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Raymond Williams Foundation – Written evidence (AIC0122)

Preface

The Raymond Williams Foundation, upon whose behalf, this evidence is submitted, is a charity committed to liberal adult education. Raymond Williams stated, "I've often defined my own social purpose as the creation of an educated and participating democracy". As part of our work, we organise residential and other courses, including for disadvantaged students who we support through grants and bursaries.

Specific to this submission of evidence, we also support a nationwide network of community-based discussion groups, centred on the premise of self-education via structured discussion. Some of our discussion groups have addressed issues germane to the Select Committee's current consultation, over the last few years. As a result, we therefore issued an invitation to our participants to consider the Select Committee's consultation.

The responses have been compiled into this document. It is submitted to the Select Committee on behalf of the Raymond Williams Foundation.

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on behalf of
The Raymond Williams Foundation
http://www.raymondwilliamsfoundation.org.uk

Some Definitions

We consider the term **artificial intelligence** (AI) to mean intelligence exhibited by machines, as opposed to intelligence exhibited by humans or other animal species. Such an intelligent entity is taken to mean any machine or device that perceives its surroundings and autonomously takes actions that maximize its chance of success at a predefined goal. It is often cynically stated that, "AI is what no machine can do yet." Or, as machine capabilities increase, it is tempting to define natural intelligence as that which no machine can yet achieve. We do not consider that either of these last two interpretations will assist the Select Committee.

We consider that artificial intelligence is closely associated with **machine learning**. We consider the term machine learning to mean the ability of a machine or device to learn without being specifically programmed. Programming, too, has often been referred to cynically by the phrase, "Garbage in; garbage out." It is most important to understand that digital machines long ago passed from the world of being dependent on explicit programming.

Machines that exhibit machine learning are doing exactly that: building up their own impressions of, and interactions with, their surroundings. In order to do this, they acquire and then process statistically vast amounts of data. For example, the ability of a machine to learn language translation skills does not depend on the relevant rules of grammar, but depends on treating every word as a potential exception and analysing statistically vast bodies of related text at vast speeds.

Our Responses to your Questions

The pace of technological change

1. What is the current state of artificial intelligence and what factors have contributed to this? How is it likely to develop over the next 5, 10 and 20 years? What factors, technical or societal, will accelerate or hinder this development?

1.1 We are not competent to express a view on this question.

2. Is the current level of excitement which surrounds artificial intelligence warranted?

2.1 The excitement is definitely warranted – this technology is likely to cause a step change in the advance of knowledge, and its application, for good or ill.
2.2 The excitement is generated, in part, by the nature of the machine changes going on and, in part, by the great speed of those changes.

Impact on society

3. How can the general public best be prepared for more widespread use of artificial intelligence?

3.1 **It is recommended** that the Select Committee should note, that it is often the scientific and technical leaders in AI who raise concerns about the effects that AI is already having, and may yet have.
3.2 **It is recommended** that the Select Committee consider if the very rapid advance of AI capabilities calls for a modern version of the Asilomar Conference 1975. A non-expert's background information is found here https://en.wikipedia.org/wiki/Asilomar_Conference_on_Recombinant_DNA. By this is meant, that when the technology of recombinant DNA was invented and found to be extremely far-reaching, the scientists, technologists and commercial interests involved persuaded each other to stop further work until they, and wider society, had had a chance to consider ethical, safety, legal and other societal issues. Perhaps previous experience can be a guide now.
3.3 **It is recommended** that the Select Committee enquire, of technical experts, what steps might already be underway as modern analogies of the "Asilomar" process.

4. Who in society is gaining the most from the development and use of artificial intelligence and data? Who is gaining the least? How can potential disparities be mitigated?

4.1 People with money to invest are most likely to gain and those with low wealth will suffer severely. Perhaps those who are made redundant should be given a significant number of shares in the company they are leaving in a way that they are unable to sell them for a long period but can benefit from the dividends. Perhaps all could be given purpose built unit trusts that will deliver dividends. Displaced employees could thus, more readily, choose whether they work or not or, perhaps, take up charity work or other means of taking up their time.
4.2 Work is satisfying and essential to the wellbeing of most people at the present time. We need to redefine how we usefully and satisfactorily use our time. If work, in the historical sense, becomes impossible for all due to lack of jobs then what can we do to fill our time, which is accepted and endorsed by society? At the moment society expresses the view that work is good and unemployment is bad. Government has worked to reinforce that view. This is not an imperative, society could recognise that there is not enough historical work to go round and recognise also that we are not really defined by our job.
4.3 **It is recommended** that the Select Committee consider how the role of Government could help in the process of redefinition of work.
4.4 **It is recommended** that the Select Committee consider if this is the time to undertake trials of a "Citizen's Income". In which case, the Select Committee should consult the Parliaments of Finland, Switzerland and Holland, in whose countries such trials are either underway or have been considered.
4.5 If the Select Committee's remit does not embrace recommendations 4.3 and 4.4 **It is strongly recommended** that the Select Committee refers these points to an appropriate alternative Parliamentary forum.

Public perception

5. Should efforts be made to improve the public's understanding of, and engagement with, artificial intelligence? If so, how?

5.1 The experience of the Raymond Williams Foundation (RWF), more widely known in the North of England than in the South, is useful in this context. This adult education charity aspires to the aim of the late Raymond Williams: "I've often defined my own social purpose as the creation of an educated and participating democracy". Our community-based discussion circles have a sound track record of meetings, courses and workshops on themes which many voters would normally think are "highbrow" and dominated by elites. Against this, RWF fosters a local, devolved, grass-roots, participative democratic culture, open and non-sectarian. The huge implications of the AI debate have already been tackled in this network. These community-based debates will continue, not only in our evening and day discussion circles and groups, but also within more ambitious day and residential events, when major players, authors and speakers may be invited to stimulate and lead the debates.
5.2 It is apparent, from discussions around our educational network, that the more distant a person is from the subjects of science, technology, engineering and mathematics (especially statistics) – the so-called STEM subjects – the less likely s/he is to appreciate the changes that are underway. There is a lesser tendency for some people, distant from STEM subjects, to dismiss news of AI as exaggeration or as science fiction and so to disengage from this area of public concern.
5.3 Education is crucial, of course with schools, colleges and universities and adult education, which should all be encouraged to engage with AI, using Select Committee guidelines and

information resources. Adult education and, especially now, the wide and growing informal networks such as Philosophy in Pubs (PiPs); Discussion in Pubs (DiPs); Café Philosophique; faith group circles, etc (see RWF website http://www.raymondwilliamsfoundation.org.uk for list and detail on all these) will continue to have AI on the agenda. The discussion tools and guidance on all this are freely available on the RWF website. They could easily and cheaply be extended for wider public promotion, supported by government at all levels, but without compromising the freedom of individuals and each group 'to follow the argument wherever it leads' in a non-party and non-sectarian fashion. This is possibly a good model for 21st century adult education, on all big issues.

5.4 **It is recommended** that the Select Committee, and through you the Government, engages vigorously with the world of informal adult education, as an essential part of improving the public understanding of, and engagement with, artificial intelligence.

Industry

6. What are the key sectors that stand to benefit from the development and use of artificial intelligence? Which sectors do not?

6.1 We are not competent to express a view on this question.

7. How can the data-based monopolies of some large corporations, and the 'winner-takes-all' economies associated with them, be addressed? How can data be managed and safeguarded to ensure it contributes to the public good and a well-functioning economy?

7.1 This question produced a sharp disagreement within our network of respondents, as expressed in 7.2 and 7.3, below.

7.2 Some, in our network of respondents, argued that data ownership and privacy are not really associated with the impact of AI, and should not have been included in the Select Committee's consultation paper. Privacy and data ownership are already an issue, without AI, and should have been dealt with separately. Their inclusion could cloud the real issues associated with what is essentially a new intelligence arising to compete with humans. If this intelligence had arisen biologically and evolutionally, conflict would almost certainly ensue. Conflict will not arise with AI only if we as humans perceive that we are in total control of this new entity. If the perception is that we are being superseded then, somewhere at some time, a group of opposing militants will arise.

7.3 Others in our network of respondents argued that data ownership and privacy are closely associated with the impact of AI. It was considered that the tendency of commercial digital enterprises to lay claim to data ownership is the modern parallel of the "enclosure" of common land some two centuries ago. Indeed the phrase "data enclosure" has been coined. It is so central to AI, that enterprises based on the manipulation of vast quantities of personal data appear to be valued on stock markets by the quantity of data they "own" rather than by reference to physical metrics such as turnover or profit.

7.4 **It is recommended** that the Select Committee should examine how citizens might be enabled to exercise the right of access to any data held about them by commercial or governmental organisations. Such an examination may well have an international dimension and policy change may need international agreements.

Ethics

8. What are the ethical implications of the development and use of artificial intelligence? How can any negative implications be resolved?

8.1 There are already more than 9 million robotic machines operating in the world. Commonly known examples are machines that build other machines, AI warehouse transport vehicles and autonomous road vehicles. There is a present and pressing need for public discussion of, and legislation to address the results of accidental damage and injury. For example, a recent death on an assembly line worker is cited here: https://qz.com/931304/a-robot-is-blamed-in-death-of-a-maintenance-technician-at-ventra-ionia-main-in-michigan/.
8.2 **It is recommended** that the Select Committee consider who is legally to blame following an accident involving an autonomous machine. Is it the machine itself, the person nominally in charge, the owner, designer, manufacturer, and supplier or a third party?
8.3 An autonomous machine may have the capacity to decide what to do in the event of unforeseen circumstances. It is important, even now, that society should reassert that all human lives and wellbeing are equal and autonomous machines must be required to act on that principle.
8.4 **It is strongly recommended** that the Select Committee reasserts that, in all interactions between autonomous machines and humans, all human lives and wellbeing are equal.

9. In what situations is a relative lack of transparency in artificial intelligence systems (so-called 'black boxing') acceptable? When should it not be permissible?

9.1 We are not competent to express a view on this question.

The role of the Government

10. What role should the Government take in the development and use of artificial intelligence in the United Kingdom? Should artificial intelligence be regulated? If so, how?

10.1 The government should monitor the progress and effects of AI very closely with a well-resourced agency. It should try to anticipate trends, both good and bad. Plans can be made, but what will be really important will be reacting properly to those trends that have not been anticipated. AI and its effects will be very complex and society can't hope to foresee everything that will occur. It is important, therefore, that hitherto unknown trends are picked up early and reacted to quickly. The governmental tendency to react after the horse has bolted will certainly not do in this case.
10.2 A specific example of regulation is in the potential for the formation of emotional relationships between humans and AI machines. It is easy enough for animal-human emotional bonds to form. In Japan, it is already apparent that humans can form emotional bonds with autonomous machines.
10.3 **It is recommended** that the Select Committee should consider British Standard BS 8611:2016 (*Robots and robotic devices. Guide to the ethical design and application of robots and robotic systems*). Although it does not refer specifically to the formation of machine-human emotional relationships, the use of British Standards would potentially form part of a range of public tools to regulate AI.

10.4 A second specific example is the rapidly increasing sophistication of machine-generated speech, machine-generated translation and machine speech recognition. Once these technologies merge, if not before, it will be essential that humans will need to be told, by some means, if the voice they are interacting with is human or machine. This will be especially important for those with impaired hearing: currently about 20% of UK pensioners are fitted with hearing aids and another 20% have seriously impaired hearing.
10.5 **It is recommended** that the Select Committee should consider if new law is required to ensure that humans are told when they are interacting with machine-generated speech.

Learning from others

11. What lessons can be learnt from other countries or international organisations (e.g. the European Union, the World Economic Forum) in their policy approach to artificial intelligence?

11.1 Japanese society appears to be more at ease with human-like manifestations of AI than many other societies. The proportion of human-like robots to the population, in Japan, is way beyond what has happened so far in the UK. **It is recommended** that the Select Committee should seek advice from Japan, including from its parliament.
11.2 Both Iceland and Estonia have moved far faster than the UK in adopting advanced data handling systems as integral tools to build democracy. **It is recommended** that the Select Committee should seek advice from Iceland and Estonia, including their Parliaments, in considering the potential impacts of AI and big data handling on democratic processes.

6 September 2017