Data management and use: an experiment in interdisciplinary advice on governance

Jon Agar

(STS, UCL)

Forskningsetisk forum 2018

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Technology

Facebook emotion experiment sparks criticism

30 June 2014 | Share

Facebook said it conducted the study to gauge users' response to content

Facebook is facing criticism after it emerged it had conducted a psychology experiment on nearly 700,000 users without their knowledge.

Experimental…

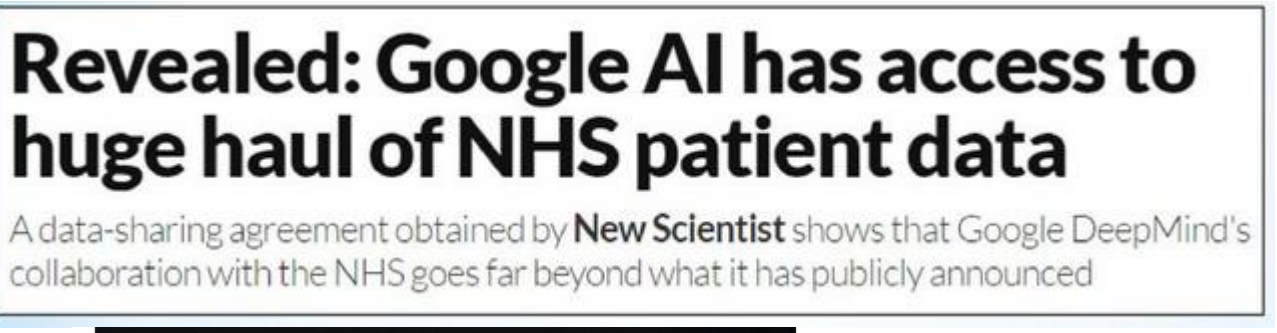
society, big data and corporations

Experimental…

science AND humanities

NHS chiefs in climbdown over sharing patient data

← *Before*:
care.data scandal



Revealed: Google AI has access to huge haul of NHS patient data

A data-sharing agreement obtained by **New Scientist** shows that Google DeepMind's collaboration with the NHS goes far beyond what it has publicly announced

← *During*:
controversy over Google DeepMind's access to Royal Free hospital patient data

The Observer

www.observer.co.uk | Sunday 18 March 2018 | £3.00

Revealed: 50m Facebook files taken in record data breach

Exclusive

- Whistleblower tells of bid to influence votes
- Tech giant suspends controversial data firm

Carole Cadwalladr & Emma Graham-Harrison

The Cambridge Analytica Files

Full interview
Whistleblower Christopher Wylie lifts the lid
Cover story New Review

Like or dislike
The algorithm that reveals all about you
Report, page 9

Facebook
How its destructive ethos imperils democracy
Observer Comment, 44

← After:
Cambridge Analytica, Facebook and election influence scandal

Industrial Strategy, 2017

UK Digital Strategy, 2017

"UK at the forefront of the artificial intelligence and data revolution"

"making the UK the best place to start and grow a digital business"

Terms of reference

- Identify the communities with interests in the governance of data and its uses, but which may be considering these issues in different contexts and with varied aims and assumptions, in order to facilitate dialogue between these communities. These include academia, industry, the public sector and civil society.

- Clarify where there are connections between different debates, identifying shared issues and common questions, and help to develop a common framework and shared language for debate.

- Identify which social, ethical and governance challenges arise in the context of developments in data use.

- Set out the public interests at stake in governance of data and its uses, and the relationships between them, and how the principles of Responsible Research and Innovation (RRI) apply in the context of data use.

- Make proposals for the UK to establish a sustained and flexible platform for debating issues of data governance, developing consensus about future legal and technical frameworks, and ensuring that learning and good practice spreads as fast as possible.

Regular members

Professor Dame Ottoline Leyser DBE FRS (Co-Chair)	Chair of the Royal Society Science Policy Advisory Group
Professor Genevra Richardson CBE FBA (Co-Chair)	Chair of the British Academy Public Policy Committee
Professor Jon Agar	Professor of Science and Technology Studies, University College London (UCL)
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on the science side:

computer science, statistics, engineering, plant genetics

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on the humanities side:

law,
history of science,
philosophy of information,
digital anthropology,
ethics

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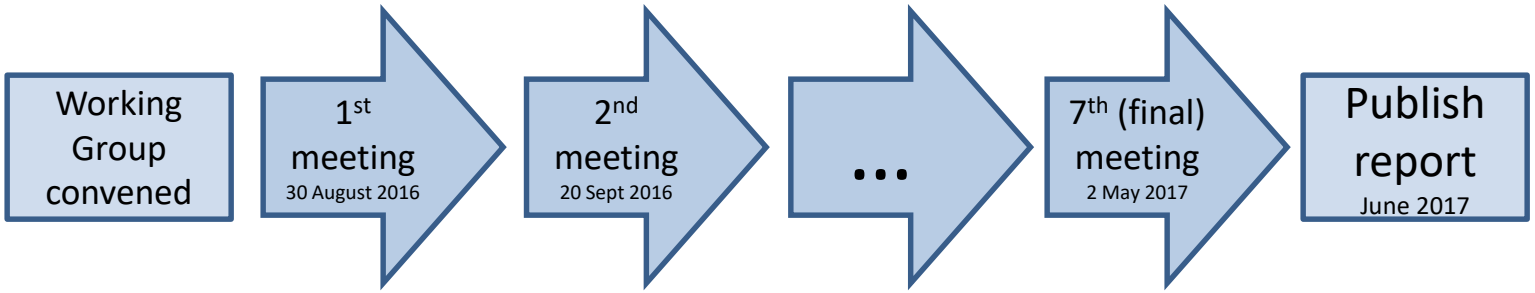
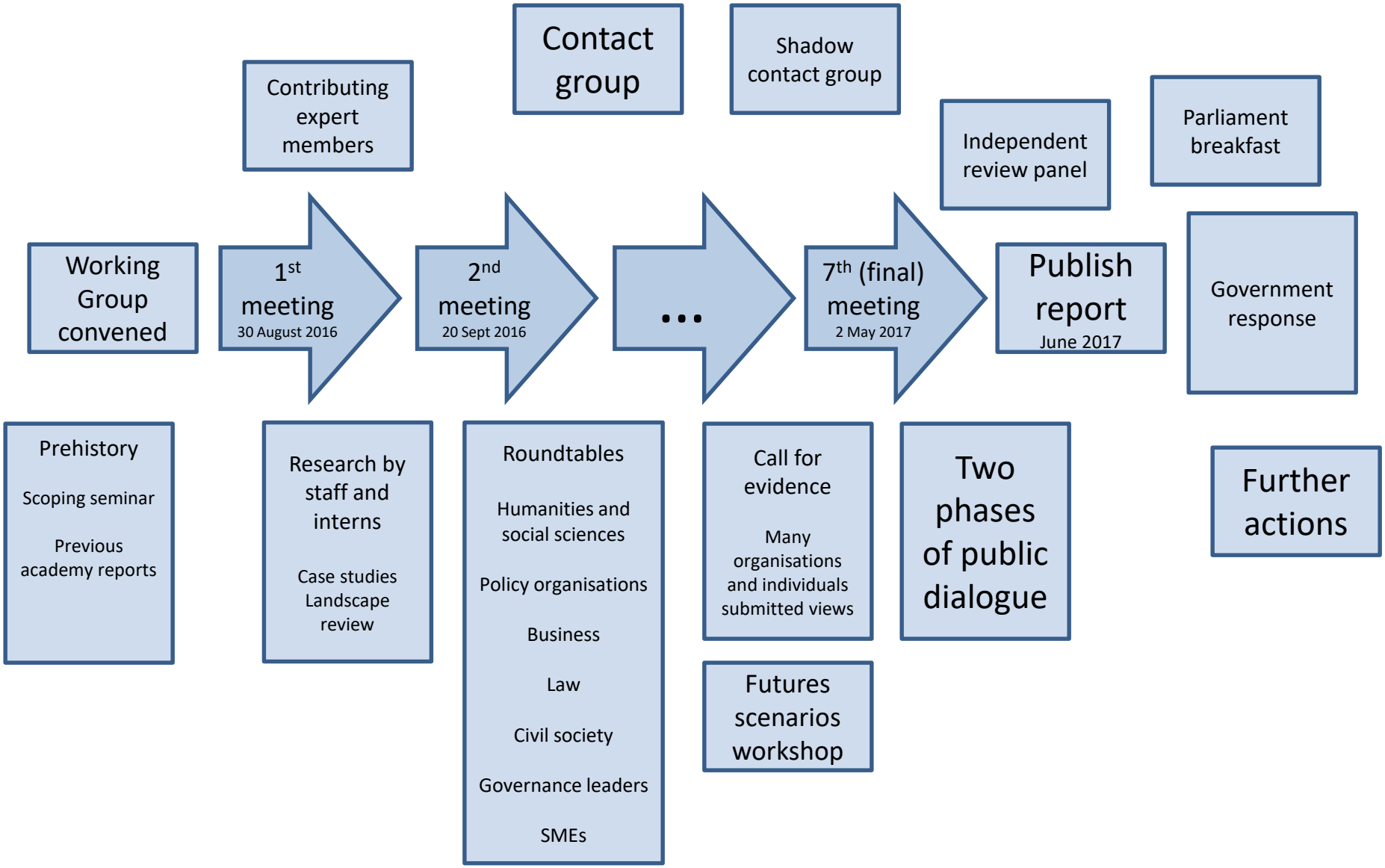
industrial experience, and representative of industrial interests

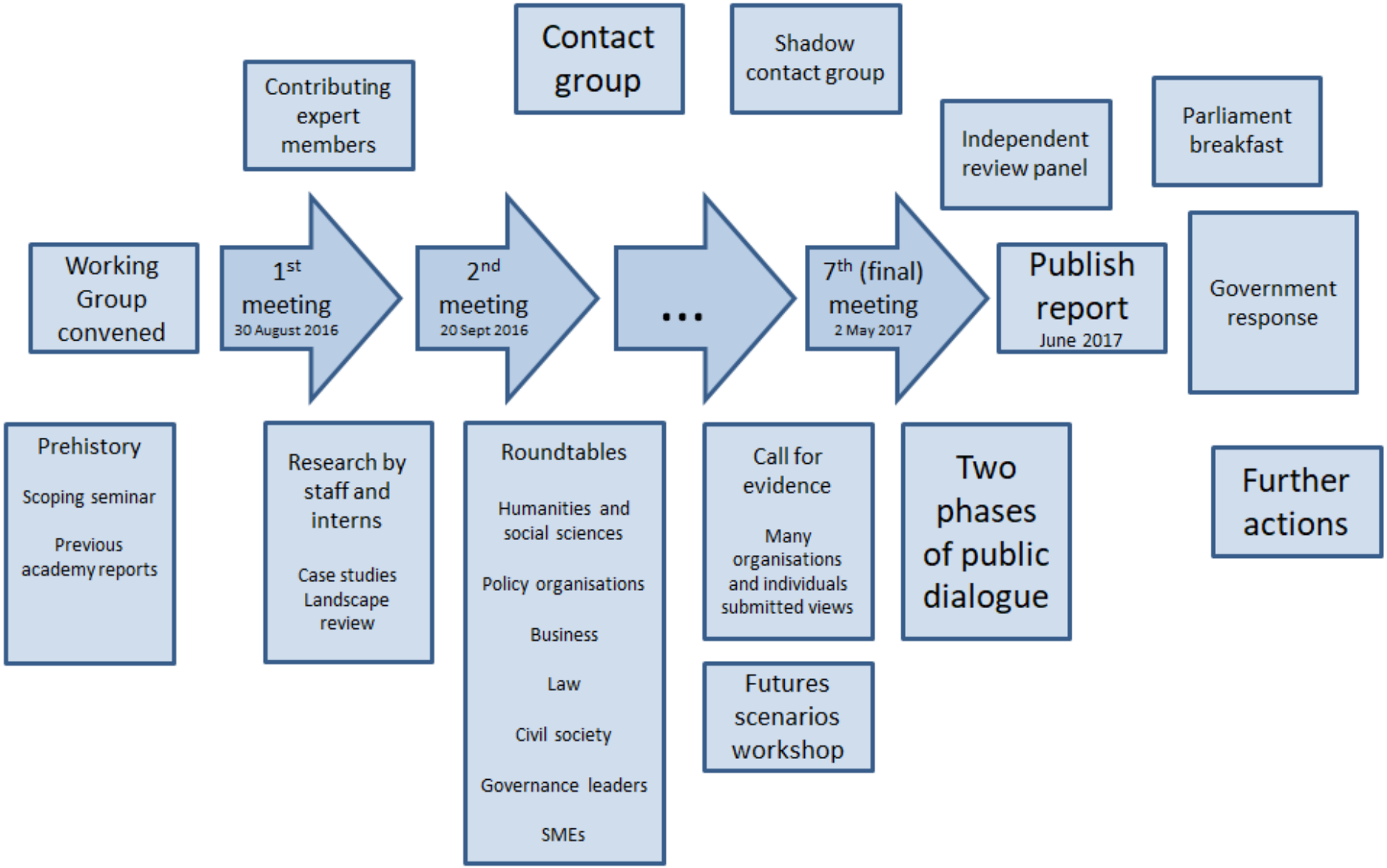
Simple view


Working Group convened
1st meeting
30 August 2016
2nd meeting
20 Sept 2016
...
7th (final) meeting
2 May 2017
Publish report
June 2017

More complex view



More complex view



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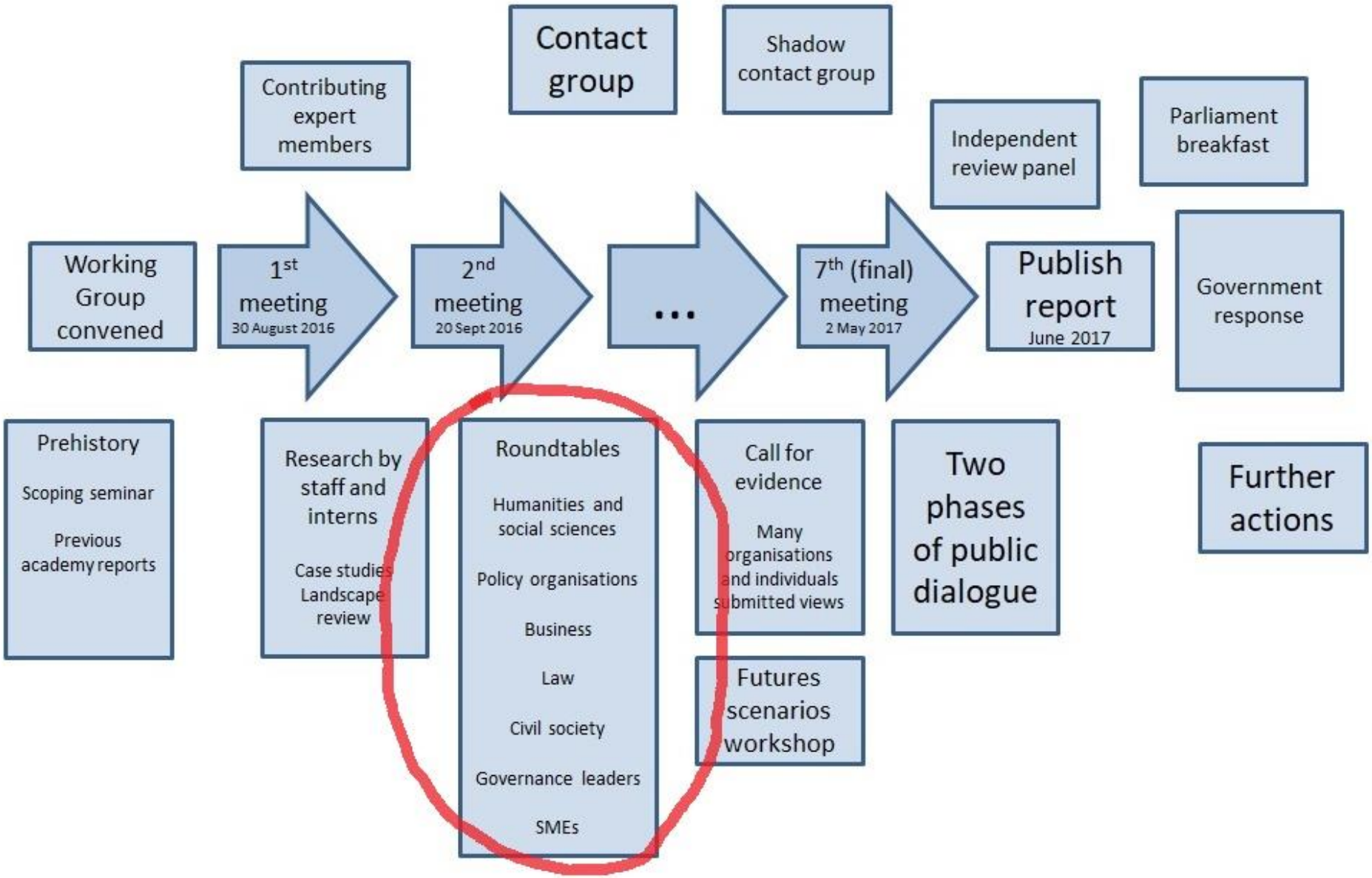

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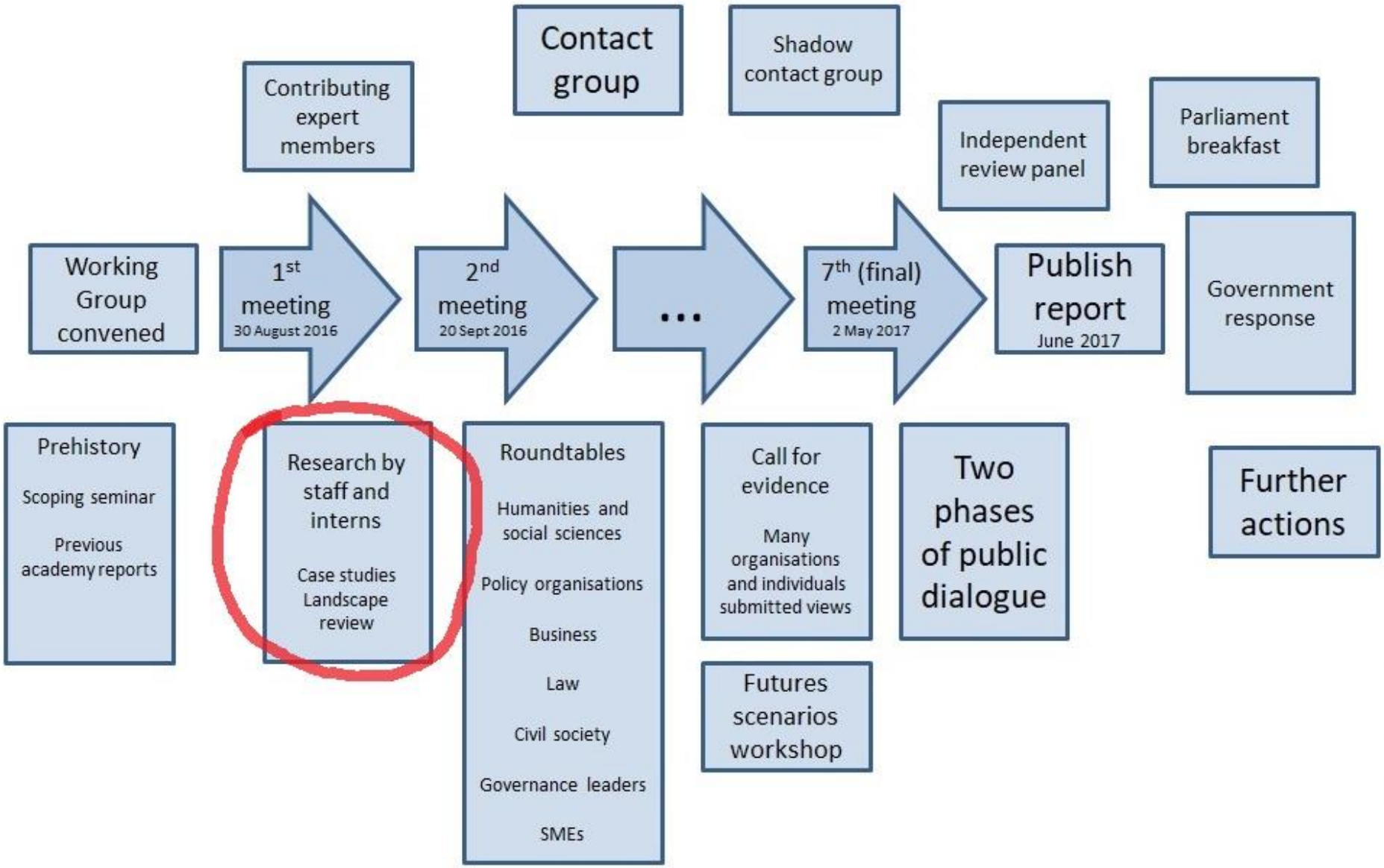

Contributions

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- Michael Veale
- Fernanda Ribas
- Marion Oswald

Staff from across the British Academy and the Royal Society contributed to the production of this report.

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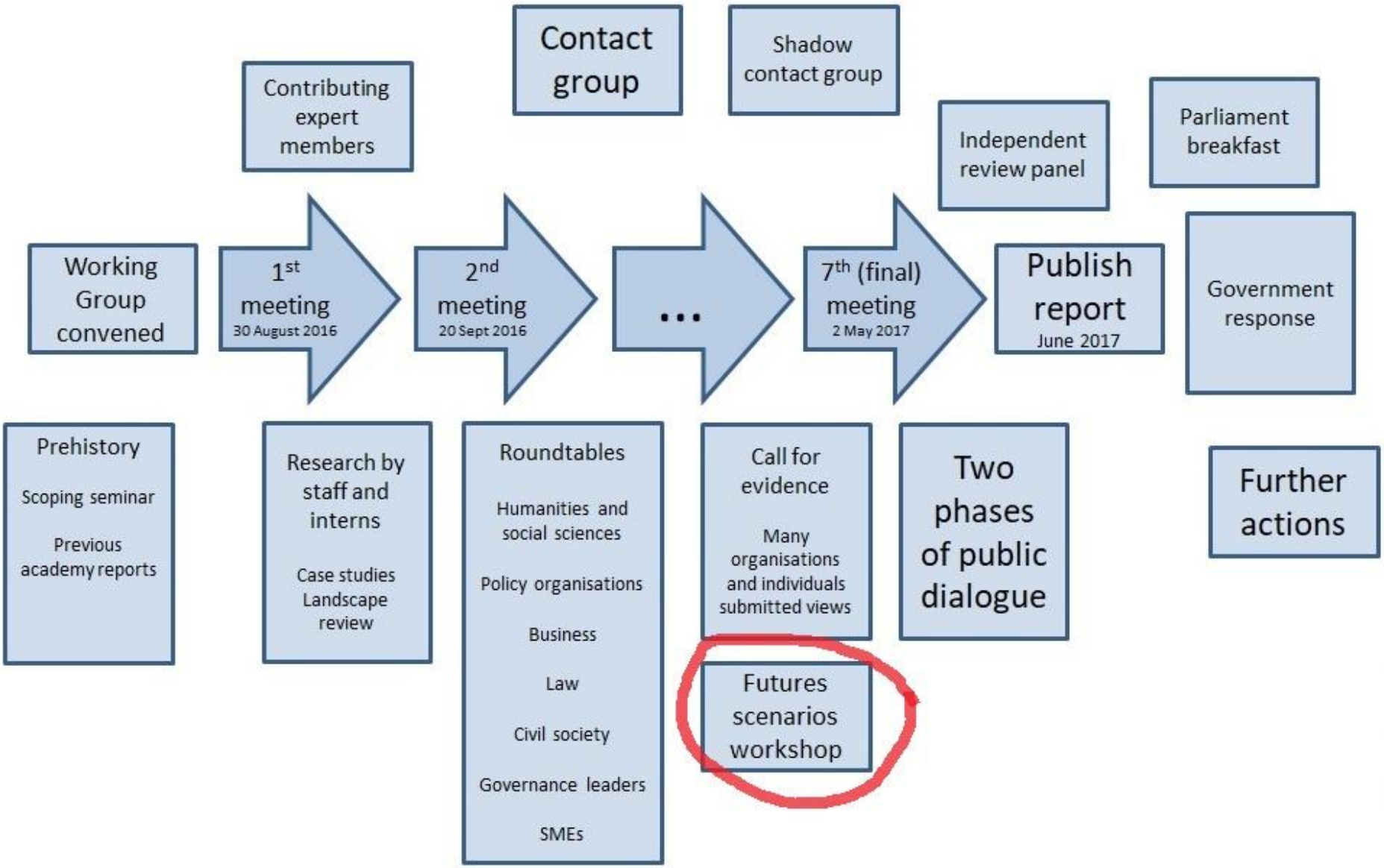
Barbara Limon	Interim Head of Policy (Public) British Academy
Helen Gibson	Policy and Engagement Manager British Academy
Tara Vernhes	Policy Advisor British Academy

More complex view



Futures scenarios

Scenario 1 - Distrust and suspicion

…

Scenario 4 - Technopoly 2021

…

Scenario 9 - Disconnected world

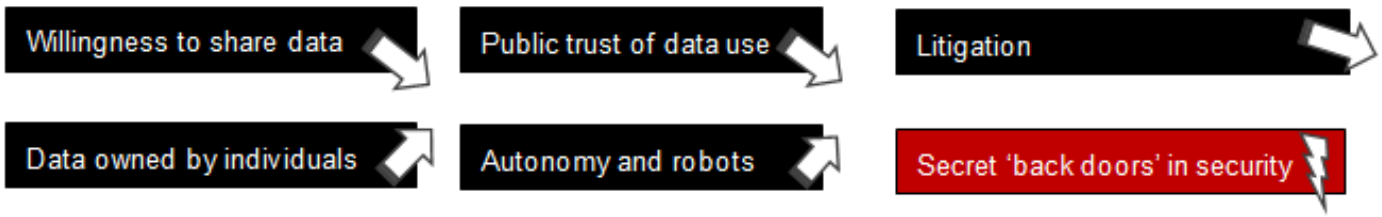
Scenario 1 – Distrust and Suspicion

Narrative

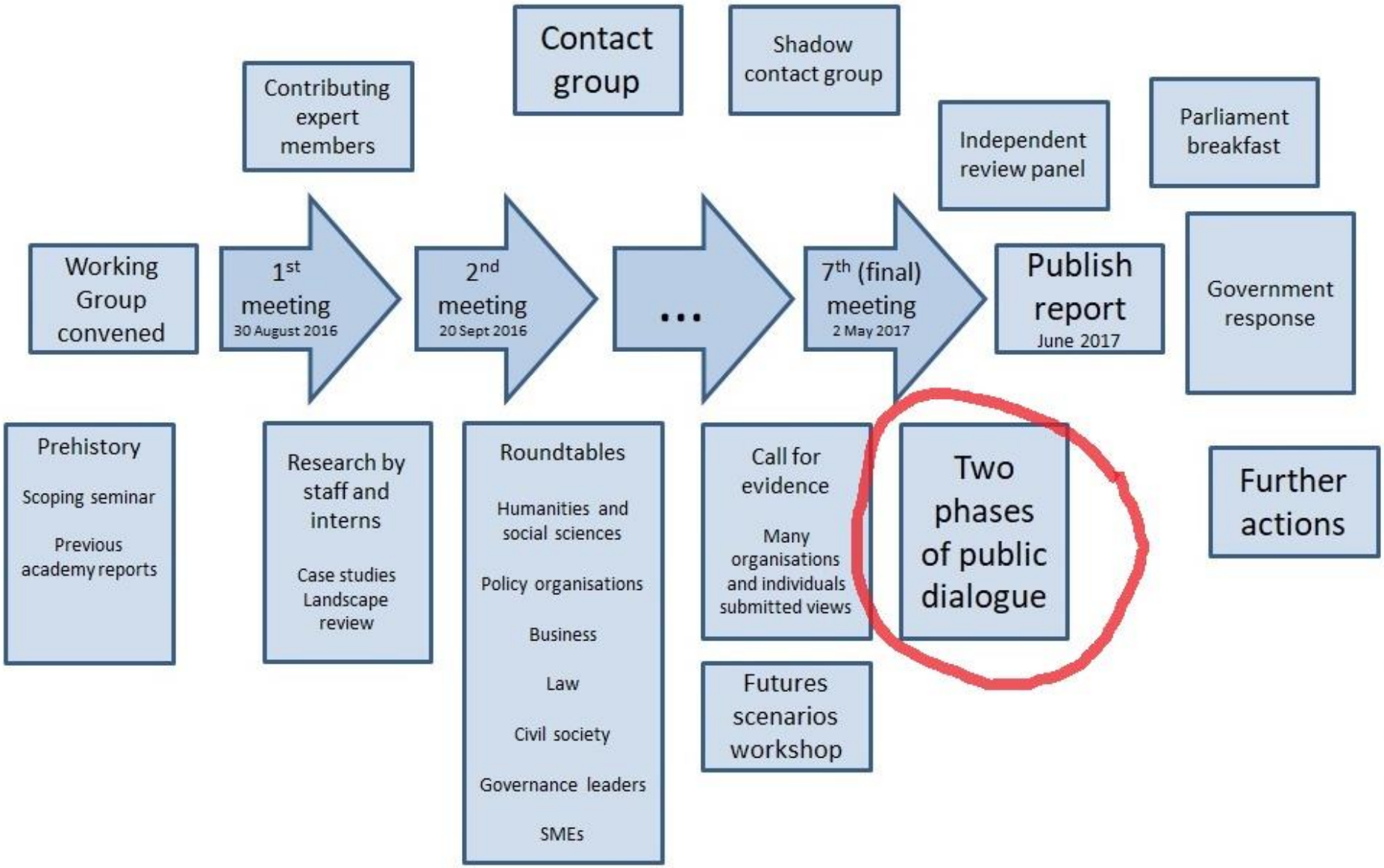
People are suspicious of how their data will be used, and suspicious of the big data collection companies, such as Facebook and Google. The culture of data sharing without concern that was prevalent in 2016 has gradually declined, and the public are more protective of their data and what they share.

There have been a number of fairly major data breeches including embarrassing shopping habits of 370,000 Amazon UK customers and occurrences of misuse of data, particularly in the last couple of years, which has led to a loss of confidence and backlash from the public. This was further exacerbated by the discovery that one major company included "back doors" in its security, despite claiming otherwise. This situation has resulted in the public boycotting Facebook and other major online companies as much as they can, and there has been a rise in using other social media approaches. As a result, these large companies, such as Facebook, have been starved of data, ad revenue is down and the platforms are losing R&D momentum giving a poor UX.

Drivers, trends and shocks



More complex view



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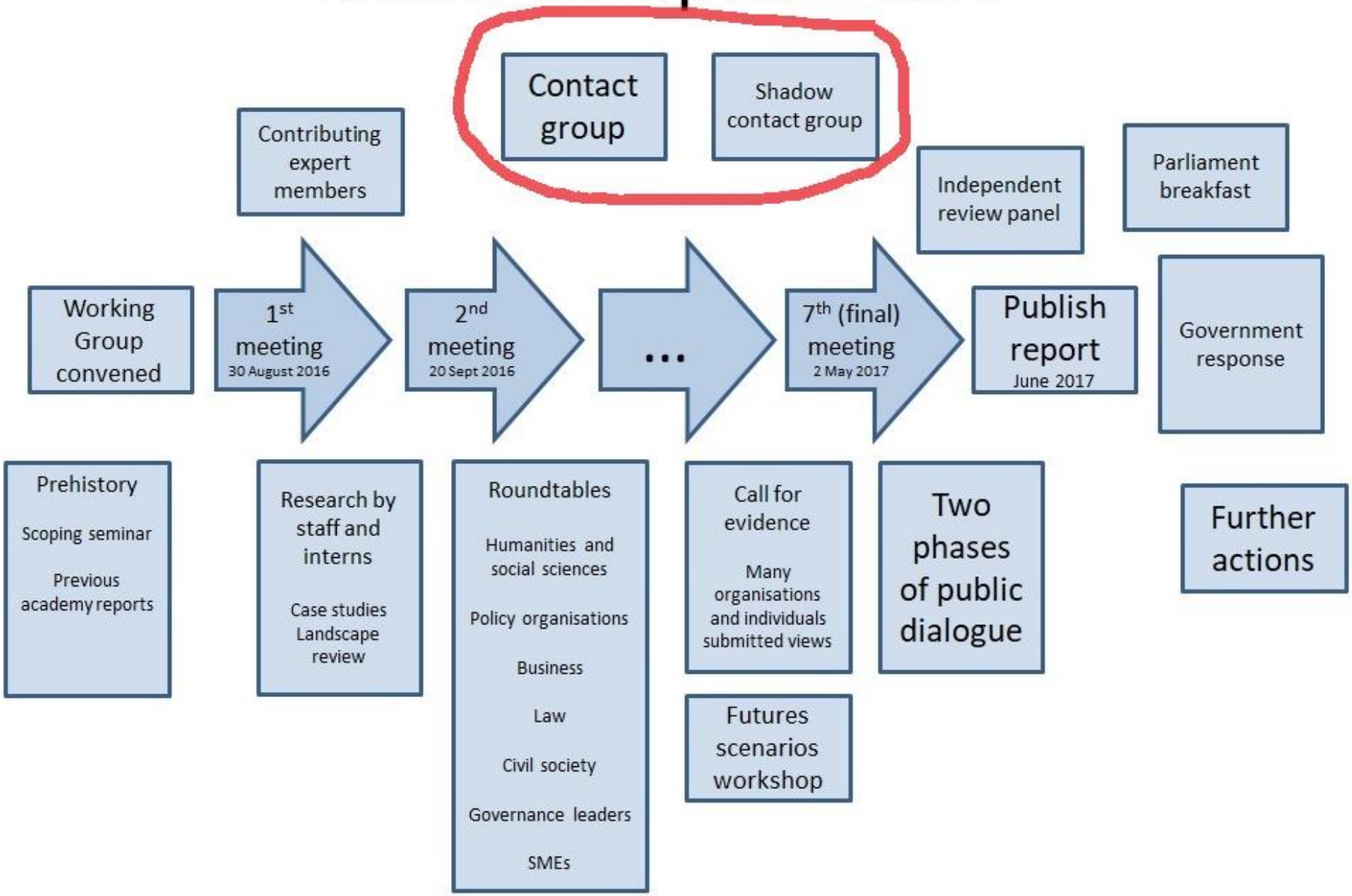

‘To ensure that the generation, collection and processing of data promotes *human* flourishing’

More complex view

Data management and use

Published June 2017

Two recommendations:

- Principles (led by human flourishing)
- New stewardship body

Data management and use (2017)

Principles for Data Governance

- A set of high-level principles is needed to visibly shape all forms of data governance and ensure trustworthiness and trust in the management and use of data as a whole.

- The promotion of **human flourishing** is the overarching principle that should guide the development of systems of data governance. The four principles that follow provide practical support for this overarching principle across the varied ways data is managed and used:

  - protect individual and collective rights and interests
  - ensure that trade-offs affected by data management and data use are made transparently, accountably and inclusively
  - seek out good practices and learn from success and failure
  - enhance existing democratic governance.

Data management and use (2017)

Essential functions and stewardship

- The governance framework for data management and data use should perform three broad categories of functions. These may be carried out by a variety of public and private actors:
  - **A**nticipate, monitor and evaluate
  - **B**uild practices and set standards
  - **C**larify, enforce and remedy

- Despite the range of actors already carrying out some of these important governance functions in their specific sectors or domains, there is a clear need **for a new body** to steward the landscape as a whole, rather than being directly responsible for implementation within specific domains.

- The purpose of such a stewardship body would be to support delivery of the full breadth of critical functions in accordance with the principles set out above.

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Annual Meeting 2018

Conclusions

- Independent yet shaped by interests
- General principles, well meaning but also acceptable across group
- Humanities a relevant set of expertise
- Would have been strengthened by more social science
- Stewardship body needed because GPDR is incomplete
- Influence considered essential by academies, but in practice limited by political realities