A MATTER OF FACT...

—or is it a matter of opinion?

NOTE: What you are reading here is an annotated ‘distribution’ version of the document which I prepared for the ‘Trust and Integrity in Information’ seminar run by NetIKX in May 2018.

The first part (pages 1 to 27) is my set of presentation slides, raising issues of concern about truthfulness and reliability of information in published, broadcast & social media.

This is followed by an appendix with links to over 80 organisations, articles and resources, grouped by theme. I am continuing to add to this latter section.

This is the version of 26 May 2018.

Some food for thought and discussion, plus links to sites and resources

Download and cite this at http://www.conradiator.com/facts/
NOTE: I put this slide up as a prelude, while people were returning to their table groups from refreshment break.

My comment: “Various assertions are made, especially on social media, the validity of which seem questionable, counter to the prevailing narrative, or short on evidence. Some seem patently absurd – e.g. reptilians – but conspiracy theorists promote them. But the dihydrogen monoxide one is a spoof of conspiracy theories (DHMO is, in fact, just water).”
My comment: “During 2017 and 2018, a number of people and organisations in information and knowledge management space started to pay attention to matters of ‘fake news’ and contested narratives, especially following the 2016 US presidential campaign, Brexit, the invasion of Crimea etc. CILIP was one of the first to express concern, with its FACTS MATTER campaign and information literacy initiatives in schools.”
Recent chronology (1)

  Panel & discussion on ‘False Narratives: developing a KO community response to post truth issues’

  Full audio recordings available, plus speakers’ slides

  David Clarke (Synaptica):
  http://www.iskouk.org/content/scoping-out-post-truth-issues-and-how-might-ko-help

  Nick Poole (CILIP):

  Dr Glenda Cooper (City University of London Journalism Dept):
  http://www.iskouk.org/content/false-news-%E2%80%93-journalist%E2%80%99s-perspective

  Discussion:  http://www.iskouk.org/content/panel-discussion

NOTE: ISKO UK is the UK chapter of the International Society for Knowledge Organization. ISKO UK has a policy of open publishing of slides and audio recordings: hundreds of lectures are available online in this way.
Recent chronology (2)

- Consultation at St George’s House, Windsor Castle: ‘Democracy in a Post-Truth Information Age’

  18–19 January, 2018 – 24 participants

  Synaptica – CILIP – Straits Knowledge – RSA – Royal Statistical Society
  Doteveryone – IMPRESS – Institute for Strategic Dialogue – WikiTribune
  World Wide Web Foundation – Ethical Journalism Network – GCHQ – LSE
  Home Office – Ministry of Housing, Communities & Local Government
  Electoral Commission – University of Stirling – King’s College London…

Report:
Recent chronology (3)

■ ISKO UK seminar, 19 March 2018, London
   ‘Knowledge Organization and Ethics’

   Full audio available, plus speakers’ slides

   **Patrick Lambe** (Straits Knowledge):
   http://www.iskouk.org/content/it%E2%80%99s-not-just-personal-what-does-it-mean-be-ethical-ko-
   professional

   **David Clarke** (Synaptica):
   http://www.iskouk.org/content/democracy-post-truth-information-age-report-st-
   george%E2%80%99s-house-consultations

   **Nick Poole** (CILIP):
   http://www.iskouk.org/content/role-ethical-information-professional-combating-%E2%80%98fake-
   news%E2%80%99
Fake news 1614?

Via British Library
‘St Pancras Intelligencer’
№ 40, March 2017
Edition has many useful links!

Fake news 1678

Titus Oates and his ‘Popish Plot’
BBC ‘In Our Time’, 12 May 2016

“In 1678, Titus Oates claimed he’d discovered a Catholic conspiracy to shoot King Charles II.
“He knew all the details; he’d invented every one of them himself.”
— Melvyn Bragg

https://www.bbc.co.uk/programmes/b079rbcj
Terminologies and taxonomies (1)

Comment: Perhaps the most prolific user of the term ‘fake news’ is Donald Trump, who uses it against media outlets such as The Washington Post, New York Times, CNN, BBC, etc., when they publish stories he doesn’t like. Also, we need terms that more subtly distinguish between fabricated content, careless parroting of dubious sources, factual reporting within a distorting context, etc.

*We need a taxonomy of misinformation types.*
Terminologies and taxonomies (2)

A Field Guide to “Fake News” and Other Information Disorders explores the use of digital methods to study false viral news, political memes, trolling practices and their social life online.

From Public Data Lab with FirstDraft and other collaborators

Available in full as PDF:

https://fakenews.publicdatalab.org/

Comment: This excellent electronic publication from the European Journalism Centre project uses “fake news” in its title, but in scare quotes. The term ‘Information Disorders’ is perhaps a more useful term to cover a wider typology.
Terminologies and taxonomies (3)

Clare Wardle’s typology at First Draft:  [https://firstdraftnews.org/fake-news-complicated/](https://firstdraftnews.org/fake-news-complicated/)
Terminologies and taxonomies (4)

**Post-truth** (ADJECTIVE)

*Relating to or denoting circumstances in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief.*

— Oxford English Dictionary (*added 2016*)

For history of the term’s use, see also Wikipedia article on Post-truth politics – [https://en.wikipedia.org/wiki/Post-truth_politics](https://en.wikipedia.org/wiki/Post-truth_politics)

**Comment:** ‘Post Truth’ is the term which Dave Clarke chose to use, see for example his online project Post Truth Forum.

Personally, I also see this as linked to the phenomenon of postmodernism with its denial of the validity of an objective account of reality.
NOTE: The Post Truth Forum project is an attempt to put together a taxonomy of misinformation types, and document causes and motivators and influences – also, to compile a list of resources and reading.

Post-Truth Forum proto-taxonomy

Site link — https://www.posttruthforum.org/

Key concepts:
— Truth
— Theoretical Frameworks (including epistemology)
— Misinformation and disinformation
— Truth and Facts
— Factual relativism
— Opinions

Influences (monetisation)
— Microtargeting (e.g. via Google results and Facebook news feeds)
— Sensational Clickbait
— Sponsored search results (not for products, but for news)
— Sponsored social media

Influences (propaganda)
— Authoritarian (a nation state influencing its own citizens)
— Foreign (a nation state influencing opinions abroad e.g. by Russia)
— Monetised (related to clickbait; e.g. youngsters in Veles in Macedonia)
— Partisan (e.g. US-NRA; UKIP; Momentum; Greenpeace?)

Influences (societal)
— Digital diplomacy
— ‘Fake News’ (gradient from satire, through opinion, to disinformation)
— Filter bubbles (for Clarke, a by-product of personalised search &c)
— Non-Debate Tactics (dissing and trolling, ad hominen stuff)
— Post-Truth or Post-Factual politics
— 24-hour News Cycle competition between channels

Influences (technological)
— Personalised Search
— Provenance blur
— Socialbots
— Third Party Trackers

https://www.posttruthforum.org/
 Democracy in a Post-Truth Information Age

RESOURCES & REFERENCES GUIDE
Excerpts from Books, Websites, Online Articles and Videos

Prepared by David Clarke
www.davidclarke.blog

Revision 1.1: January 25th 2018

Post-Truth, Democracy & Free Speech

Post-Truth & Democracy

Commission appoints members of the High Level Expert Group on Fake news and online disinformation, European Commission, Web post, 12 Jan 2018

Data & Society to Launch Disinformation Action Lab, Website, Accessed 2018-01-10

Lexicon of Lies, Caroline Jack, Data & Society, 2017 (PDF Download, 20 pp.)

Media Manipulation and Disinformation, Alice Marwick and Rebecca Lewis, Data and Society, 2017 (PDF Download, 104 pp.)

Democracy and Its Crisis, AC Grayling, 2017 (Book)

The Democracy Club, Website, Accessed 2018-01-08

Disinformation & Democracy: Fighting for Facts, National Democratic institute, 2017 (6-minute video)

The Filter Bubble, Eli Pariser, 2012 (Book)

For and Against Truth, John Keane & Colin Wright, 24 Sep 2017 (1’25” video)


Information Disorder, Clare Wardle and Hossein Derakhshian, Council of Europe Report, 27 Sep 2017 (PDF Download, 109 pp.)


https://davidclarke.blog/?p=528

extracts from the resources logged on the Post Truth Forum, with extensive annotations
Conspiracy theories and rumour (1)

‘America’s 10 most popular conspiracy theories’

http://bigthink.com/paul-ratner/the-10-most-popular-conspiracy-theories

- There is a secret group controlling the world (Freemasons, Illuminati, Bilderberg Group, ‘globalists’)
- President Obama wasn’t born in the US and may be a secret Muslim
- The attacks on 9/11 were an inside job
- Shape-shifting ‘Reptilians’ are running the world (David Icke)
- JFK Assassination (blamed on CIA, KGB, or Mafia)
- Aliens are contacting us (Roswell & Area 51)
- The moon landing was faked
- The cure for cancer is being withheld from us
- ‘Chemtrails’
- The Holocaust did not happen
Conspiracy theories and rumour (2)

‘We do not find conspiracism to be a product of greater authoritarianism, ignorance or political conservatism. ‘Rather, the likelihood of supporting conspiracy theories is strongly predicted by a willingness to believe in other unseen, intentional forces and an attraction to Manichean narratives.’

Eric Oliver & Thomas Wood
March 2014
Misleading health information

Misinformation and falsehood of health news in social media constitute a potential threat to the public health, but the scope of this issue remains unclear. Our pilot study is an attempt to measure a number of the top shared misinformation stories in the Polish language social media...

40% of the most frequently shared links contained text we classified as fake news. The most fallacious content concerned vaccines... More than 20% of dangerous links was generated by one source.

Przemyslaw M Waszak, Wioleta Kasprzychka-Waszak, Alicja Kubanek
March 2018

NOTE: See Appendix for links to more stories and resources about medical misinformation.
Consultant, author, former Professor of Rhetoric and Document Design at Carnegie Mellon University, Pittsburgh.

Believes the future is bright for Plain Language communication, but notes a setback as the Trump administration interferes in what government agencies are allowed to talk about, and throws a wrecking ball at consumer-protecting regulation.

As indicated previously, Karen A. Schrimer is the 2017 winner of the Joenk Award for the best paper in the IEEE Transactions on Professional Communication for her paper “Plain Language in the United States Gains Momentum: 1940–2015.” Listen to her speak about her research into Plain Language in an interview with George Hayhoe, Editor of the IEEE Transactions on Professional Communication below.

http://sites.ieee.org/pcs/podcast-karen-a-schrimer/
45 minutes (64.3 MB) – relevant section from 01’22” to 08’25”
Reality checking ‘The Last Straw’

World-Wide Fund for Nature: UK uses annually 42 billion plastic straws

UK population 66 million
London population 8.8 m (13.3%)
Rest of UK population 57.2 m

∴ average UK person (of all ages!) uses 636 plastic straws per annum?

If London (according to this) uses 2 billion straws/annum, average Londoner uses 227 straws p.a.?

If both are true, breakdown: average Londoner 227 straws p.a., non-Londoner, 700 straws p.a.?
Reality checking ‘The Last Straw’

Reality Check: Do we use 8.5 billion straws a year in the UK?

By Reality Check team
BBC News
© 19 April 2018

“8.5 billion plastic straws are thrown away each year in the UK.”

Press release from Department for Environment, Food & Rural Affairs

Answer: nobody knows how many.

A report commissioned by DEFRA estimated 8.5 billion straws/year.

That’s 129 straws/year (still a lot!)

But both the DEFRA figure and the WWF figure of 42 billion/year come from the same consultancy: Eunomia.

We do believe in recycling, but not any old rubbish!

Reality checking news sources, especially social media

- Shrinking newsroom budgets, fewer personnel, fewer ‘investigatives’ on the staff
- 24-hour news-cycle
- Competition for ‘eyes’, especially on television, which in some cases promotes sensationalism and confrontation
- Politicians hiding behind sound-bites, PR agencies, professional liars, spokespeople
- Some areas of the world now very dangerous for journalists (E.g. Iraq, Syria, Mexico, Turkey) – or highly restrictive
- At the same time, technology magnifies the reach of ‘citizen journalism’ via SMS, email, Twitter, YouTube, Facebook &c
- Both State and non-State actors getting very savvy about manipulating social media channels
- SO – what can a journalist believe?

‘Little Green Man’ at Simferopol Airport, Crimea Feb 2014. No insignia; masked; carrying the latest Russian AK74M weapons and equipment, as issued to Russian paratroopers and Special Forces.
News, sourced from social media (1)

Citizen Journalism in the DRC reported on BBC Click

https://www.bbc.co.uk/programmes/p064p0gq

NOTE: An example of how activists use social media to alert the intention of a wider public – in this case, capturing footage that documents corruption e.g. amongst police officers.
Seven Years of War — Documenting Syrian Rebel Use of Anti-Tank Guided Missiles

Over the course of seven years of war, Syrian rebels have been fighting an army which once had the 6th largest number of tanks in the world. This article will detail the collection of footage of Syrian rebel anti-tank guided missile (ATMG) use and their impact on events during Syrian civil war.

From independent news site ‘Bellingcat’.

This report from Jakub Janovský, 4 May 2018.

Question: how are Syrian anti-government forces dealing with govt. supremacy in tanks and APCs, using tube-launched missiles? Where are those missiles coming from?

US supplies of missiles were contingent on rebels putting on YouTube, a video to document each launch. No video, no replacement BGM-71…

Ironic: YouTube took them down as potentially encouraging jihadi volunteers…

Fact-checking, for newsrooms and the rest of us

- Full Fact, London-based charity, see https://fullfact.org
  — fact-checking claims; research team; non-partisan
Fact-checking, for newsrooms and the rest of us

- Full Fact, London-based charity, see https://fullfact.org
  — fact-checking claims; research team; non-partisan

From some recent Full Fact articles:
these summary boxes are followed up with
a much more detailed review of the evidence
Fact-checking, for newsrooms and the rest of us

■ **First Draft** – [https://firstdraftnews.org](https://firstdraftnews.org)
  - experimental fieldwork in journalism
    (some in collaboration with Full Fact e.g. UK Election Watch)
  - empirical research
  - online educational resources

■ **DMINR** – data-mining tool for newsrooms: Google-backed project at City University London (Department of Journalism):

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City journalism academics to lead European big data and fake news project

Tom Felle will lead a team of City researchers to create an app with the help of a £300,000 Google grant

First published Friday, 7th July, 2017 • by Ed Grover (Senior Communications Officer)

City, University of London journalism researchers will lead a major European push to combat ‘fake news’ after being awarded a new grant by the Google Digital News Initiative (DNI) to help journalists find and verify information in big data.

A team of researchers at City have been given £300,000 by Google to build a web-based app called DMINR. The app combines machine learning and artificial intelligence technologies to help journalists fact check, make sense of data and verify information. It also has applications for investigative journalism by sorting and finding connections in so-called ‘big data’ such as police, government and environmental data, and company records.

City’s researchers will work with test users in up to 30 European newsrooms, including the data teams at the Telegraph media group and the Guardian in the UK, and the Investigations Unit at Ireland’s national broadcaster RTE, to build the web-based software tool.

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**NOTE**: See other fact-checking resources in the Appendix section of this PDF.
An exercise: truth in contention, and trust in sources

■ Several study cases are put forward – choose which three you want to assess (you can add your own)

■ There is also a sheet of hashtags; which of those issues arise in each case? (again, you can add your own tags)

■ Can you propose what information sources or research methods you might trust in seeking the truth in each of these? And also, the types of source you would definitely distrust?

■ Can you identify your own biases and filters for each case?

NOTE: After my presentation, I led a half-hour workshop exercise with participants organised into six table groups. ‘Syndicate sessions’ like this are a regular and popular feature of NetIKX meetings.

The exercise was introduced with a set of briefing slides, which have been removed from this PDF.

The remaining pages in this PDF are the Appendix of links to resources and reading.
Appendix: a collection of resources and links

Note: I do not claim this list to be comprehensive in the slightest, and the classification is a bit random too! — Conrad Taylor, May 2018

<table>
<thead>
<tr>
<th>Links to sources of other relevant link collections</th>
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</thead>
<tbody>
<tr>
<td><strong>Democracy in a Post Truth Information Age:</strong></td>
<td>Resources and References Guide</td>
</tr>
<tr>
<td>A selection of links compiled in January 2018 by Dave Clarke of Synaptica, in connection with the St George's workshop in Windsor that same month.</td>
<td><a href="https://davidclarke.blog/?p=528">https://davidclarke.blog/?p=528</a></td>
</tr>
<tr>
<td><strong>Definitions, enquiries and typologies re ‘fake news’, misleading information etc</strong></td>
<td></td>
</tr>
<tr>
<td>‘Fake News. It’s complicated’</td>
<td>An article by Clare Wardle of First Draft which explains her typology of different kinds of problematic information, including: satire or parody; misleading content; imposter content; fabricated content; false connection; false context; manipulated content.</td>
</tr>
<tr>
<td>The surprising origins of ‘post-truth’ – and how it was spawned by the liberal left</td>
<td>The Conversation, November 2016 — the article explores the idea that the origins of the phenomenon may lie in the rejection of the idea of an objective truth by philosophers and academics around 1980, as ‘postmodernism’ came to dominate much academic discourse.</td>
</tr>
</tbody>
</table>

Except where quote marks indicate otherwise, the synopses about these resources are all Conrad’s fault.
<table>
<thead>
<tr>
<th>Fact-checking for the general public</th>
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<tbody>
<tr>
<td><strong>Snopes.com</strong></td>
<td>A popular site which keeps an eye on circulating Internet memes of dubious or contested validity, digs into them, and delivers an informed assessment. Useful as a first check of odd claims on Facebook, etc.</td>
</tr>
<tr>
<td><strong>Full Fact</strong></td>
<td>Non-partisan UK charity which responds to requests to check facts, whether in public/political claims or in the media.</td>
</tr>
<tr>
<td><strong>BBC ‘More or Less’ with Tim Harford</strong> <em>(radio programme and podcasts)</em></td>
<td>Tim Harford explains – and sometimes debunks – the numbers and statistics used in political debate, the news and everyday life</td>
</tr>
<tr>
<td><strong>FactCheck</strong></td>
<td>This site is a project of the Annenberg Public Policy Center, and has it would seem a purely American focus.</td>
</tr>
<tr>
<td><strong>Bellingcat</strong></td>
<td>Started by crowdfunding, Bellingcat uses a methodology called OSINT (Open Source Intelligence), which relies on on-the-ground posts to Twitter, YouTube etc, and satellite imagery freely available, to fact-check news, especially stories being spread by Russian media and their proxies e.g. about conflicts in Ukraine and Syria. They are also running workshops in Europe and the USA during 2018 to teach others how their methods work. This article explains OSINT and its history.</td>
</tr>
<tr>
<td><strong>Example of Bellingcat work: the disintegrating Russian narrative about who shot down Malaysian Airlines flight MH17</strong></td>
<td>Unpicks the evidence around the shooting down with a Buk-M1 Russian missile of Malaysian Airlines Flight MH17.</td>
</tr>
<tr>
<td><strong>Another OSINT example: Citizen journalist Eliot Higgins fingers Russia for shelling Ukraine in 2014</strong></td>
<td>Eliot Higgins (aka ‘Brown Moses’) explains how his team used open source Google Earth imagery plus crater analysis to determine that 2014 artillery attacks on Ukrainian territory appear to have been fired from Russian territory into Ukraine. Video (3 min 11 sec).</td>
</tr>
</tbody>
</table>
### Fact-checking resources, training and more, primarily for journalists

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Website</th>
</tr>
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<tbody>
<tr>
<td><strong>First Draft</strong></td>
<td>A source of online journalism training and research</td>
<td><a href="https://firstdraftnews.org/">https://firstdraftnews.org/</a></td>
</tr>
<tr>
<td><strong>Full Fact</strong></td>
<td>Non-partisan UK charity which responds to requests to check facts, whether in public/political claims or in the media.</td>
<td><a href="https://fullfact.org/">https://fullfact.org/</a></td>
</tr>
<tr>
<td><strong>Public Data Lab</strong></td>
<td>‘The Public Data Lab seeks to facilitate research, democratic engagement and public debate around the future of the data society. We want to develop and disseminate innovative research, teaching, design and participation formats for the creation and use of public data.’ Public Data Lab has collaborated with First Draft around misinformation, and the team includes Liliana Bounegru (Universities of Ghent and Groningen) and Jonathan Gray (Digital Humanities, KCL), authors of the <em>Field Guide to Fake News</em> and the <em>Data Journalism Handbook</em>.</td>
<td><a href="http://publicdatalab.org/">http://publicdatalab.org/</a></td>
</tr>
<tr>
<td><strong>‘Field Guide to Fake News’</strong></td>
<td>A publication prepared by Liliana Bounegru, Jonathan Gray and others, through the Public Data Lab.</td>
<td><a href="https://fakenews.publicdatalab.org/">https://fakenews.publicdatalab.org/</a></td>
</tr>
<tr>
<td><strong>European Journalism Centre (Netherlands)</strong></td>
<td>‘[Building] a sustainable, ethical and innovative future for journalism through grants, events, training and media development… an international non-profit, headquartered in The Netherlands, that connects journalists with new ideas, skills and people.’</td>
<td><a href="https://ejc.net/">https://ejc.net/</a></td>
</tr>
<tr>
<td><strong>Data Driven Journalism</strong></td>
<td>“A hub for news and resources from the community of journalists, editors, designers and developers who use data to support journalism.’ Also home to an online course on data journalism. (A project of the European Journalism Centre)</td>
<td><a href="http://datadrivenjournalism.net/">http://datadrivenjournalism.net/</a></td>
</tr>
<tr>
<td><strong>The Verification Handbook</strong></td>
<td>Edited by Craig Silverman, available as PDF or e-book in several languages. ‘Authored by leading journalists from the BBC, Storyful, ABC, Digital First Media and other verification experts… a groundbreaking new resource for journalists and aid providers. It provides the tools, techniques and step-by-step guidelines for how to deal with user-generated content (UGC) during emergencies.</td>
<td><a href="http://verificationhandbook.com/">http://verificationhandbook.com/</a></td>
</tr>
<tr>
<td><strong>Data Journalism Handbook (first edition)</strong></td>
<td>A guide for journalists about how to research and use numerical and statistical data sources. A second edition is in preparation at the time of compiling this resource list.</td>
<td><a href="https://datajournalismhandbook.org/">https://datajournalismhandbook.org/</a></td>
</tr>
<tr>
<td><strong>Ethical Journalism Network</strong></td>
<td>London-based international network, promoting and defending ethical journalism.</td>
<td><a href="https://ethicaljournalismnetwork.org/">https://ethicaljournalismnetwork.org/</a></td>
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<tr>
<td><strong>Focus section on ‘media bias’, in broadcast and news-print media</strong></td>
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<tr>
<td><strong>What’s behind the rows about BBC and Brexit bias?</strong> Essay by Mike Galsworthy at politics.co.uk. ‘The corporation has been frozen with fear after countless attacks by the reactionary right, and is systematically failing to uphold its responsibilities for public education. It has prioritised character-driven political soap-opera over communicating the huge unpublicised evidence base.’</td>
<td><a href="http://www.politics.co.uk/comment-analysis/2018/04/17/what-s-actually-going-on-with-the-bbc-and-brexit-bias">http://www.politics.co.uk/comment-analysis/2018/04/17/what-s-actually-going-on-with-the-bbc-and-brexit-bias</a></td>
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<tr>
<td><strong>News-Watch rightwing ‘analysis’ group is behind most claims that BBC has an anti-Brexit bias</strong> Many accusations of BBC anti-Brexit bias can be traced to a right-wing group.</td>
<td><a href="https://www.opendemocracy.net/uk/brexitinc/peter-geoghegan-adam-ramsay/whos-paying-for-these-reports-on-bbc-brexit-coverage">https://www.opendemocracy.net/uk/brexitinc/peter-geoghegan-adam-ramsay/whos-paying-for-these-reports-on-bbc-brexit-coverage</a></td>
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<tr>
<td><strong>Local US TV news stations forced to deliver Trump propaganda</strong> There is evidence that in the USA, local TV stations are trusted above most other news sources. But the Sinclair Broadcasting Group, which owns stations with a reach across nearly 70% of the USA, has been instructing local news anchors to echo the ‘fake news’ labelling of national media by President Trump, while claiming that the truth lies with Sinclair’s conservative agenda. Links are to stories from New York Times and PBS.</td>
<td><a href="http://nymag.com/daily/intelligencer/2018/03/local-news-anchors-now-have-to-read-pro-trump-propaganda.html">http://nymag.com/daily/intelligencer/2018/03/local-news-anchors-now-have-to-read-pro-trump-propaganda.html</a> <a href="https://www.pbs.org/newshour/show/viral-video-raises-worry-over-sinclairs-political-messaging-inside-local-news">https://www.pbs.org/newshour/show/viral-video-raises-worry-over-sinclairs-political-messaging-inside-local-news</a></td>
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</tbody>
</table>
**Focus section on media ‘false balance’ and other failures in science reporting (especially BBC)**

<table>
<thead>
<tr>
<th>‘Impartial journalism is laudable. But false balance is dangerous’</th>
<th><a href="https://www.theguardian.com/science/blog/2016/nov/08/impartial-journalism-is-laudable-but-false-balance-is-dangerous">https://www.theguardian.com/science/blog/2016/nov/08/impartial-journalism-is-laudable-but-false-balance-is-dangerous</a></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Physicist and cancer researcher David Robert Grimes argues that ‘when the evidence is clear-cut, the assumption that good journalism requires mutually opposed views to be treated as equally valid simply doesn’t hold’. References MMR vaccine debate. (Nov 2016)</em></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>BBC Today airs false statements by Lawson in the name of balance</th>
<th><a href="https://climatefeedback.org/bbc-today-airs-false-statements-lord-lawson-name-balance/">https://climatefeedback.org/bbc-today-airs-false-statements-lord-lawson-name-balance/</a></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Climate Feedback article about controversial BBC Today John Humphrys interview with climate change denier Nigel Lawson on 10 Aug 2017, which drew the ire of many scientists due to untrue claims and false equivalence of ‘expertise’.</em></td>
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<tr>
<td><em>BBC Environment Correspondent Matt McGrath reports on scientists’ fury at the BBC Today interview with Nigel Lawson (10 Aug 2017), pointing out his assertions fly in the face of evidence. BBC responds: ‘The BBC’s role is to hear different views so listeners are informed about all sides of debate and we are required to ensure controversial subjects are treated with due impartiality.’</em></td>
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<td><em>Story in UnDark about the 2014 report into BBC coverage of science issues (&amp; see next)</em></td>
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<td><em>BBC Trust nine-page summary review of actions in the light of Prof Steve Jones’ studies into BBC reporting on science matters.</em></td>
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<td><em>The internal BBC training course had been initiated after a 2011 review found that the BBC had ‘an adversarial attitude to science which allows minority, or even contrarian, views an undue place’. The course has now been axed, reports The Independent.</em></td>
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### Focus on false news/fake news on social media

<table>
<thead>
<tr>
<th>Title</th>
<th>Description</th>
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<tr>
<td><strong>The spread of true and false news online</strong></td>
<td>Paper in <em>Science</em> magazine. ‘To understand how false news spreads, Vosoughi et al. used a data set of rumor cascades on Twitter from 2006 to 2017. About 126,000 rumors were spread by ~3 million people. <strong>False news reached more people than the truth</strong>; the top 1% of false news cascades diffused to between 1000 and 100,000 people, whereas the truth rarely diffused to more than 1000 people. <strong>Falsehood also diffused faster than the truth</strong>. The degree of novelty and the emotional reactions of recipients may be responsible for the differences observed.’ <em>(Paper full text behind paywall)</em> See also next entry…</td>
<td><a href="http://science.sciencemag.org/content/359/6380/1146">http://science.sciencemag.org/content/359/6380/1146</a></td>
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<td><strong>Why It’s Okay to Call It ‘Fake News’</strong></td>
<td>Robinson Meyer writing in <em>The Atlantic</em>, March 2018. ‘More than a dozen high-profile social scientists and legal scholars [have] charged their profession to help fix democracy by studying the crisis of fake news.’ One author: ‘[Fake news is] content that is being put out there that has all the dressings of something that looks legitimate. It’s not just something that is false—it’s something that is manufactured to hide the fact that it is false.’</td>
<td><a href="https://www.theatlantic.com/technology/archive/2018/03/why-its-okay-to-say-fake-news/555215/">https://www.theatlantic.com/technology/archive/2018/03/why-its-okay-to-say-fake-news/555215/</a></td>
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<td><strong>Inside the Macedonian fake news complex</strong></td>
<td>Article from <em>Wired</em> (February 2017) about the town of Veles in Macedonia, where many young people created and ran hundreds of pro-Trump websites essentially as clickbait, making hundred of thousands of dollars through the mechanism whereby Facebook rewards prolific click-throughs because of the advertising revenue they generate.</td>
<td><a href="https://www.wired.com/2017/02/veles-macedonia-fake-news/">https://www.wired.com/2017/02/veles-macedonia-fake-news/</a></td>
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<tr>
<td><strong>Facebook closes one billion false accounts in 6 month (May 2018)</strong></td>
<td>The Times, 16 May 2018 — Facebook has disabled 1.3 billion fraudulent accounts in six months, and removed 1.56 billion spam posts, mostly from fake accounts.</td>
<td><a href="https://www.thetimes.co.uk/article/facebook-closes-one-billion-fake-accounts-in-six-months-mw3cqbpj8">https://www.thetimes.co.uk/article/facebook-closes-one-billion-fake-accounts-in-six-months-mw3cqbpj8</a></td>
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<td><strong>Facebook details scale of abuse</strong></td>
<td>15 May 2018 — Facebook has published statistics on their efforts to enforce their rules. Articles from BBC News (Technology) and also Facebook’s own news site</td>
<td><a href="http://www.bbc.co.uk/news/technology-44122967">http://www.bbc.co.uk/news/technology-44122967</a></td>
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### Focus on denialism, and science-related conspiracy theories (including climate change)

#### Conspiracy theories in science

**EMBO Reports**, July 2010 — paper by Ted Goertzel. ‘[Until] a decade or so ago, few serious conspiracy theories haunted the natural sciences. More recently, however, conspiracy theories have begun to gain ground and, in some cases, have struck a chord with a public already mistrustful of science and government. Conspiracy theorists—some of them scientifically trained—have claimed that the HIV virus is not the cause of AIDS, that global warming is a manipulative hoax and that vaccines and genetically modified foods are unsafe. These claims have already caused serious consequences: misguided public health policies, resistance to energy conservation and alternative energy, and dropping vaccination rates.’

http://embor.embopress.org/content/11/7/493

#### Fact Checking Six Persistent Science Conspiracy Theories

Ker Than, National Geographic News. The data refers exclusively to people in the USA. [1] A total of 37% of American voters believe global warming is a hoax; [2] 29% of voters believe aliens exist; [3] 20% believe childhood vaccines are linked to autism; [4] 14% believe Bigfoot is real; [5] 9% believe the government adds fluoride to drinking water for ‘sinister’ purposes; [6] 7% believe the moon landing was faked.


#### Denialism: what is it and how should scientists respond?

European Journal of Public Health, viewpoint article by Martin McKee, lshtm.ac.uk. ‘HIV does not cause AIDS. The world was created in 4004 BCE. Smoking does not cause cancer. And if climate change is happening, it is nothing to do with man-made CO2 emissions. Few, if any, of the readers of this journal will believe any of these statements. Yet each can be found easily in the mass media.’ PDF available online.

https://watermark.silverchair.com/ckn139.pdf

#### Wikipedia on the ‘global warming conspiracy theory’


#### Global warming labelled a ‘scam’

Washington Times, March 2007, referring to a British Channel 4 programme ‘The Great Global Warming Scandal’ by Martin Durkin. To be more accurate, the programme claimed that global warming is not man-made but caused by solar radiative forcing.


#### The Great Climate Change Swindle?

Defra ‘archives’ from 2007, retained at the Web Archive project — David Milliband, then Secretary of State for Environment, Food and Rural Affairs, in response to the Channel 4 programme described above. ‘Several people have said to me that they couldn’t quite believe what they were being told in Channel 4’s programme last week on climate change – and I promised yesterday in my interview on the Todday programme to put the facts on my blog. Below I have set out what Defra scientists say about the 11 main allegations in the programme…’

**‘Spectator’ [magazine] recycles climate rubbish published by sceptic**

The Guardian, July 2009; George Monbiot. ‘Seldom has a book been more cleanly murdered by scientists than Ian Plimer’s Heaven and Earth, which purports to show that manmade climate change is nonsense. Since its publication in Australia it has been ridiculed for a hilarious series of schoolboy errors, and its fudging and manipulation of the data…’


**Wikipedia on ‘ClimateGate’ (2009)**

https://en.wikipedia.org/wiki/Climatic_Research_Unit_email_controversy

**‘ClimateGate’ – report of the Independent Climate Change E-mails Review**

160-page PDF of the final report of the enquiry. At issue: ‘In November 2009, approximately 1000 e-mails from the Climatic Research Unit (CRU) of the University of East Anglia (UEA) were made public without authorisation. CRU is a small research unit which over the last 30 years has played an important role in the development of climate science, in particular in their work on developing global temperature trends. The e-mails fuelled challenges to the work of CRU, to the reliability of climate science generally, and to the conclusions of the Intergovernmental Panel on Climate Change (IPCC). All this happened shortly before the Copenhagen Summit, and was extensively referred to there. ¶ In response, the UEA commissioned two inquiries…’

http://www.cce-review.org/pdf/FINAL%20REPORT.pdf

**‘9 out of 10 top climate change deniers linked with Exxon Mobil’**

ZME Science, May 2011. ‘In a world where accusations like this fly by like pigeons in the park, it was about time someone but some work into research before making a claim such as this one. This is not some unsubstantiated assertion, or some crazy scientist’s statement – this is backed up by numbers. Let’s look at the matter in depth…’


**Role of Koch brothers in financing climate change denial groups**

Greenpeace (June 2016) article by Connor Gibson on Koch Industries owners’ funding of groups attacking climate change science (over $88 million in traceable donations). Also an explanation of how agencies Donors Trust and Donors Capital Fund play a role in anonymising such donations.


**Focus on misleading health information, and projects supporting evidence-based medicine**

**Revealed: How dangerous fake health news conquered Facebook**

The Independent, 7 Jan 2017 — Misinformation published by conspiracy sites about serious health conditions is often shared more widely than evidence-based reports from reputable news organisations. Article cover various sites touting alternative remedies for cancers, and some of the medical pushback against sites such as Natural News.

### About ‘Natural News’
Wikipedia article about popular site founded by Mike Adams, which sells dietary supplements, promotes alternative medicine, and publishes scientific fake news and conspiracy theories. Site gets about 7 million unique visitors a month.  
https://en.wikipedia.org/wiki/Natural_News

### #NaturalNonsense: Science Supporters Condemn Natural News Founder Mike Adams
Opinion column in Forbes, 23 Dec 2016 — Kavin Senapathy reports on a campaign by science supporters to discredit Mike Adams and his Natural News web site as described above. Quotes from scientists such as lida Ruishalme: "[It] is the regular source of scares in internet mommy groups. This site, like many other misleading ‘alt’ health sites, is trying to make new parents view anything and everything in their surroundings as a health danger…"

### Sense About Science
"Sense about Science is an independent campaigning charity that challenges the misrepresentation of science and evidence in public life. We advocate openness and honesty about research findings, and work to ensure the public interest in sound science and evidence is recognised in public discussion and policymaking." Particularly campaigns for clinical trials to be registered and fully and transparently reported. Based in London.
http://senseaboutscience.org/

### All Trials
AllTrials, founded 2013, calls for all past and present clinical trials to be registered and their full methods and summary results reported. It is an international initiative of Ben Goldacre (author of 'Bad Science'), BMJ, Centre for Evidence-Based Medicine, Cochrane Collaboration, James Lind Initiative, PLOS and Sense about Science.
http://www.alltrials.net/

### Centre for Evidence-Based Medicine (CEBM)
Based at Oxford University’s Nuffield Department of Primary Care Health Sciences, CEBM was founded in 1995 and aims to develop, teach and promote evidence-based health care. Academic lead for MSc and DPhil study, plus short courses and the annual ‘Evidence Live’ conference. Has occasionally hit the news e.g. finding that Tamiflu is of no benefit in the treatment of influenza, and that carbohydrate-based sports drinks cannot be proved to enhance performance.
https://www.cebm.net/

### The Catalogue of Bias (in medical research)
The Catalogue of Bias is a collaborative project studying the persistence, diversity and impact of bias in medical research, based on ideas from David Sackett who founded CEBM at Oxford. Biases can affect sampling and measurement in the context of clinical trials, case-control, and cohort studies.
https://catalogofbias.org/about/
### Focus on Russian ‘maskirovka’, deception and ‘cognitive subversion’

#### Maskirovka

‘Russian military deception, sometimes known as maskirovka (Russian: маскировка, lit. ‘disguise’), is a military doctrine developed from the start of the twentieth century. The doctrine covers a broad range of measures for military deception, from camouflage to denial and deception.’

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#### How Russia outfoxes its enemies

‘Russia's annexation of Crimea last year [2014] caught almost everyone off guard. The Russian military disguised its actions, and denied them – but those ‘little green men’ who popped up in the Black Sea peninsula were a textbook case of the Russian practice of military deception – or maskirovka.’ — Lucy Ash, BBC News, Jan 2015

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#### Little green men (Ukrainian crisis)

‘…refers to masked soldiers in unmarked green army uniforms and carrying modern Russian military weapons and equipment that appeared during the Ukrainian crisis of 2014. The term was first used during the annexation of Crimea by the Russian Federation.’

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#### Maskirovka: Russia’s Gray Zone between Peace and War

Article in The Cipher Brief, Nov 2017. ‘With maskirovka, the fog of war is not merely the natural byproduct of combat, but a deliberately manufactured feature of military operations…’ The article also explores how the advent of social media platforms has at times undermined Russian efforts to hide the truth (inadvertent disclosure), but has also opened fresh avenues for spreading disinformation.

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Analytical article from Israel’s Institute for National Security Studies. ‘[It] is now clear that democratic governments in the West … must prepare for a significant strategic threat to their stability: manipulation of the public discourse by external elements seeking to undermine social unity or damage public trust in the political system. This phenomenon, namely the link between psychological warfare methods and technological infrastructures, enabling intervention in the “consciousness” of another country, could be called “cognitive subversion.” ’
### Of State-sponsored troll farms, sockpuppets and social media bots

**Twitter admits over 50,000 Russian bots posted on 2016 US election**

Jan 2018, *The Guardian* — Twitter removed 50,258 accounts linked to Russia and turned over details to congressional investigators who are looking into Moscow’s interference with the US 2016 election campaign. The posts had reached at least 677,775 Americans.

https://www.theguardian.com/technology/2018/jan/19/twitter-admits-far-more-russian-bots-posted-on-election-than-it-had-disclosed

**These are the 3,400 Facebook ads purchased by Russia’s online trolls around the 2016 election**

*Washington Post* 10 May 2018 — Democrats on the House Intelligence Committee… released about 3,400 Facebook ads purchased by Russian agents around the 2016 presidential election on issues from immigration to gun control, a reminder of the complexity of the manipulation that Facebook is trying to contain… The ads, from mid-2015 to mid-2017, illustrate the extent to which Kremlin-aligned forces sought to stoke social, cultural and political unrest on one of the Web’s most powerful platforms.


**Hundreds of Facebook accounts and pages linked to Russian IRA**

April 2018 article on *The Verge*. Facebook says it has suspended 70 accounts, 138 pages, and 65 Instagram accounts controlled by the Internet Research Agency in Russia (see next entry). The vast majority were aimed at Russian speakers.


**Internet Research Agency (Russia)**

The *Internet Research Agency (IRA)* (Russian: Агентство интернет-исследований) is a Russian company, based in Saint Petersburg, engaged in online influence operations for Russian business and political interests. In slang they are called the ‘Trolls from Olgino.’

https://en.wikipedia.org/wiki/Internet_Research_Agency

**Web brigades or ‘troll farms’ (Russia)**

The web brigades (Russian: Веб-бригады) are state-sponsored anonymous Internet political commentators and trolls linked to the Russian government, reportedly organized into teams of commentators that participate in Russian and international political blogs and Internet forums using ‘sockpuppets’ and orchestrated trolling and disinformation campaigns to promote pro-Putin and pro-Russian propaganda.

https://en.wikipedia.org/wiki/Web_brigades

**Yevgeny Prigozhin**

CNN October 2017 article about the ex-convict, now oligarch and Kremlin insider, who is said to be the main financier behind the Internet Research Agency ‘troll factory’.


**50 Cent Party (China)**

The *50 Cent Party* (五毛党) is a colloquial term for Internet commentators hired by Chinese authorities from 2005 in an attempt to manipulate Chinese public opinion on social media to the benefit of the Chinese Communist Party – somewhat similar to the Russian ‘web brigades’. These days, this role is a mainstream duty for CCP party officials.

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<tr>
<th>Focus on the Cambridge Analytica and Facebook scandal</th>
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<tr>
<td><strong>Wylie: ‘I made Steve Bannon’s psychological warfare tool’</strong></td>
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<td><em>The Guardian</em>, 18 March 2018 — The article by <em>Carole Cadwalladr</em> which broke this story in <em>The Observer</em>. ‘For more than a year we’ve been investigating Cambridge Analytica and its links to the Brexit Leave campaign in the UK and Team Trump in the US presidential election. Now, 28-year-old Christopher Wylie goes on the record to discuss his role in hijacking the profiles of millions of Facebook users in order to target the US electorate.’</td>
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<td><strong>Seven days that shattered Facebook’s façade</strong></td>
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<td><em>The Guardian</em>, 24 March 2018 — Article by Olivia Solon. ‘As the scandal unfurled over the last seven days, Facebook’s lackluster response has highlighted a fundamental challenge for the company: how can it condemn the practice on which its business model depends?’</td>
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<td><strong>Revealed: Trump’s election consultants filmed saying they use bribes and sex workers to entrap politicians</strong></td>
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<td><em>Channel 4 News</em> — ‘Senior executives at Cambridge Analytica – the data company that credits itself with Donald Trump’s presidential victory – have been secretly filmed saying they could entrap politicians in compromising situations with bribes and Ukrainian sex workers. In an undercover investigation by Channel 4 News, the company’s chief executive Alexander Nix said the British firm secretly campaigns in elections across the world. This includes operating through a web of shadowy front companies, or by using sub-contractors.’</td>
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<td><strong>BBC Reality Check: Was Facebook data’s value literally nothing?</strong></td>
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<td><em>BBC Reality Check team</em>, 24 April 2018 — ‘There is a huge spectrum of opinion on the value of the Facebook data that Cambridge University academic Aleksandr Kogan gave to Cambridge Analytica’s parent company, SCL. Dr Kogan told a parliamentary committee: “Given what we know now, nothing, literally nothing – the idea that this data is accurate I would say is scientifically ridiculous.”’</td>
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<td><a href="http://www.bbc.co.uk/news/technology-43502366">http://www.bbc.co.uk/news/technology-43502366</a></td>
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<td><strong>‘Cambridge Analytica dismantled for good? Nope: It just changed its name to Emerdata’</strong></td>
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<td><em>The Register</em>, 2 May 2018 — ‘The company formerly known as Cambridge Analytica shocked the media today when it announced an immediate shutdown and liquidation of its business. That “shutdown,” however, may be short-lived as official documents indicate those behind [CA] will be launching as a new firm with a less-toxic brand.’</td>
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<td><a href="https://www.theregister.co.uk/2018/05/02/cambridge_analytica_shutdown/">https://www.theregister.co.uk/2018/05/02/cambridge_analytica_shutdown/</a></td>
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<td><strong>Reflection on CA/Facebook scandal &amp; wider implications</strong></td>
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<td>Guardian opinion piece by Jonathan Freedland, 23 March 2018. ‘Social media gave the powerless a weapon but it was wrested away by firms such as Facebook and Cambridge Analytica.’ Reflects on how lies of the powerful have been ripped apart on Facebook before, but noughties naïveté must be discarded if we are to re-take social media.</td>
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### Focus on information, misinformation and opinion struggles around the Skripal poisoning case

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<tr>
<td><strong>‘Russia spread fake news via bots after Salisbury poisoning’</strong></td>
<td><a href="https://www.theguardian.com/world/2018/apr/19/russia-fake-news-salisbury-poisoning-twitter-bots-uk">https://www.theguardian.com/world/2018/apr/19/russia-fake-news-salisbury-poisoning-twitter-bots-uk</a></td>
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<td><strong>‘Scientist Brilliantly Tears Conspiracy Theory About Russian Spy To Shreds’</strong></td>
<td><a href="http://www.iflscience.com/chemistry/scientist-brilliantly-tears-conspiracy-theory-about-russian-spy-to-shreds/">http://www.iflscience.com/chemistry/scientist-brilliantly-tears-conspiracy-theory-about-russian-spy-to-shreds/</a></td>
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<td><strong>Soviet scientist backs UK over Skripal poisoning</strong></td>
<td><a href="https://www.ft.com/content/3c279804-3b44-11e8-b7e0-52972418fec4">https://www.ft.com/content/3c279804-3b44-11e8-b7e0-52972418fec4</a></td>
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