**Introduction**

**Approach, Literature Review, and Methodology**

The Internet is the most remarked-upon technology of our time. The Westminster Parliament lies at the centre of the United Kingdom (UK) political and legal system. This book explores, in historical context, the relationship between the two. The subject is important, first, in its own right. Change in the way in which the UK legislature operates is significant. Parliament is the primary institution of representative democracy in the UK, and one of the longest operating and most influential such entities in the world. It has encountered numerous prior transformations in modes of communication, and its responses to them have generated much comment as they occurred and subsequently. In the context of an ‘uncodified’ or ‘unwritten’ constitution, Parliament possesses supreme legal authority or ‘sovereignty’.

A key focus for public debate, governments are formed out of this body, and ministers are in turn accountable to it. Parliament – the primary chamber of which, the House of Commons, is elected – carries out its tasks on behalf of the public. The Internet has impacted upon the way in which it functions and the legislature has taken an interest in shaping the environment within which this technology operates.

Secondly, the issues with which this work engages form part of a wider international debate about the consequences of the Internet for society as a whole.\(^1\) At one extreme, this device can appear as a vehicle for malign ends, such as social manipulation and exploitation. At the other, it is a saviour, as during the coronavirus pandemic, when it provided a means for the swift dissemination of vital information, and of overcoming enforced social isolation (yet at the same time being a conduit for the so-called ‘infodemic’ of misleading assertions\(^2\)). There are many points in between. A prominent sub-discussion, that dates back over decades but seems to have grown in intensity over time, centres on the extent to which the Internet is a force supportive of democracy and meaningful individual empowerment, or is inimical to these ends.

---

1. See Ch. 1 of this volume.
Introduction

The present work seeks both to explore the particular instance of the UK Parliament in relation to these concerns, and contribute to this broader discourse. It considers both the way in which technology is perceived, and put into practice, and the connection between the two themes. The book performs this task through introducing the subject, placing it in a wide and long context, and then returning to it in detail. Alongside the Internet itself, it assesses inventions that predated this digital network, or developed contemporaneously with it. It considers the overall development of Parliament as an institution and branch of the constitution. Ultimately it asks: what use has Parliament made of the Internet? How and with what consequences has Parliament sought to influence the development of the Internet? What overall difference has the Internet made to Parliament, including its position within the UK constitution? What more general conclusions can we draw?

To define certain terms, by ‘Internet’ I refer – using a proper noun – to a digital network the historic function of which was the joining together of multiple computer networks, to which mass connections became possible. But as a technology it has many complex implications and discerned meanings, that I explore further in Chapter 1 and beyond. The ‘UK Parliament’ is the legislature of the United Kingdom, including within it two Houses: an elected Commons and mainly appointed (though hereditary in its origins) Lords. It is the repository of legal supremacy or ‘sovereignty’ and not limited by a ‘written’ or ‘codified’ constitution (itself defined in the following paragraph). The UK Parliament is in some respects descended from the English Parliament, an institution with origins lying at least as far back as the thirteenth century. Formally it ceased to operate with the Union of Scotland and England, implemented in 1707, succeeded at this time by the Parliament of Great Britain and then (following Union between Ireland and Great Britain, that came into force in 1801) of the United Kingdom.

‘Constitution’ is used to refer to the structures, rules, and principles of the political system; and the relationship that different governmental institutions have with each other and with the people. In many countries, core features of this type are included in a single text with special legal status – a ‘written’ or ‘codified’ constitution. In the UK, they are spread more diffusely across a variety of documents or more amorphous understandings or ‘conventions’. Hence the UK is often described as having an ‘unwritten’ or ‘uncodified’ constitution. By ‘democracy’, I mean a system of government which is subject to popular control of some kind and within which there is a basic principle that all people are politically equal to one another. I refer to two different subvarieties of democracy. The first – ‘representative democracy’ – entails decision-making power being vested in a set of institutions that govern on behalf of the public, and are accountable to them, including via elections. The second – ‘direct democracy’ – involves voters as a whole, rather than intermediary entities, making choices, for instance through referendums. There can
be a degree of tension between these two types of democracy, though they often to some extent co-exist. The book makes particular use of long-term analysis. In trying to appreciate the value of this approach, it is instructive to consider some of the written output of an Elizabethan and Jacobian politician, lawyer, philosopher – and member of the English predecessor to the UK Parliament (both in the House of Commons and House of Lords). Francis Bacon saw great potential in technology. Writing in *Novum Organum* in 1620, he referred to a need to 'note the force, effect, and consequences of inventions'. The most significant among them, he judged, 'have changed the appearance and state of the whole world'. He both discerned importance in existing devices and sought to anticipate the nature and consequences of advances yet to come. Many examples falling in the latter category appeared in his unfinished work *A New Atlantis*. Published after his death in 1626, it depicted an imaginary, isolated, and scientifically advanced island society. This essay is noted for the prescience it displayed. Bacon described, for instance, flying machines, submarine vessels, 'towers' up to 'half a mile in height', the creation of new breeds of plants and animal life, and means of modifying the temperature. It had developed telescopes and microscopes to a high level of sophistication. There were 'perspective-houses' for the display of various simulated images. Bacon also described 'houses of deceits of the senses'. Within them it was possible to 'represent all manner of feats of juggling, false apparitions, imposture, and illusions; and their fallacie'.

Given the ingenuity on display, the science of the island could easily have gone far in creating means to 'deceive the senses'. However, an organisation that had responsibility for inventions, called Salomon’s House, was firmly opposed to 'all impostures and lies'. It had 'severely forbidden it to all our fellows, under pain of ignominy and fines, that they do not shew any natural work or thing, adorned or swelling but only pure as it is, and without all affection or strangeness'. Bacon described how members of Salomon’s House held discussions as to 'which of the inventions and experiences which we have discovered shall be published, and which not: and take all an oath of secrecy,'

---

6 Ibid., pp. 481–4.
7 Ibid., p. 485.
8 Ibid., p. 484.
9 Ibid., pp. 484–5.
10 Ibid., p. 486.
11 Ibid.
Introduction

for the concealing of those which we think fit to keep secret’. Salomon’s House might in some instances even withhold such knowledge from the ‘state’.12

With these passages, Bacon suggested that technology could be negative in its implications. It should, in the model he set out, be subject to social regulation based on assessments of impact upon public welfare. The ‘state’ itself could not necessarily be trusted with some devices. Such concerns are perennial, and have surfaced in debates about the Internet. The contemporary piquancy of Bacon magnifies because of a particular prospective problem he identified. He anticipated potential for the use of visual communications technology to mislead the viewer. It has in some respects found a manifestation in reality in the form of online disinformation and misinformation, commonly known as ‘fake news’. Those who discern problems in the nature of online political discourse frequently argue that it exploits a tendency for people to prefer exposure to material that fits with their pre-existing outlooks. In the process, they hold, rather than fostering open debate between people of differing positions, and the consideration of evidence-based propositions, it magnifies social divisions, and confines those who participate online to groups of like-minded individuals, entrenching their mutual prejudices.13 Bacon, writing elsewhere, anticipated this possibility also, suggesting that, once someone forms a view, they tend only to recognise information that serves to support it. As he put it in Novum Organum, ‘[o]nce a human intellect has adopted an opinion ... it draws everything else in to confirm and support it’. A preconception, he held, was psychologically entrenched ‘[e]ven if there are more and stronger instances against it than there are in its favour, the intellect either overlooks these or treats them as negligible or does some line-drawing that lets it shift them out of the way and reject them’. It is common nowadays to present Bacon, with this theory, as anticipating the tendency known as ‘confirmation bias’. He saw the phenomenon he discerned as a problem to be overcome by those who sought to expand the range of human knowledge.14

Bacon, therefore, had a nuanced view of science, the way in which people and society might employ it, what the consequences could be, and the disposition of the human mind. There was both caution and optimism in his work. He was enthusiastic about an actual rather than anticipated communications technology first introduced to Europe in the mid-fifteenth century. In A New Atlantis, Bacon describes how Salomon’s House makes use of ‘two very long and fair galleries’, one of which housed ‘the statues of all principal inventors’ including ‘the inventor of printing’, who was unnamed.15 In his discussion in Novum Organum of ‘the force, effect, and consequences of inventions’ that

---

12 Ibid., p. 487.
14 See e.g. ‘Confirmation Bias’, available at: https://rintintin.colorado.edu/~vancecd/phil3600/Bacon.pdf, last accessed 4 August 2020.
15 Bacon, The Major Works, p. 487.
'have changed the appearance and state of the whole world', he emphasised the importance of 'three which were unknown to the ancients'. The first in his list, followed by 'gunpowder, and the compass' was 'printing'. The particular value he attached to this technology was the possibilities it created for the dissemination of learning. It was in this account an advance that in itself might facilitate more such development.

By considering the different strands of his thought discussed here, it is possible to construct a dilemma that Bacon did not extrapolate or directly address. If a communications technology seemed to offer benefits similar to those he ascribed to printing, but also created the potential to 'deceive the senses' and promote 'impostures and lies', playing upon the capacity for self-deception inherent in human psychology, what would be the proper response? Restrictions, imposed by an equivalent to Salomon's House, might protect us from abuses – including those perpetrated by 'state' authorities. But how extensive would they need to be if they were to prove effective? Might the benefits that the system produced as a disseminator of information be lost in the process? Such questions would arise in the context of various devices in the centuries that followed, including – in the decades that followed the death of Bacon – with respect to the technology he venerated. A discussion of printing in Western Europe (though it appeared elsewhere earlier), its supposed impact, and relationship with the English Parliament, is apt at this point.

**Printing in History**

In their classic history of printing, Lucien Febvre and Henri-Jean Martin describe how, around 1450, 'some rather unusual “manuscripts” made their appearance in the northern regions of Western Europe'. Their production took place 'with the mechanical aid of a printing press which used moveable type'. Their means of production became 'the object of considerable curiosity and fascination'. These 'new books', Febvre and Martin argue, would 'cause profound changes not only in the habits of thought but also in the working conditions of the intellectual community. Furthermore, they 'made considerable impact on the world outside'. In popular conception, the advent of printing is often treated as associated with immense transformative change, particularly in Europe (and North America) during the sixteenth through to the eighteenth centuries. For instance, a connection is often drawn between

18 Ibid., pp. 71–6.
Introduction

it and the Reformation.20 The technology helped disseminate the ideas of Luther. His precursors, in particular John Wycliffe and Jan Hus, did not have this particular advantage and in, this sense, it may have made an important difference. Luther himself remarked, in discussion with Pope Leo X, that ‘[i]t is a mystery to me how my theses, more so than my other writings, indeed, those of other professors were spread to so many places. They were meant exclusively for our academic circle here… They were written in such a language that the common people could hardly understand them.’21 Printing may have done more at this time than simply spread specific arguments, generating general reputational momentum around the Luther cause. Leo X could have followed the same approach taken to Hus and had Luther put to death, regardless of previous assurances given. That he did not, and that Luther survived, Andrew Pettegree attributes to ‘publicity’. Luther, whose ‘defiance became a public event’ generated a ‘torrent of publicity’ without precedent, achieved through print. Pettegree concludes: ‘the Reformation was Europe’s first mass-media news event’ and Luther a ‘celebrity’, drawing large gatherings on his journey to the Diet of Worms of 1521.22

Given its immense (though as we will see, contested) historic reputation, assessments of developments in communications technology often use printing as a reference point.23 To invoke printing in an act of description is often to imply immense significance for a subject.24 Those making reference to this invention might do so to create heightened expectations about changes yet to come. For instance, in an article first published in 1964, Gerald Barry, a journalist who was Director General of the Festival of Britain of 1951, described the possible development in coming decades of ‘resources of total visual communication’ that could ‘occasion social changes in the areas of knowledge and understanding as radical as those brought about by the invention of printing itself.’25 In a 1972 work considering the prospects for communications technology, another journalist, Brenda Maddox, held it was ‘possible that the worldwide sharing of information at enormous speeds will actually raise the collective intellectual potential of the human race, just as the printing press and the computer have done.’26 Depiction of the Internet and related

devices through reference to this earlier invention has long been commonplace. For instance, Howard Rheingold, an influential exponent of the use of networked computers during its initial period of mass expansion, held in 1994 that, appropriately deployed, this practice had ‘democratizing potential in the way that alphabets and printing presses had democratizing potential’. If we are to understand the Internet and its relationship with the UK Parliament in an historical sense, then, it is worth reflecting upon the perceived and actual nature of this earlier medium. Such consideration might lead us to qualify some more widely accepted assessments of the role of printing and to question how appropriate is the comparison between it and the Internet. Yet even through these acts of questioning (though not outright dismissal) we can develop more sophisticated tools for the analysis of the Internet.

A consideration of literature relating to the historical role of printing suggests a series of ambiguities and areas of disagreement. It is important to recognise the technology from the perspective of a series of connected inventions and innovations that took place over a prolonged period of time, rather than being a fixed development that took place at a specific point. The arrival of paper into Europe via Moorish Spain in the twelfth century helped make it viable. The technology itself had precursors and the specific invention attributed to Johannes Gutenberg was a compound of parallel achievements. Some of the subsequent impact on European affairs associated with it came about because of its intersection with a particular administrative mechanism: the European postal system. As Paul Arblaster writes, ‘[t]he appearance of the newspaper followed upon the conjunction of two technical preconditions: cheap print and regular posts’, a combination achieved by 1600, around a century-and-a-half after Gutenberg.

This linking to a network is of particular importance to an assessment of parallels with the Internet. While – like the Internet – the printing press could facilitate the transmission of information, it is a means of producing hard copies of content for dissemination, but not the actual conduit through which this distribution takes place. In the same way, standalone computers had many uses; but their incorporation into networks (gaining momentum during the 1960s and among which the Internet eventually became the all-embracing system) provided a new context within which they functioned. It is important,

27 e.g. Bill Gates, *The Road Ahead* (Viking, New York, 1995), pp. 8–9, 120–1; Esther Dyson, George Gilder, George Keyworth, and Alvin Toffler, ‘Cyberspace and the American Dream: A Magna Carta for the Knowledge Age’, *Future Insight*, Release 1(2) (August 1994); Naughton, *From Gutenberg to Zuckerberg*.
therefore, to consider not only physical devices (whether presses or computers) but also the network (whether postal or digital) into which they integrated as distinct but related matters. To this end, in this work, I consider approaches specifically to the computer – particularly from within Parliament – and the extent to which they took into account the potential of this invention as a communications mechanism (and to which they failed to do so), as well as the Internet as a subject for itself.

The print network was a technological and social system comprising a portamento of inventions and distribution mechanisms appearing at staggered intervals (though there was a key coming together in the mid-fifteenth century\textsuperscript{32}). Ongoing development continued over time. Techniques became more sophisticated, efficient, and reliable.\textsuperscript{33} Furthermore, different applications appeared. An initial impulse was to employ printing for the more efficient and reliable production of familiar texts such as worship materials, indulgences or royal edicts.\textsuperscript{34} But, over time, other forms – such as pamphlets and newspapers – developed.\textsuperscript{35} Internet history has seen similar patterns of changing technology and usage. Mobile devices, for instance, have become increasingly significant. There has, moreover, been a shift away from online versions of the static text found in hardcopy publications and towards more interactive functions, such as those provided by social media. The way in which people perceived printing altered over time: for instance, Adrian Johns argues that only over a prolonged period did a wide trust in the reliability (or ‘fixity’) of books develop.\textsuperscript{36} Perhaps the Internet today faces similar challenges.

Though printing became important and widespread in Europe (and elsewhere), it never supplanted earlier communications techniques; and in many cases was – and continues to be – used in complex combination with them. For instance, a text written in longhand could then be reproduced by a press, the output of which a reader might choose to annotate personally. Speech can be delivered given from a printed text, perhaps marked in pen, then recorded in shorthand before being transferred into printed form. Though they utilised printed material and postal systems, the European information networks developing by the early seventeenth century were fed by gossip, personal contacts, and intelligence supplied perhaps orally or on

\begin{thebibliography}{9}
\bibitem{febvre} Febvre and Martin, \textit{The Coming of the Book}, pp. 49–56.
\end{thebibliography}
handwritten notes.37 The Internet, similarly, has intersections with other media. To regard it crudely as rendering them obsolete or replacing them would be a mistake. Offline and online activities overlap – for instance, with the employment of social media as a means of arranging physical political events; or for arranging in-person dating. In some ways, the Internet has been employed to imitate or subsume other forms of communication, including mail, radio, television, telephone, and even (via such packages as Zoom, Teams, and Skype) traditional conversations or group meetings. The digital network carries copies of signatures and has incorporated printing – both through carrying digital versions of documents that reproduce written texts and because people (still) print out hardcopies of content accessed via the Internet. (When envisaging what is now regarded as a prototype for the computer in the mid-nineteenth century, Charles Babbage anticipated that it would include typesetting as a function.38) As the House of Lords Select Committee on Democracy and Digital Technologies put it in 2020: ‘[p]eople now have a printing press, a broadcast station and a place of assembly in their pockets.’39

Based on the aspects of printing discussed so far, provisional conclusions are possible regarding how we might approach the history of the Internet (and by extension its specific application to Parliament). Any such study must take into account certain observations. This system of networked computers did not appear immediately in fixed form. The closest to a moment of origin comes in 1969 with the launch of ARPANET (see p. 27 below).40 But this event was preceded by much scientific significant development; more of which has followed continued thereafter. In a related phenomenon, the uses to which the Internet has been put have changed substantially over time. It has never been a fixed, stable entity. This changeability – or perhaps volatility – has meant that, despite sometimes confident predictions, paths followed were not fully knowable in advance. Furthermore, study should not be confined to the Internet and directly supporting technologies. Earlier and parallel devices have helped open a path for and worked in conjunction with its operation. Finally, notwithstanding the difficulties of precise dating, consideration of printing reminds us that the Internet is relatively new. Changes in the nature and use of this prior technology – and the dramatic developments with which it was associated – occurred over centuries. Enough has transpired for us to begin

37 Joad Raymond and Noah Moxham (eds.), News Networks in Early Modern Europe (Brill, Leiden, 2016). This point is clear in the introduction by the editors, and in the subsequent individual chapters.
considering a history of the Internet – but there might (or might not) be much to more come. Eventually, one day, newer inventions – of which we cannot yet fully conceive – could come to challenge its primacy as a device for remote communication. But in keeping with its relationship with printing, they might come to interact with or absorb – rather than completely replace – the Internet. To take into account the various technological indeterminacies identified, it is necessary to begin studies at an earlier period, and to give them a broader scope, than might initially appear necessary.

Beyond the nature and uses of inventions, what does assessment of the role of the printing press reveal about their impact? As we have seen, there has been a tendency to link it to major historic developments. The remarks of Bacon show that some who were closer to events involved perceived the invention as of great significance. Jason Peacey conveys the idea of contemporaries in positions of authority regarding printing as undermining of the existing order. He recounts how, in England during the first half of the seventeenth century, significant concerns were felt and expressed, from the monarchy downwards, about the supposedly distorting, vulgarising, and ultimately destabilising consequences of the wider permeation of printed material. Those expressing such views feared that it had the effect of encouraging participation in political discussion by people who could not properly understand it.41 Complaints about changes in communications technology having negative consequences for public discourse, and the idea that the response they elicit from the wider population might not be of an appropriate equality, have recurred since, including in analysis of the Internet.42

Later in the seventeenth century the poet, Andrew Marvell made great claims on its behalf. A renowned author and politician, he was an ally of John Milton, Oliver Cromwell, and Thomas Fairfax, and Member of the House of Commons for Hull from 1659 until the end of his life in 1678.43 In his Rehearsal Transpros’d, he made a case for the printing press as a politically disruptive force.44 It first appeared in 1672, initially without his name attached, owing to the controversial nature of the text in its treatment of religious matters (a second part appeared the following year). In this work Marvell presented a parody of the outlook of those to whom printing was a malign generator of upheaval. In doing so, he made a connection between this process and turmoil of his time.

42 See e.g. Committee on Standards in Public Life, Intimidation in Public Life: A Review by the Committee on Standards in Public Life, Cm. 9543 (Stationery Office, London, 2017), pp. 33, 27, 34.