Open Data

Six Stories About Impact in the UK

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Summary

TheyWorkForYou.com is a parliamentary monitoring website that has been running for more than 10 years in the UK. It provides an accessible, searchable version of the official record of proceedings of the UK **Parliament**, as well as the devolved **Northern Ireland Assembly**. It also provides analysis of the voting records of elected and **non-elected representatives**. TheyWorkForYou predates open data reforms in the UK by a number of years, and is included in this report as a window onto the long-term impacts of outputs based on public data. One of TheyWorkForYou's long-term impacts appears to be encouraging parliamentarians to vote less with their party and more in the interests of the people they represent. It is also important to consider the potential monetised time savings delivered to the site's users—many of whom are civil society groups and journalists. These might well be in the millions of pounds a year, although methodological constraints mean it will probably always be impossible to put an exact figure on them.

▶ Key takeaways

- The greatest impact of TheyWorkForYou may be on Parliamentarians themselves. mySociety suspects, and some data confirms, that Parliamentarians have changed the way they go about their work in response to TheyWorkForYou's vote monitoring and analysis tools, both by turning up for more votes and rebelling against their party more often.

- Just as TfL's open data policy saves commuters' time, TheyWorkForYou.com saves time for its users—many of whom are civil society groups and journalists. As well as expecting websites with a social/political mission to achieve long-term positive social/political impacts by themselves, we can also expect them to save time for people trying to achieve those impacts through other means.

- Although it may look on the face of things like postcodes have nothing to do with Parliamentary monitoring, in fact postcode data is one of the key datasets that drive TheyWorkForYou.com. Early on in the website's history, mySociety had access to postcode data via a licence from Ordnance Survey. It now uses open data on postcodes provided by Ordnance Survey and the **Office for National Statistics**[AD]. But mySociety's lack of access to Royal Mail's Postcode Address File (see page 7) means it cannot deliver accurate information to all its users on who their elected representative is.

- mySociety views maintaining TheyWorkForYou.com as a "residual", and hence low priority, activity, and now focus most of their work on helping international NGOs. The long-term sustainability of projects like TheyWorkForYou.com is brought into question by this case.

AD Although in the case of postcode information (for Northern Ireland) provided by the Office for National Statistics, this data does not conform to the open definition, as it is made available for non-commercial use only.

▶ Background

TheyWorkForYou.com provides accessible, searchable data on the members and proceedings of **Parliament**, the main legislative body of the United Kingdom, as well as the **Northern Ireland Assembly**. Previous versions of the website also offered information on the members and proceedings of the Scottish **Parliament**. **TheyWorkForYou.com** provides a wide range of information, including members' voting records, speeches, and registered interests. The front page of the website invites users to answer the question "Does Your **MP** represent you?" by filling in their postcode to access analysis on the way their **constituency**'s **MP** votes and see their latest appearances in **Parliament** (See Figure 9 and Figure 10).

Figure 9: Screenshot of front page of TheyWorkForYou.com. Copyright mySociety. Reproduced with permission.

Figure 10: Screenshot from TheyWorkForYou.com. Copyright mySociety. Reproduced with permission.

TheyWorkForYou.com was launched in June 2004 by a group of volunteers "who thought it should be really easy for people to keep tabs on their elected **MP**s, and their unelected Peers, and comment on what goes on in **Parliament**"[174]. Individually, the original volunteers had already developed a number of

civic-minded websites. Since 2006, **TheyWorkForYou.com** has been run by **mySociety**, a nonprofit social enterprise based in the UK that develops web platforms that "give people the power to get things changed".[175]

The data that powered **TheyWorkForYou.com** was **scrape**d from **Hansard**, the official record of parliamentary proceedings, published on **Parliament**'s own website. **TheyWorkForYou.com** launched despite the fact that this activity constituted a copyright infringement: The volunteers did not have the right to reproduce **Hansard**, which was covered by Crown Copyright. Later on, and in cooperation with some of the **TheyWorkForYou.com** volunteers, click-use licences were developed at the **Office for Public Sector Information (OPSI)** which among other things legitimised the site's activities[176AE].

▶ The data

TheyWorkForYou.com uses multiple data sources. When asked about the most important datasets that drive the platform, **mySociety**'s Matthew Somerville, the site's lead developer, identifies the following datasets[177]:

1. **Postcode and** constituency **boundary data**, for mapping people to their representatives

2. **People**, for each of the legislatures covered

3. **Transcript** data, for each of the legislatures covered, and multiple different types of data in that (e.g., actual debates, written answers, future business, committees, etc.)

He continues:

The vote analyses are important, but are fundamentally just derived from the transcript data that includes the voting information. I'd possibly add our own dataset of everyone signed up for email alerts, as the daily emails we send based on information gleaned from the other datasets does presumably help power the site in a way[178].

AE Today, the official Parliament website is published under an Open Parliamentary Licence, which encourages re-use. In 2014, the development team behind the official Parliament website began releasing Parliamentary proceedings as open data.

Over 10-plus years operating **TheyWorkForYou.com**, Somerville has seen changes in how this data is provided. In terms of postcodes and **constituency** boundaries, since 2010, **TheyWorkForYou.com** has been using **Ordnance Survey**'s **CodePoint Open** open data product to match people's postcodes to their constituencies in Great Britain, and the **Office for National Statistics**' postcode product to perform the same function for users living in Northern Ireland. The latter source does not conform to the **open definition**, since it is provided for non-commercial use only. Before these products became available, **mySociety** had access to postcodes via a licence from **Ordnance Survey**.

The people data has been constructed over the years from various data sources, and **mySociety** makes it available under an open licence[179].

The transcript data for the **Northern Ireland Assembly** is accessed via the assembly's AIMS open data portal launched by the **Northern Ireland Assembly** in 2012. Since 2014[180] the development team of the official UK **Parliament** website, Parliament.uk, has also been making its data available via **API**. Despite this, **TheyWorkForYou.com** still **scrape**s transcript data from **Hansard** every morning to populate the site with the latest proceedings of the UK **Parliament**, rather than access the data via the **API**.

Tom Steinberg, outgoing CEO of **mySociety**[AF], explains that continuing to **scrape** official websites rather than taking advantage of new open data **API**s is mainly down to prioritising resources at **mySociety**:

If we've not used some of it [open data] it's quite often because the cost of us rewriting the software to use it is just not worth it when we can carry on screen **scraping**.[181]

The original **scraper** that provided **TheyWorkForYou.com** with transcripts of proceedings in the Scottish **Parliament** was developed by a volunteer, Mark Longair. But for the last couple of years **TheyWorkForYou.com**'s Scottish site has not been updated. Somerville explains:

[The] Scottish **Parliament** *changed their site a couple of years back and we haven't had time since to update the* **scraper***, and not had anyone volunteer to help out, so [it's not been] updated since then. Don't think they have an* **API** *of any sort as yet.*[182]

▶ **The path to open**

TheyWorkForYou.com played a key role in forming the UK's policy around open data. In 2007 Tom Steinberg was commissioned to co-write an influential review of the opportunities presented by opening up public sector information, a move he says traces directly back to his involvement with **TheyWorkForYou.com**:

Back in the **Labour** *era, Number Ten [i.e., the Prime Minister's office] was willing to talk to us as a group of people because TheyWorkForYou existed. Why were they willing to talk to*

us? Because they used it, they used it to look up their own parliamentary data and they couldn't use the **Parliament** *website at the time because it was too [poorly designed]. And so unarguably TheyWorkForYou was a key to get in through the door of Number Ten. And it led pretty directly to the Power of Information review.*

One of the most interesting things about **TheyWorkForYou.com** is how central postcode data is to its operations. **mySociety** was part of the range of voices calling on **Ordnance Survey** to free its data before the 2010 **CodePoint Open** release, particularly boundary data, which is crucial in identifying a user's elected representative.

The way **mySociety** uses postcode data immediately personalises the experience of using TheyWorkForYou, and lowers the barrier to accessing the workings of democracy in a country where research shows only 22% of people can name their elected representative.[183] This observation underscores the utility of postcodes across a vast range of online applications.[AG]

▶ **Users and outcomes**

Somerville reports that **TheyWorkForYou.com** sends out around 30,000 emails a day to people who have subscribed to a range of notifications, from when their **MP** speaks in **Parliament** to when specific words are mentioned.

The most recent in-depth research into **TheyWorkForYou.com**'s user base was published by Tobias Escher of the Oxford Internet Institute in 2011[184]. It showed that the site receives between 200,000 and 300,000 visits every month

Average monthly visits to **TheyWorkForYou.com**: **200,000-300,000**

Average monthly visits to **TheyWorkForYou.com** from people working at the Houses of **Parliament**: **4,000-6,000**

Proportion of users surveyed who say they are using it as part of their job: **30%**

Proportion of users surveyed who say they are getting information on their elected representative for the first time: **21%**

AF Tom Steinberg founded mySociety in 2003 and acted as its CEO until August 2015. He was interviewed for this report in June 2015.

AG Most postcodes in the UK match precisely to constituency boundaries, meaning the OS CodePoint Open product is generally sufficient to serve TheyWorkForYou.com's users. But there are exceptions. A 2013 Twitter conversation between Matthew Somerville and a TheyWorkForYou.com user reveals one occasion where the data did not match: Although inhabitants of the user's road all shared a postcode, those living in odd-numbered houses were represented by one MP, and those living in even-numbered houses by another (mySociety 2013) (Matthew Somerville tweets as @dracos). Access to the Royal Mail's Postcode Address File (see page 7) would allow TheyWorkForYou.com to provide all its users with accurate information about who represents them in the UK Parliament.

(see Figure 11—the peaks in May 2009 and May 2010 are respectively due to the **MP**s' expenses scandal, when many newspapers published links to **MP**s' pages on **TheyWorkForYou.com**, and the publication of an election quiz that matched voters to Parliamentary candidates based on each of their stated political beliefs, developed by **TheyWorkForYou.com** volunteers in the run-up to the 2010 elections).

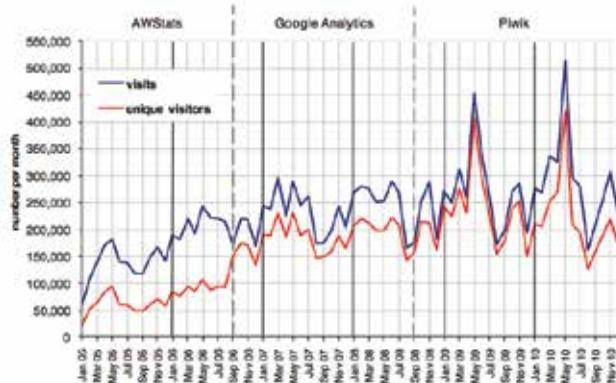### TheyWorkForYou.com visitor statistics

Figure 3: Visits and unique visitors to TheyWorkForYou (November 2004 – December 2010)

Source: mySociety AWStats, mySociety Google Analytics, mySociety Piwik web analytics

Note: Underreporting for data in April 2010 as no statistics were collected from 26 April 2010 until around midday Friday 30 April 2010 due to an update error.

Figure 11: TheyWorkForYou.com—visitor statistics. Taken from (Escher 2011). Copyright Tobias Escher. Reproduced under terms of CC-BY-NC 2.0 licence.

> "I don't think the political classes have got used to the idea of news or information that sticks."
>
> Tom Steinberg, **mySociety**

Escher reports that about half of **TheyWorkForYou.com**'s audience are regular users, and about one in five use it every month. 30% of respondents to a survey of 903 site users developed by Escher say they use the website for work, and usage patterns concentrated in UK business hours substantiate this. About 2% of visits come from IP addresses that indicate the user is working in the Houses of **Parliament**, and a further 2-3% indicate the user is working for the government. Workers at the BBC accounted for 0.5% of visits in 2010.

▶ Impact

Tom Steinberg thinks that the site's impact on elected members is probably greater than on any other of its stakeholders:

I don't think the political classes have got used to the idea of news or information that sticks. They're very habituated to the idea that there's a bad news story today and it's gone tomorrow. All politicians can cope with that. However, a Wikipedia page or a TheyWorkForYou page … they're sort of permanent.

They mean that if you're going to go and meet someone who doesn't know you, in the future, then you have every reason to suspect that that person will find out about you from this. So what these static pages say I believe influences what politicians do[185].

Several anecdotes support the claim that Parliamentarians are becoming increasingly aware of how their activities are reflected on **TheyWorkForYou.com**. In 2006 The Times newspaper speculated that some **MP**s were making interventions in **House of Commons** debates simply to keep their "appearances" tally on **TheyWorkForYou.com** sufficiently high, an event which prompted **mySociety** to rethink how it represented **MP**s' activity[186]. Steinberg relates a story he heard from someone who once had a meeting with an **MP** cut short so that the **MP** could go and vote in the **House of Commons**. When they asked whether the vote really mattered, the **MP** replied "They all matter since TheyWorkForYou". In 2008, Gordon Prentice **MP** complained to the leader of the **House of Commons** that **TheyWorkForYou.com** did not cover **MP**s' work on committees and therefore gave a "distorted impression" of the efforts **MP**s make at Westminster[187].

Philip Cowley, Professor of Parliamentary Government at the University of Nottingham, has published data showing that "**rebellion**" (that is, **MP**s voting against the party line, or— specific to Cowley's data—government **MP**s voting against government policy) is on the up in British politics. An Economist article from 2012 cites this data[188] and argues that vote-tracking websites are part of the reason why, as they allow voters and **constituency** parties to keep better track of their **MP**s:

*One ringleader of [2011]'s huge **Conservative rebellion** over a referendum on EU membership says that it was "incredibly easy" to persuade **MP**s to join because they were already under intense pressure from their **constituency** associations. Gone are the days when an **MP** could vote with the government, then sign a contradictory early-day motion or two to muddy the waters, he adds. These days it is "harder to bluff".*

In recognition of the site's important accountability role, most of the new resources **mySociety** now devotes to **TheyWorkForYou.com** go into improving voting records and voting analysis. A recent grant from the Joseph Rowntree Reform Trust saw **mySociety** add about 60,000 more pages of vote analysis to the site.

The impact on the site's other users, be they civil servants, journalists, campaigners, or simply citizens interested in the workings of **Parliament**, is less visible. But Steinberg does not doubt that it is real:

I have no doubt that in some way [TheyWorkForYou] must oil the wheels of tons and tons of campaign groups and people who are kind of just generally in the political world … if it saves them five minutes here, that's five minutes they can spend on something else …. However, what I can't do is say "Here is someone who said 'I was going to lose my campaign, and then I used TheyWorkForYou and then I won it'".

For these communities, **TheyWorkForYou.com**'s impact is probably best understood through the same lens as the impact apps derived from **TfL**'s data have on London's commuters: It saves them time. One respondent to Escher's survey notes:

It is a hundred times easier to search than **Hansard** *itself. I've spent two hours on* **Hansard** *before coming here and have just found what I want in under a minute.*

Crudely, then, one might try and follow Deloitte's analysis of **TfL** and assume that 30% of the 200,000-300,000 monthly visits to **TheyWorkForYou.com** are work-related. If every one of these visits represented a 119 minute time-saving (and since time wasted sitting in traffic can be compared to time wasted looking for something and not finding it) one could use the Department for Transport's average value of working time (£34.12 per hour) to conclude that **mySociety** was saving this group of users roughly £5,075,350 worth of time every month, or just under £70 million worth of time each year. Taking a more realistic assumption, say that each visit represented Steinberg's 5 minute time saving, annual time savings delivered are just over £2.5million.

The analysis is flawed, of course. Unlike the Deloitte analysis, which takes advantage of **TfL**'s data on Lost Passenger Hours, we cannot assess how many hours working users of **TheyWorkForYou.com** might have spent trawling through **Hansard** and other information sources, not finding what they were looking for. It is included here simply to remind readers that although they may not make great stories, incremental time savings are an important and entirely valid form of impact to consider.

Third sector users have gone on record in praise of the website. **TheyWorkForYou.com**'s own FAQs contain a lengthy testimonial from Jo Brodie of Diabetes UK, part of which is reproduced below:

TheyWorkForYou.com *contributes to my 'current awareness' of what is being said about diabetes and insulin (access to treatment, statistics, etc.) and other related health topics (for example organ transplantation and stem cell research as that's very relevant for diabetes and its complications too). The email alerts and RSS feeds mean the information lands rather helpfully in my intray …. It's a great site—thank you*[189].

mySociety's team also receive private messages of thanks from policy experts, elected and unelected members, third sector workers, and others working in public affairs[190].

Escher notes from his survey data that **TheyWorkForYou.com** is reaching people who don't usually engage in civic activity:

While there are clearly TheyWorkForYou users who are already politically active and who are also [organised] in groups, the online survey shows that one in five users (21%) has neither been politically active (online and/or offline) within the last year nor been a member of any group and importantly, has got information for the first time on what his or her representatives are doing through the use of TheyWorkForYou[191].

TheyWorkForYou.com has also played a key role in helping other Parliamentary Monitoring Organisations (PMOs) around the world. Three years ago it changed its mission, and it now works internationally to support partners who deploy its technology in countries around the world. The code that runs **TheyWorkForYou.com** is open source, and has been adapted to create similar websites in New Zealand, Ireland, and Australia. In 2013, working with Kenyan PMO Mzalendo, **mySociety** released Pombola, a "less-UK centric" codebase that it actively helps PMOs to install in order to deploy parliamentary monitoring websites in their own countries. Pombola is already in use in Ghana, South Africa, Nigeria, and Zimbabwe.

> "It is a hundred times easier to search than **Hansard** itself. I've spent two hours on **Hansard** before coming here and have just found what I want in under a minute."
>
> Anonymous site user

▶ Discussion

TheyWorkForYou.com predates open data reforms in the UK by several years and can in fact be said to have contributed to open data policy's inception. This case study is included in the report because (although not all its data inputs are strictly open data) it is an example of an "output" project that repurposes public information and that has existed for over a decade. As such, it may provide a window through which to view the more long-term impacts of such public data re-use outputs.

Indeed, the increase in political **rebellion**, attributed by experts in part to the increased visibility of **MP**s' voting records that **TheyWorkForYou.com** provides, is a positive indicator that **TheyWorkForYou.com** is having a long-term impact. If politicians are choosing to serve the people who elect them more, and the party political machinery less, then this is a good outcome for representative democracy.

Of interest too is the amount of time **TheyWorkForYou.com** may be saving civil society groups and journalists (and, of course, corporate lobbyists too). The monetised time savings used in this case study should not be relied upon and do not bear repeating, since unlike in the **TfL** case they are based on speculation about the amount of time such users may have lost in seeking out information elsewhere, and not recorded Lost Passenger Hours. The calculations have rather been included here in order to remind readers that as well as expecting websites with a social/political mission to achieve long-term positive social/political impacts by themselves (in this case better representative democracy) we can also expect them to save time for people trying to achieve those impacts through other means.

Although Matthew Somerville sees no reason why **TheyWorkForYou.com** won't survive another 10 years ("**Parliament** will certainly still be around"[192]), it should be of some concern that Tom Steinberg describes the site as a "residual" from before **mySociety** changed its mission to focus on helping international NGOs develop similar websites through projects like Pombola. Somerville sees lots more work for mySociety to do with **TheyWorkForYou.com**, and says that even if the official website becomes easier to use, many of **TheyWorkForYou.com**'s most important functions—like vote analysis and email alerts—may never be provided by **Parliament**:

There are many things the site still doesn't cover, but it's not like we have had countless volunteers [clamouring] to add select committees, or what have you.[193]

This observation further calls into question how realistic it is to anticipate sustained activity from **civic hacker**s (or indeed David Cameron's "whole army of effective armchair auditors"[194]) in response to the release of government data as open data. In fact, that pool of volunteers may be more limited than first imagined. **mySociety** has done recent, funded, work on TheyWorkForYou, the 60,000 additional pages of vote analysis

supported by the Joseph Rowntree Reform Trust. But the fact that the site does not serve its Scottish users as at July 2015 because no one has volunteered to update the tool so that it can **scrape** the Scottish **Parliament**'s new website should be of major concern.

▶ Calls to action

FOR OPEN DATA ADVOCATES

- **The Deloitte study on the impact of TfL data on transport users, and its analysis that TfL are delivering transport users annual monetised time savings of between £15m and £58m, is one of the most quoted stories of open data impact in policy circles. The Deloitte methodology can be borrowed to discuss impact in other spheres too.**

FOR OPEN DATA DEVELOPERS

- **Shiny new projects are fun and inspiring, but established sites like TheyWorkForYou.com need volunteer developers too. Open data developers should consider whether knowing you're contributing work to a project that is having long-term positive impacts for representative democracy makes up for some of the hassle of working on someone else's code.**

FOR FUNDERS

- **Projects like TheyWorkForYou.com need long-term commitment, and may not be able to rely on volunteer efforts to keep going.**

Notes

1   (Hogge 2011)
2   (Gray and Davies, Fighting Phantom Firms in the UK: From Opening Up Datasets to Reshaping Data Infrastructures? 2015)
3   (Prime Minister's Office 2010)
4   (Hogge 2011)
5   (Atz, Heath and Fawcett 2015)
6   (Robinson, et al. 2009)
7   (World Wide Web Foundation 2015)
8   (Open Knowledge Foundation n.d.)
9   (Royal Mail n.d.) "Postcode Address File"
10 (Hope 2013)
11 (*BBC News* 2014)
12 (Jee 2015)
13 (Caplan, et al. 2014)
14 (Craveiro, et al. 2014) as cited in (Davies, Open Data in Developing Countries: Emerging Insights from Phase I 2014)
15 (Caplan, et al. 2014)
16 (Thwaites 2012)
17 (Williams 2015)
18 (McGee and Gaventa 2010)
19 (Keserű 2015)
20 Rebecca Rumbul, personal communication
21 (Atz, Heath and Fawcett 2015)
22 (Deloitte 2013)
23 (Lateral Economics 2014)
24 (Lateral Economics 2014)
25 (*BBC News* 2015)
26 (Transport for London n.d.) "What we do"
27 (Transport for London n.d.) "What we do"
28 Interview: Vernon Everitt
29 (Transport for London n.d., Transport for London 2015) "How we are funded"
30 (Topham 2014)
31 (Reed 2015).
32 (Transport for London n.d.) "Transport Data Service terms and conditions"
33 Interview, Phil Young
34 (Siddle 2014)
35 (Mirani 2014)
36 Interview, Phil Young
37 Interview, Vernon Everitt
38 Private correspondence, Phil Young and Vernon Everitt
39 Interview, Vernon Everitt
40 Interview, Paul Clarke
41 Interview, Emer Coleman
42 Interview Phil Young
43 Interview, Emer Coleman
44 (Everitt 2014)
45 (Reed 2015)
46 (Reed 2015)
47 (Deloitte 2013)
48 Interview, Vernon Everitt
49 (Transport for London 2015)
50 (Baxevanis 2015)
51 Interview, Vernon Everitt
52 Interview, Vernon Everitt
53 Interview, Phil Young
54 (Deloitte 2013)
55 (Reed 2015)
56 Interview, Phil Young
57 Interview, Vernon Everitt
58 Interview, Vernon Everitt
59 Interview, Paul Clarke
60 Interview, Phil Young
61 Interview, Vernon Everitt
62 Interview, Vernon Everitt
63 (Land Registry 2006)
64 (Land Registry 2006)
65 (KPMG 2011)
66 (Hogge 2011)
67 (Arthur, Met Office and Ordnance Survey to be part of 'public data corporation' 2010)
68 (Department for Business, Innovation & Skills and Cabinet Office 2011)
69 (Cabinet Office 2011)
70 (Department for Business, Innovation & Skills and Cabinet Office 2011)
71 (Syal, Land Registry privatisation plans abandoned by ministers 2014)
72 (Quinn 2015)
73 (We Own It n.d.)
74 (Public Data Group n.d.)
75 Interview, Lynne Nicholson
76 (Land Registry 2012)

77 (Land Registry 2013)
78 http://archive.is/pFEzX#selection-1665.0-1665.251
79 (Private Eye 2015)
80 (Land Registry 2014)
81 (legislation.gov.uk n.d.) "Copyright, Designs and Patents Act 1988"
82 (Department for Business, Innovation & Skills and Cabinet Office 2011)(22 of the 116 respondent were identified by the government as "market participants")
83 Interview, Lynne Nicholson
84 (Department for Communities and Local Government 2010) "Property sales based on Land Registry data"
85 (Department for Communities and Local Government 2010) "Median house price"
86 (HM Treasury 2012)
87 Interview, Lynne Nicholson
88 Interview, Lynne Nicholson
89 (Cabinet Office 2011)
90 Interview, Lynne Nicholson
91 (Land Registry 2013)
92 (Mapping London 2015)
93 (Ramsay 2014)
94 (Timita 2014)
95 (Ramsay 2014)
96 Interview, Adrian Black
97 Interview, Adrian Black
98 Interview, Adrian Black
99 Interview, Henry Pryor
100 (Assetti 2015)
101 (Fowler 2015)
102 Interview, Peter Thum-Bonanno
103 Interview, Peter Thum Bonanno
104 http://developer.zoopla.com/
105 Interview, Vasanth Subrahmanian
106 Interview, Vasanth Subrahmanian
107 Interview, Henry Pryor
108 (HMRC 2015)
109 (OECD n.d.)
110 (HMRC 2015)
111 Interview, Lynne Nicholson
112 (Land Registry 2013)
113 Interview, Lynne Nicholson
114 Interview, Peter Thum-Bonanno
115 Interview, Claudia Arney
116 (Aston 2015)
117 (Hope 2013)
118 (Arthur, MPs and open-data advocates slam postcode selloff 2014)
119 (van de Does de Willebois, et al. 2011)
120 (OECD 2001)
121 (OpenCorporates 2010)
122 (ODI n.d.) "Case study: OpenCorporates"
123 (Cabinet Office 2013)
124 Interview, Robert Palmer
125 Confidential source, Cabinet Office
126 Confidential source, Cabinet Office
127 Interview, Robert Palmer
128 (G8 2013)
129 (Cameron 2013) (my emphasis)
130 Interview, Chris Taggart
131 Interview, Robert Palmer
132 Interview, Chris Taggart
133 Interview, David McNair
134 Private communication, Robert Palmer
135 (Transparency International 2014)
136 Interview, Chris Taggart
137 (Gray and Davies, Fighting Phantom Firms in the UK: From Opening Up Datasets to Reshaping Data Infrastructures? 2015)
138 (Gray and Davies, Fighting Phantom Firms in the UK: From Opening Up Datasets to Reshaping Data Infrastructures? 2015)
139 (Gray and Davies, Fighting Phantom Firms in the UK: From Opening Up Datasets to Reshaping Data Infrastructures? 2015)
140 (Prime Minister's Office 2010)
141 (digitalhealth.net 2007)
142 (Open Public Services Network 2013)
143 (Open Public Services Network 2013)
144 (Open Public Services Network 2015)
145 (Department for Education 2013)
146 (Department for Education 2013)
147 (Open Public Services Network 2013)
148 Interview, Charlotte Alldritt
149 (Hansen, Joshi and Dex 2010)
150 Interview, Charlotte Alldritt
151 (Adams 2013)

152 (Open Public Services Network 2015)
153 (Cabinet Office 2013)
154 (World Bank n.d.)
155 (Coughlan 2015)
156 (Times Educational Supplement 2015)
157 (Nottingham Post 2015)
158 (Bradford Telegraph and Argus 2015)
159 (Sampson 2015)
160 (Harding 2015)
161 (Skidmore 2015)
162 (Gray, Bounegru and Chambers, The Data Journalism Handbook: How Journalists Can Use Data to Improve the News 2012)
163 Interview, Roger Taylor
164 (Prime Minister's Office 2010)
165 (Thwaites 2012)
166 (Wheeler 2012)
167 (Freeguard, Munro and Andrews 2015)
168 Interview, Roger Taylor
169 Interview, Roger Taylor
170 Interview, Roger Taylor
171 Interview, Roger Taylor
172 Interview, Roger Taylor
173 Interview, Roger Taylor
174 (TheyWorkForYou.com n.d.) "About TheyWorkForYou"
175 (mySociety n.d.)
176 (Hogge 2011)
177 Email-based interview, Matthew Somerville
178 Email-based interview, Matthew Somerville
179 (Nixon 2014)
180 (Hadi 2014)
181 Interview, Tom Steinberg
182 Email interview, Matthew Somerville
183 (*BBC News* 2013)
184 (Escher 2011)
185 Interview, Tom Steinberg
186 (Hurst 2006)
187 (Prentice 2008)
188 (The Economist 2012)
189 (TheyWorkForYou.com n.d.) "Frequently Asked Questions"
190 Private communication, Myf Nixon, mySociety marketing and communications manager
191 (Escher 2011)
192 Interview, Matthew Somerville
193 Email interview, Matthew Somerville
194 (Prime Minister's Office 2010)
195 (Coeliac UK n.d.)
196 (Wikipedia n.d.)
197 (Howdle 2010)
198 (Brandbank 2015); (Mills & Reeve 2015)
199 (Coeliac UK 2014)
200 Interview, Beau Archer
201 Interview, Beau Archer
202 (Brandbank n.d.) "FAQs" (See question "Why do I have to pay an annual fee?")
203 Interview, Beau Archer
204 (Shopper Goggles n.d.)
205 Interview, Beau Archer
206 (Coeliac UK n.d.) "History of Coeliac UK"
207 Interview, Beau Archer
208 (TalkTalk Digital Heroes n.d.)
209 Private communication, Kathryn Miller
210 (Coeliac UK 2014)(see comment stream underneath post)
211 (Hall, Rubin and Charnock 2013)
212 (Hall, Rubin and Charnock 2013)
213 Private communication, Kathryn Miller
214 Interview, Kathryn Miller
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227 Interview, Tom Steinberg
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