Transport for London

Walking Maps Research

Job Number 12053
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Transport for London

Research Objectives, Sample and Methodology

Objectives

- Explore how people use two versions of walking map leaflet (current version without bus stop point letters and alternative version with letters)
  - What do people naturally use the map for? (eg way finding in-the-moment; pre-planning; locating attractions/amenities etc)
  - What elements of the map do people naturally use? (eg map key; 3D attractions; 2D symbols; road names; bus stop points etc)
  - How are the maps used in relation to other information/cues in the environment?

- Provide feedback on the pros and cons of the two versions from a user perspective?
  - If/how the different versions affect the information hierarchy and overall usage?
  - For version with letters, explore:
    - Are the letters clear/easy to see?
    - What is the impact of having two of the same letter on the map/within close proximity?
    - What is the impact of showing some bus stop points without letters/blank?
    - If looking for a bus stop - how does this version work alongside the bus spider hub on the other side of the leaflet?

Methodology

- 2 x three hour extended intercept sessions with two researchers at each session:

Intercept	Location	Time of Day	Criteria
1	Piccadilly Circus	Late morning/ lunchtime	Spread of ages, gender, ethnicity
2	Piccadilly Circus	Mid – late afternoon	Spread of tourists, visitors and Londoners who are more/less familiar with the area

- Over the two sessions, a total of 50 people intercepted across 10 locations
- We interviewed 20 tourists, 20 visitors, and 10 Londoners[1]

- When intercepting, people were first asked to naturally use the map, while the researcher observed them. The researcher then explored what the user was doing (elements they were using on the map, what steps they were taking etc); before introducing the alternative version of the map and exploring how this affected natural usage. Finally, the bus stop points/letters were explored in detail.

- The order in which the maps were shown was rotated across the sample; the second version of the map was shown only once we had understood how people naturally usedone version the map.

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[1]Tourist = visiting from outside the UK, Visitor = visitor who lives in UK, not in London, Londoner = lives in London

Locations of intercepts:

Key findings

Key findings

People do not naturally use the bus stop points to aid with navigation, on either version of the map. People use other features/elements that are most familiar to them, mainly the landmarks, general areas and street names. The bus stop points play a recessive role; highlighted by how only one out of 50 people noticed the difference between the maps when shown. Once the difference is pointed out to people, the map without the bus stop point letters is generally preferred for aesthetic reasons: familiar symbol; consistently used. The bus stop point letters are post-rationalised by some as useful, but only for 'someone else' needing to find a specific bus stop, which none of the people intercepted were.

Paper walking map usage context

Customers use a range of environmental cues and information sources when navigating the Piccadilly area; in isolation and in combination:

- Key landmarks; signage (particularly Tube station stops), main street name signs

- A variety of paper maps (particularly tourists and visitors) including: detailed fold-out walking maps; bus maps to locate specific bus stops and plan onward journeys; printouts of google maps

- Legible London monoliths and maps at bus stops–playing a key role in providing reassurance en-route (cross-checking with paper maps or own their own)

I have this paper map I use when walking round, but I like to stop at these maps (monolith) *when I see them so I can check where I am. It is very useful because it tells me exactly where I am*

- Smartphones – google maps/GPS providing more detailed navigation on iphones

Regardless of what other information sources people are using, people are spontaneously very positive when shown either version of the paper walking map:

This is great, it is very clear, the writing is bigger than my paper map
Tourist

I like that you can see the landmarks very clearly
Visitor

The colours are good – the green stands out, so the parks are clearly visible, as is the yellow for the buildings
Londoner

They look the same as the map billboards (monoliths) I have been using which is really useful, as I could use them together
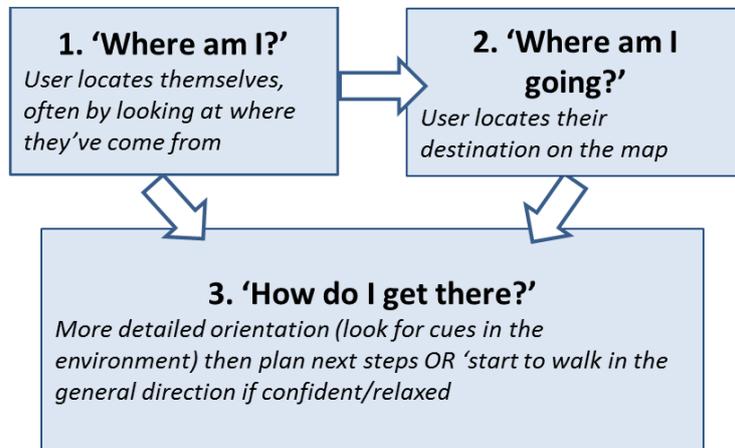**Visitor**

All the street names are too small, I can not read them! But at least I can read the larger writing of the main areas, some maps don't even have that
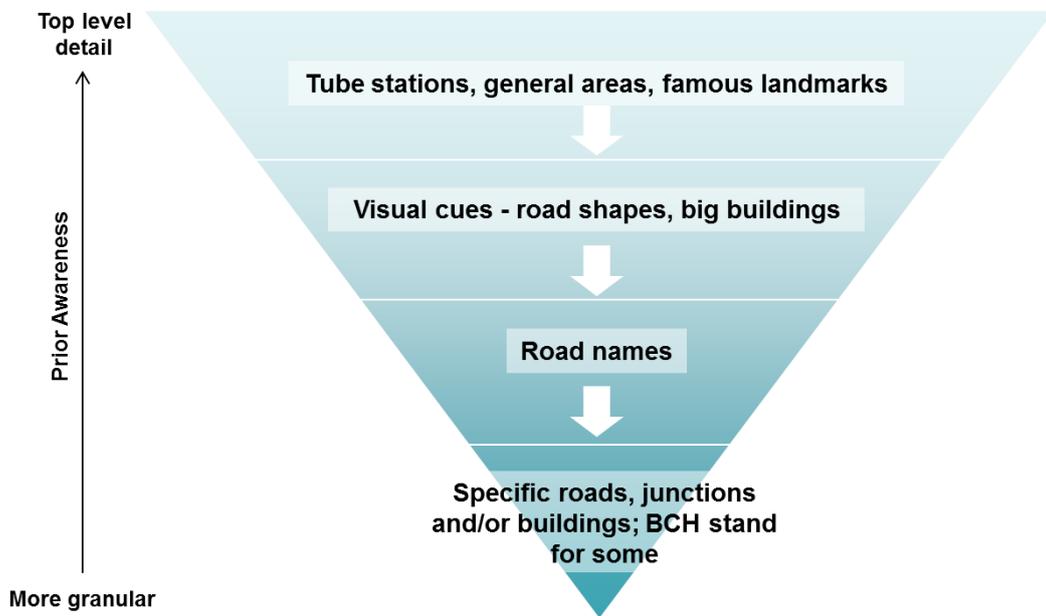**Tourist**

Walking Map Natural Usage

When people are given either version of the walking map, all use it to answer three key questions:

1. 'Where am I?'
User locates themselves, often by looking at where they've come from

2. 'Where am I going?'
User locates their destination on the map

3. 'How do I get there?'
More detailed orientation (look for cues in the environment) then plan next steps OR 'start to walk in the general direction if confident/relaxed

I'm standing next to the National Gallery so I just looked for that on the map

I looked for Piccadilly tube first as that is where I got off and it's easy to find
Tourist

The following information hierarchy for navigating is observed across users (tourists, visitors and Londoners):

Top level detail

Prior Awareness

More granular detail

Tube stations, general areas, famous landmarks

Visual cues - road shapes, big buildings

Road names

Specific roads, junctions and/or buildings; BCH stand for some

Bus stops do not feature as part of the information hierarchy when navigating

Key observations from exploring how people use the maps:

- ➢ ***At no point are bus stop points used to navigate (in-situ or on the map) and therefore do not feature as part of the information hierarchy when navigating***
    - ○ ***(NB None of the people intercepted were about to catch a bus)***
- ➢ Users process the information on the map by 'filtering', ie they short-cut to what they know and consider relevant, and don't investigate/screen out other information[2]
- ➢ General areas (eg Trafalgar Square), stations (eg Piccadilly Circus) and major landmarks (eg the National Gallery) are key short-cuts for navigation for everyone
    - ○ More visible in situ and on map; more relevant to people's journey purposes; more familiar
- ➢ No one naturally uses the map key
    - ○ the paper map contains sufficient familiar/known information allowing customers to short-cut to the key reference points without needing it
- ➢ A minority of Londoners use the grid references on the paper maps if struggling to find something very specific, eg a street name they have never heard of before

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[2]People have a limited capacity for information processing; while a vast amount of information is processed by the subconscious mind, we can only hold seven pieces of information (+/- two) in the conscious mind at any one time.http://www.psych.utoronto.ca/users/peterson/psy430s2001/Miller%20GA%20Magical%20Seven%20Psych%20Review%201955.pdf

A number of factors affect map use:

- *Familiarity with the area and confidence with where they are*: more familiar/confident userstend to move through the information hierarchy much more quickly,eg Londoners are more likely to look immediately at road names;tourists will take longer and work from what they are familiar with, eg where they are in relation to Piccadilly Circus

> *I know I am on Haymarket, so I am here*

- *Location:* If near a key obvious landmark, (eg Piccadilly Circus, National Gallery) it will be very quick for users to find where they are without having to go into more granular details

> *I am here, right next to National Gallery*
> **Tourist**

- *Purpose of journey*:[3] If ona leisure trip and sightseeing, users tend to be vaguer with directions, and may head toward a general area. If going somewhere specific, eg a particular restaurant on a particular road, users are much more exact in looking at the detail on the map

> *I am going to Covent Garden. I don't need to remember the road names, as long as I head that way up there I will get there. I like going down all the little back roads and admiring the beautiful buildings. I like getting a little bit lost in London, because you find hidden gems everywhere!*
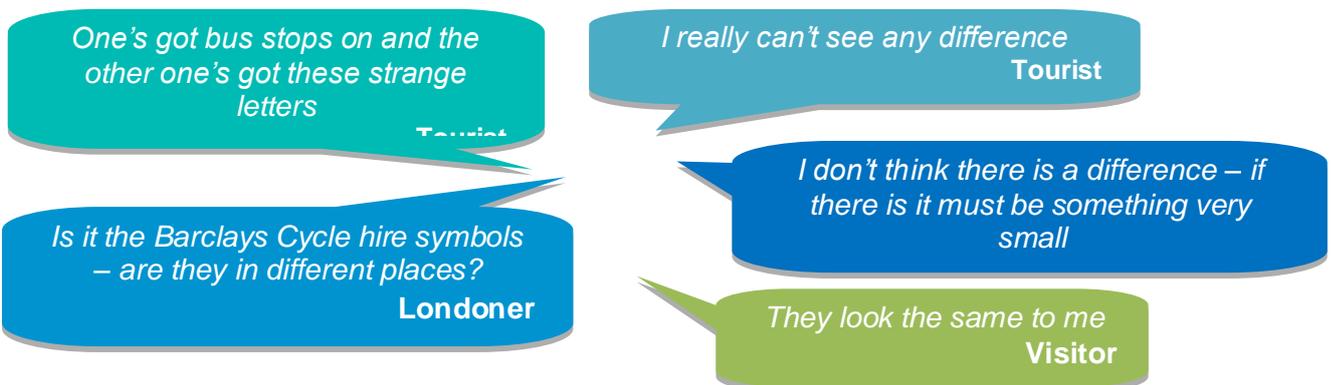> **Visitor**

- *Distance to destination:* Typically users tend to require more granular detail the closer they get to their destination, eg looking for specific streets to turn-off versus just be checking they're going in the right general direction

> *Now I know it is that direction, I will walk that way and then when I get closer I will stop again and look at another map for the exact street names*
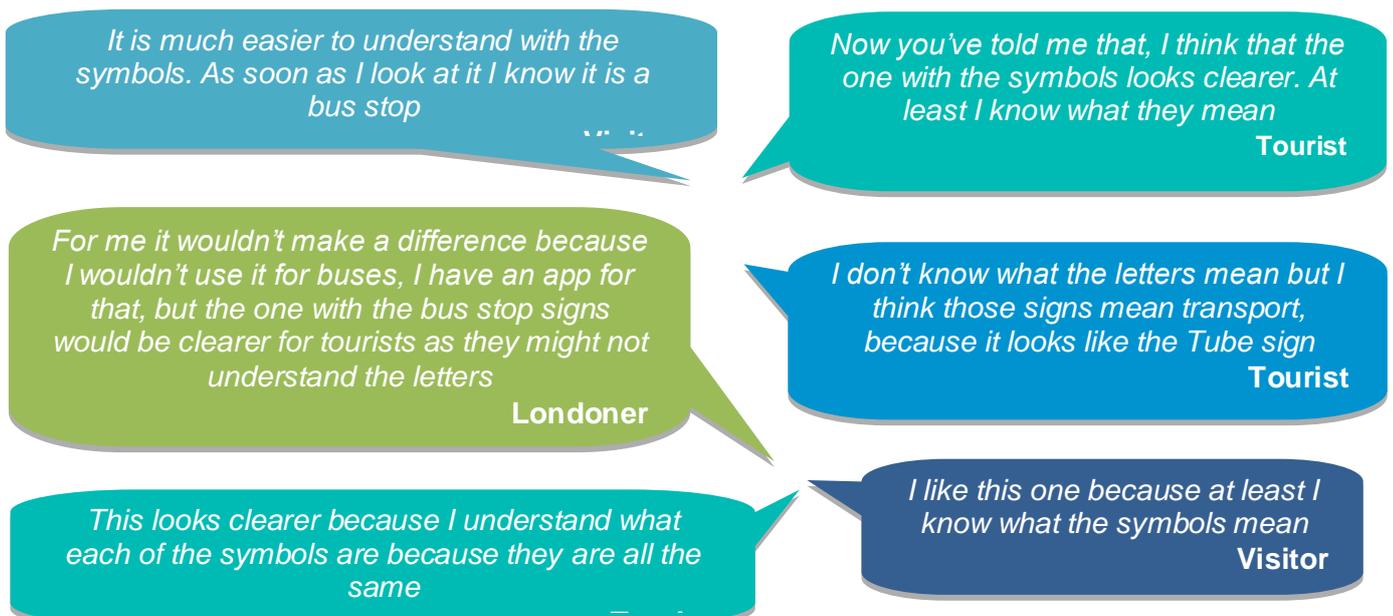> **Visitor**

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[3] Previous Legible London research showed that information requirements varied according to journey purpose, and the impact of 'Stroller vs Strider' mentality. The purpose of the journey determines the stroller or strider mind-set: 'Strollers' tend to be on leisure trip and looking for more information to help them 'explore' London; 'Striders' have more a requirement for finding out the most efficient route information (Legible London – Walking Information Strategy & Mode, TfL/Outlook Research Report, p15 and p21, April, 2008).

Impact of the different maps on customer usage

- Bus stop points on walking maps (either with or without point letters) do not spontaneously feature on the customer information hierarchy;as such, they have no impact on map usage

    - Only 1/50 people intercepted noticed the difference between the two versions of the map

    - People even made things up as they searched for differences

> One's got bus stops on and the other one's got these strange letters
> **Tourist**

> I really can't see any difference
> **Tourist**

> I don't think there is a difference – if there is it must be something very small

> Is it the Barclays Cycle hire symbols – are they in different places?
> **Londoner**

> They look the same to me
> **Visitor**

- **When the difference is pointed out to them, users consistentlyprefer the version of the map with the bus stop point point signs** (without letters):

    - NB: These responses are all post-rationalised after we prompted them, because none actually used or noticed the bus stops naturally

> It is much easier to understand with the symbols. As soon as I look at it I know it is a bus stop
> **Visitor**

> Now you've told me that, I think that the one with the symbols looks clearer. At least I know what they mean
> **Tourist**

> For me it wouldn't make a difference because I wouldn't use it for buses, I have an app for that, but the one with the bus stop signs would be clearer for tourists as they might not understand the letters
> **Londoner**

> I don't know what the letters mean but I think those signs mean transport, because it looks like the Tube sign
> **Tourist**

> This looks clearer because I understand what each of the symbols are because they are all the same

> I like this one because at least I know what the symbols mean
> **Visitor**

- A minority post-rationalise the 'logic' of having the version with the bus stop point letters, normally for someone else/a different use to theirs:

> *It would be useful if someone was trying to get a bus – it's extra information*

> *You can see the logic when you turn it over, it makes sense to have them on there*

> *If you were using the bus system then you would definitely want them on there*
> **Londoner**

> *That would be helpful for visitors who didn't know the bus system and needed to get a bus*
> **Londoner**

- o However, people who do use the bus network tend to use different means to find the information they require

> *I have a bus map which is great, gives me all the information so I don't need the letters, but they would be helpful to others who aren't as prepared*
> **Tourist**

> *I have an app I use which tells me what bus I can get to where*
> **Visitor**

> *I know the buses I need to get and where they go from. It might be helpful for a tourist*

Summary of feedback on the two maps

Version of map <u>without point letters</u>:

+ ***Consistency*** – having one symbol across the map creates clarity

> *This one looks much clearer and less confusing*
> **Tourist**

> *With them all being the same, it means when I look at it I know they all mean the same thing*
> **Visitor**

+ ***Familiarity/recognition*** - the bus stop symbols are more familiar so more instantly recognisable by all audiences

> *This one is much easier for me to understand because I know this means bus*
> **Tourist**

> *I like this one because at least I know what the symbols mean*
> **Visitor**

+ ***Prominence*** – The repetition of the symbol means it looks more prominent on the map

> *This stands out more because they are all the same*
> **Londoner**

> *I can notice it more on this map*
> **Tourist**

Summary: Having bus stop point symbols provides instant recognition and understanding for most and is more user-friendly.

Version of map <u>with the bus stop point letters</u>:

+ ***Useful(for someone else)*** – extra information rationalised as useful if someone was looking for a specific bus stop.

   o However,they werenot useful to anyone intercepted as part of the research; it is a <u>hypothetical </u>answer – *'it could be useful if….'*

> *The extra information is definitely useful for those who need to know where their bus stop is*
> **Visitor**

> *The letters could be useful for those less familiar with the area who needed to find a specific bus stop*
> **Londoner**

+ ***Post-rationalised as logical*** – links to spider hub on front of the map (in some places), so makes 'sense' to have the letters on there

   o But in reality, people go elsewhere to find out bus information

   o Potential for confusion if used with spider hub, as that focuses in on central bus stops only

> *Makes more sense to have them on there for those who need them – why wouldn't you?*
> **Londoner**

> *You need to have them on there to link up with the key on the other side*
> **Visitor**

– ***Confusion*** –Visitors and tourists especially do not instantly recognise these letters as bus stops which creates confusion at what the letters mean

> *What do those letters mean?*
> **Visitor, male**

> *Is that P for Parking?*
> **Tourist**

> *The letters are clear to me, but I think to someone less familiar with London transport it could be confusing*
> **Londoner**

– ***Inconsistent*** – As the letters are all different, it creates the expectation that they all mean different things

   o This is exaggerated by the blank bus stops and by some letters being repeated

> *The blank stops look like a mistake*
> **Londoner**

> *I thought different letters would mean different things*
> **Visitor**

> *They might be to show different attractions; you quite often get that in the maps they have in Lonely Planet guides*
> **Visitor**

- *Information overload* – Customers already have enough information on the map to navigate, and that the letters are mostly considered too much information, leading to unnecessary confusion[4]

> *I wouldn't take the time to look up what the letters mean, it is too much information which I don't need to know, so I just ignored them*
> **Tourist**

> *I wouldn't need the letters on there, it is too much information to look at. The symbols are easier on the eye*
> **Visitor**

Summary: The letters make 'logical sense' for some, but only for 'other people' who might need to find a particular bus stop, not for them/others to navigate.To some who don't know what they mean at first, especially less familiar and less frequent visitors to London, the bus stop point letters are consideredconfusing. As the variety of letters on the map can be thought to symbolise different things, users may be even less likely to notice/use them.

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[4] The concept of parsimony – 'enough but not too much information'- (IDS 1.2 Asset Selection Criteria, DRAFT 4, September, 2008)