



HOUSE OF LORDS

Select Committee on the Constitution

Corrected oral evidence: The Legislative Process

Wednesday 11 January 2017

10.30 am

Watch the meeting

Members present: Lord Lang of Monkton (Chairman); Lord Beith; Lord Brennan; Lord Hunt of Wirral; Lord Judge; Lord Norton of Louth; Lord Pannick; Baroness Taylor of Bolton.

Evidence Session No. 8

Heard in Public

Questions 113 - 121

Witness

[I](#): Professor Richard Susskind OBE.

Examination of witness

Professor Richard Susskind OBE.

Q113 **The Chairman:** Professor Susskind, welcome to our Committee. Technology is an area that we have not explored very fully in our legislative process inquiry. If I may say so, your written evidence was very lucid and helpful to the Committee, most of whom I suspect have a slightly opaque view of technology and its application to legislation. That is what really stimulated our wish to ask you to come to answer a few questions from us.

We are keen to explore the subject in a broad sense, and we have a few questions that we would like to put to you. In your evidence, you say that “technology is bringing fundamental change across society” in ways that exceed the simple automation of current practices and processes. Could you outline for us some of the implications of technological developments for the process of developing and making law, and to what extent they offer improvements?

Professor Richard Susskind: Thank you very much for inviting me to speak to you. The context is that we live in a remarkable time. It is a time of unprecedented change in relation to technology. We are seeing more rapid advances than even specialists were imagining a few years ago. The broad context is that our machines and systems are becoming increasingly capable. They are now able to take on more and more tasks, many of which in the past we thought could only be undertaken by human beings. In the research I have done, not just in law but across the professions, what is remarkable is that even the most cerebral and challenging areas of our lives are now deeply affected by technology. My premise is that there is no obvious reason to think that the legislative process will somehow be immune from those changes.

I do not come to you today with a blueprint or a specification of the systems you need; I come to encourage you in some way to think further, to research in more detail and to consider the ways that technology might fundamentally affect all dimensions of the legislative process. I am as specialist on the subject as anyone in this country, but I make the point in my paper that technology has been used far less in the legislative process than, for example, in the legal profession or the court system. You have been relatively unaffected by technology.

To answer your questions, and I have tried to divide them in my paper generally, the implications are in two categories. First, what does it mean for those involved with legislating, and, secondly, what does it mean for those who are being governed and who exercise their rights to vote? It seems to me, and this may seem slightly platitudinous, that one will look in the legislature to use technology to give rise to a system that is more efficient; a system that is clearly under pressure and can become more productive; a system that is more convenient for all participants; and a system whose quality increases through the use of technology. That is what one would expect. Whether one is using it in a law firm, a hospital

or a school, one looks to identify inefficient processes and take out some of the cost and delay.

One looks at bottlenecks to see whether one can overcome them using systems and, therefore, be more productive. You work in a particular way, but I am also thinking of the next generation, and those who follow you, and having in place systems and processes and a working environment that is more convenient for you. Ultimately, whether it be through the assistance of computer-assisted drafting or other techniques, we can increase the quality of the work that you do. That is for those of you here, and it is in fairly general terms. Those are the benefits we would normally expect.

From the point of view of the voter, the citizens—we are already seeing great signs of this—it seems to me that technology, and the technologies I mention in my paper, could give rise to a more transparent system. I think that is important. It could give rise to a system that is more intelligible, which is crucial, and a greater opportunity to participate and have their voice heard for those who think that is a good thing—and I do.

By way of context, it is terribly important to remember one vital distinction in technology, which is the distinction between automating what you already do, so that you can look around your working environment and say, “Actually, that’s rather inefficient, so we can use technology there a bit”, by simply taking pre-existing processes and systemising and motorising them through technology. That is what I call reassuringly familiar. Then there is the use of technology that fundamentally challenges and changes the way you work. It might deliver the same output but in an entirely new way. Most of us feel uncomfortable with that. Doctors feel uncomfortable about it in hospitals. Lawyers feel uncomfortable with it in law firms, and in education we find the same thing.

I can give a couple of examples. It is remarkable that Harvard, when it launched online learning courses, had more people subscribe in one year than attended that physical university in its entire existence. It is not a question of saying, “Let’s have a screen in the lecture room”; it is an entirely new way of delivering an educational service. When I look at law and the way the due diligence process in major deals is now done by increasingly capable machines, it is not saying that junior lawyers should work in a new way; it is saying that we do not need them to work in that way at all. I can go through a whole bundle of professions, industries and sectors and show that distinction.

We have to make a leap in thinking about the legislative process. It is not simply a question of thinking, “What’s a little bit annoying about how we have to work today, and aren’t our communications poor?”—if they are—or “We have far too much documentation”; the challenge is clearly to improve inefficiencies, but the real opportunity is to take a step back and say, “I wonder if we could do things entirely differently”. I do not have the answers to that, but in my research that is the mindset that I have found has succeeded in medicine, architecture, audit, education,

journalism, consultancy, and even in the clergy—entirely new ways of professionalism and how they can work.

That is by way of background. Finally in my introduction, the least likely outcome in our world is that nothing will change as a result of technology. Yet that is the premise upon which many organisations base their future strategy. I am urging you to say, “We can expect considerable change, so the question is about the next step and how to take our thinking further - how we can both automate and innovate in the legislative process”.

The Chairman: Thank you very much. That is a very helpful way of opening up the subject. Let us now move into some of the detail.

Q114 **Lord Pannick:** I found your written evidence fascinating and thought-provoking, Professor Susskind, and not just because we know each other very well. I have heard you speak on many occasions publicly and privately about these subjects. You say in your written evidence, and you mentioned this morning, that the legislative process both here and around the world has been subject to far less computerisation than other aspects of the legal system, such as the courts and the legal profession. Why is the legislative process so far behind other aspects of the constitutional system?

Professor Richard Susskind: I do not think I can be dogmatic or definitive about it, but there are different forces at play. In the legal profession, we have market forces at play. The biggest driving force across much of the legal profession is the client’s hope of paying lower fees. The market is becoming increasingly competitive. Liberalisation in this country is allowing new players into the market, which requires lawyers to think about how they can be more efficient and work differently. The answer in the profession is market forces. That is in the private sector.

In the public sector the pressures are rather different. Rather cynically, as I heard a friend say in relation to the NHS, you can say that we are not going to change until we run out of money. It is often the running out of money that causes people fundamentally to rethink; otherwise there is no imperative. So too in law, where the drastic reductions in legal aid have encouraged people to think that it is not a question of tucking and trimming. We simply cannot deliver the service in the old way, and we have to think fundamentally differently. That has happened in the court system. We have a court system that, for most litigants in person, is too costly. It is unintelligible. It is full of delay and out of step with much else that we seem to be doing in society, where we use technology and so forth. There has been an imperative, driven by a lack of public legal funding. Are there other ways in which we might deliver the court service? This is where I come in with online courts.

The burning platform for the legal profession has been competition. The burning platform in the public sector has been as a result of the reduction in public legal aid. I come to you with a question. I do not know if there is

a burning platform here. As human beings—I put myself in that category—we suffer from inertia. We tend to carry on as we are. There will be an inclination around the room, “I get what he’s saying. He’s one of those people who comes along and talks about technology. I’m sure it will affect us in the future, but do we really need to do anything just now?” The answer is that probably you do not *really* need to do anything just now.

Lord Pannick: We are not subject to competition. We are subject, maybe not to the same extent as the courts, to financial pressures. My point is this: there is nothing inherent in the parliamentary process that prevents us advancing if we want to do it.

Professor Richard Susskind: Absolutely not. I agree fully with that. You may not have the same imperatives, but I do not see any particular obstacles that are unique to Parliament.

Q115 **Lord Hunt of Wirral:** First of all, I should declare an interest, although it is many years since I was made an honorary member of the Society for Computers and Law. I want to move on to consider how technologies could be used to support the development and scrutiny of legislation. You have separated the short and medium term, to 2020, from the long term, from 2020 onwards. Turning for the moment to the short and medium term, what are the barriers to adopting such systems? What do you think are the best ways to go about introducing such systems?

Professor Richard Susskind: By way of context, I have had the privilege of seeing some of the questions in advance. Those who are listening in who have not seen my paper will see laid out the technology systems that I think could be of benefit in the legislative process. The thrust of the questions—this is not a criticism but an observation—is quite negative: what are the problems, the risks, the barriers and the obstacles? It is absolutely clear that we need to address those, but I would not want to lose sight of the benefits that technology could bring. That is by way of context.

Lord Hunt of Wirral: You have given us a very long list. I am just trying to get a little more focus, if I may.

Professor Richard Susskind: Absolutely. Your question is about the barriers to adopting such systems. It is true right across all industries and all sectors, private and public, that unless you have leadership in the introduction of systems, and an individual or group of individuals who are driving ahead the change and the use of new systems, it never happens. Another obstacle, which is in no way unique to this institution, is the conservatism of professional people. By and large, our comfort zone is working in the way we have always worked. There is an argument in law, which could be reflected in our enjoyment of precedent, that lawyers and the legislature suffer from this more than others. There is an inclination towards conservatism and a resistance towards change in the legal profession.

The unintended consequences worry me the most—the unknown unknowns. I have never been involved in a profound technology project that worked out in the way we thought it would. Sometimes untold benefits accrue that no one had expected, but equally problems and difficulties arise. To turn it in a more positive way, if you have strong leadership, and if a group can somehow overcome the forces of conservatism and have a clear vision of how a system could improve your own workload and benefit society, with ways and methods in place to monitor and manage the risks that arise from those projects, I do not see any insurmountable barriers to adopting those kinds of systems.

Indeed, when you look at the lists that I am talking about, many of them are in place. For citizens, I talk about applications for tracking the progress of Bills in Parliament. That already exists. They could be richer and more informative. There is the use of social media, for better or for worse. Sometimes their uses are wonderful and sometimes they are really rather troubling, but we already have in place a new channel to allow people to express their views on the need for legislation or changes in legislation.

I have not done detailed analysis of a legislative information system, but I am interested for you in a system that would acknowledge the huge amounts of documents in your working environment. You are very information intensive and there is a lot of communication, with very many people involved.

The traditional response to that in the world of technology is to introduce some kind of integrated workflow system that makes life a lot easier for you. It means that you have all the information—but only the information you need—at your fingertips. It means that you can easily communicate and collaborate with one another. It overcomes the inefficiencies of paper-based systems and can include calendaring. It could give updates and automatic document production. It could do Bill tracking.

My sense is that this organisation—if I may call this great institution an organisation—would benefit from organisation-wide technology and a workflow system for a whole set of facilities; but, as I said, unless you have strong leadership and a clear vision of where you want to go, and unless you can overcome the conservatism, most people will say, “We can carry on much as we are. The system is not broken, although it could be better”. I am saying that it could be a lot better.

Lord Hunt of Wirral: If we now provide the strong leadership that your vision seeks, what risks or dangers should we be aware of, should the mechanisms be adopted more widely?

Professor Richard Susskind: All of you will be familiar with the notion of public sector technology projects. We need to unpack that a little. The biggest risk with public sector technology projects in my view is that they become too ambitious. I come to you on the one hand slightly evangelically saying that you should be ambitious, but on the other hand I know that if you try to boil the ocean, as they say, what will happen is

that X years down the road you will have sunk a lot of money into a system that does not do what was ever envisaged. Although you can have a shared vision of what a system might look like, say in 2025, I implore you to proceed in an incremental Lego-like way. Almost every failure I have seen in public sector technology projects comes down to this: the ambition has been great and it has been dealt with as a large, monolithic, indivisible project that either succeeds wholly or fails wholly. Most of them fail substantially.

I worry a little, once I have converted people and they become very enthusiastic. I have to say that even among some of the judges and the officials in the online courts I am now becoming an advocate for saying, "I think we should slow down; we should start with very low value disputes in the first instance. Let us not get too ambitious". The most successful projects I see in the private sector are developed incrementally. You learn from experience and you build on it. You do it in a step-by-step way, so there is a very clear map: "Within two years we will have this and within four years we will have that". The minute I hear people saying, "By 2023", for example—this is many more years ahead—I have the feeling of a revolutionary rather than an evolutionary approach. The biggest single danger is how the project is managed.

Q116 Lord Judge: You spent five years advising me. I was showing off before you came. I got a gamma treble minus from you for my abilities, but that was probably ambitious; it was probably delta minus.

We are investigating the legislative process. One of the things that I find impossible, judges find impossible, and I think parliamentarians find impossible, is our habit of legislating by sticking bits of new legislation into old legislation, and sometimes into three or four older bits of legislation going back almost to eternity. What sort of investment would be required to enable us to produce each Act as a complete Act, with all the bits and pieces squared off in a single place? Just give me a rough idea.

Professor Richard Susskind: That has been an aspiration for many years.

Lord Judge: What is holding us up if it has been an aspiration for many years?

Professor Richard Susskind: It is a very complex project, but it has already been done in the private sector. I think it is true to say that both LexisNexis and Westlaw have delivered systems that do precisely that. In fact, even more ambitiously, you can say, "I would like a view of the law as it was in 2005", and you can see what law was in force then. As you say, for the average citizen, and in fact for the average lawyer, when you see a piece of legislation online, you do not know if it is in force; in many of the current systems, you do not know if it has been repealed or amended.

I should be better informed, but my understanding is that HMSO, under the auspices of National Archives, has been working for many years on

the development of such a system. My understanding, and this is often true with technology, is that it has worked forward from current legislation but there is a large backlog that—

Lord Judge: Forgive me for interrupting, but I just want to take the moment when the legislative process has been completed, all the scrutiny has happened, and all the argument and debate, and we end up with the new Act. Part of the new Act says, “In the 1933 Act, so and so, and in the 1975 Act such and such”. In technological terms, what is there to stop the end process of a new Act being a complete document on its own with everything in it?

Professor Richard Susskind: Technologically, it has already been achieved. That is what the subscription-based services around the world will give you. The question is about the systems that are delivered as a public service or available to you by HMSO, which used to print documents and now makes them available online. My understanding is that some of the facility you are talking about is available, but we do not yet have what the technology calls complete coverage. That would require you to go back historically. I cannot remember the year from which that facility is available, but I am pretty sure that for certain categories of legislation that system already exists. Technologically, there are no barriers. It is complicated and difficult. As you can imagine, writing a system that allows you to have different views of pieces of legislation at different periods of time, and which integrates them, is technically difficult.

Lord Judge: If the process is available and could be available when the parliamentary process had ended, of course it could be available before the parliamentary process starts, so that when we scrutinise and debate we can see everything that we have to bear in mind without shuffling through three or four different Acts of Parliament.

Professor Richard Susskind: Forgive me asking you this. How do you do it today?

Lord Judge: With difficulty. You open up the Act; it refers back to another Act, and you look at different bits of legislation in different books. That seems absurd.

Professor Richard Susskind: I accept that, but are any of you doing that online? The system you are using may or may not be one of the commercial systems. The commercially available systems are very powerful, but they may not be available.

Lord Judge: What is the Committee to recommend about this?

Professor Richard Susskind: It seems very clear to me. You articulated it yourself. A vital tool for any modern legislator is the ability to view the law that is valid at any moment in time, and perhaps even say, “If we change this, what would the knock-on effect of that be?”, which is more sophisticated again and requires, as you can imagine, a whole new level

of facilities. Is that not what you would want? When scrutinising, presumably you are looking not just at the form and substance of an individual instrument but at its coherence across a whole body of instruments. I would have thought that you could have a system, as I say, that is not just used for publication and promulgation once the law has been passed but should allow you to do what technology calls a “what if” analysis: “What would be the knock-on effects if we removed this piece of legislation?” Perhaps that is what you are anticipating.

Listeners will correct me if I am wrong, but I do not think that kind of system exists. What you would need is a level, in the jargon, of meta-knowledge. For each section of an Act, you would not only need that section articulated, but its various connections, dependencies and interrelationships also to be noted. That could be partly done in an automated way. It would require quite a lot of manual handling as well. It seems to me—forgive me if I am wrong in thinking so—that the ability to do that more speculative analysis, to find out the knock-on effects of changes and amendments, would be very powerful. I do not think that exists.

In summary, because I have perhaps not been entirely clear, the technologies already exist in the private sector and are in place for you to look at all the law that is valid at one moment in time, with interrelationships to amendments, repealed instruments and so forth. The technology is also in place to allow you to do that historically. I do not think that technology has been fully rolled out right across all legislation in this country. A lot of that is what they call in the jargon a back capture—how you capture past data and apply technology to that. We might be talking about something more powerful, which is the ability when you are considering the impact, speculating on the impact and thinking through the impact of changes in the new law to see what the ripple effect and knock-on effect would be. Again, that is technically feasible. It is just a big project. There is no reason to think we cannot set that as a goal for legislators many years hence.

Q117 Lord Judge: That would be the process. Can I move slightly, or quite a lot? In your very interesting and valuable paper, you speak about automated drafting of legislation work that began in the 1960s. Then you speak about systems to analyse the mood of the nation and the community as a whole, and identify the need—an interesting word—for legislative change, and citizens receiving personalised information. How should we, in the legislature, be preparing for the capacity that technology will give us? Do we just wait for it to come or do we think ahead, and, if so, how?

Professor Richard Susskind: I would want you to be more proactive than that. It is not unlike the question for any organisation. “We see all this technology coming through, but should we be reactive or proactive?” In the commercial world, people often talk about first-mover advantage. It goes back to Lord Pannick’s question about the drivers of change. In the commercial world, the reason one wants to introduce technology before others is that it gives you some kind of advantage in the

marketplace. It seems that that driver is not necessarily present here. Many people in the commercial world, in law firms, say, "I want to be a fast second"—there is a book called *Fast Second*—which means that we observe what all the best are doing and then take advantage of that thinking. We do not need to be the pioneers. Amazon did not invent online bookselling; someone else invented it. Amazon saw the idea and exploited it.

One of the things that would be fascinating to do is not necessarily a detailed survey but to get a sense, as I would advise all clients to do, of what has been achieved in other legislatures around the world. It would be quite interesting to look at some less advanced legislatures.

Lord Judge: Which particular ones? Which advanced ones do you have in mind?

Professor Richard Susskind: Intuitively one might think, "Let us look at the United States, Canada or Australia", but one of my clients over the years has been the Government of Jersey. You learn a lot from looking at very small jurisdictions. The kinds of technologies that we have been talking about, and the whole body of legislation in Jersey, are relatively modest. Jersey introduced very advanced technology in four or five years. It would probably take 15 or 20 years in another country to do that. Intuitively one thinks we should go to the high-tech countries to see how they are doing it, but, as I travel the world, I find that in many ways many developing economies are leapfrogging the technologies of more advanced countries. There is certainly a need to have a look at what has been done in legislatures around the world.

A second thing, which may seem slightly foreign or unusual but is fundamental—it is not a huge project—is that you would benefit from some detailed process analysis. This is emerging as an absolutely vital discipline. Someone comes into a complex organisation and analyses what goes on. The first task is to draw, if you can visualise it, a detailed map. You have diagrams and flowcharts at quite a high level within Parliament, but this would be a very detailed map showing from start to finish all the processes, tasks and activities people are involved in. Once you have that, and it would probably fill a wall, you can start doing the analysis of where the bottlenecks are, the inconveniences, the inefficiencies and the concerns. You can start thinking about what is known as process redesign. "We could change that bit. There are the four or five areas where we could make a difference". Whenever you have that challenge in an organisation with technology coming along, the first thing you should do is ask what else is happening around the world, and benefit from other people's thinking. The second thing is that you have to subject your working practices to detailed process analysis.

I came here today to say to you that this is phase one of the project that I would recommend to you. It involves those two stages, but you can begin to have a shared view of how it might be. You can use words like "visions" or however you want to express it, but once you have been exposed to what is achieved elsewhere you can say it is like a buffet: "We

would like a bit of that, that and that. Within 10 years, would it not be wonderful if we had this?" Then we do the analysis of what the obstacles are, and the benefits and so forth. I am saying that it is time to do a feasibility study or a scoping study; there is a whole bundle of names that one can append to it. However, if you want to take a strategic long-term view, you do not jump in and take one little part of the system and introduce new technology. In the context of what you are doing, which is a broader review, you need a more phased approach.

Lord Judge: Lord Chairman, as Baroness Taylor is dealing with social media, I will leave that question.

Q118 **Lord Beith:** Perhaps I could follow on from Lord Judge's earlier line of questioning and what you say in your written evidence, Professor Susskind. You go rather further than Lord Judge was asking for, because you go to the idea of dynamic laws and regulations that automatically update themselves within parameters established by legislators on the occurrence of certain events. At the moment, that tends to be done by giving Ministers powers to update, which we refer to as Henry VIII powers, and this Committee often gets concerned about them. Would it not be creating a Henry VIII machine in this case, which just churns out changes to legislation? There may be very good arguments for it, but constitutionally it is a cause for concern.

Professor Richard Susskind: You are questioning the constitutional acceptability of granting delegated powers to a robot, as it were. I see the point, but I had something rather different in mind. There are all sorts of different ways of imagining this. The mindset issue is important. Let me tell you a little story first—one of my favourite stories—to get you in the right mindset. It is a story about Black & Decker, which manufactures power drills. Apparently when Black & Decker recruits new executives, it takes them off on a course. The trainers put on the wall a slide of a gleaming power drill. They say to the new executives, "This is what we sell, isn't it?" All the executives say, "Of course that's what we sell; we are Black & Decker". The trainers, with some satisfaction, say, "That's not what we sell, because that's not really what our customers want. This is what our customers want", and up comes a slide—a photograph of a hole neatly drilled in a piece of wood. They say, "That is actually what our customers want, and it is your job to find ever more creative, imaginative and competitive ways of giving our customers what they want".

The lesson is that the temptation when you are thinking ahead is to have a power drill mentality; to tend to think, "We have this power drill. How can we make it quicker, cheaper or better?" Maybe there is not enough taking a step back and asking, "What is the hole in the wall? What is the real problem, issue or challenge we are sorting here?"

When we think of the issue of delegated legislation—forgive the oversimplification—where Parliament cannot foresee all possible outcomes and when details emerge and circumstances change, it is only practical that the responsibility to make rules is delegated, and the

mindset of automation is to ask how we can automate the process of delegation. I wonder whether there might be other ways in which we can somehow deal with the specificity that more detailed regulation requires that we do not yet have sufficient knowledge or experience of when we are involved in the generation of primary legislation.

Let me make it concrete by taking you to some other technology, to give you an idea of the kinds of changes we are seeing. One of the most important emerging areas of technology is known as the 'internet of things'. We are used to the concept of the internet as something to which we are all connected—our laptops, our handhelds—

Lord Beith: I am sorry, but we are drifting away a bit from the question.

Professor Richard Susskind: I can see that you think I might be, but if you will give me a bit of latitude I will be back with you in a few minutes. That way of thinking is important, because there is a broad context.

The internet of things allows, for example, everyday objects to be connected to the internet. Combining that with the idea of self-driving cars, I want to think for a second about the idea of legislating for self-driving cars. It seems to me entirely likely that there will be some primary legislation but there will be a lot of gaps to fill, and we will delegate that power. One way we could deal with variable parameters for self-driving cars would be to think about the law on speeding. It is a question of embedded law. You will not really need—

Lord Beith: That is in your written evidence. It is a different point from the one I am trying to get at. Can we really contemplate giving law-making powers to a robot?

Professor Richard Susskind: If your question is about whether I am suggesting that robots have discretion to fill gaps that Parliament could not foresee, my answer at this stage is no, that is not what I envisage. It might not be a technical answer, but for me it is a constitutional and jurisprudential answer. However, we can envisage that in certain circumstances the rules governing self-driving cars would change and that Parliament would introduce legislation permitting self-driving cars. We do not know a lot of the details but we can embed some of the details in the system. For instance, we are used to the idea that there is a speed limit of 40 miles per hour, so self-driving cars simply would not go faster than the speed limit. What about the idea that, if weather conditions were fair, we would allow the car to go at 45 miles per hour, or, if conditions were poor, it was not allowed to do more than 30 miles per hour? That is what I mean by dynamic legislation. You are not legislating dogmatically and definitively for specific events; you allow some movement depending on circumstances.

Lord Beith: That is a decision to create a law that has a lot of flexibility.

Professor Richard Susskind: That is what I mean when I talk about dynamic laws and regulations. Perhaps my answer could have been a lot

shorter. If your question is whether machines should draft delegated legislation, my answer, as I said, is no. Can we have rules that automatically update themselves when events change? Yes. If we have the legislative system that Lord Judge was after, it seems to me that in financial services, for example, on the occurrence of a particular level of interest rate or some kind of event where we anticipate the rule would change, that could automatically be propagated through the system. It may be less ambitious than you were thinking, but my specialism is artificial intelligence and the law, and I am absolutely not here today to say that you take discretion, judgment, creativity and constitutional and legislative responsibility away from human beings and give it to machines. I am saying that we can probably adopt a rather different view of how we make the law available and how we change and update it.

Lord Beith: That conveniently answers my other questions.

The Chairman: It is a very sensitive area for Governments and politicians.

Professor Richard Susskind: Yes, I can see that, and I am really not as radical as one might think.

The Chairman: One thinks of the David Walliams comedy sketch that always ends with, "Computer says no". That would not work with the Cabinet.

Professor Richard Susskind: "Computer says maybe" would be more worrying.

Q119 **Baroness Taylor of Bolton:** This has been very interesting. We all found interesting things in your paper and in what you have said, and we probably all accept that there is potential for more use of technology to make us more efficient, or for our convenience—for example, the points you made about Bill tracking. That is an issue we have to deal with. To a certain extent, I dispute what you said about legislators being relatively unaffected by technology. You mentioned Twitter and social media. I am quite concerned about the way politicians—Members of the upper House in particular—have to respond on social media. I find it quite alarming that most days a tweet goes out saying, "The MP who tweeted most today is"—and names them. That distorts the priorities of MPs, because they feel that they have to be responsive immediately to that kind of pressure, and it may take them away from doing some of the detailed Committee work that is a core part of the job but is not glamorous and is often not noticed. Being social media-driven is not necessarily good.

You talked about robots drawing up laws. I do not think we have touched on the fact that we have a representative democracy, not a direct democracy. People may sit in on Saturday night and press a button to vote for Ed Balls, or whoever, on a programme, but that is not how governing your country works. It is a representative democracy, and there is a great danger that you build expectations; if people sign a petition and it will be debated in Parliament, or we consult them on an

issue and they press buttons to say yes, no or whatever, you are actually making the citizens you talk about expect immediate results. Governing the country and making legislation is not that simple. That can lead to alienation from a parliamentary system rather than making it more inclusive. That is a real danger that needs to be taken into account in these issues.

Professor Richard Susskind: All the points you make are tremendously important. They are also the subject of detailed academic study just now. At the Oxford Internet Institute, to which I am attached, two of the leading professors are looking intensely at the impact of social media, both on the legislative process and on citizens and their feeling of connectedness and so forth. I want to give you reassurance that many people who work in that world are giving the issue serious and rigorous thought. This is not an accusation against you, but we all tend to have quite strong intuitions in this area that often are not borne out by the research. If yours is a call for a deeper understanding of the impact, risks and benefits, I am absolutely in support.

For every argument against the use of social media, many politicians say that they have never felt more connected to their voters. Voters feel similarly connected. It is a fascinating issue, and I am sure that the question whether we can now have a more diluted version of representative democracy will be played out in a number of jurisdictions. It is not something I advocate. One of the most common subjects among people who write on the politics of the internet is whether it should require us to revisit our concept of what democracy is or should be, and what our rights and freedom of speech should be. The new technology raises key issues, but that should encourage us to be vigilant rather than inactive. It should encourage us to be cautious and alive to the risks as well as the benefits. It seems to me that even some of my more modest suggestions would give rise to a more efficient machine here. It is not an all-or-nothing set of propositions. I am just giving you a flavour of what might be available.

Social media both excites and worries me. I am a fairly big user of Twitter. I have quite a large following. I am not that active a user in my own tweeting, but personally I find it a very powerful way of keeping in contact and keeping up to date. At the same time, it worries me deeply that it seems that freedom of speech on the internet has become freedom to abuse through Twitter. For every great strength, there is also a great weakness. What we are doing at this time of great turmoil is feeling our way as a society and establishing new sets of legal and cultural norms. I urge those in positions of seniority not to default necessarily to the status quo.

Baroness Taylor of Bolton: But you are talking about real-time feedback, and that is part of the problem we have because it allows more potential for media manipulation. It allows the loudest voice to put the greatest pressure on. That pace is not necessarily conducive to making sensible, long-term decisions.

Professor Richard Susskind: I was talking about sentiment analysis, using these systems. We are very much at the first generation of these systems, where they are unfiltered in a way. You are right that some people seem to have a far louder voice and far greater impact. More sophisticated systems will allow us to analyse right across social media what the real sentiment is. Someone who sends out 5,000 messages a day that are broadly the same message does not seem to be the same as a person who sends out one message a day. The next layer of systems will help. That is why sentiment analysis systems are tremendously important. They will be able to take the social media feeds, as we are doing in Oxford already, and discard the repetition, the noise and so forth. That is why we have to urge more sophisticated use. What is entirely clear is that these systems are not disappearing; they are becoming ever more important. How do we impose upon them a set of processes, regulations and technologies that allow us to use them to their greatest advantage?

The issue of representative democracy and direct democracy is fascinating. I am not for a second suggesting that we now have direct democracy in place, but it is interesting that around the world we have a feel—probably inaccurate at this stage because the systems are primitive—for people's sentiments in a way that we never did in the past.

I want to raise a concept that might help you—the idea of a 'filter bubble'. There has been a book of that title. For me, one of the most profound dangers of social media is that you tend to follow people and connect to people who think quite similarly to you. Quite a lot of them have stated predictions about the outcomes of recent political events, and because of this your views from social media tend to be that of like-minded individuals. You do not tend to sign up and follow people who hold diametrically opposite views. If you are a *Guardian* reader or a *Telegraph* reader you know that, but the culture and patterns of behaviour within social media are still very much in their infancy. We have to be aware of the filter bubble.

Lord Pannick: Social media obviously adds immediacy. It adds volume to communications, but is it really different in nature from the traditional means of communication between the constituent and the MP? People have always turned up to Central Lobby to express their views. They phone their MPs and go to constituency surgeries. Is it really different from that?

Professor Richard Susskind: I am not sure it is qualitatively different. I think it might be quantitatively different. The general view is that a wider range of people express their views. You are absolutely right that people participated in the ways you mentioned, but it seems that many more people are inclined to express their view in a tweet who would not go to a surgery. You might think, "Surely we only really want the views of people who are prepared to walk along and visit, and the ill-considered and untutored views of people who just tweet at random are less significant". I personally take the view that it is valuable input. It is quite interesting

to hear and take account of as one of a whole bundle of different inputs of views expressed on social media. It is human beings communicating with one another, so it is still the same basic inter-human contact, but the scale is unimaginable.

If you consider tweeting about a political issue to be engaging in the political process—I do not know whether you do, and I am not sure that I do—there are now immeasurably more people engaging in the political process than there used to be. The contrary argument is that it is not really engaging in the political process; it is just people expressing their views as they might do in the pub. It is quite interesting to be able to tap into that if, which is the concern here, we can reliably tap in, and if from social media we can determine a balanced view of the views that have been expressed.

The Chairman: Is it not sloganising, though, with a limited number of words or syllables, as opposed to arguing? In a pub, you can at least argue and debate.

Professor Richard Susskind: Yes, but of course there are other social media platforms, and no doubt many more will emerge, which do not have restrictions on the number of words. Twitter happens to be the one that dominates today. My guess would be that, if we reconvened in 2025, systems that have not yet been invented will have changed our way of thinking about political issues.

Q120 **Lord Brennan:** The potential for people to communicate with the legislative process through technology is extremely important in an educational sense in both directions: people from outside Parliament talking and people from inside Parliament listening, and vice versa. The question arises with this kind of use of technology as to when you move from the ability to participate to the capacity to determine. Our representative democracy presumes time and consideration, not rapid response. Is the technology a danger to that representative system, not just in a technical sense but in a democratic sense as to who is deciding? I was struck by an example of that this week. The RAND Corporation in the United States has just produced a major report on technology and the criminal justice system, and its constitutional consequences. One wonders, no matter how well informed some people are, whether the majority of ordinary citizens will understand the significance of constitutional consequences. That is an example. What do you think? Are we at risk?

Professor Richard Susskind: If you are asking me whether I prefer representative democracy to direct democracy, given that technology allows us, in a way that we could barely imagine a few years ago, to put in place direct democracy, my own personal view is aligned with your own, which is that I prefer representative democracy. I believe that the business of legislating requires deep expertise, extensive reflection, considerable experience and the ability to analyse a complex and wide range of materials. Without in any sense being patronising, I think it is

very hard for specialists, never mind lay people, to get their heads around most issues that come through this House.

I know RAND well. Coincidentally, when I first worked with RAND in 1983 it did a wonderful report on technology in civil disputes, and published about 500 copies. I think I was the only person in England who had a copy because I had happened to visit the company in the United States. It is wonderful that, now, the distribution capability means that anyone who is interested in technology and the criminal justice system can go online and have a look at it. I am engaged just now in discussions with various parts of the criminal justice system and I will go online and draw people's attention to that report.

I find that wonderful, and I think that at some level it increases the level of debate and insight, but if your question is whether the average lay person can master that kind of document, and frankly the same on education, transport, health and so forth, it seems to me that the answer is assuredly no. That is why we delegate the responsibility for governing and legislating to people who have time, expertise and insight.

This is a personal view and it is no more valuable than anyone else's view. None of the advances in technology draws me away from my confidence in representative democracy. I think we can improve the way we run the systems that underpin and support the representative democratic process. Are you comfortable with that?

Lord Brennan: I am comfortable with your response, but I am not so comfortable about what would happen with society and the media. We can now use these phones in the Chamber for reading things. During a debate on a critical issue—a yes/no debate—the media could be running a programme asking people to express their view, yes or no, which Members of Parliament and Members of the Lords could be looking at during the course of the debate.

Professor Richard Susskind: It therefore seems to me incumbent on this House to educate every Member to understand the potential and limitations. One of my roles in the last few years has been speaking to and training judges up and down the land on technology, not on technology in the courts but understanding social media. I give an hour's presentation so that people really understand the potential and limitations of Twitter, Facebook, LinkedIn, Instagram and so forth. Often for people of our generation and older, the tendency is to think that they are for young people. I share your concern that people's exposure to and use of such technologies is probably rather untutored. It seems to me that regular briefings on the potential and limitations of those technologies, and on systems that are powerful and useful, is very much needed.

It is all part of the same programme of work. One can imagine that in one sense you will say, "Let us not do much and continue as we are", but the external factors are so powerful that no matter what you do, social media will be used more rather than less. It seems to be about

embracing what is appropriate, and educating and understanding where the limitations lie. If we did the process analysis—the process map—one might ask at what stage in the process it makes sense for people in this House to research or recognise the view of the people as being expressed on social media. You are saying that it is probably rather random—you might be sitting there looking at it before you go into a meeting—but I think that should be integrated in the process.

We should think clearly about what is best practice and try to spread it around the House. Very often in business meetings, people now say, “Leave the mobile phone at the door and no one should use email”. We can put in place sensible practices, but unless you think about it in process terms, you will have different Members of the House dipping into these systems at different periods of time. It may be that at time A the views are 40% and 60%, and at time B 60% and 40%. You are dealing with different data. That needs to be part of the process.

- Q121 **Lord Norton of Louth:** I have two questions. The first may have been answered in your last few comments. One might distinguish what are called the digitally unsophisticated—those who have access to social media but are not particularly good at interpreting the data—and what you refer to in your paper as the digitally deprived, essentially those who do not have access to it anyway. If the digitally deprived are those who are supposed to be the decision-takers, how would you ensure that the process is not captured by those who are serving them and have access?

Professor Richard Susskind: I love your distinction, incidentally. The category of digitally deprived is relatively small. By and large, of course, in western countries about 85% of people now have access to the internet. The bigger point we always make in the Oxford Internet Institute is that it is not even so much whether I am a direct user; it is whether someone can use it on my behalf. I was going to say that granny does not use the internet so she will get her grandson to do it, but now granny often uses the internet. Many people who do not have the technology nonetheless have a relative or a friend, or public advice agencies, to support them.

I worry less about people not having access to the technology because most of the technology is delivered through the handheld in any event. The point that struck me when you articulated it was that simply having access to it does not mean you have the wherewithal to use it well or in an informed way, or to come to reasonable decisions on the basis of the data before you. Using Lord Pannick’s phrase, I am not sure there is anything different here. It might be more accessible and there might be far more of it. The problem of people coming to ill-informed, untutored views is not that different in the internet society, but you can express those views more widely.

Lord Norton of Louth: I will express it slightly differently; it is not really recognising the potential.

Professor Richard Susskind: Were you euphemistically talking about your own working environment? Are you saying there is wide disparity of use within this legislative body? Is that your point?

Lord Norton of Louth: The point is that Ministers may be relying on officials. They have some idea of what can be delivered, but the officials may have greater awareness of what the potential is. You may come back to the situation of "Computer says no" because you are not sufficiently sophisticated about the system to know whether that is accurate or not.

Professor Richard Susskind: It is a different line of discussion, but it is incumbent on each and every one of you as legislators not necessarily to be users but to be familiar with this technology and not to feel disadvantaged. It is a horrible, alienating feeling when some people have facilities you do not have. It goes back to the observation that was made in relation to the judiciary, and in a sense that was the response; it is important that you have a more, if I can put it this way, technically astute community. That does not mean you are active users. For example, I barely use LinkedIn. I use it a little bit, but I know exactly what it does and I know what it could do for me. I understand when a message comes through, or I hear when there has been a post. That level of knowledge can be acquired quite quickly, interestingly.

In a word, you probably need some training programmes. Probably a two-hour workshop every couple of years will bring you up to date. That might sound heretical to people listening who are technologically sophisticated, but just understanding the potential and limitations of these technologies is not a huge task. Becoming a power user may or may not be an appropriate step.

Lord Norton of Louth: Part of the challenge is getting people to recognise that it is not such a huge task.

Professor Richard Susskind: That is right.

Lord Norton of Louth: I have a separate question related to that, looking ahead. You were identifying potential, which was interesting, but you referred to real-time monitoring of the actual impact of legislative change. What were you getting at?

Professor Richard Susskind: I know so many different ways one can model that. I had in mind the idea that when a piece of legislation was introduced you could set up in parallel an economic model. If a piece of legislation is introduced on the basis of a set of assumptions built into the system, you can monitor it—the purpose of this legislation was to keep this level up and you could monitor what happens. It might be demographic. It seems to me that part of the legislative process should be the introduction of systems and methods for monitoring impact. You get that a lot in the private sector. Strategic decisions are made and people say, "How are we going to monitor and measure the impact?" They do it very carefully. They say, "We are going to report back in this way". What I was saying was not speculative, but it seemed to me that it

would follow quite naturally that we could introduce computer-based models linked to legislative change.

Lord Norton of Louth: That would be useful in imposing discipline on government when it introduces legislation—to identify what the purpose is and identify when it has been successful.

Professor Richard Susskind: Yes. A very interesting basis for political discussion would be that it was very clear that the policy thinking behind a piece of legislation was to deliver certain outcomes. We have four simulations that are running and monitoring, and none of the outcomes is being delivered. That is an interesting premise for a discussion. It is not computer-assisted legislating, but it is talking about other tools one might use.

The Chairman: Professor Susskind, we have imposed on you for about 20 minutes longer than advertised. That reflects the extent of the interest you have stimulated through your written evidence to us, and the extent to which we found your responses informative and equally stimulating. It has been a very useful session. Thank you very much indeed for coming to see us.

Professor Richard Susskind: It has been a great pleasure; thank you. I am more than happy to help in any way, because this is a tremendously important opportunity. If you need any further input, please get in touch.

The Chairman: That is most helpful. Thank you very much.