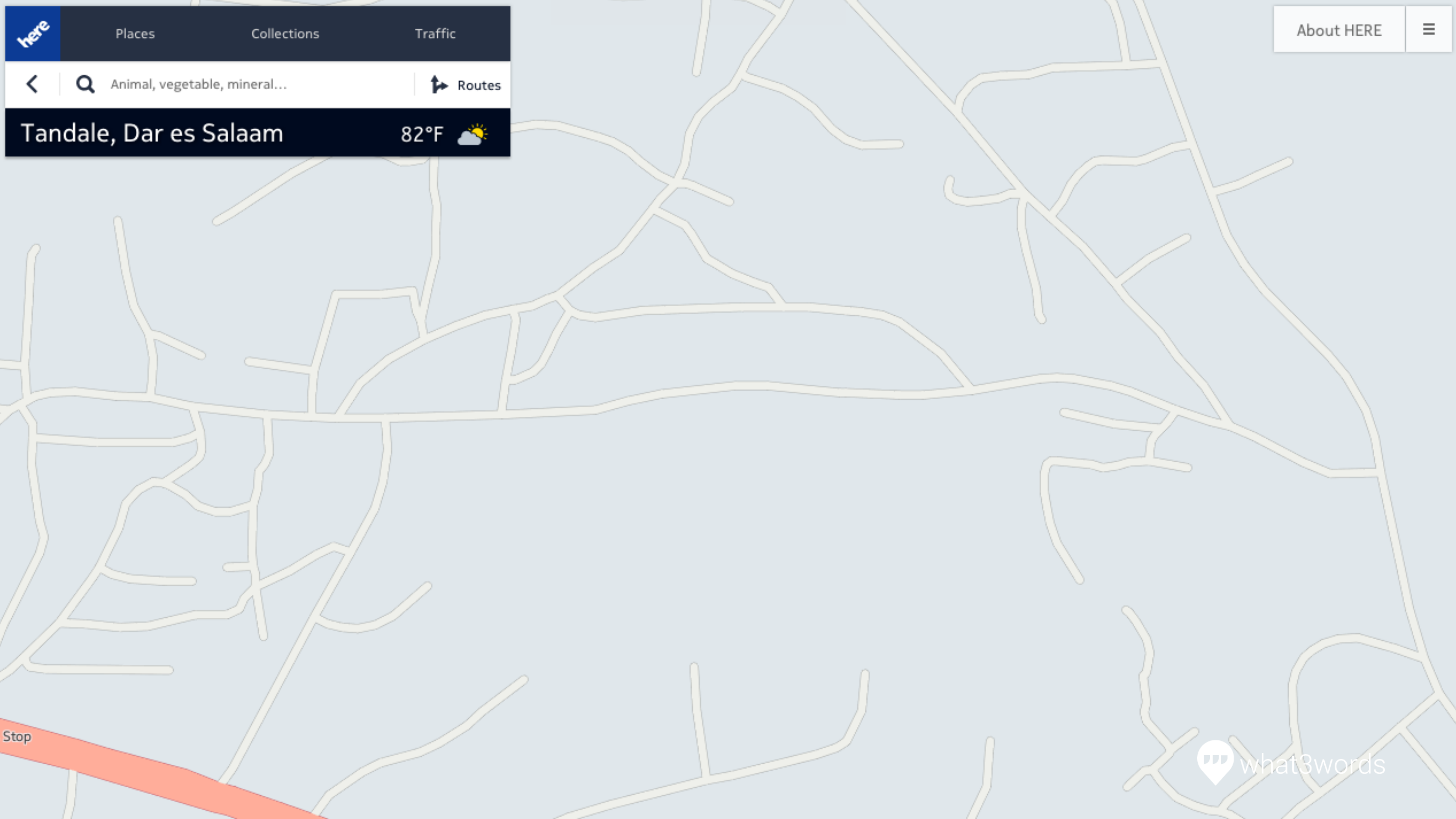
<

Q

Animal, vegetable, mineral...

Routes

Tandale, Dar es Salaam82°F



Stop

Akiba Commercial Bank, Tandale Branch



R C Church Tandale

Friends Corner



Morogoro Rd

Morogoro Rd

Connect Rd

Morogoro Connect Rd

Makanya

Livalov St

Babat St

Kagera St

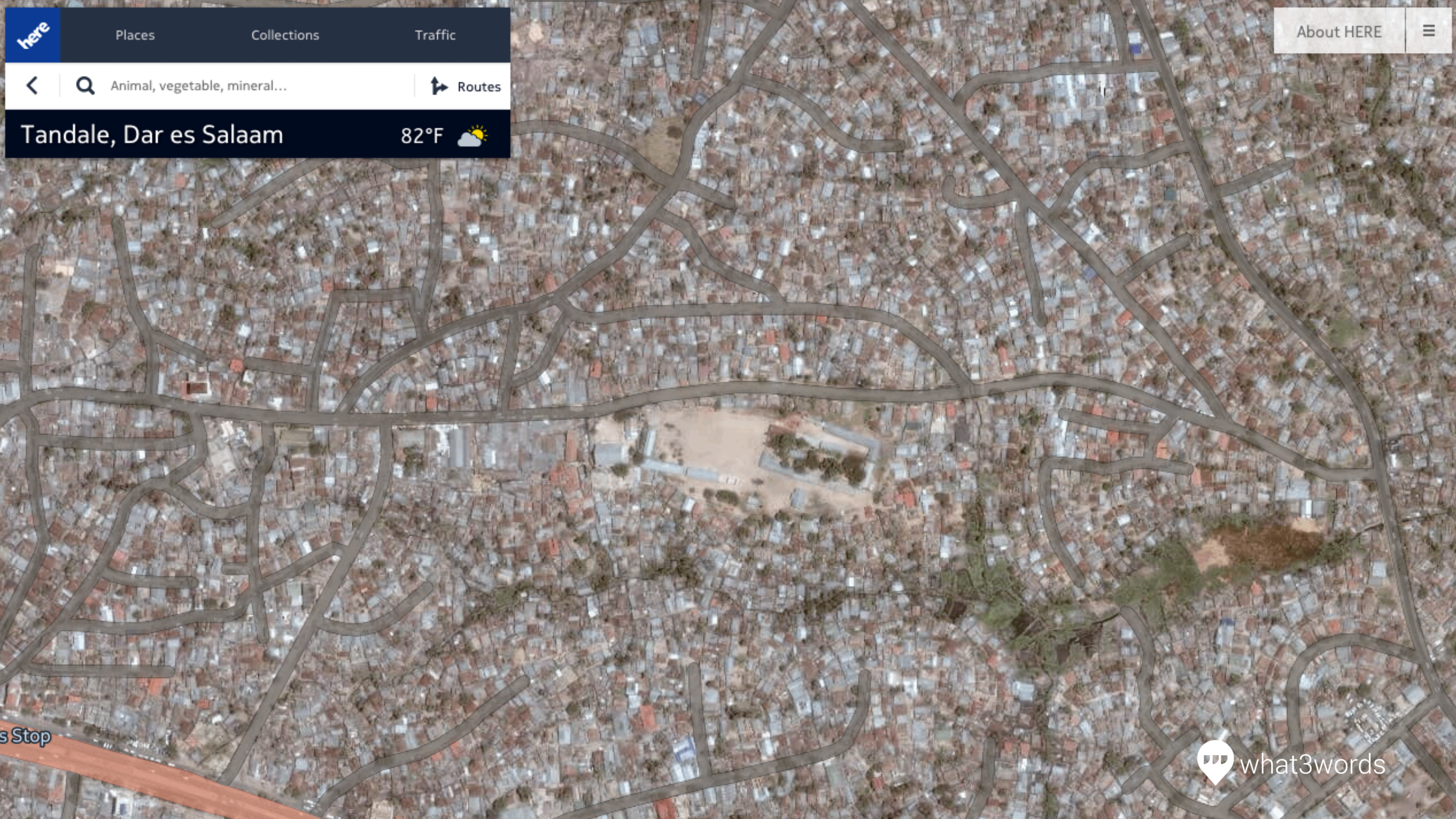
Babat St

Zinge St

Zimpeto St



what3words



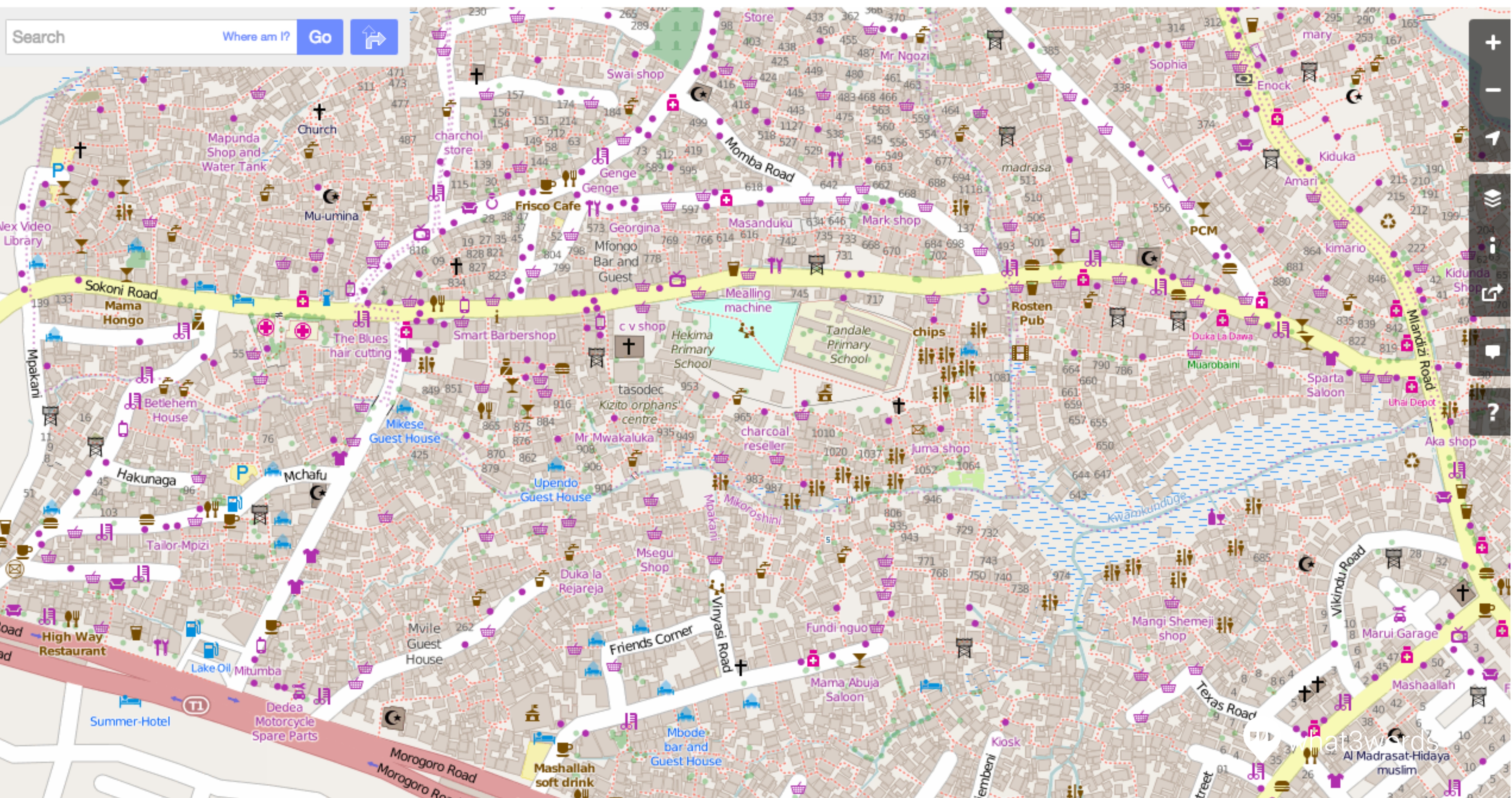
s Stop



Search

Where am I?

Go



at3words

A scenic view of a narrow canal in Burano, Venice. The canal is flanked by multi-story buildings painted in bright, varied colors including brown, green, orange, and yellow. Numerous small boats, likely gondolas, are moored along the edges of the canal. The water is calm, reflecting the colorful buildings and the clear sky. In the distance, the horizon line of the Venetian lagoon is visible under a pale blue sky. The overall atmosphere is peaceful and picturesque.

THE WORLD IS POORLY ADDRESSED

Geocoders
hard at work!
😊

An address will start with, or at least include a building number

ROYAL OPERA HOUSE, COVENT GARDEN,
LONDON, WC2E 9DD, UNITED KINGDOM

No buildings are numbered zero

0 EGMONT ROAD, MIDDLESBROUGH, TS4 2HT

OK, but they won't have negative numbers

-1 PRIORY ROAD, NEWBURY, RG14 7QS

But the building number will only be used once per street

50 AMMANFORD ROAD, TYCROES,
AMMANFORD, SA18 3QJ

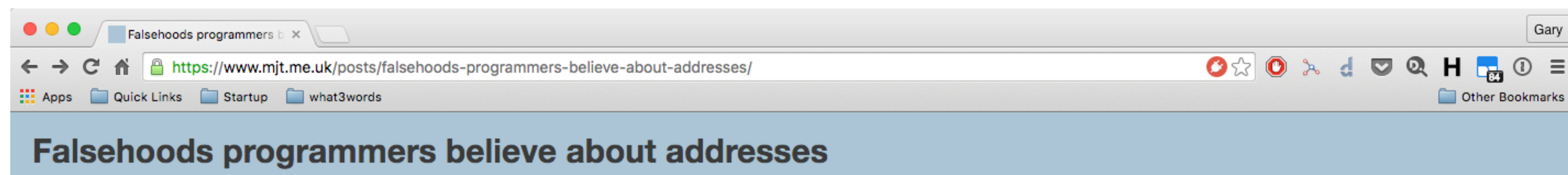
50 AMMANFORD ROAD, LLANDYBIE,
AMMANFORD, SA18 3YF

But there'll only be one number in the address, surely?

5/F, CITYPLAZA 3, 14 TAIKOO WAN ROAD,
ISLAND EAST, HKSAR

Aha! But there'll be a road name!

2 MI N THEN 3 MI W OF JENNINGS, OK 74038



Perhaps you've read posts like [Falsehoods Programmers Believe About Names](#) and [Falsehoods programmers believe about time](#). Maybe you've also read [Falsehoods programmers believe about geography](#).

Addressing is a fertile ground for incorrect assumptions, because everyone's used to dealing with addresses and 99% of the time they seem so simple. Below are some incorrect assumptions I've seen made, or made myself, or had reported to me. (If you want to look up an address for a UK postcode or vice-versa to confirm what I'm telling you, try the [Royal Mail Postcode Finder](#))

- **An address will start with, or at least include, a building number.**

Counterexample: Royal Opera House, Covent Garden, London, WC2E 9DD, United Kingdom.

- **When there is a building number, it will be all-numeric.**

Counterexample: 1A Egmont Road, Middlesbrough, TS4 2HT

4-5 Bonhill Street, London, EC2A 4BX

- **No buildings are numbered zero**

Counterexample: 0 Egmont Road, Middlesbrough, TS4 2HT

- **Well, at the very least no buildings have negative numbers**

Guy Chisholm provided this counterexample: Minusone Priory Road, Newbury, RG14 7QS

(none of the databases I've checked render this as -1)

- **We can put those funny numbers into the building name field, as no buildings have both a name and a funny number**

Counterexample: Idas Court, 4-6 Princes Road, Hull, HU5 2RD

- **When there's a building name, there won't be a building number (or vice-versa)**

Counterexample: Flat 1.4, Ziggurat Building, 60-66 Saffron Hill, London, EC1N 8QX, United Kingdom

- **A building number will only be used once per street**

The difference between 50 Ammanford Road, Tycroes, Ammanford, SA18 3QJ and 50 Ammanford Road, Llandybie, Ammanford, SA18 3YF is about 4 miles ([Google Maps](#)).

- **When there's line with a number in an address, it's the building number.**

Counterexample: Flat 18, Da Vinci House, 44 Saffron Hill, London, EC1N 8FH, United Kingdom

You also get suite numbers, floor numbers, unit numbers, and organisations with numbers in their names.

WWW.MJT.ME.UK/POSTS/FALSEHOODS-PROGRAMMERS-BELIEVE-ABOUT-ADDRESSES/

Tibor Schütz points out building numbers may be skipped - for example, on a street where even-numbered buildings are on one side, odd numbers on the other; multiple buildings sharing the same number (such as where a new house has been built) and buildings with more than one number.

Cyrille Chépélov and Sami Lehtinen tell me in Antibes, France and rural Finland some buildings are numbered based on the distance from the start of the road - such as Longroad 65 for the building 750m from the start of longroad.

An aerial photograph of the Burj Khalifa in Dubai, United Arab Emirates. The skyscraper is the central focus, reaching high into a clear blue sky with some light clouds. The surrounding cityscape is visible, including other high-rise buildings, roads, and green spaces. The text "75% OF THE WORLD HAS INADEQUATE, POOR OR NO ADDRESSING SYSTEMS" is overlaid in white, bold, sans-serif font across the middle of the image.

75% OF THE WORLD HAS INADEQUATE,
POOR OR NO ADDRESSING SYSTEMS



4 BILLION PEOPLE DON'T HAVE AN ADDRESS

25° 9' 40.918" S
18° 59' 2.824" E



MINISTRY OF LOCAL GOVERNMENT RURAL
DEVELOPMENT AND ENVIRONMENT

UMLIS



A.M.A

URBAN MANAGEMENT LAND INFORMATION SYSTEM

MINISTRY OF LOCAL GOVERNMENT RURAL DEVELOPMENT AND ENVIRONMENT,
ACCRA METROPOLITAN ASSEMBLY,

Funded By



Sida / GoG



SwedeSurvey



Geo -Tech Systems Ltd.

COLLABORATORS : GEO - TECH SYSTEMS LIMITED, SWEDESURVEY

PO. BOX: GP 385, ACCRA, GHANA

TEL: 021-763435

ASI ZIPCODE SYSTEMS LTD.

P.O.BOX CT 995 ACCRA TEL:0244624987

STREET NAMING AND HOUSE NUMBERING PROJECT

- *STREET NAME SIGNAGE PRODUCTION & INSTALLATION
- *HOUSE NUMBER PLATE PRODUCTION & INSTALLATION
- *ZIP CODES PRODUCTION AND COMPUTERIZATION
- *STREET ADDRESS DATA MANAGEMENT

AMA
47
HUNSON ROAD

13
SEMPE MENSAN ST.

MICS 0018

~~*~~
End



E

195
—
15

AMHIS
0-10800
S-0100
H 01404

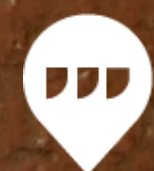
HOUSE N^o

E 193
15

AMHIS
C-10800
S-0100
H-01400

BLK

54



what3words



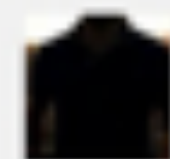
Doner Pasha Oven & Grill Cafe

Al Muthana Square, Opp. Oman Oil Petrol Pump,
MBD Area, P.O. Box 560, Ruwi

★★★★○ Posted 7 Jul 2013

"Authentic Turkish Cuisine from Antalya"

Excellent Turkish food from Antalya. Quite different from the usual Turkish fare we get in Muscat. R... [read more](#)



Been



Want



In most industrialized countries, having a physical address is something that we take for granted. But in many developing countries, as well as in some emerging economies, the majority of people do not have an address. Yet addresses are an essential tool for economic and social development.



UPU

UNIVERSAL
POSTAL
UNION



what3words

“EVEN IN ONE OF THE BEST ADDRESS SYSTEMS IN THE WORLD, IN THE UK, RESEARCH HAS SUGGESTED THAT A 1% IMPROVEMENT IN THE GOVERNMENT’S OWN ADDRESS DATA WOULD BRING A EUR 25BN REDUCTION IN COSTS.”

JAMES CARTLEDGE
POST&PARCEL

‘...ONLY ABOUT 50 OR 60 [COUNTRIES] HAVE POSTAL CODE OR ADDRESS DATABASES WHICH ARE KEPT REASONABLY CURRENT...’ .

‘IN THE LEAST DEVELOPED COUNTRIES, [ADDRESS VERIFICATION] MAY ONLY MEAN THAT THE CITY OR TOWN EXISTS.’

“ADDRESSING THE WORLD: AN ADDRESS FOR EVERYONE”
UPU (UNIVERSAL POSTAL UNION)

“THE ADDRESS DATA IS REALLY THE MOST IMPORTANT AND INTERESTING THING
TO WORK ON [RIGHT NOW].”

“FOR THE LOVE OF OPEN MAPPING DATA”
STEVE COAST (FOUNDER OF OPENSTREETMAP), IN TECHCRUNCH 2014

A person with short brown hair, wearing a blue and white patterned scarf and a white backpack, is walking away from the camera down a busy city street. The street is filled with people, including a person in a blue shirt and helmet on a scooter to the left, and a person in a white jacket to the right. In the background, there are buildings with various signs, including a green sign that says "Mr. Wish" and a red sign with Chinese characters. The scene is slightly blurred, suggesting a shallow depth of field.

**POOR ADDRESSING IS EXPENSIVE AND FRUSTRATING IN THE
DEVELOPED WORLD...**

An aerial photograph of a sprawling informal settlement, likely a favela, built on a steep hillside. The houses are tightly packed, multi-story, and constructed from various materials including brick, concrete, and corrugated metal. Many roofs have blue water tanks. In the background, a large mountain peak is visible under a cloudy sky.

...AND COSTS LIVES & LIMITS GROWTH IN DEVELOPING ONES

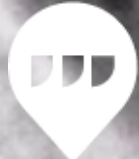
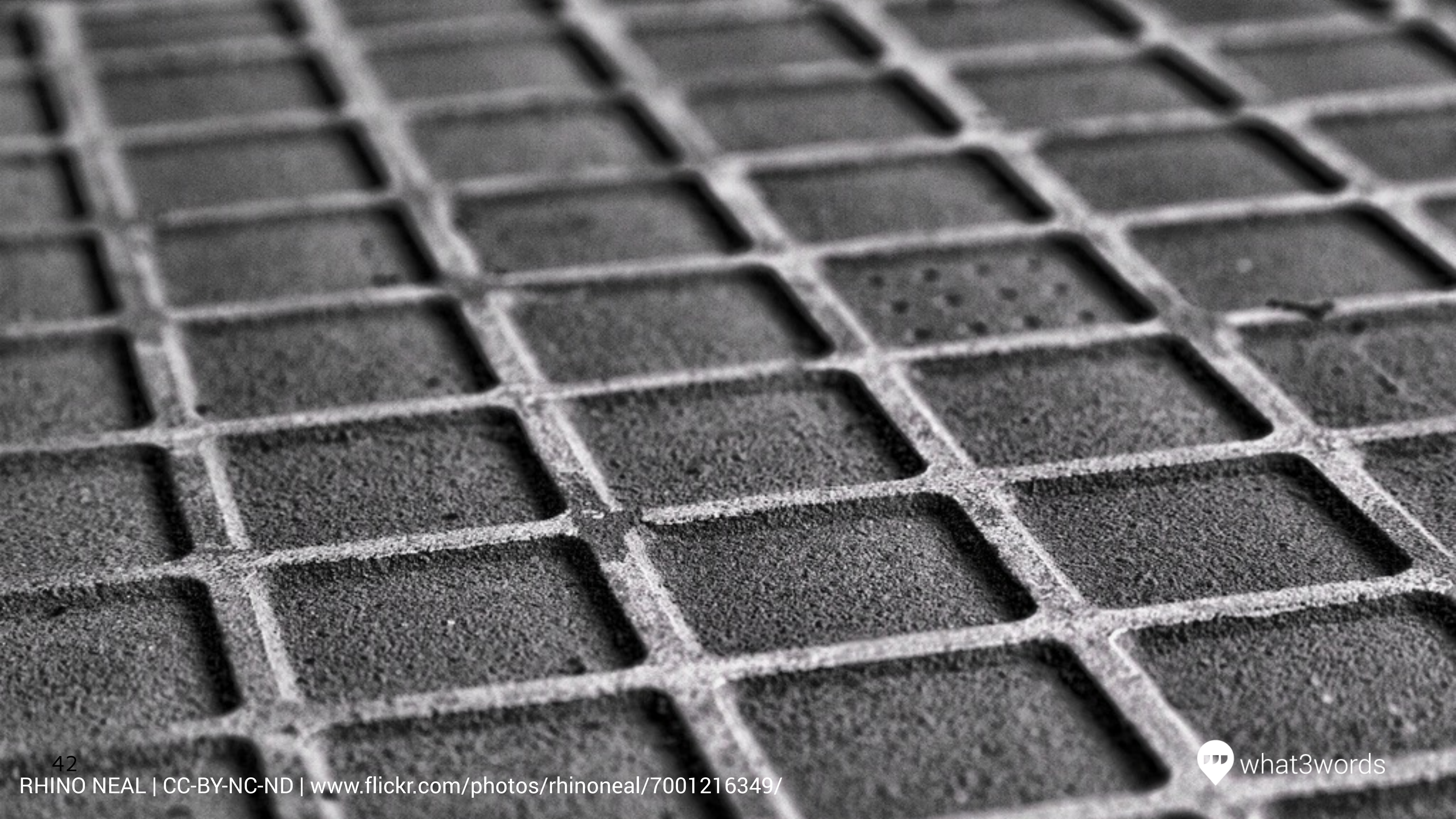


THE WORLD WOULD BE A BETTER PLACE IF EVERYONE COULD
EASILY TALK ABOUT THE LOCATION OF EVERY PART OF IT

REUSABLE . TIMERS . DESTINY

YOU CAN. IT'S CALLED WHAT3WORDS





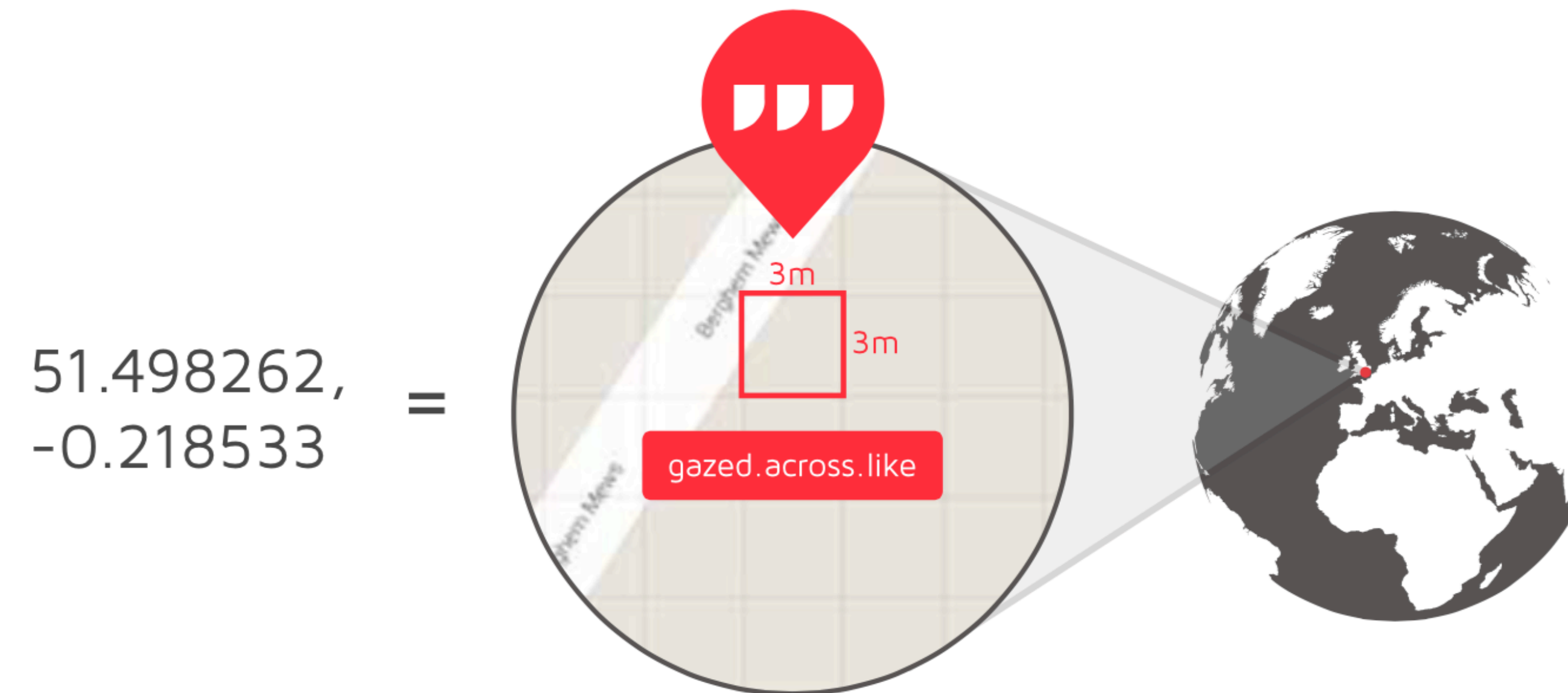




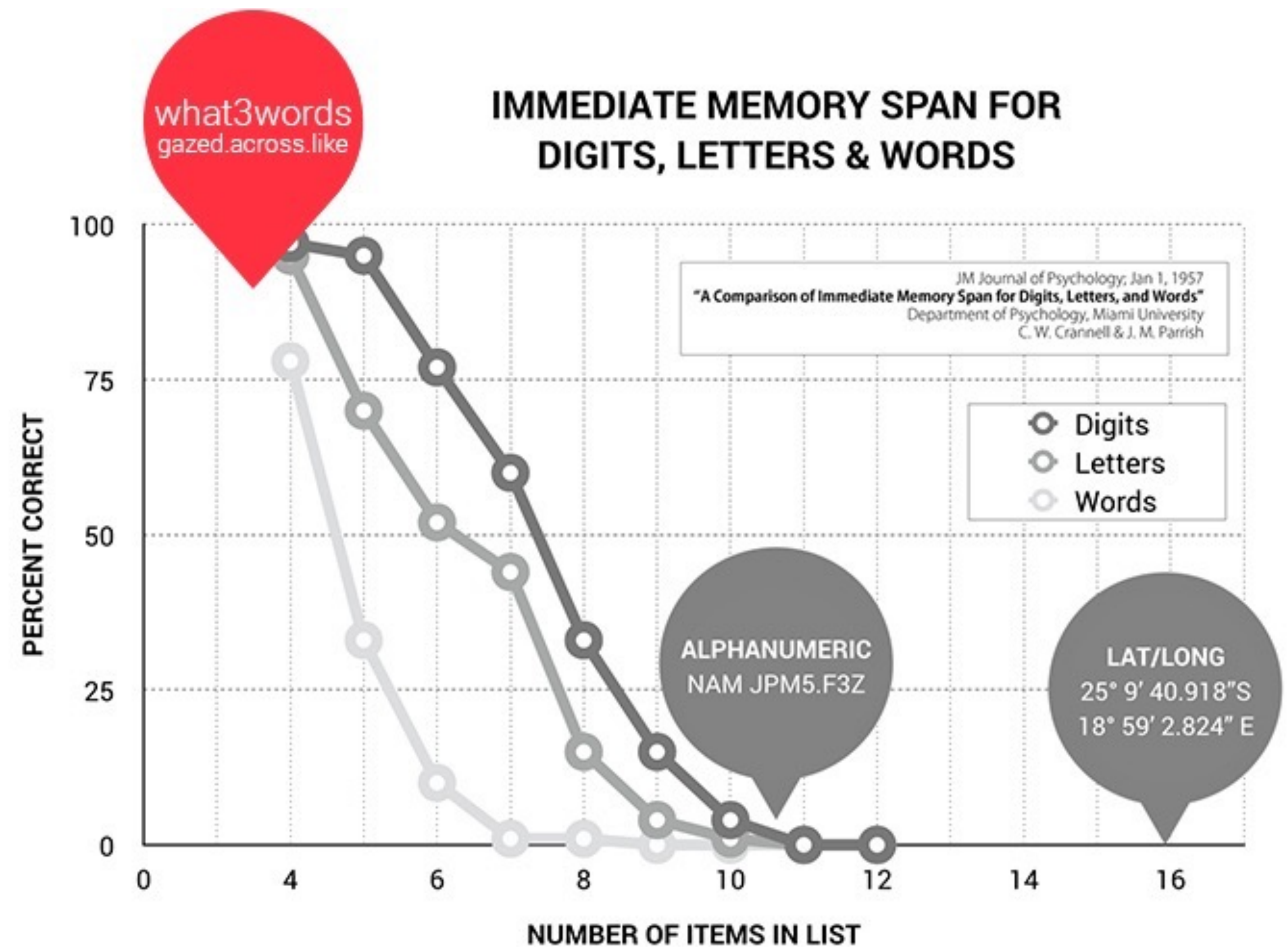


INDEX.HOME.RAFT

WHAT3WORDS IS A **GLOBAL** ADDRESS SYSTEM



BECAUSE WORDS BEAT NUMBERS FOR COMMUNICATION



BECAUSE WORDS WORK EVERYWHERE



BECAUSE WORDS MEAN YOU CAN SPOT ERRORS



BECAUSE WORDS ALLOW INTELLIGENT DISTRIBUTION



BECAUSE LANGUAGE EMPOWERS COMMUNITIES



A COMMON COMMUNICATION LANGUAGE

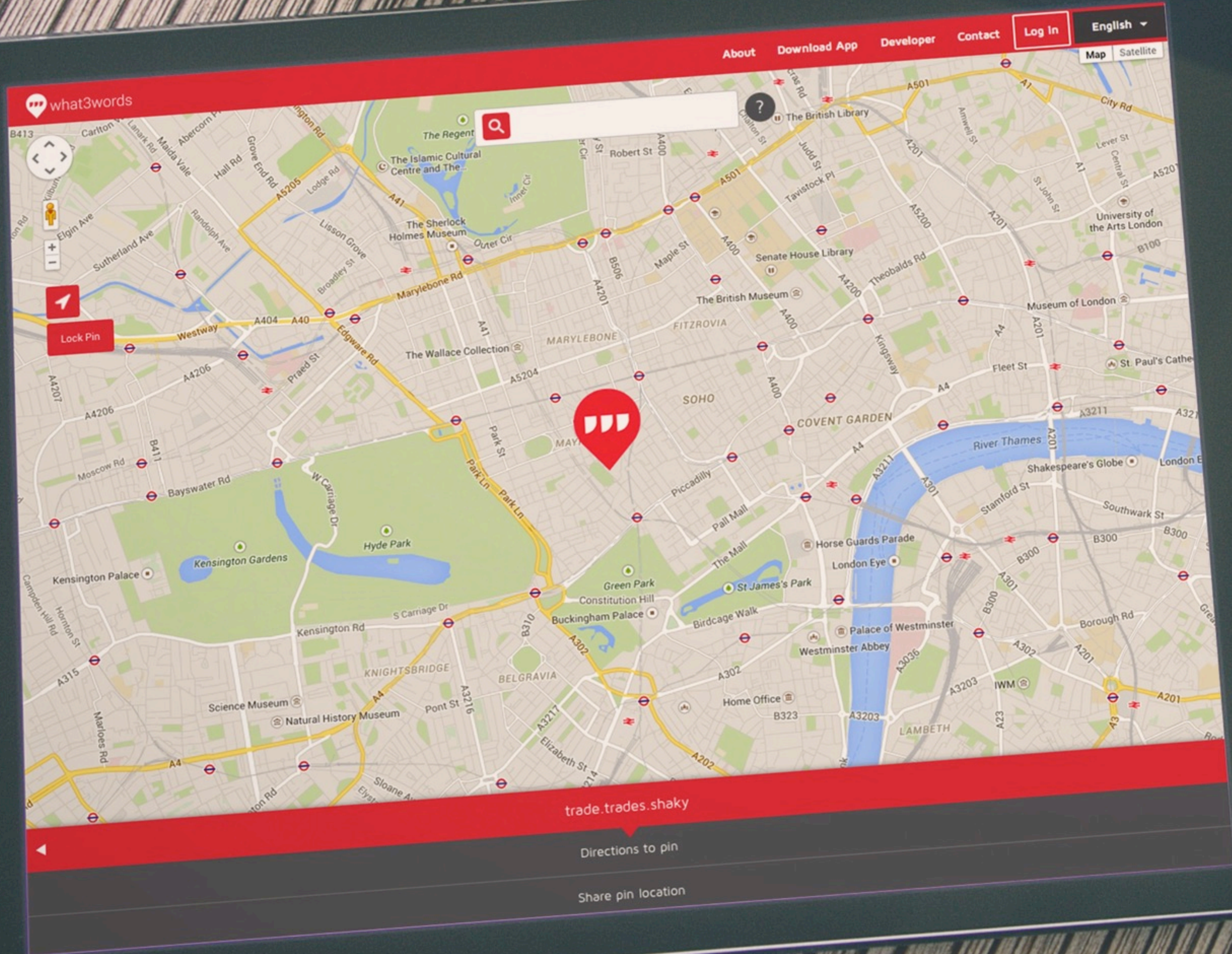


SAY BIG DATA



ONE MORE TIME





No Service

SMS

1

1

RunnerImport

BuilderTeam Library

IN SYNC

Gary Gale

Search

HistoryCollections

AllMeTeam

beta w3w v1 (explicit versioning)
4 requests

beta w3w v1 (no versioning)
4 requests

beta w3w v2 (explicit versioning)
4 requests

Live v1 API
7 requests

Live v2 API
21 requests

GET Forward Geocode - JSON

GET Forward Geocode - GeoJSON

GET Forward Geocode - XML

GET Reverse Geocode - JSON

GET Reverse Geocode - GeoJSON

GET Reverse Geocode - XML

GET AutoSuggest - JSON

GET AutoSuggest - GeoJSON

GET AutoSuggest - XML

GET Languages - JSON

GET Languages - XML

GET Custom 404 Handler

POST Custom 405 Handler

GET Invalid API Key

GET Missing API Key

GET StandardBlend - With Focus - JSON

GET StandardBlend - With Focus - XML

Forward Geocode - JSON

Forward Geocode - JSON

GEThttps://api.what3words.com/v2/forward?addr=index.home.raft&key=BOT1CGE6&display=full&format=jsonParamsSendSave

AuthorizationHeaders (1)BodyPre-request ScriptTests ●Generate Code

TypeNo Auth

BodyCookiesHeaders (8)Tests (5/5)Status: 200 OKTime: 248 ms

PrettyRawPreviewJSONSave Response

```
1 {
2   "crs": {
3     "type": "link",
4     "properties": {
5       "href": "http://spatialreference.org/ref/epsg/4326/ogcwkt/",
6       "type": "ogcwkt"
7     }
8   },
9   "words": "index.home.raft",
10  "bounds": {
11    "southwest": {
12      "lng": -0.203607,
13      "lat": 51.521238
14    },
15    "northeast": {
16      "lng": -0.203564,
17      "lat": 51.521265
18    }
19  },
20  "geometry": {
21    "lng": -0.203586,
22    "lat": 51.521251
23  },
24  "language": "en",
25  "map": "http://w3w.co/index.home.raft",
26  "status": {
27    "status": 200,
28    "reason": "OK"
29  },
30  "thanks": "Thanks from all of us at index.home.raft for using a what3words API"
31 }
```


Search

HistoryCollections

Today

GEThttps://api.what3words.com/position?position=52.52082,13.415802&key=BOT1CGE6&cor...

GEThttps://api.what3words.com/w3w?string=internal.retail.caller&key=BOT1CGE6&corner...

BuilderRunnerImport

https://api.what3wo...+No environment

GEThttps://api.what3words.com/position?position=52.52082,13.415802&key=BOT1CGE6&corners=trueParamsSend

AuthorizationHeaders (1)BodyPre-request scriptTests

No Auth

BodyCookiesHeaders (12)TestsStatus 200 OKTime 154 ms

PrettyRawPreviewJSON

```
1 {
2   "words": [
3     "internal",
4     "retail",
5     "caller"
6   ],
7   "position": [
8     52.52082,
9     13.415802
10  ],
11  "corners": [
12    [
13      52.520806,
14      13.41578
15    ],
16    [
17      52.520833,
18      13.415824
19    ]
20  ],
21  "language": "en"
22 }
```

Scroll to response

New Map ▾



Measure



Bookmarks



Find a 3 word address



All

what3words

Esri World Geocoder



Code Libraries | what3words

developer.what3words.com/code-libraries/

what3words

API & DocsCode LibrariesSDKBatch conversion toolBrand AssetsSupportSign up for APIMy AccountEnglish

Code Libraries

Additional code and wrappers to help with w3w integration

API Wrappers

Wrappers for the what3words API.
Official wrappers can be seen in [GitHub](#) (pull requests very welcome).

PHP – what3words

Javascript – what3words

Ruby – what3words

Objective-C – what3words

Python – what3words

Java – Christian Mayer

Node.js wrapper – OpenCageData

Additional Code & Snippets

Developed by what3words and the developer community

3 words button – what3words

what3words for pebble – what3words

Unofficial Blackberry App – Oleg Derevenetz

Leaflet Control Geocoder – Per Liedman

Leaflet JS plugin – David Piesse

Drupal Get Locations module – Bob Hutchinson

Node-RED node – Node-RED (IBM Emerging Technology)

Perl CPAN module – OpenCageData

geopy Geocoding library for Python – geopy

Geocoder written in python – Denie Carriere

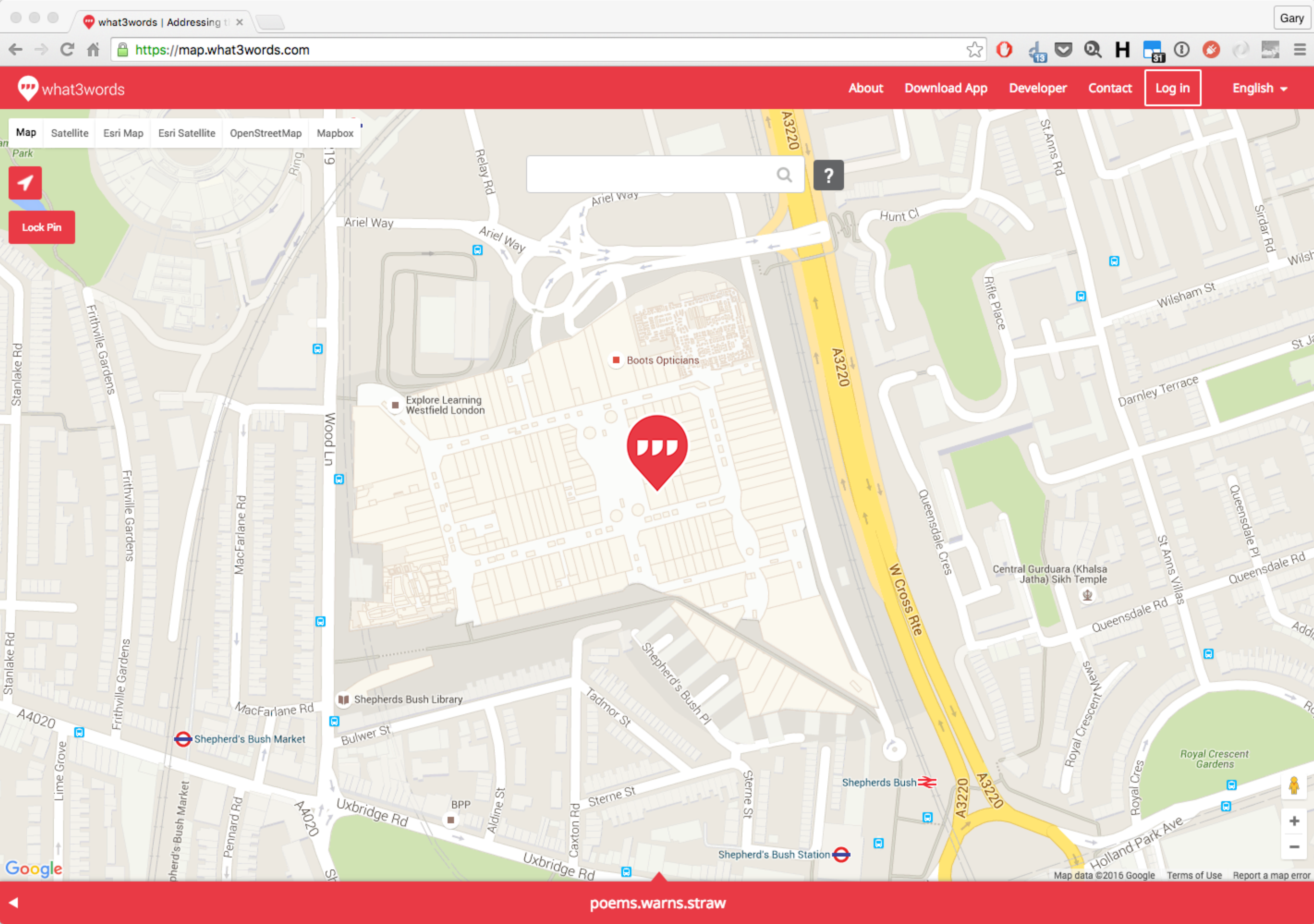
what3words to Address Utility – Steve Caldwell

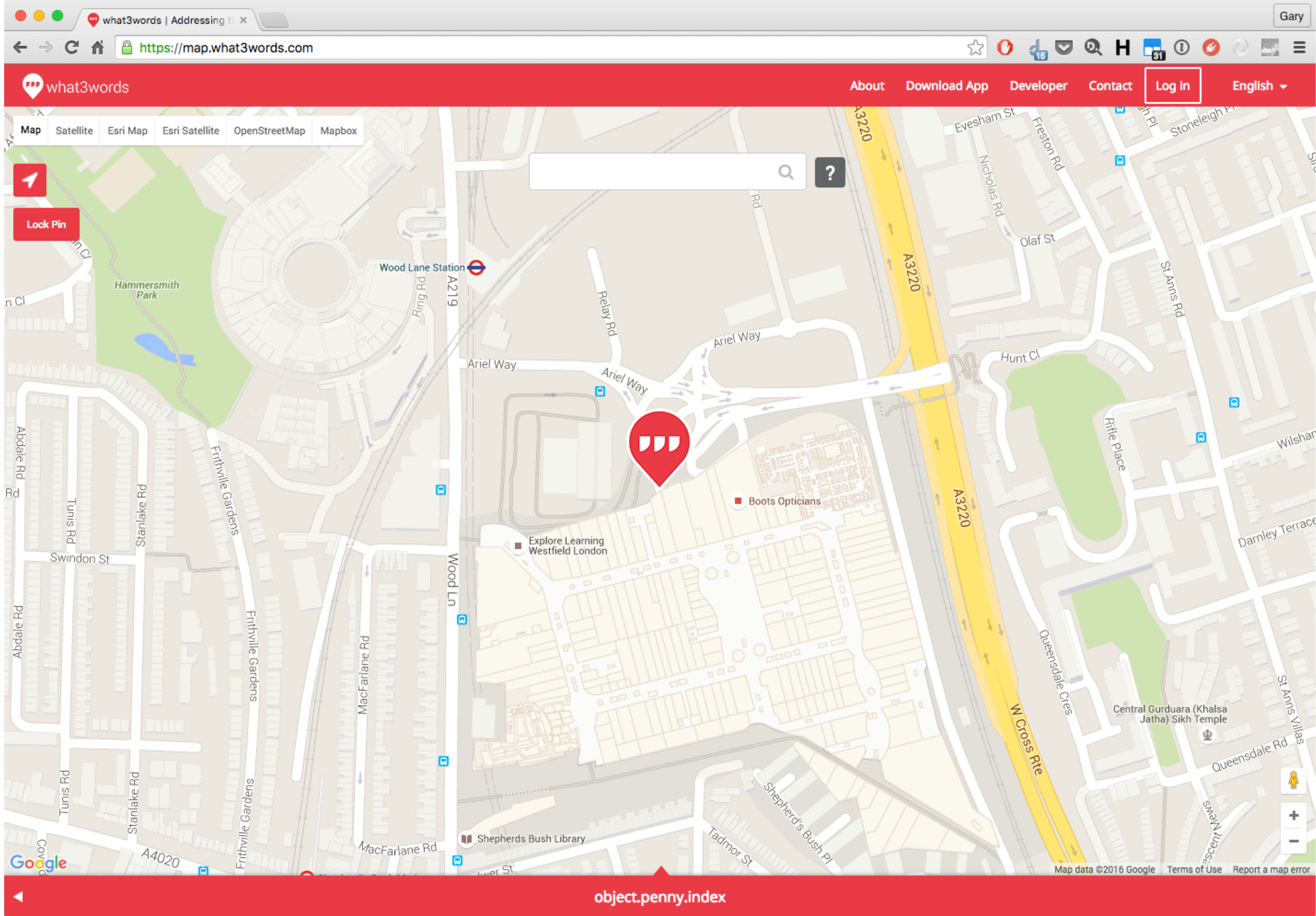
what3trackz – Alexander Uhlig & Fabian Schebanek

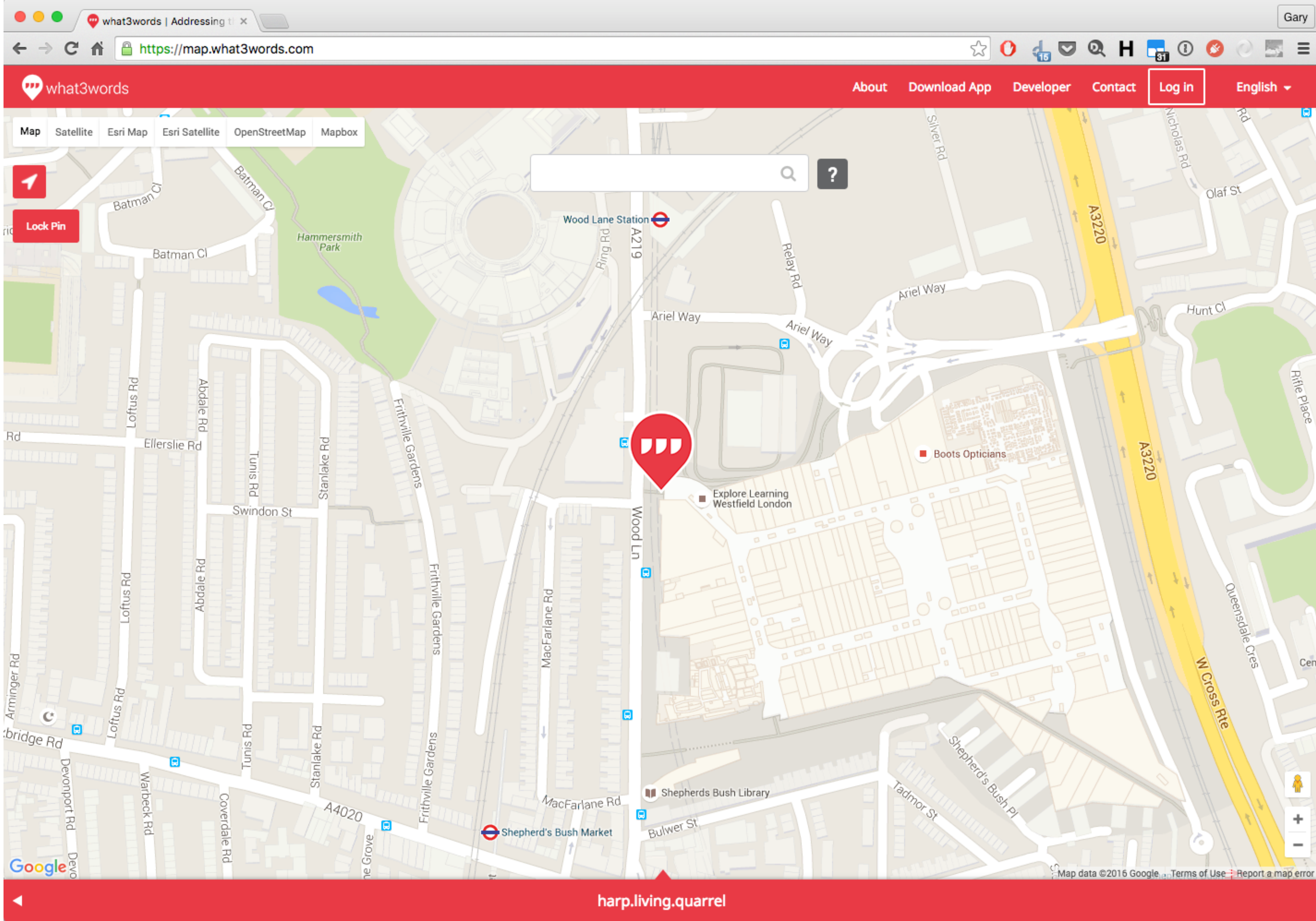
Help

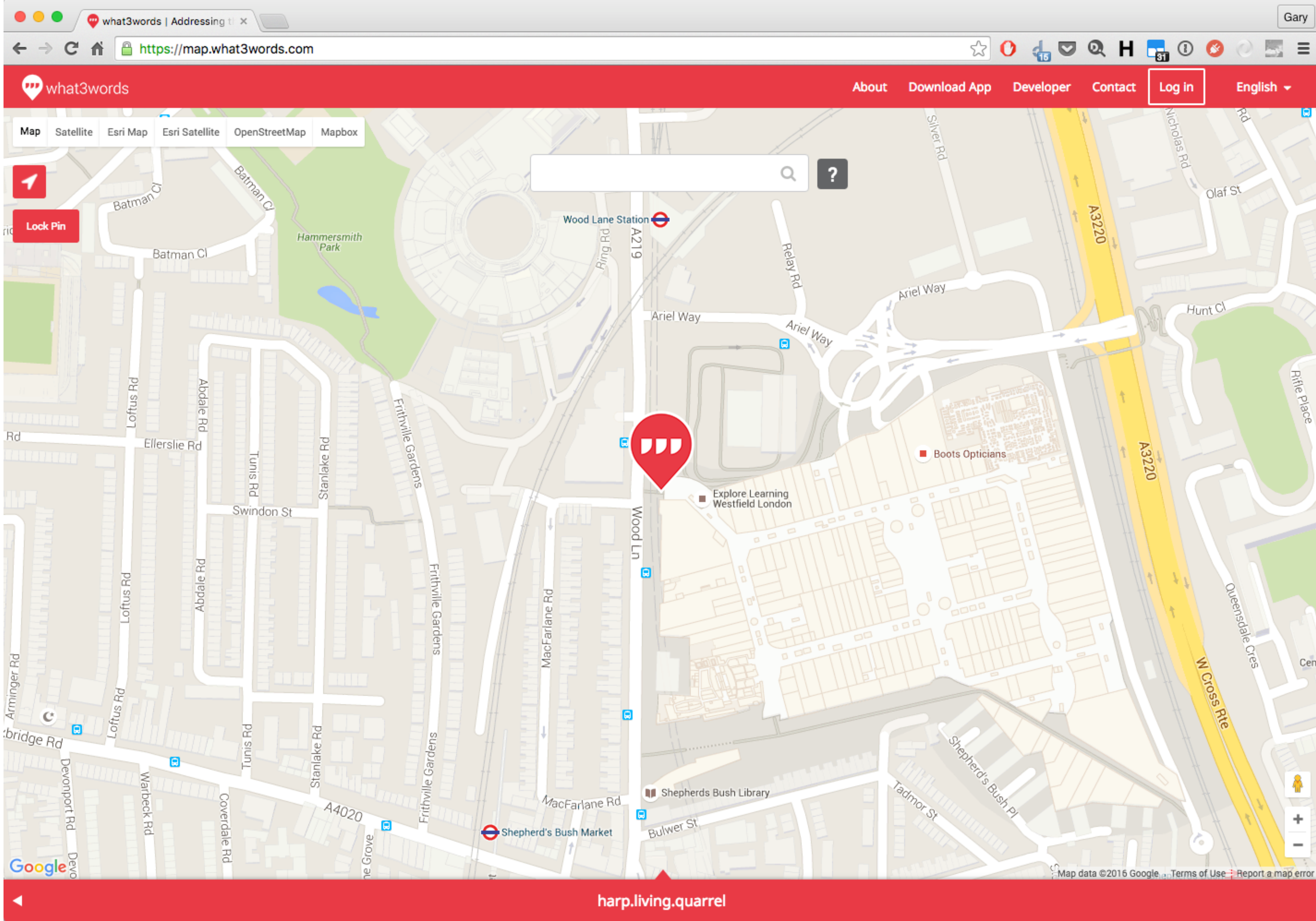
59

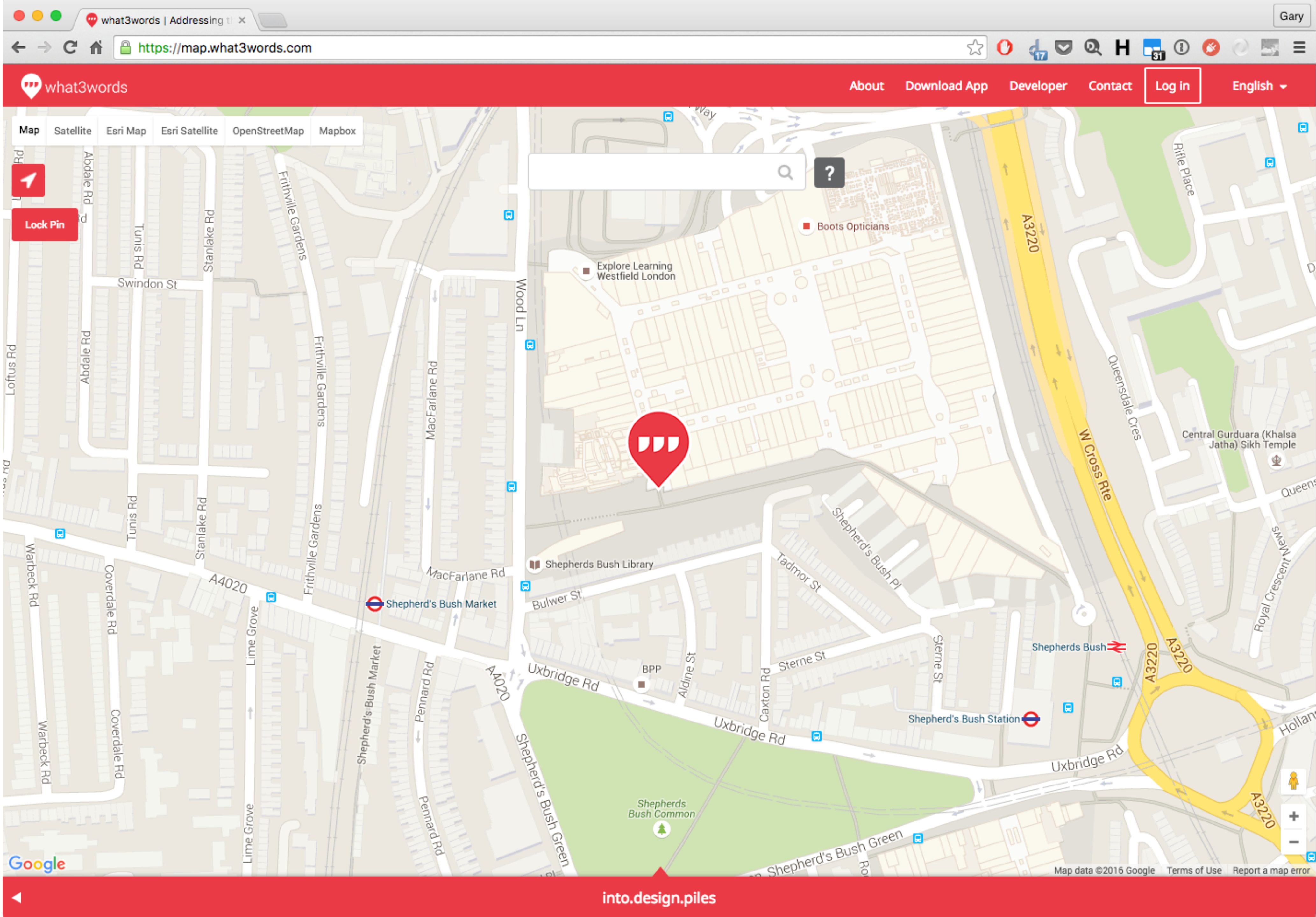
FOR WHEN ONE ADDRESS JUST ISN'T ENOUGH

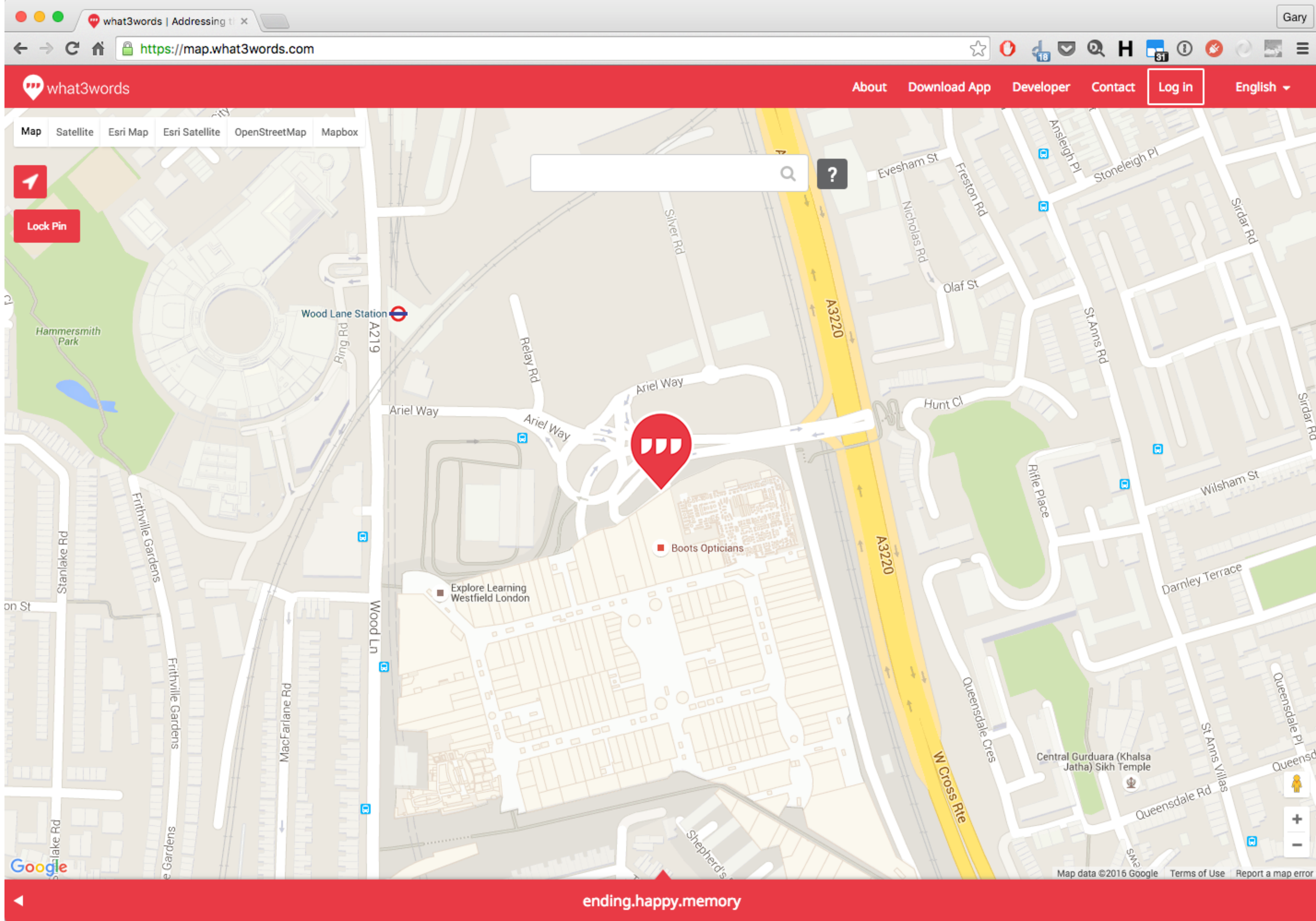












BEING USED IN THE SLUMS TO DELIVER LIGHT



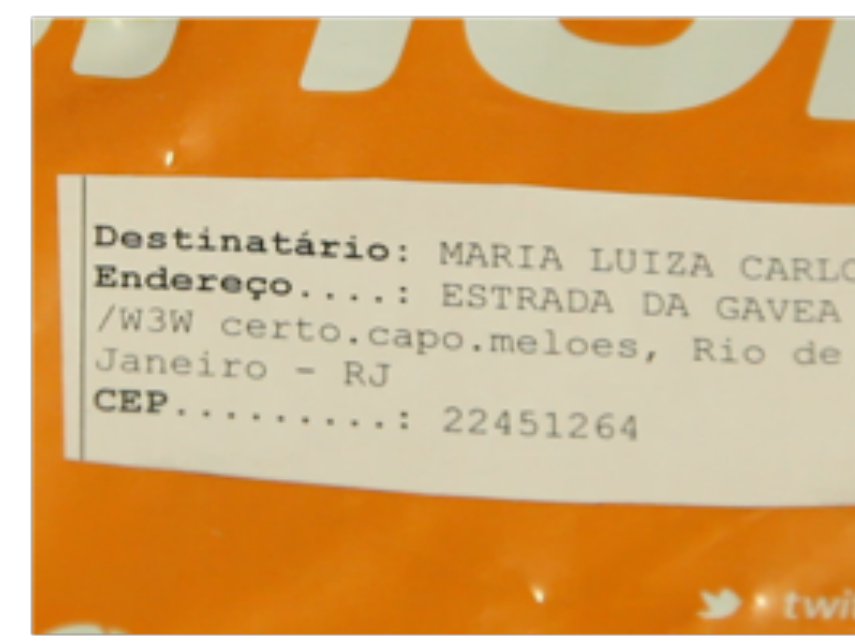
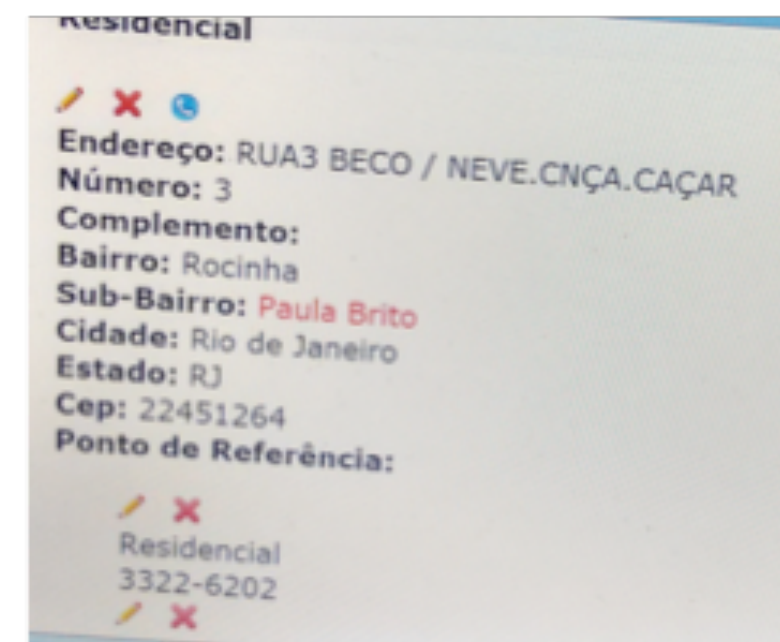
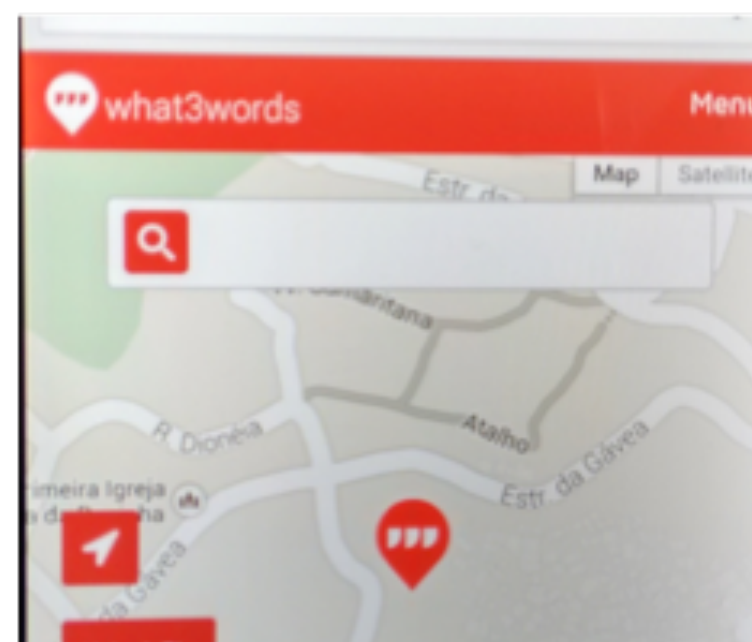
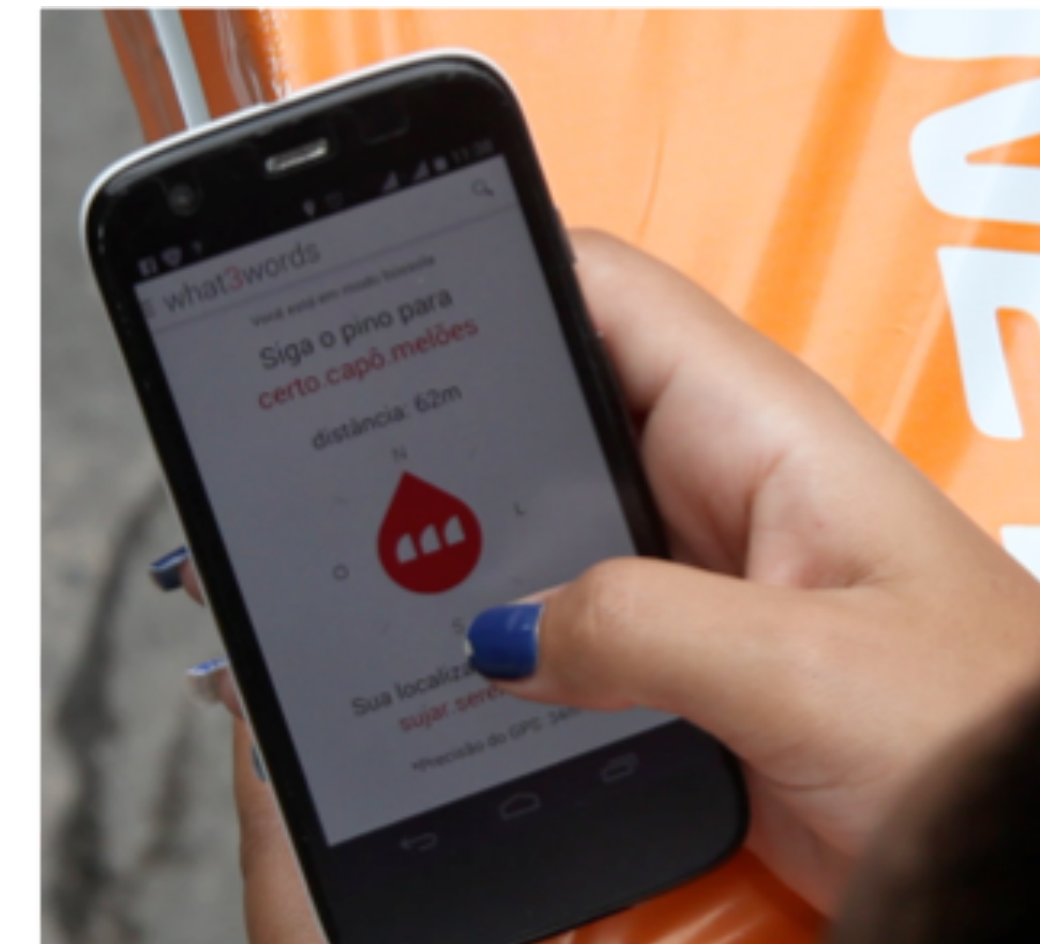
w3w.co/pollinate-energy

BEING USED IN RURAL AFRICA TO ERADICATE MOSQUITOS

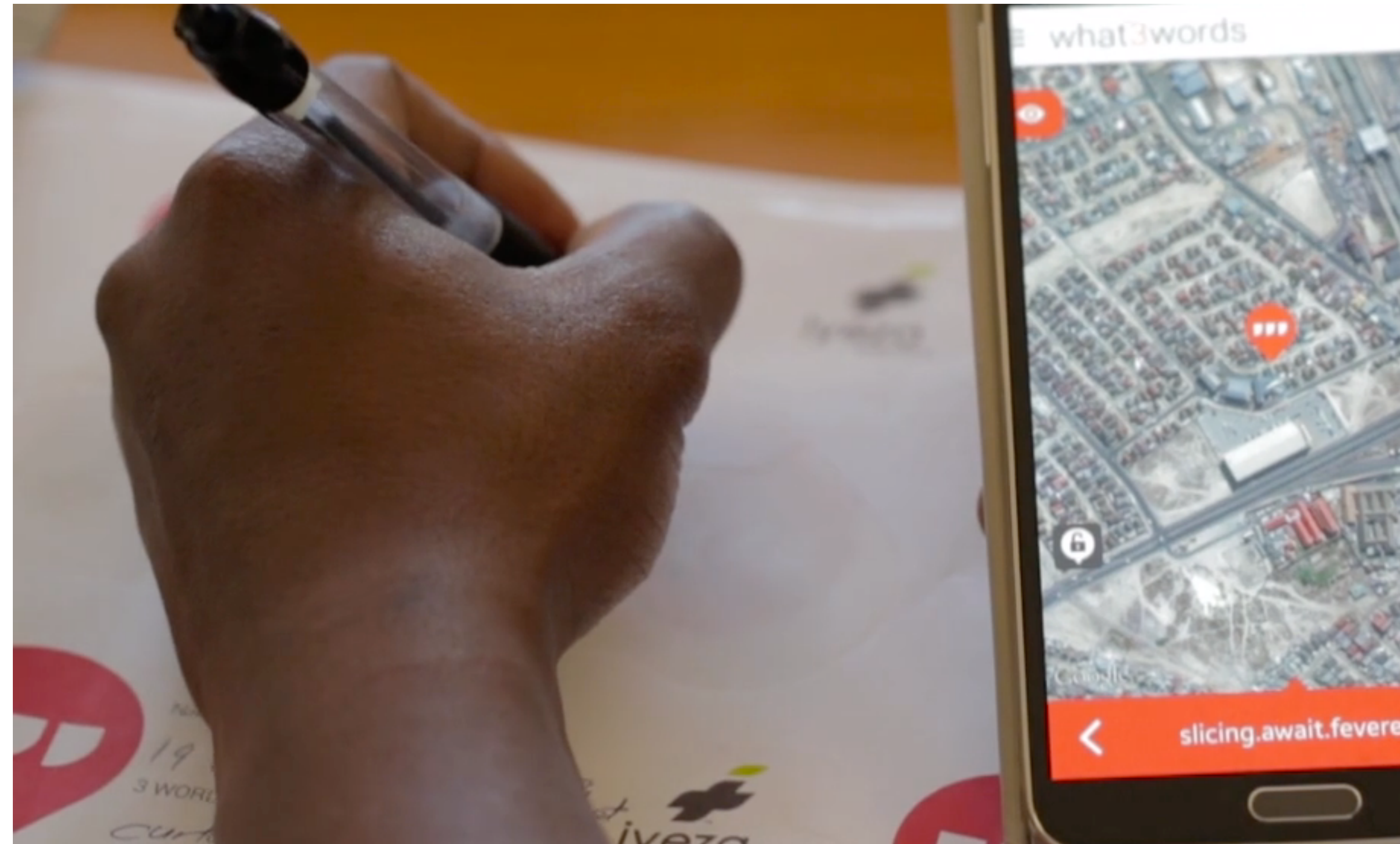


w3w.co/in2care

BEING USED IN THE FAVELAS TO DELIVER PACKAGES



BEING USED IN THE TOWNSHIPS TO DELIVER MEDICINES



BEING USED BY THE UN TO REPORT DISASTERS

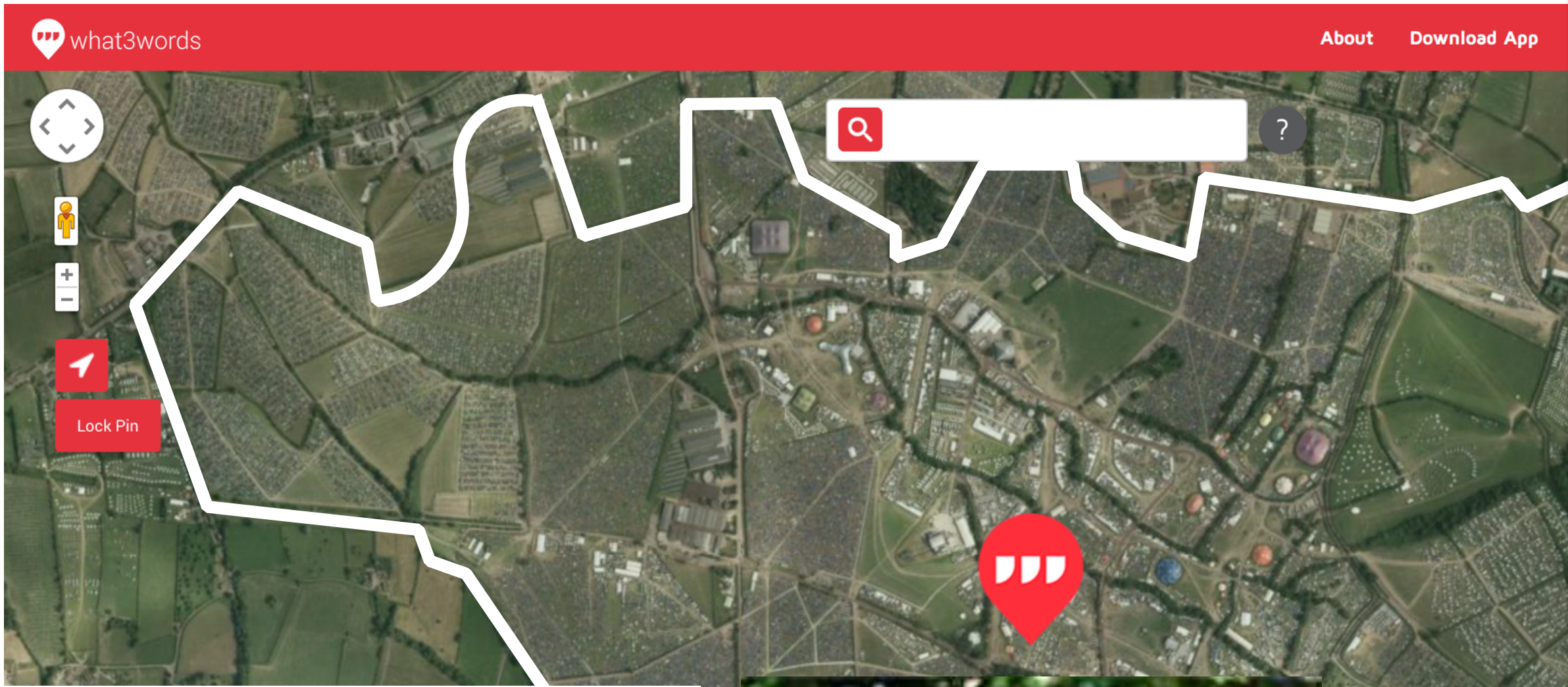


w3w.co/un-asign

FESTIVALS, RUNS, CHALETS, SCAVENGER HUNTS



WiltshireByways
Brayford - Walscott Hill (ORPA, N-S) ▾



Places for tea

Click the map markers for details.



[Back to Index](#)



Purple Ski

Location

The chalet is a 5 minute chauffeured drive from the main lift hub and center of Méribel. It is approximately 2 minutes walk from the piste and Golf chair which offers quick access to the Altiport, Méribel and Courchevel. For most of the season, it is also possible to ski back to the chalet.

Address: Foinsbois, Impasse de l'Adret, 73550 Méribel Village

Telephone: +33 (0)4 79 24 04 99

Email: michael@purpleski.com

GPS Coordinates

Latitude: 45.4143

Longitude: 6.5641

What3Words Address: [companies.fishmongers.covert](https://www.what3words.com/companies/fishmongers.covert)

Altitude: 1,419m/4,655ft

For a location map of the chalet just click [here](#).

BARS, HOTELS & RESTAURANTS

Hg2

DESTINATIONS / MAGAZINE / ABOUT / AGENCY

SEARCH...

A Hedonist’s guide to...

Intelligent. Irreverent. Inspired.

AFRICA › ASIA › EUROPE › NORTH AMERICA › OCEANIA › SOUTH AMERICA › SKI › MAGAZINE



w3w.co/hedonists-guide

Udon Maruka

TOKYO / RESTAURANTS / JAPANESE

SHARE
Twitter Facebook Pinterest

ADDRESS
Chiyoda-ku, Kanda-Ogawamachi 3-16-1, New
Surugadai Bldg. 1F,
Chiyoda-ku
TELEPHONE
81-3-3294-1320
PRICE
£

WHAT 3 WORDS
♥ reapply.changing.dorm

Explore this venue in our app

Kanda isn't usually the first place that tourists will explore when visiting Tokyo, but nestled in this residential neighbourhood is an Udon spot worth taking a detour for. Udon Maruka is a long-time lunchtime favourite among office workers and students in the area and the snaking queues come midday are a good indication of the great food on offer here. The small space gets full quick, but the noodles appear from the stoves and open kitchen in lightening speed so you're never waiting too long. The communal tables and the sound of everyone slurping on their hot broths is a satisfying hum to a rather authentic fast food dining experience. The sanuki udon noodles, made with a thick wheat noodle are the speciality here and worth ordering with a side of the delicious soft-boiled egg tempura.

Image credit: Fuyuhiko TAKAYA/Flickr

USED TO DOCUMENT 1 MILLION+ ARCHEOLOGICAL FINDS

Home

Contacts

Get Involved

Database

Treasure

Guides

News & Events

Publications

Research

Counties

Forum

Welcome to the Portable Antiquities Scheme website

The Portable Antiquities Scheme is a DCMS funded project to encourage the voluntary recording of archaeological objects found by members of the public in England and Wales. Every year many thousands of objects are discovered, many of these by metal-detector users, but also by people whilst out walking, gardening or going about their daily work.

Portable Antiquities Scheme

www.finds.org.uk

Search our database

Try coin for example

Search!

Latest tweets

2 hours, 31 minutes ago

findsorguk

said: RT @Chiara_Bonacchi: now @DEJPett talking about evaluating the @findsorguk Portable Antiquities Scheme @MicroPasts #micropasts

2 hours, 31 minutes ago

findsorguk

said: RT @SouthendMuseums: Found anything historic in the attic or back garden? #digoutyourtreasure... @findsorguk 14/11 #FindsRoadshow [http://t...](#)

Micropasts

A community platform for conducting, designing and funding research into our human past. The Scheme's latest partnership project in conjunction with UCL and funded by the AHRC.

Read more »

Spatial metadata

Region: [South East](#) (European Region)

County or Unitary authority: [Hampshire](#) (County)

District: [Basingstoke and Deane](#) (District)

Parish or ward: [Upton Grey](#) (Civil Parish)

Spatial coordinates

4 Figure: SU7048

Four figure Latitude: 51.22690788

Four figure longitude: -0.99892011

1:25K map: SU7048

1:10K map: SU74NW

WOEID: [26350819](#)

[What3Words: intensely.faded.scarred](#)

Grid reference source: From a paper map

Unmasked grid reference accurate to a 10 metre square.


Discovery metadata

Method of discovery: [Metal detector](#)

General landuse: [Cultivated land](#)

w3w.co/british-museum

74

 what3words
addressing the world

GO CAR SHARERS CAN NOW PICK EACH OTHER UP AT A 3 WORD ADDRESS

GoCarShare now supports what3words w3w.co/partners

KARTVERKET USERS CAN NOW FIND POINTS OF INTEREST WITH 3 WORD ADDRESSES

Kartverket now supports what3words w3w.co/partners

WITH GEOSPAGO, VITAL PLACES CAN NOW HAVE A 3 WORD ADDRESS

Geospago now supports what3words w3w.co/partners

STREETMAPPERS CAN NOW USE A 3 WORD ADDRESS

streetmap now supports what3words w3w.co/partners

BOUNCE CARS NOW PICK UP AND DROP OFF AT A 3 WORD ADDRESS

bounce now supports what3words w3w.co/partners

POINTPLOT SURVEYORS CAN NOW PLOT WITH 3 WORD ADDRESSES

PointPlot now supports what3words w3w.co/partners

NESTORIA USERS CAN NOW HUNT FOR A HOUSE WITH A 3 WORD ADDRESS

nestoria now supports what3words w3w.co/partners

20 MILLION NAVMII USERS CAN NOW USE A 3 WORD ADDRESS

navmii now supports what3words w3w.co/partners

CROWSFLIGHT USERS CAN NOW NAVIGATE TO A 3 WORD ADDRESS OFFLINE

CROWSFLIGHT now supports what3words w3w.co/partners

WALKERS IN GUNNISON NATIONAL PARK CAN NOW USE A 3 WORD ADDRESS

geoflyer now supports what3words w3w.co/partners

YOU CAN NOW CONTROL & CO-ORDINATE UAVS USING 3 WORD ADDRESSES

PI IE PATH now supports what3words w3w.co/partners

GEOVIEW USERS CAN NOW CREATE LAYERED MAPS USING 3 WORD ADDRESSES

GeoView now supports what3words w3w.co/partners

MULTI-AWARD WINNING IDEA



FINALIST
DISASTER PREPAREDNESS



WINNER - LAUREATE
ECONOMIC DEVELOPMENT



WINNER - INNOVATION GRAND PRIX



WINNER - BT INGENIOUS AWARD



FINALIST



WINNER - MOST
INNOVATIVE APP 2015



NATIONAL NOMINEE & SHORTLISTED



WINNER - LONDON INNOVATOR

A 3 WORD ADDRESS MEANS



BANANA URGENTLY UPLIFT



FICTION . UNLESS . PAVE

ANDIKA • USULI • SIHA

40A



PARISH HEALTHCARE



FUTURES • NOODLE • INVENTIVE



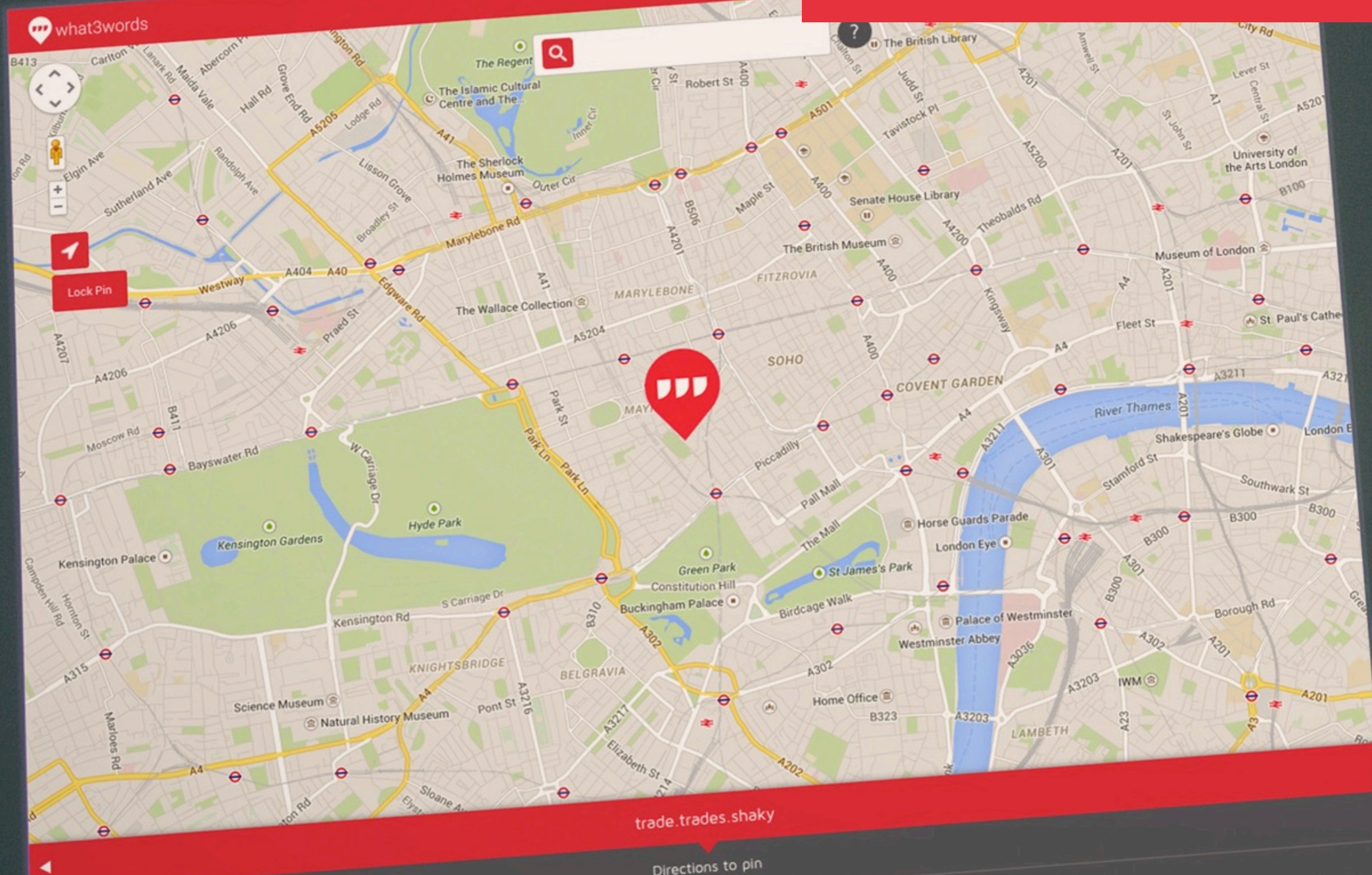
EVERYONE & EVERYWHERE NOW HAS A SIMPLE ADDRESS

We're on a mission to make the world better: more efficient,
less frustrating, and safer



[packet.radio.coffee](https://packet.radio/coffee)

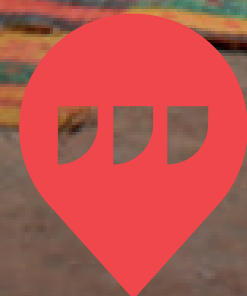
ON THE WEB AND ON MOBILE



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