DIGITAL LITERACY:

WHY IT MATTERS FOR REPRESENTATIVE DEMOCRACY

ASSEMBLEIA DA REPÚBLICA

CONFERENCE PROCEEDINGS

DIGITAL LITERACY: WHY IT MATTERS FOR REPRESENTATIVE DEMOCRACY

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ASSEMBLEIA DA REPÚBLICA

LIST OF CONTRIBUTORS

Achilles C. Emilianides, Professor, Dean of The School of Law, University of Nicosia

Alexandre Quintanilha, Chair of the Parliamentary Committee on Education and Science of the Portuguese Assembleia da República

Andy Helliwell, Chief Operating Officer, United Kingdom Parliament

Bruno Aragão, Member of the Portuguese Assembleia da República

Bruno Dias Pinheiro, Permanent Member of the COSAC Secretariat

Cristiana Ferreira, Member of the Portuguese Assembleia da República

Evanthis Hatzivassiliou, Professor of Contemporary History, National and Kapodistrian University of Athens; Secretary-General, Hellenic Parliament Foundation

Fakhreddine Aouadi, Head of Unit, Innovation, Intranets and Digital Solutions Unit, Directorate-General for Innovation and Technological Supp ort, European Parliament

Giovanni Rizzoni, Head of the Research Department, Italian Chamber of Deputies

Gonçalo Caseiro, Former President of Imprensa Nacional — Casa da Moeda (Portuguese Mint)

Ismini Kriari, Emeritus Professor of Constitutional Law, Panteion University of Social and Political Sciences, Athens; Member of the Executive Committee, Hellenic Parliament Foundation

Joana Gonçalves-Sá, Principal Investigator, SPAC - Social Physics and Complexity Lab, LIP Portugal

Libby Kurien, Programme Director, Transforming Digital, Parliamentary Digital Service, UK Parliament

Luis Miranda, Head of the Department for Plenary Sittings, Spanish Congress of Deputies; Professor of Constitutional Law, Carlos Iii University

Maria da Graça Carvalho, Member of the European Parliament

Maria Kamilaki, Acting Director-General for Electronic Administration, Library and Publications, Hellenic Parliament

María López, Director for International Relations, Spanish Congress of Deputies

Maria Manuel Leitão Marques, Member of the European Parliament

Mário Campolargo, Secretary of State for Digitalisation and Administrative Modernisation, Portuguese Government

Mark Harbord, Director of Cyber Security, UK Parliament

Marlene Erll, Analysis and Research Team — General Secretariat, Council of the European Union

Matas Maldeikis, Deputy Chair of the Committee for the Future, Lithuanian Seimas; Host of the Global Parliamentary Congress “The Future of The World”

Paulo Pena, Journalist, Investigate Europe consortium

Rosario Rodríguez, Director of Communication, Spanish Congress of Deputies

Sofia Moreira de Sousa, Head of European Commission Representation to Portugal

Susana Sargento, Professor at the University of Aveiro; Researcher at Instituto de Telecomunicações (Telecommunications Institute)

Susanne Janistyn-Novák, Deputy Secretary General of the Parliamentary Administration, Republic of Austria

Triinu Põdramägi, Adviser at the Legal and Research Department, Parliament of Estonia

Vânia Neto, Education Skills & Learning Lead for Western Europe, Microsoft

ABBREVIATIONS

AI	Artificial Intelligence
CBS	Columbia Broadcasting System [American commercial broadcast television and radio network]
CCTV	Closed-circuit television
CEO	Chief Executive Officer
CERN	Conseil Européen pour la Recherche Nucléaire or European Council for Nuclear Research
CF	Committee for the Future
ChatGPT	Chat Generative Pre-Trained Transformer [artificial intelligence chatbot technology that can process our natural human language and generate a response]
COVID-19	Coronavirus disease (COVID-19) is an infectious disease caused by the SARS-CoV-2 virus
CV	Curriculum Vitae
DG ITEC	Directorate General for Innovation and Technological Support
DMA	Digital Markets Act
DSA	Digital Services Act
EBP	Evidence-based policy
EU	European Union
GAI	Generative AI
ICT	Information and Communication Technology
ID	Identification
IoT	Internet of Things
IPU	Inter-Parliamentary Union
LB	Legislative Brief
LLM	Large language model
ML	Machine Learning
MP/MEP	Member of Parliament/Member of the European Parliament
NATO	North Atlantic Treaty Organization
NGEU	EU Next Generation Plan
NGO	Non-governmental organization
NLP	Natural Language Processing
NRRP	National Recovery and Resilience Plan
OCR	Optical character recognition
OECD	Organization for Economic Co-operation and Development
PB	Policy Brief
R&D	Research and Development
RS	Research Service
SME	Small and medium-sized enterprise
SMG	Standard Modern Greek
STOA	Scientific Foresight Unit
TD Programme	Transforming Digital Programme
UK	United Kingdom
UN	United Nations
USD	United States Dollar
WWW	World Wide Web

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FOREWORD BY THE PRESIDENT OF THE PORTUGUESE ASSEMBLEIA DA REPÚBLICA

AUGUSTO SANTOS SILVA

1.
First and foremost, welcome to Portugal and to the Portuguese Parliament, the Assembleia da República. It is an honour to host this Conference, on the opportunities and challenges faced by Parliaments in this new Digital Era.

Not only because Parliaments are homes of representative democracy, but also because, despite being ancient, all around the world, they have been at the forefront in opening politics to citizens, pushing for reforms, and democratizing decision-making processes.

This is not by chance. Contemporary representative democracies are now more than ever being questioned by citizens, which reflects not only some discontentment but, and above all, their wish that Members of Parliament (MPs) perform their duties better.

As such, parliaments have been undertaking many initiatives to come closer to citizens, through improving inclusiveness, publicity, transparency, and accountability. One can even argue that this engagement with citizens has gradually become one of the most significant roles played by 21st-century Parliaments, in addition to their traditional functions of legislation and oversight.

In this path, there has been a clear focus on information and communication technologies (ICT) which, as societies become more digitized, make it possible to more easily reach "citizens where they are".

2.
There are two fundamental goals of this digitization process: more information, and more participation. Let me consider each of them.

First, information.

Over the last three decades, parliaments have started to make all relevant information about their activities available through their websites.

This extensive information repository enables both the media and citizens to directly access all relevant information regarding parliamentary activities. Consequently, it empowers them to engage in more informed monitoring and scrutiny of the work MPs are doing.

This is an incredibly positive development. But it poses at least two important challenges that we must face collectively.

Firstly, the issue of literacy: that immense quantity of information needs to be framed and organized in order to be understood as well as found. Given this, parliaments have also to engage in digital literacy as a critical dimension of mass education for democratic citizenship.

Secondly, parliamentary institution now offers unparalleled levels of transparency, surpassing most public entities, including other branches of government. This is particularly relevant to counter a false, yet common, populist argument on the "uselessness" of parliaments: in fact, MPs have never worked harder. This is evident from the significant increase in the number of bills considered, laws passed, resolutions adopted, votes approved, debates held, as well as the time spent in plenary sittings and committees.

However, on the other hand, publicity is not an indisputable value in itself. For instance, it has been noted that the broadcasting of committee meetings has introduced an incentive for political groups to engage in more confrontational interventions, thereby limiting the potential for mutual understanding and concessions: drama tends to prevail over rational debate and deliberation. Given this, we need to reflect on how, in this new digital society, we can balance the two attitudes that we need, namely accountability and absence of compromise.

Let us move to the other main goal: fostering more participation.

Even if they have clearly prioritized the information dimension, parliaments have also invested in some forms of participation, such as citizen legislative initiatives and, above all, petitions, the modernizing drive for which has relied to a great extent on their association with ICT.

This is really a crucial point: digital literacy plays a vital role in ensuring that the opportunity to participate is a reality for all citizens. Therefore, it is important to gather data on who is actually participating, as digital opportunities are still unequal, along the lines of education, occupation or generation. Thus, the "digital divide" is still a major concern.

Meanwhile – the second concern – participation being just a click away does not mean that citizens will automatically start engaging and interacting with Parliaments. Parliaments need to stimulate civic

participation, giving it room and visibility, through demonstrating that they value the demands and proposals of citizens, and they take them into consideration within the political agenda and decision--making. Civic participation cannot be the instrument of those that are already included in the political system, or the privilege of the more educated, affluent, or those familiar with digital technologies.

3.

Like many others, the Portuguese Parliament has developed a pathway towards digitization. Here are some milestones: the creation of an official website in 1995; the implementation of significant digital tools, such as the early introduction of the streaming of plenary sittings; the modernization of working conditions in the plenary in 2007, granting each MP his or her own computer terminal and digital devices; the early implementation of an electronic petition system in 2005, facilitating the use of this right and enabling broad public dissemination.

In 2016, a Working Group for the Digital Parliament was established, with the aim of harnessing the potential of new technologies to strengthen the relationship between citizens and the Assembleia da República. Its report paved the way for a significant qualitative leap in this area, including the following measures: an in-depth revision of the website, which is nowadays the main tool through which parliament disseminates its activities and provides public access to its data; the launching of an open access methodology, presenting the parliament's work in Open Data, that is, in a completely open and structured format, thus allowing for the downloading and automatic processing of data, as well as its reuse by other institutions, researchers, and the general public; the creation of digital platforms for the submission of petitions, legislative or referendum initiatives and the collection of the necessary signatures – thus ensuring greater security guarantees and enabling petitioners to receive feedback (by email) of the different stages of the parliamentary processing of their initiatives; the improvement of parliament's public communication through its own TV channel and the presence on social media platforms; and the forthcoming "System of alerts for law regulation and fulfilment of legislative duties", that will provide information on government compliance with the tasks prescribed by laws approved in parliament.

4.

Digital transition is a huge opportunity to bring parliaments closer to citizens, and to foster multiple forms of public participation in the political process.

This brings new responsibilities for our democratic institutions. I will focus on two of them, which I consider especially relevant.

The first deals with the effectiveness and impact of citizens' initiatives (petitions, hearings, or legislative initiatives) on parliamentary work.

One of the problems that has been observed in many parliaments that have invested in participatory measures is the lack of clear information on how citizens' inputs are subsequently taken into consideration, or how they are potentially integrated within the decision-making process.

This explains a certain precaution we can observe here and there, regarding the multiplication of means through which citizens can communicate directly with parliament (avoiding the mediation of political parties and MPs); and concerning the expectations such direct interaction can generate among citizens, concerning their real influence on parliamentary outcomes. I would say that it is essential to be candid: participation does not necessarily mean deliberation. The right to provide inputs must be distinguished from the power to force outputs. Even so, participation increases the possibility to influence democratic politics and, even if the power to decide is granted to those who were elected – the MPs – the participatory instruments parliaments put in place improve the political awareness and practice of citizens and bring them closer to their representatives. In relation to that, it is particularly important to establish clear rules and procedures, treating citizens fairly in this experience of direct interaction with parliament, that, for many, is a one in a lifetime experience.

My second point relates to the full understanding of what digital literacy means. It is not exclusively technological training. Not at all. Its most decisive feature has to do with critical thought. ICT offers formidable means of recording, spreading, and receiving information, and social media and digital platforms multiply almost *ad infinitum* the ability to voice and communicate. They can be used to empower people, to modernize institutions and to foster democratic participation and scrutiny; however, they can also be misused to manipulate public opinion, to convey disinformation, to disseminate prejudice, and to disrupt the common ground of liberal democracies.

The same goes for artificial intelligence. It poses a significant challenge to democracy, requiring our capacity to keep up with the state of art, which is evolving at a rapid pace, and to assess the need for regulation. Human dignity, human agency, public debate, common goods, the distinction between *logos* and *pathos*, the distinction between truth and falsehood and ethical standards lie at the heart of democracy; and artificial intelligence must be used to foster them, not to put them in peril.

Therefore, it is crucial to keep in mind that we cannot see in the digital transition merely a huge opportunity. This digital transition is also a process involving the questioning of democratic values and principles.

That is the real meaning of digital literacy and that is why it is so needed.

I wish all of you a pleasant stay in Portugal and a fruitful Conference.

PART I. OPENING SESSION.

FROM ATHENS TO LISBON – MAIN ACHIEVEMENTS AND LESSONS LEARNT FROM THE INAUGURAL CONFERENCE“DIGITALTECHNOLOGIES” AND THE STAKES FOR REPRESENTATIVE DEMOCRACY

ALEXANDRE QUINTANILHA

CONSIDERATIONS ON "DIGITAL LITERACY: WHY IT MATTERS FOR REPRESENTATIVE DEMOCRACY"

Good afternoon, welcome to Lisbon, welcome to our Parliament and welcome to this chamber, the Senate chamber — we no longer have a working Senate, but we use the chamber for many other activities, such as this one.

I wanted to say a few words before we start: this is the second of what I hope will be a series of conferences, the first of which was held in Athens, about a year ago, in June 2022. At that time, the conference was hosted by the Hellenic Parliament Foundation under the very able leadership of its Secretary General, Prof. Evanthis Hatzivassiliou, who is here with us today — and to whom I extend a very warm welcome.

The title of the conference in Athens was "Digital Technologies and the Stakes for Representative Democracy". At that time, and given the success of the meeting, we decided to have a follow-up and Portugal's Parliament suggested the theme "Digital Literacy: why it matters for representative democracy", because we believe its relevance has become even stronger over the past year. I think the issue of digital literacy is something which is increasingly at the forefront of the concerns that we experience. The suggested title was accepted by the academic committee of the group that started working in Athens.

I would like to also — right at the very beginning — very briefly, let you know that one of the reasons why I'm here today has much to do with Bruno Dias Pinheiro, also with us here today, who not only encouraged me to participate in the meeting in Athens but is largely responsible for the programme of the present meeting. We discussed everything, but he did most of the work, and therefore, I believe, we should all thank him for that.

In Athens we had representatives from the Hellenic Parliament Foundation, Portugal's Parliament — the Assembleia da República —, the European Parliament, the House of Representatives of Cyprus, the Parliament of Estonia, the Italian Chamber of Deputies, and the Spanish Congress of Deputies. For this meeting, we decided to increase the number of members of the academic committee to include the Austrian Parliament and the UK Parliament. We also sent an invitation to all the other European parliaments and as a result we have with us members from Sweden, Lithuania, Belgium, Ireland, and the Permanent Representative of the equivalent of the Parliament of Poland in Brussels.

The panels that we put together were meant to cover interesting and relevant issues to all the parliaments and the various stakeholders involved. We also decided to include not just politicians but also academics, practitioners from different domains, journalists, and industry representatives. All those that have a stake in the issue of digital literacy.

In addition to the obvious topics, which are currently attracting enormous and increasing attention — such as artificial intelligence and cyber security —, we also included two other topics to cover the role of parliaments in promoting digital and participatory literacy outreach to young people and the issue of how to increase civic participation through technology and the impact of social media.

Let me emphasize, schematically, what we hope to get out this meeting. The overall aim is threefold. First, how are you addressing, in your own country, in your own parliament, some of the challenges that these new powerful tools are revealing? We mustn't forget that these tools can be used in many ways and we need to understand how to use them in such a manner as to achieve a society that is more just, more inclusive, freer and at peace.

The second question is: what are the success stories that you would like to provide us with? It would be very interesting if some of the experiments that you have carried out in your parliament could be reproduced elsewhere without us having to start from scratch, and that we could learn from each other in such a process.

And finally, for this is equally important: what did not work? What did you try and was, perhaps, less successful than you thought it might be and what are you doing about that?

This morning, we heard in our Parliament Chamber from the visiting EU (European Union) Parliament President, Roberta Metsola, how enthusiastic she was about the new AI (artificial intelligence) policy document that was approved, I believe a few days ago, in the European Parliament.

In a few minutes we will hear from a Member of the European Parliament, to inform us about what actions are being planned and what is being accomplished.

I, for one, as a researcher by training, am concerned by the fact that the US and China are moving at an accelerated pace in these domains, competing ferociously, most likely with very little regard for human rights and protections. Many colleagues of mine share these concerns.

Europe should be congratulated on its approach, but it perhaps needs a Europe-wide programme of research and innovation that makes the most of our immensely skilled researchers that currently are, in many cases, struggling to be competitive in the world at large. They would like to collaborate more while maintaining Europe's ethical standards. Perhaps we require a vast new European project to address the current challenges.

I would venture to say that, together with climate change, artificial intelligence tools that are being developed pose enormous challenges to democracies. As parliamentarians, we have a responsibility to address both the opportunities and the concerns.

The challenges that we face are the main reason why we, as a group of parliaments, decided that it would be a good idea to get together and share information with each other. I believe that this could be the beginning of a broader and wider meeting of parliaments in Europe, and I am convinced that just as in the case of climate change, a collaborative effort involving researchers, enterprises, and all kinds of stakeholders in this area is crucial.

Having said that, let me now introduce our next speaker.
Maria Manuel Leitão Marques is a Member of the European Parliament. She was a full professor at the Faculty of Economics at the University of Coimbra. She was elected a Member of the European Parliament in the last European election of 2019 for the Portuguese Socialist Party. She is Vice--Chair of the International Market and Consumer Protection Committee and she's a full member of the Committee on Legal Affairs. She's a substitute member in the Women's Rights and Gender Equality Committee and previously she had an extensive career in our government as Minister for the Presidency and Administrative Modernization in Portugal.

She was responsible for a highly successful project named Simplex, which was intended to simplify bureaucracy and provide citizen autonomy. She created what I would like to call new "public offices", meant to help citizens find the information required about official documents that they need to acquire. We now have dozens of these so-called *Lojas do Cidadão* (citizen outlets) in Portugal. She also fought very strongly, as a member of government, against domestic violence and for gender equality.

Maria Manuel Leitão Marques, the floor is yours. Thank you once again for being with us.

MARIA MANUEL LEITÃO MARQUES

DIGITAL TECHNOLOGIES: RISKS AND BENEFITS FOR DEMOCRACY

Thank you for inviting me to this discussion on digital technologies and representative democracy. This is something that has, in one way or another, made its way into my work in the European Parliament during this term.

There are two main questions I would like to start with.

The first is whether digital technologies have contributed to strengthening democracy or, on the contrary, are restricting it.

And the second one is whether it is possible through regulation to build a more democratic digital model, which can contribute to reinforcing democracy.

Let me start with the potential risks and benefits of digital technologies for democracy.

I think it's a bit narrow to look at things in a black-and-white fashion. We have examples of situations in which digital, by improving access to information or enabling participation at a distance, has shown its benefits.

We also have examples of situations in which digital has been at the centre of democratic scandals, such as with Cambridge Analytica and the Brexit vote, or with the AI systems awarding public benefits in the Netherlands.

As different impacts are possible, it's important to reinforce the positive aspects and prevent the others.

It's what we have been doing at the European level and this is my second point, to mention the main pillars we are working on.

In general, we have been working on rules that try to find the right balance between enabling the benefits and mitigating the risks of technologies, including for democracy and the rule of law.

I'd like to give you three examples of regulations that do just that: the Digital Services Act, the Artificial Intelligence Act and the Regulation of Political Ads.

Let me start with the **Digital Services Act (DSA)**. This is a regulation that we approved last year and that is focused, as the name suggests, on regulating services online. To put it in simple terms, it's a regulation to tackle the problems **we have with social media or online marketplaces, where sometimes the rules we have as a society offline do not always apply, even though they should.**

This is a very important piece of regulation to provide clarity on **content moderation and users' rights.**

Example: a tweet with suspected illegal content.

Now, with the DSA, users have the ability to denounce this, they are entitled to explanations on why that tweet has been or has not been removed, and they can appeal the decision. Platforms are obliged to explain their content moderation decision.

As we know, this is important to ensure healthy democratic debate, without abuse or false information about opponents being allowed to circulate online.

The DSA also provides more **transparency for users**, for instance, by making them more aware of why they are being targeted by a certain ad, or being able to tell in detail what data platforms have on them. I'll explore this a bit more when I talk about the Political Advertising regulation.

However, the most important provisions in the DSA are the risk audits.

Articles 34 and 35 of the DSA demand that Very Large Online Platforms, which are those with the most users at the European level, perform **risk audits and implement risk mitigation measures.**

As part of this exercise, they will have to assess "any actual or foreseeable negative effects on civic discourse and electoral processes, and public security". This is very important to achieve aims such as mitigating the impact of hateful political speech or coordinating campaigns of disinformation online.

Moving on to my second example: the Artificial Intelligence Act, which we just voted on in the European Parliament this week, and on which we will start negotiating with the Member States.

AI has a lot of potential to assist in the provision of public services, for instance, but we have seen examples of how that integration has gone wrong, causing discrimination and harm to citizens, and in particular to those who are most vulnerable.

This is what happened in the Netherlands with the AI-assisted detection of fraud in public benefits, which turned out to be highly discriminating against immigrants. Other tools, such as remote biometric identification, can also pose threats to fundamental rights – just imagine it being used in protests to identify those opposing the government.

The AI Act, with its risk-based approach and with the aim of making AI trustworthy, is going to help democracies use AI in a positive way.

It will ban unacceptable risks, such as the use of real-time remote biometric identification in public spaces, and have high standards of transparency and safety for high-risk applications, such as the use of AI in the assessment of credit scores or recruitment of workers. This will ensure citizens can trust institutions, which is a fundamental pillar of our democracies.

And finally, I would like to talk to you about the Regulation on Political Advertising.

The Political Ads Regulation intends to regulate political advertising in several aspects. It will impose ambitious transparency rules, limit the sponsoring of ads by foreign actors, and it will limit the use of personal data for the microtargeting and manipulation of voters – or at least that's what the European Parliament is asking for.

This Regulation will be very important to provide more transparency in political campaigns and to reinforce trust in elections and democracy.

What have we tried to do with it? We have made sure the Regulation will have strength to tackle some problematic practices that contribute to the manipulation of voters, fragmentation of the electorate into bubbles, and which make the promotion of hateful campaigns cheaper than positive, constructive ones.

How do we do that? I can highlight 2 pillars of this proposal:

Thanks to our efforts, we have a strong **transparency tool in this Act, which is a European Repository for Online Political Advertising.** It will contain every online political ad and information about its sponsor, financing and reach. It will allow everyone, but especially authorities, journalists and researchers, to better detect malign political campaigns and study the impact of political advertising. It will contribute to reducing echo chambers and polarization, by removing the veil that hides political ads behind each individual news feed or timeline.

Of course, we have also moved beyond transparency, taking strong action against the mechanisms that allow sponsors to manipulate voters and promote hate. We have proposed strong rules for the use of personal data in political advertising, which consist of the following:

- We are trying to ban the use of inferred and observed data for this purpose. This is the data that is not actively provided by users, but instead collected by following the behaviour of the users online (for instance, where they click or navigate online) or inferred based on other sets of data (for instance, concluding I vote for a certain party based on the fact that I like the pictures of certain politicians of that party and click more often on the content of that party).

- We have limited the number of categories of personal data you can use to target someone with an ad, to avoid microtargeting.

Of course, these regulations work and protect people and democracy in a society which also relies on a good baseline of digital literacy for its citizens. Using a concept that is very fashionable, universal digital literacy is one of the pillars of a resilient digital democracy.

And digital literacy is also an important condition for the effective enforcement of the regulations I have previously mentioned. Nowadays, digital literacy involves not only knowing how to use a computer. It includes basic knowledge of AI, what an algorithm is, which data was used to build it and so on.

The best way to protect democracy is always to empower citizens to protect themselves.

EVANTHIS HATZIVASSILIOU

FROM ATHENS TO LISBON – MAIN ACHIEVEMENTS AND LESSONS LEARNT FROM ATHENS. PARLIAMENTS AND THE DEBATE ON TECHNOLOGY: AN ONGOING PROCESS

There have been some notable things that we have learnt from the 2022 Athens conference, both organizational and concerning substance.

The first and most important, I believe, is that we realized that this can be done. The experience of organizing a conference on this model – bringing together academics, experts and parliament officials – was invaluable, and showed a creative interaction between them. People belonging to these diverse groups, from many European countries and from many European Parliaments, shared their perspectives and engaged in a productive dialogue. This is a factor that greatly enriched the debate.

The second important finding was that the option to bring parliament officials into this process paid off. This was a relatively novel element and the Athens conference confirmed that parliament officials are often intellectuals in their own right, and they can contribute to the discussion in a substantial manner. They can bring their own, very particular experience into the process which represents a *partially different perspective* compared to those who deal with more theoretical issues. Parliamentary officials do not deal only with the major questions of constitutional law or political thought (that mostly form part of the domain of academics), or even with the practical handling of technology by experts. In our first conference, parliamentary officials critically explained the ways that Assemblies try to face dangers, adjust and respond to resulting dilemmas. At the same time, they also discussed efforts to exploit the opportunities that technology presents for modern representative democracy. Thus, these officials bring to the discussion the perspective of the parliaments not only as tribunes (in other words, the function of parliaments in the somewhat passive role of platforms for politicians), but also as large organizations that interact with the public and the academic community, and therefore as active actors within the social sphere.

As regards substance, the Athens conference presented an interesting picture. I may be exaggerating a little, but I think that, on the whole, constitutional lawyers or experts of political thought tended to be more sceptical towards the unprecedented growth of technology, and to point more to the dangers emanating from technological development, rather than to its opportunities. This is to a considerable extent natural. Law can only react to a social phenomenon; it cannot foresee, much less arrest it. Therefore, the sheer scale and speed of the pace, together with the strengthening of populist tendencies in the hard core of the Western world taking advantage of new technological tools such as social media, is a source of great concern for these intellectuals.

On the other hand, parliamentary officials, the lawyers who also serve as parliamentary officials and the politicians arguably proved a little calmer. Perhaps this second group was not more optimistic. However, its members pointed to the various tools that parliaments are using in trying to cope with the problem. They pointed out that parliaments – representative of democracy as such – are not passive bystanders or collateral damage resulting from these breathtaking developments. They also established their distance from the widespread view of rapidly advancing technology as the towering figure of being a Darth Vader of the twenty-first century. This does not mean that parliamentary officials and politicians were dismissing or ignoring the dangers; they were fully aware of the risks, and sometimes they simply were recording the means that their organizations were employing in an effort to adjust. Indeed, these parliamentary officials and politicians strongly emphasised that European Assemblies *were trying to adjust*, and that the opportunities are as important as the risks. This partial difference was extremely interesting. What parliamentary officials and politicians were saying was that the European Assemblies are very much alive and kicking in this huge process.

A central, decisive contribution in the Athens conference came from a politician, Alexandre Quintanilha. His presentation was one of the most enlightening I have ever attended during an academic career of three decades. Mr. Quintanilha pointed to the pace and the speed of technological change, which in our days creates an unprecedented challenge, namely, that societies, institutions, and individuals no longer have enough *time to reflect* on the changes. As he noted, "knowledge grows slowly, and robust knowledge even more slowly" and "trust takes time" – a pivotal remark. He stressed that technological innovations are tools, not ends in themselves.[1] This means that the good taste of our societies will be crucial in our handling of these pressures. I think that Mr. Quintanilha wonderfully expressed the accumulated wisdom of the civilization of representative democracy in this process. His contribution, bearing the same title as the volume of the Athens conference papers, is the last in the volume: deservedly, I believe, because it is a progressive, wise conclusion. As such it does not provide an answer to the dilemmas. Mr. Quintanilha points to the responsibility of our societies, of all of us, in choosing the correct options.

Admittedly, it is not easy to discuss ongoing developments. E. H. Carr, in his pivotal work on historical methodology, warned us that we do not have a bird's eye view of the present; we are part of the process, not outside it, and therefore we cannot watch it in a disinterested way. Thus, Carr spoke

[1] Alexandre Quintanilha, "Digital Technologies and the Stakes for Representative Democracy", in Evanthis Hatzivassiliou (ed.), *Digital Technologies and the Stakes for Representative Democracy* (Athens: Hellenic Parliament Foundation, 2023), 167-170.

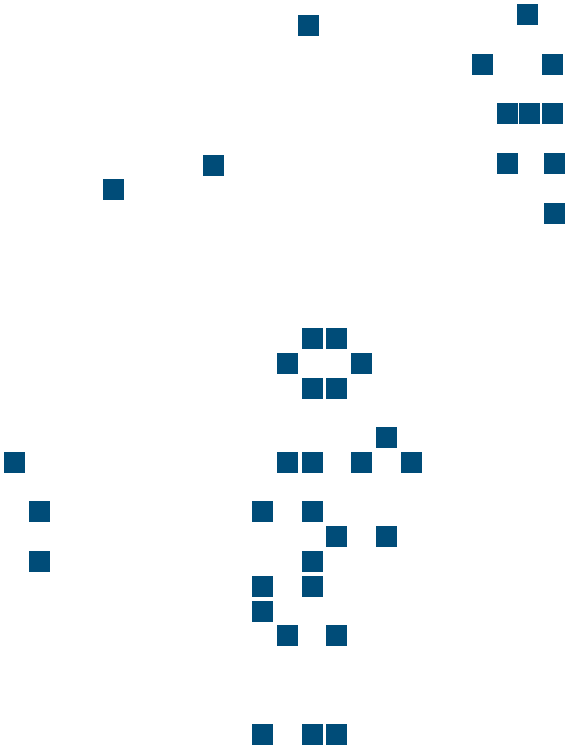
about the responsibility of calm, enlightened perspectives, and about the necessary exercise of self--restraint by the analyst, without which it is impossible to arrive at responsible interpretations.[2] There is much sense in this view. As a historian, I am greatly interested in discussing perceptions, especially in international affairs. However, as a historian, I find it much easier to define and understand the fundamental unspoken assumptions of *past eras*, rather than of the present. I even find it easier to define my own unspoken assumptions of 30 years ago rather than of today. It is always so difficult to have a comprehensive view of the present, but it can be done. It just requires considerable caution, especially when also discussing trends of the future.

What is more, we must not lose sight of some equally important facts. The interest of our societies in such a discussion, including the perceptions of technological advancement, is a characteristic of over-mature civilizations, how Europe is in our days. This could be a sign of the wisdom or, on the other hand, a sign of an impending decline of such an over-mature civilization. Therefore, to make such evaluations and still avoid decline, we must retain our fervour and our commitment to the fundamental values of our civilization and of representative democracy.

Representative democracy presupposes a mixture – some people might even describe it as a "strange" mixture – both of certainties and the encouragement of doubt. It is not easy, but it is important to remember that allowing for doubt does not mean that we could ever lose our certainties at the level of values. Societies are hardly expected to follow a leadership, political or intellectual, that only projects doubt or an amorphous relativism. Societies need a healthy measure of certainties, but what exactly this measure is and where its limits end, is for the societies themselves to determine. Moreover, it is equally crucial to be able to think outside the box, and avoid intellectual confinement and the tyranny (or the conservatism) of obligatory, preconceived dogma. If we lose this fervour and this energetic mobilization, we will run the risk of seeing our civilization becoming a sitting duck. I think that these conferences show that we can, and that we will avoid this danger.

I must also make one last point which involves the contribution of Mr. Quintanilha and Bruno Dias Pinheiro. The Athens conference was a start. It went well, and it deserved to be continued. However, I must express my thanks and my admiration for the way that Mr. Quintanilha and Bruno have organized the Lisbon conference. More Parliaments entered the process – a significant step forward. A new theme was adopted, connected to that of Athens but also expanding and focusing it at the same time, and bringing the dimension of participation into the picture. I am confident that there is a thread uniting the 2022 Athens conference with this one, but also that the Lisbon conference took this endeavour much further. This, exactly, is how a vibrant, energetic and dynamic process should unfold.

[2] Edward Hallett Carr, *What is History?* (New York: Alfred A. Knopf, 1962), 28-35.



PART II.

DIGITAL LITERACY: WHY IT MATTERS FOR REPRESENTATIVE DEMOCRACY

ANDY HELLIWELL AND LIBBY KURIEN

KEYNOTE ADDRESS: DIGITAL LITERACY: WHY IT MATTERS FOR REPRESENTATIVE DEMOCRACY

This article looks at why digital literacy matters for representative democracy and calls on the experience of two officials of the UK Parliament working in or with the Parliamentary Digital Service. It calls on their experience of and views on how the UK Parliament reacted to the Covid-19 pandemic as well as work carried out as part of the Transforming Digital Programme, which has invested in creating a new digital and data operating model.

Investing in digital and data to enable parliamentary legislatures

Although Parliaments are fundamentally physical places, designed to bring people together to represent their regions and to foster dialogue and reach agreements, we know that digital and data underpin more and more of how we do this. In an ever-increasing digital world, democracy needs to actively keep up with developments to remain relevant and accessible. It is fundamental to parliamentary democracy that people can engage digitally (which is only intensifying) with our work and that politicians are enabled to reach their electorate and that governments/executives are able to engage and provide services for their populations.

The Covid-19 pandemic enabled the UK Parliament to undergo a step-change but also the experience showed that the UK Parliament approach to digital and data was not sustainable and needed targeted strategic investment in creating an operating model designed for the future to enable the UK Parliament to do more through digital. This includes investment in infrastructure and technology but also critically in skills and knowledge.

UK Parliament Digital Strategy 2022-25

In 2022, the UK Parliament agreed a new digital strategy, which showed the importance and renewed emphasis that Parliament wanted to put on digital as an enabler for it to work more effectively. The

strategy supported both the Commons and Lords – critical to both as Parliament could not happen without digital. The strategy has guided the work of the digital professions and the transformation programme since its agreement.

The strategy was drafted for the Parliament's administration and made publicly available to ensure accountability for delivering this for Parliament. It included four priorities, namely to:

- Ensure that our digital services are flexible, secure and resilient;
- Keep pace with advances in digital technology;
- Make digital more sustainable and scalable; and
- Enable Parliament to make best use of its data and information.

Six objectives were agreed, which were to:

- Define, agree and manage enterprise standards for IT and digital;
- Deliver a digitally enabled business transformation to Parliament's core services;
- Ensure improvement in data availability, quality, and accessibility;
- Continue to reduce legacy technology;
- Continue to build digital skills; and
- Improve digital culture and community.

In reviewing the strategy after the first year, and mapping the work of the digital service to each of its priorities and objectives, significant progress can be seen. This included identifying that information and data need to be better integrated with digital so we are consciously enabling this through the amalgamation of decision-making bodies and a greater emphasis of the work of the Transforming Digital Programme on the data landscape in Parliament.

It is very important to understand that data on democracy is our asset and that aspect of value that must be treasured. Parliament has a responsibility to ensure that data reaches or is available to the populations served by them, in a transparent and pure form. This is also true for the complementary functions of democracy that require data on Parliament to carry out their jobs (government, courts, journalists, lobbyists, etc.).

Digital literacy in legislatures, and how digital and data enable this

In the UK Parliament, there is a diverse range of members to cater to: from MPs born in the 1990s who are digital natives, to members of the House of Lords who are in their late 90s, who first took their place in the 1960s. Enabling each and every member of the Houses to be able to discharge their duties in the way they would like, while taking advantage of what digital and data driven ways of working have to offer, is a complex yet common challenge for many democratic institutions.

Digital has become and will continue to be more and more important to parliaments and to democracy overall, and this reflects developments in the outside world. Democratic institutions must keep up with these developments to stay relevant, not only to members of parliament, but also to society and to ensure that citizens can access services and information about democracy.

This is important because in Parliaments information about what happens, which decisions are made, which laws are passed, who said what in support of whom, is very important for democracy. Democracy is a data rich "industry" and Parliament's major asset is the data produced about Parliament and its procedures. It is important to ensure this is communicated quickly and accurately outside of Parliament, otherwise there is a risk that this is communicated by others. At best these others do this well although some may have a particular agenda or perspective, and at worst they may deliberately misuse or manipulate information for illegal or otherwise bad purposes.

Secondly, to mitigate wider risks and specific risks to MPs such as the use of deep fakes to misrepresent their views. Unless Parliaments are equipped with new skills and get to know more about digital developments and build new capabilities, there will be immense difficulty in detecting any risks or threats that emerge as well as difficulty combatting them.

However, developments in technology also represent opportunities for parliamentary administrations, including:

- Greater accessibility of information on representative democracy;
- Greater equality of representation and civic participation; and
- Potentially greater value of investment in technology.

In the UK Parliament, opportunities to embrace the use of digital arose from the response to the Covid-19 pandemic and subsequently the opportunity to build on this to grow digital literacy in the Parliament and to design and implement a new digital and data operating model to ensure Parliament's approach to digital is sustainable and continues to keep up with wider developments.

Case study: lessons learned from the Covid-19 pandemic and the UK Parliament response

In short, the Covid-19 pandemic showed that the UK Parliament was able to be very responsive in a crisis but this took an exceptional input of resources that showed this model of revolution in technology was not yet sustainable or repeatable. Therefore, following the pandemic, the focus turned to sustainability.

During the pandemic, the UK Parliament response included:

- **Remote voting** – the embarrassment of the "conga" led to the swift development of a remote voting app (which was quickly dropped for political reasons in the Commons but persisted throughout the pandemic in the Lords), followed by pass reader voting and the use of proxy voting.

- **Enabling the chambers and committees** to meet in a hybrid and/or remote way using conference call technology. MPs and Peers were able to contribute to the chambers and committees, in whole or part. This showed that the work of Parliament could be undertaken differently as it had or quickly developed the capability and responsiveness to meet the need to enable remote participation in its proceedings.

- Shifting the whole administration to embed **new ways of working**, for example the extremely quick rollout of Microsoft Teams, and the ability to work from home for the majority of the workforce, who had previously been based almost entirely within the Parliament's precincts.

Investing in a sustainable model for broadcasting the chambers and committees

The approach taken to broadcasting the UK Parliament's chambers and committees stood out as exemplary digital delivery at the height of the pandemic. When the pandemic struck, front and centre in the minds of people working in Parliament was the need to ensure accessibility to parliamentary proceedings for the public to ensure transparency and equality of access to information about debates and decisions taken by lawmakers. The UK Parliament was already grappling with how to adapt its services to both its internal users (MPs, Peers, their staff and the staff of Parliament) as well as its external users (the print and broadcast media, organisations interested in Parliament and the public) even before the COVID-19 pandemic. When the pandemic hit in March 2020, Parliament's chambers and committees practically overnight transformed their operations to allow remote participation in proceedings through audio-visual means. This was a game changer in the following ways:

- The broadcasting unit is now seen as essential to the core functioning of Parliament and has been embraced as an essential strategic partner, not a risk held off at arm's length or a service provider. This meant that Parliament prioritised investment in this area and was culturally ready to invest in the long term.

- The pandemic shifted the mindset of the Parliament's administration due to the total dependency on audio visual (A/V) to function as a Parliament at all. This shifted thinking and A/V was seen as a service that needed investment and continuous improvement, expert advice, and needed a roadmap that prioritised a backlog of improvements that were needed to ensure the service was up to date and sustainable for the future.

The UK Parliament learnt a lot from the pandemic and has retained a number of the changes that were initially enacted at that time. The use of remote voting sparked discussions over the longer--term use of this digital application for member services, particularly in the House of Lords. The use of proxy voting mechanisms during the pandemic led to continued use in situations such as long--term sickness. The pandemic enabled members to improve their digital literacy and abilities, and show their ability to adapt to change and cope with innovations, and to have greater trust in digital professionals. Parliament learnt that it must invest in sustainable infrastructure and ongoing updating of technology, understand and exploit the value of digital tools, continue to innovate its procedures to take advantage of technology to enhance participation and representation of views to better inform our work, and it should be open to adapting parliamentary procedures and other business processes to enable greater use of technology. The implementation of a hybrid chamber highlighted advantages for inclusion, for example to aid the inclusion of disabled or shielding members.

Since the pandemic, there has been a sustained effort to maintain such trust and digital literacy gains through investing in skills and capability to ensure that digital services can be maintained, users understood and guided and advice given on innovation. This has been undertaken by working with experts outside of Parliament – through exploring academic links and working with partnership organisations and through better user research and understanding the needs of users through entering into a dialogue with them. The Transforming Digital team has also committed to working openly, acknowledging the essential nature of collaboration between digital experts and the experts

in and around legislatures who have in-depth knowledge about this and passion and ideas on how digital can enhance and enable parliaments to do things better or do more with inevitably limited resources. This has empowered and enabled the institution to do more through digital to meet its strategic needs but also to explore further, through initiatives such as enabling citizen development in Parliament and exploring the potential of AI for Parliament.

A new operating model for digital and data in Parliament

Since the pandemic, Parliament has intentionally invested in making the operating model for digital and data in Parliament more sustainable. This has primarily been undertaken through a programme called Transforming Digital. One of the TD Programme's key components has been the creation of a new **digital and data-operating model**. If an operating model describes how people, process and technology are organised and work together to achieve strategic objectives, a digital operating model does this whilst putting digital thinking up-front. The digital and data operating model has encouraged Parliament's different communities to work together even better to more effectively use digital technology and has enabled Members and staff to access what they need digitally in order to work more effectively.

Work to create the digital and data-operating model centred around the use of problem statements – a description of common barriers to Parliament effectively working with digital and data – and addressing those statements. This work has bought about a different way of funding digital investment, funding the ongoing development and iteration of products and platforms rather than the previous over-emphasis on achieving progress only through projects and programmes. The Parliamentary Digital Service organisational design has changed to more effectively support a lifecycle product and platform centred approach. The work has facilitated better decision-making by bringing together data and digital decision makers in one forum, thereby simplifying governance. It has also reduced the legacy technology estate in Parliament and highlighted the need for active management of that legacy technology on an ongoing basis. The programme has invested in digital and data skills and capabilities through improving Parliament's offer to digital staff (using an employee value proposition, examining remuneration and alignment to a digital skills framework), and by using partnerships to bring more diverse talent into Parliament's digital service.

Challenges and opportunities for representative democracy

In conclusion, parliaments and other democratic institutions are unlikely to be at the cutting edge of digital and data but these institutions need to be able to stay in touch. This article has set out some of the ways that the UK Parliament has built on the excellent response to the COVID-19 pandemic by building a new digital and data operating model for Parliament. Democratic institutions need to balance the digital and data opportunities and risks that present themselves now and in the future. Democratic institutions need to be digitally literate and keep up with developments which represent great opportunities, such as AI and generative AI in particular; using technology to more effectively carry out the core functions of democratic institutions; and taking advantage of automation to free up employees to add greater value within the democratic process.

Challenges that democratic institutions face in this regard include maintaining security and ensuring digital systems are not attacked or democratic processes threatened. Given this, continuing investment in our cyber operating model is a key priority for the UK Parliament. These institutions must also ensure that talent is attracted and retained both in the digital services but also by enhancing the digital and data skills of everyone working in democratic institutions. This will continue to be a challenge for public institutions and partnerships with commercial organisations and consultants may form part of the skills and capability mix that parliaments need to use in the future.

The credibility and reputation of the UK Parliament depends on maintaining the quality of information concerning its own business. MPs do not want deep fakes misrepresenting what they said and ruining their reputation and losing the trust of their voters. With the rise of misinformation, Parliament needs to ensure that reporting of democratic processes continues to be accurate. Parliament is the authoritative provider of information on its own proceedings, and it is important that users can access that information. If these institutions do not remain digitally literate and sustain investment in digital services this will be at risk.

In conclusion, there are opportunities ahead that Parliaments and other democratic institutions need to embrace, although these are accompanied by risks that we will need to guard against. The UK Parliament is taking steps to ensure we position our administration in a sustainable place to be able to face the future with confidence.

PART III.

THE ROLE OF PARLIAMENTS IN PROMOTING DIGITAL, DEMOCRATIC AND PARTICIPATORY LITERACY, INCLUDING OUTREACH TO THE YOUTH

SUSANNE JANISTYN-NOVÁK

DEMOCRATIC AND PARTICIPATORY LITERACY THROUGH CIVIC PARTICIPATION: THE VISITOR CENTRE AND THE DEMOCRACY WORKSHOP OF THE AUSTRIAN PARLIAMENT AND THE DIGITAL REVIEW PROCEDURE OF AUSTRIA'S LEGISLATION

First of all, I would like to thank the Assembleia da República for organising this conference and for the invitation to take part in it. Over the past ten to fifteen years, we have seen a variety of challenges and crises for parliaments and democracy. Recent examples such as Russia's war of aggression against Ukraine and an increasingly fragmented society pose major challenges to our parliaments and democratic institutions. In addition, we have experienced an ever-growing demand for participation and transparency in the democratic process. The consequences of these challenges have been new political movements, smaller political centres, and dwindling citizen support for democratic institutions. In response, policymakers have looked for answers to strengthen the relationship between democratic institutions and citizens and to find new ways of participating in the legislative processes. In this context, I would like to present some best practices of the Austrian Parliament, such as the Democracy Workshop Programme, the *Demokratikum* Visitor Centre of the Austrian Parliament, and the digital review procedure for legislation of the Republic of Austria.

The didactic basis

The educational programmes of the Austrian Parliament are based on a didactic model drawn up by the University of Vienna's chair of didactics of civic and citizenship education. The main focus is to define target groups and their needs, as well as to set up milestones for the different programmes.

The Democracy Workshop Programme

In Austria, the lowering of the voting age, from 18 to 16 years of age in 2007, was the starting point for the implementation of educational programmes for children and young adults in Parliament. Since then, there has been a growing consensus that – alongside its traditional functions of legislation and executive control – Parliament should play a leading role in providing information and transparency regarding political processes and decisions. As part of this, democratic citizen education has become a central function. Today, the Austrian Parliament offers a wide range of activities and programmes for different age and target groups.

The Democracy Workshop's objective is to educate children and young adults aged eight to 18 years of age, from elementary school to apprentices, about the basic principles of democracy and the parliamentary system, through interactive workshops, as well as to promote an understanding of democracy and politics. As with all educational programmes of the Austrian Parliament, participation in the workshops is free of charge.

The workshops are designed as a field of experimentation with different approaches to political topics. In seven workshop modules, various crucial aspects of democracy are highlighted. The broad spectrum of topics allows discussions on different interests and different approaches to the topic of democracy. Another goal of the workshops is to provide participants with learning opportunities that motivate and enable political thinking and participation. An additional goal is, therefore, to explore two further important skills for political participation: media literacy and the willingness to express one's opinion.

Examples are the *Politicians Workshop*, in which students, personally supported by Members of the National and/or the Federal Council, learn about the legislative process and the tasks of parliamentarians, and the *New Media Workshop*, in which participants explore their role and responsibilities in relation to their presence on social media, as well as discuss the topic of fake news. At the end of each workshop, participants create a media product summarising the outcome of their research. Choosing between different tools and means of expression, the students create their own newspaper, podcast, or film.

Members of Parliament regularly attend the workshops, as experts on parliamentary processes, to answer students' questions. Non-partisanship is an essential component of the programme. Therefore, the workshops are not the place to promote the parliamentarians' political agendas. Furthermore, national experts and public figures as well as international delegations regularly visit and participate in the workshops.

Since the programme's implementation in October 2007, more than 135,000 students have participated in the workshops. Approximately 8,500 students participate in the more than 450 workshops each school year. The recently-completed renovation of the Parliament Building has further expanded the programme's capacity.

This leads to the second best-practice example I would like to mention: the new Visitor Centre of the Austrian Parliament. The 140-year-old Austrian Parliament Building has been renovated over the last five years. An important goal of the renovation was to open it up further to citizens. For this reason, the 1,500 m^2 Visitor Centre "*Demokratikum – Experience Parliament*" was created. 27 interactive media stations present the Parliament and its processes in a factual and understandable manner. All content is offered in German and English.

Demokratikum – Experience Parliament

Target Group

The "*Demokratikum – Experience Parliament*" is aimed at visitors of all ages and educational levels – from elementary school pupils and students to families and senior citizens. The aim is to encourage visitors' active interest in parliamentarism and democracy, to illustrate the development of democracy

in Austria, and to awaken interest in participation. Furthermore, the manifold tasks of Members of Parliament are explained, and the Parliament is presented as an open place for conflict resolution. In order to enable people with disabilities to actively participate in and use the *Demokratikum*, extensive accessibility measures have been implemented.

The Halls of the *Demokratikum*

Agora

The heart of the *Demokratikum* is the exhibition and experience space *Agora*, which is located directly underneath the *Colonnaded Hall* in an area of 900 m^2. Digital stations provide an overview of the history of democracy and politics in Austria since 1848. Significant moments from 170 years of democratic history and its ruptures can be explored at an interactive media table. Bearing the title "*We are Democracy*", one wall of the *Agora* is dedicated to citizens. In short videos, citizens can express their wishes and thoughts on democracy and politics. Other station areas provide information about civic engagement, tasks and the everyday work of parliamentarians. On a media table, parliamentary procedures and terms are explained in an experience-oriented way. In addition, we inform visitors about current sessions of the National Council and the Federal Council as well as about laws which have been passed and other news from Parliament. A touch-guidance station with site plans and touch models of the Parliament are located in this area.

Auditorium

Next to the *Agora*, the so-called *Auditorium* is dedicated to the interplay of politics and media which is addressed at two interactive tables.

Forum

Located opposite the *Auditorium* is the *Forum* exhibition hall. The legislative process and possibilities for citizen participation, the principle of the separation of powers, and the Parliament's instruments of control are its focus. The highlight of this room is the possibility of a virtual meeting with the Presidents of the National Council and Federal Council as well as the chairpersons of the parliamentary groups to have a "digital conversation". Holograms answer questions that visitors can select individually.

Since its opening on 16 January 2023, around 207,000 people have visited the Austrian Parliament, an average of around 11,000 visitors per week.

Finally, I would like to briefly introduce a digital tool that allows citizens to participate in the legislative process directly.

Review procedures in the Austrian Parliament

Review procedures enable certain institutions (e.g. public authorities and professional associations) or the general public to have the opportunity to comment on draft legislation or other parliamentary business.

Austria implemented a pre-parliamentary and a parliamentary review procedure. In the pre-parliamentary review procedure, a completed ministerial draft for a government bill that concerns a federal law is subjected to a review. In turn, the parliamentary review procedure concerns, *inter alia*, bills and popular

initiatives that have already been submitted to the National Council. In both procedures, citizens can actively participate in political decision-making by submitting opinions on the respective topics.

Government bills, Members´ bills, committee bills, Federal Council bills, and popular initiatives must be published on the Parliament's website. Anyone may submit opinions on these items during the parliamentary legislative proceedings. This applies to the period from the introduction of the bill in the National Council to the conclusion of the procedure in the Federal Council. Statements by institutions are published, and those of private individuals only with their consent. In addition to submitting opinions, it is also possible for anyone to submit a statement of support for individual opinions on the Parliament's website. As for the objectives of the parliamentary review procedure, it is intended to increase the transparency of the legislative process and to improve the quality of legislation. For sensitive political issues, the procedure also serves as an indicator of public opinion.

The public makes extensive use of the possibility to participate in the review procedures. In 2022, approximately 250,000 comments and 470,000 statements of support were submitted. Peaks in participation were particularly noted for initiatives related to the COVID-19 pandemic.

Prospects

These figures show that low-threshold review opportunities on the Parliament's website have quickly and effectively become a central form of public participation in democratic discourse. However, both the pre-parliamentary review procedure and the parliamentary review procedure offer potential for continuous improvement in public participation. In order to expand this potential, innovations in digitisation are necessary.

Thus, administrative processes in the Parliamentary Administration and the preparation of participation opportunities on the Parliament's website are constantly being evaluated and optimised. In the long term, the extent to which artificial intelligence can support parliamentary deliberations in the committees will be examined.

Conclusion

An increasingly fragmented society and an ever-growing demand for participation and transparency in the democratic process have created challenges for our parliaments. To strengthen the relationship between democratic institutions and their citizens and to find new forms of democratic participation, answers must be found quickly and effectively. Against the backdrop of a rapidly evolving digital world, legislative processes will increasingly move into a virtual space. Digital education is the key to shaping and dealing with democracy in the future. The Austrian Parliament strives to support democratic, participatory and digital literacy through civic participation. Its Democracy Workshop, Visitor Centre, and digital review procedure for legislation provide best practices in this endeavour.

ALEXANDRE QUINTANILHA
THE YOUNG PEOPLE'S PARLIAMENT PROGRAMME

I'd like to start by saying that Portugal will next year be commemorating its 50th anniversary of the establishment of democracy. To many of our citizens, this will be a memorable event.

The country experienced a stifling inquisition for almost 300 years, followed by considerable political and economic instability for another century, ending with a dictatorship that lasted almost half a century. The establishment of the current democracy in 1974 was a formidable achievement. And I am fully convinced that this has been even more important for women than for men, because while all our citizens gained political freedom, women gained all kinds of other liberties and rights that they didn't have. And I am delighted to report that they took full advantage of these.

I was asked to talk about the *Parlamento dos Jovens* (Young People's Parliament), which was established in 2006 but in fact existed prior to that. In fact, it started as a Kids' Parliament in 1995, which then became established as a yearly event, the result of a collaboration between the Assembleia da República of Portugal, our Parliament, and the school system. It involved Portuguese schools, not only from mainland Portugal, but also from the Azores and Madeira as well as Portuguese schools from around Europe and outside of Europe. In a system that comprises twelve years of schooling, before entering Higher Education, the Young Peoples's Parliament involved pupils from the 5th to the 12th grade.

The idea was to increase the awareness of these pupils as to how the elected representatives of citizens construct the laws that govern the country. What is more, I believe that it is currently — without any exaggeration — the largest programme dedicated to active participatory citizenship in Portugal. It was intended to stimulate the civic and political participation of young people in the understanding of the construction of the electoral process and the drawing up of bills which might

or might not become laws, to influence and to change the existing laws that the country had or to propose changes or new laws for the future on subjects that are chosen by schools every year.

Let me give you a couple of examples of the topics that have been chosen by the schools in the last 15 years.

In 2007, the topic was the impact of television on young people and the problem of pupils abandoning school prematurely. In 2008, the choice involved alternative sources of energy for an economy with increasing energy needs and an approaching climate crisis. In 2009, the topic was the impact of nutrition on health. In 2010, it was sex education. In 2011, it concerned violence in the school milieu. In 2014, the selected topic had to do with drugs and addiction. In 2018, the issue was gender equality, while in 2019 it was climate change, once again. In 2020 and 2021 — the pandemic forced us to combine these two years — the topic chosen was domestic violence and violence during dating. Then, in 2022, it had to do with fake news. Finally, last year attention was focused on issues of mental health in youngsters — what have been the challenges and how they have been dealt with. I hope this condensed list gives you a notion of the broad number of topics of concern and the relevance of the challenges that the young experience.

The tasks are organized and carried out at three levels. Firstly, at the local school level, then at the regional level and finally at the national level, when the pupils' representatives travel to the National Parliament in order to present and debate their motions and vote.

At the school level, they start with the election of their own representatives, the approval of their school recommendation that they want to put forward, and the election of those that will be representing that school at the regional level.

At the regional level they invite members of the National Parliament to come to their schools to help them clarify doubts that they may have. They then approve their regional recommendations, elect their representatives to the national session and vote on the theme for the following year.

At the national level, they come to Lisbon, divide themselves into several committees and discuss the motions over a full day. At the final plenary session, held in the Parliamentary Chamber, they have, once more, the opportunity to address and to listen to parliamentarians from all the political parties and conclude by approving their final recommendation.

To give you an idea of how this programme has evolved over the years, let me mention just a few numbers.

The number of schools has increased steadily since 2006. In 2006, there were 445 schools involved. This year the number of schools was 1028. The participation of parliamentarians from the National Assembly that go to schools and meet with students has also increased steadily: from 340 sessions in 2010, this year this figure was up to 550.

The number of students that get involved in electing their representatives every year has also steadily increased. Last year, 216 000 students elected 264 representatives to come to the Parliament in Lisbon. Having participated in several of these debates with the school kids has confirmed what I have always thought — that often they come up with unexpected and interesting questions. Questions that are difficult even for parliamentarians themselves. A few decades ago, I taught a course of Physiology to non-science majors at UC Berkeley and had the same experience — some of the most interesting questions that anyone has ever asked me came from people that were not in science degree programmes, but wanted to obtain clarification on issues that puzzled them. Here you have an analogous situation. Young people have wonderful questions, many of which have no definitive, clear, or simple answers, but we hope that they will continue to ask them, for that is the way democracies will continue to grow and flourish.

Bruno Dias Pinheiro: — Thank you very much, Mr. Quintanilha. As you can see from the enthusiasm of Mr. Quintanilha, we are quite proud of this Young People's Parliament programme.

We would be keen to know if you have similar programmes connected to your parliaments, that you can share here as best practice. I will now give the floor to Maria.

Maria, as I mentioned in the beginning, is from the Spanish Congress of Deputies, and she will present a paper about promoting digital and participatory literacy to fight disinformation in a digital era.

We now have 16 minutes before the coffee break, so I will open the floor, in case anybody has any questions. I know it's Saturday morning and it is a bit difficult to break the ice... But I see Achilles has a question. The others can perhaps think about questions as well. Achilles Emilianides, please go ahead.

Achilles Emilianides: — Thank you very much. These were very stimulating presentations.

I would like to ask two questions. The first question is about the Young People's Parliament programme. I actually found your presentation very interesting. It seems the Portuguese paradigm is much more advanced than other paradigms we have in Europe.

Now, my main question would be: do you have any response to the common criticism regarding such initiatives, namely that they rely too much on tokenism? Namely, are there any concrete examples where the voice of the young people was actually heard in parliament, not as a symbolic gesture, not in theory, but by the parliamentarians actually taking into account, in specific legislative initiatives, what was suggested?

It would be very interesting to know this, because the standard response to this type of initiative in Europe is that they do not have any actual impact on the ground.

Bruno Dias Pinheiro: — Mr. Quintanilha, perhaps you can answer the question on the Young People's Parliament programme?

Alexandre Quintanilha: — The question, as I understood it, was: *What kind of an impact does the exercise of the "Parlamento dos Jovens" have on the laws that the country is governed by?* A very pertinent question. I'd like to answer by saying two things.

One of the impacts is more difficult to measure since it has to do with their growing understanding of the process of drafting a law; how to make proposals on different issues, how to deal with the fact that people often have opposing views about many issues, and how to reach a consensus. As you might expect, what they quickly recognize is those individuals more on the right of the political spectrum usually think that there is too much regulation whereas people on the left of the political spectrum usually feel that there's not enough regulation. This is the case when it comes to nutrition, public health, energy sustainability, agriculture, or the economy. It might be the opposite when dealing with gender issues or immigration.

The second point I'd like to make is to provide some evidence of the impact their recommendations had. The discussion that took place on health and nutrition led to a change in the food that is served in canteens in schools all around the country. Many political parties introduced proposals to change the legislation and the outcome was that the Ministry of Education advised schools to change the kind of food that was provided to kids in schools. I might add that, of course, that the topic was already being discussed within many of the political parties, but the visibility of the recommendations of the *Parlamento dos Jovens* was important.

The second case has to do with drugs. The pressure regarding the whole issue of cannabis has been sufficiently strong to lead several parties to place this discussion in their agendas. Beginning next year, this whole issue of whether cannabis should be qualified as a recreational drug or not will be widely discussed.

Of the two examples I'd further like to give you, one has to do with violence during dating, which also ended up with changes in the way schools deal with the question of violence and bullying that takes place. There is a greater level of awareness and capacity to act at much earlier stages of the problem.

And the last example is on a related issue, namely mental health. The need to increase the presence of psychologists in schools was recognized and is currently being implemented. I should add that the Ministries with competence regarding the issues that are raised, are invariably required to react, and respond to the proposals that are put forward by the *Parlamento dos Jovens*.

It has become very clear to many of us, parliamentarians and citizens, that in terms of the general understanding of how laws get developed and in terms of required changes to specific laws, as a result of some of these discussions, that the *Parlamento dos Jovens* is a success story. It has become an important project for active participatory citizenship in Portugal.

Bruno Dias Pinheiro: — Maria, if you wish to intervene and comment on any of the topics raised.

Maria López: — This is the most important aspect.

My question would be if there has been a change in the legislation based on comments made by young people, but you answered it in a perfect way.

Bruno Dias Pinheiro: — Finally, Susanne, you had a couple of questions directed to you.

Susanne Janistyn-Novák: — We are also convinced that all the programmes presented perhaps do not have a direct impact but an indirect impact in the long run.

We also see that, for example, school classes don't come to the Parliament just once. They come more often. And if they have taken part in our programmes for four times, then the president of the National Council rewards them for the efforts they have made. So I think the children will always keep this in mind.

Alexandre Quintanilha: — I ask myself the same question: is the Young People's Parliament programme just something that allows them to play a little bit around the idea of how laws get developed?

I don't think so. I think that is one part of it, but there's nothing wrong with playing. I think playing is a very educational process. And being able to confront ideas and have parliamentarians go to schools to answer specific questions from the kids ends up making them more participatory in the political system.

The effects of this are probably in the long term. You'll find that when kids grow up — we hope — they will become more aware of their contribution to citizenship in the countries where they are.

But it's very encouraging to see that, in most countries that we've heard of so far, this involvement of schools and young people is being taken very seriously. And I think that's a good sign.

Bruno Dias Pinheiro: — Yes, Maria?

Maria Kamilaki: — This is very important.

I think what we also need to do, at a research level, is to measure the effectiveness of our interventions. All parliaments do many things, but do we have this follow-up stage when we bring the schools back, have a discussion with them, see whether our digital resources have been taken advantage of in a proper manner, in a creative manner, to inspire new ideas? And this meta-analysis of the results of our interventions and our digital tools is something we should also focus on.

Bruno Pinheiro: — Thank you very much. I think this was a very insightful discussion.

MARÍA LÓPEZ MORENO DE CALA

PROMOTING DIGITAL AND PARTICIPATORY LITERACY TO FIGHT DISINFORMATION IN A DIGITAL ERA

I. The impact of disinformation in parliamentary democracies: if democracy is a conversation, *who is talking*?

Figures show that overall trust in news in Spain has decreased to only 33 per cent[1]. This represents a decrease in trust of nearly 40 per cent in the past decade. This is related to the changes in the sources of information that we receive: the written press (print) has gone from 60 per cent to just 25 per cent, whereas social media has risen from 20 per cent to 50 per cent. Therefore, nowadays the main sources of information are online (including digital and social media), which represent 74 per cent of the total out of the sources of information that we receive. The same is happening in the rest of the world.

A 2019 *Ipsos Global Study*[2] concluded that one third of adults around the world trusted traditional media (newspapers, magazines, television, and radio) less than they did five years ago, and that only 40 per cent of Americans trusted mass media to report news completely and accurately. The study established that people that received news through social media were less informed than the people that received it through written media (newspapers or magazines). They posed several questions on general knowledge and the people that were informed through written media answered most of them, whereas the people that were informed through social media had a much lower level of knowledge about what was happening in politics.

[1] *Reuters Institute Digital News Report 2023.* Reuters Institute for the Study of Journalism, University of Oxford (with core funding from Thomson Reuters Foundation).

[2] *CIGI-IPSOS Global Survey – Internet Security and Trust 2019 Part 3: Social media, Fake News and Algorithms.* Ipsos Public Affairs, Centre for International Governance Innovation.

Similarly, a 2020 survey showed that only 17 per cent of those who depend on social media for political news had a high level of political knowledge (after posing nine questions on general knowledge), compared to approximately 41 per cent and 42 per cent of those who used the radio or print media, respectively, as their main sources of information. If people are less informed, they are less capable of fighting disinformation, and their public trust in democratic institutions decline, because they are also less capable of understanding critical issues that will eventually inform their decision to take part in an electoral process and vote rationally based on corroborated facts.

If democracy is a public conversation, it is important to understand who is participating in this conversation. Technological progress has made it possible to engage in a conversation with an increasing number of unverified actors all over the world. Any individual can share content globally in real time and become an information actor with total anonymity. This is one of the main changes that social media has brought, when compared to written newspapers, where the source of information is always known.

On the one hand, this can be considered very democratic given that nowadays almost everyone has access to a large free market of ideas and information, but it is also a considerable risk that should not be underestimated, because the chances of spreading *misinformation, disinformation, propaganda, and fake news*[3] increase greatly and so does polarisation. People receive or read only the information they already believe in. The algorithms on social media platforms behave in a way that consists of you receiving the information you want to consume, so if you have shown some interest in a piece of news containing propaganda and fake news, the social media platform will give you more propaganda and fake news, so you will eventually end up believing that this is the truth or at least your truth. This gets worse with the so--called bots, or bot accounts, which flood the internet with false news that amplify polarisation, making everyone read only that which resonates with their beliefs. As was said above, this limits the ability of citizens to access verified sources of information and damages public trust in democracy.

A 2021 Special Report from the Committee on Democracy and Security of the NATO Parliamentary Assembly (*Bolstering the Democratic Resilience of the Alliance against Disinformation and Propaganda*), warned about the involvement of an increasing number of actors in the spreading of disinformation and propaganda, including authoritarian States like Russia, China, and Iran, to generate tensions in allied democracies and promote their governance models abroad[4]. Alongside this, some non--state actors, including terrorist organisations, conspiracy theory movements, far right and informal groups, are developing sophisticated technologies to spread disinformation, propaganda, and fake news, attempting to undermine democratic values. The flood of information, as it is designed, is so overwhelming, that it is exceedingly difficult for uninformed citizens to distinguish between facts and fiction and socially agree on common verified facts that should inform their participation in democracy.

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[3] **"Disinformation"** refers to "the deliberate creation and dissemination of false and/or manipulated information with the intent to deceive and/or mislead" (NATO 2020).
"Propaganda" is defined as "information, specially of a biased or misleading nature, used to promote a political cause or point of view" (NATO 2013).
"Misinformation" refers to "false or misleading information spread without the intention to deceive" (Colley *et al.*, 2017).
"Fake news" refers to "verifiably false information that is spread intentionally" (West, 2017), similar in meaning to "disinformation" in its origin, but now increasingly used to qualify "genuine information that one disagrees with" (Colley *et al.*, 2020).

[4] *Bolstering the Democratic Resilience of the Alliance against Disinformation and Propaganda.* Special Report – Lidia Sanchez (United States), Special Rapporteur, Committee on Democracy and Security of the NATO Parliamentary Assembly, 10 October 2021.

There are numerous examples of how social media platforms work to generate mass movements:

- In 2011, the anti-austerity movements in Spain, also referred to as the 15-M Movement (*15th of March movement*), against austerity policies in Spain that began around the local and regional elections of 2011 and 2012, gave birth to a new political party in Spain (*Podemos*), after a series of protests, demonstrations and occupations triggered through social media, in the midst of the discontent caused by the two main political parties in a traditionally bipartisan system.

- The Arab uprisings in 2011 and 2012, which generated a wave of demonstrations in the Middle East and North Africa, gave hope for democracy to many countries, and social media were reported to have played a significant role in facilitating communication and organisation among protesters. A Research Group[5] from the *Project on Information Technology and Political Islam* found that online conversations often preceded mass protests and played a critical role in global uprisings, regardless of their previous levels of internet usage. In its origins, the April 6 Youth Movement, the largest online human-rights activist group, used a Facebook campaign "*We are all Khaled Said*", to call upon young Egyptians to protest.

- The Brexit referendum in 2015 and 2016, with the famous logo *Take back control*, was promoted largely through social media[6]. It has been established through numerous studies and TV reports that the Leave campaign's usage of social media was crucial in the outcome. The use of disinformation and false anti-Islam sentiment misleading more isolated and regional parts of the UK, was effective in convincing individuals to participate and feel more integrated in the debate in Britain than ever before, using targeted messages and confirmation bias as techniques. Alongside this, Leave supporters were prominent across Twitter and Instagram.

- The referendum in Catalonia in 2017 was said to have allegedly received help from Russian bots, aiming to destabilise EU democracies.

- The conspiracy theories around the COVID-19 pandemic in 2020 extended the belief among many people that vaccines were not useful, and even harmful.

- The events leading to the assault of the US Capitol building on 6 January 2021 were a consequence of a series of messages spread through social media.

Given this, the paradox is that, with more information than ever, we are less informed. However, it is not easy *to monitor disinformation and misinformation* without damaging democracy itself. Freedom of information, freedom of expression and freedom of speech are fundamental rights of any democracy. Freedom of expression lies at the very core of democracy. As an example, the Spanish Constitution establishes the right to receive "*truthful*" information, but not the right not to receive false information. This is a huge difference. Truthful information applies to traditional media, the actors of which must prove that they employed due diligence in obtaining and constructing a piece of information, through

[5] Philip Howard; Aiden Duffy; Deen Freelon; Muzammil Husain; Wil Mari; Marwa Mazaid, *"Opening Closed Regimes: What was the role of social media during the Arab Spring?"*, (2011).

[6] Stephen Yan, "Social Media and Brexit: the role of social media in the outcome of the UK's EU Referendum".

verifying the sources of information and the facts. However, this may turn out to be false information. And the ways of presenting the information are always subjective and biased. Of course, disinformation and fake news, which deliberately try to deceive, are not covered by this right. Responsibilities may arise if, as a result of this, someone gets hurt, alleging a series of constitutional rights (*the right to honour or the right to health and personal safety* – e.g., *in the case of COVID-19 fake news that led some people to decide not to get the vaccine or that even suggested drinking bleach as a form of combating the disease*). However, outside of these cases, truthful information is not the same as true information.

In fact, a political form of speech is a mixture of information, misinformation, manipulated facts, subjective opinions, and sometimes pure lies. There is a constitutional right "to lie" in Parliaments. Every Member of Parliament has the right to express an opinion without being persecuted for the opinions expressed during a parliamentary debate in the exercise of their office. They even have a right "to insult" with the sole limit being slander, violence, or coercion (that generates "a clear and present danger" to citizens). As Hannah Arendt said: "Secrecy, the mysteries of Government and deceit, deliberate falsehood and pure lie, as legitimate means to achieve political goals/purposes, have been with us since the beginning of written history".

If there is a right to lie, the question is if we should use *independent fact-checkers* to help citizens make a rational decision in an electoral process. Misinformation and lies have truly always been there, but now social media spreads and amplifies misinformation with such speed, through algorithms and bots, that it constitutes a clear danger for the ability of citizens to form a reasoned opinion to exercise their right to vote. The European Commission approved *The Strengthened Code of Practice on Disinformation* in 2022, which advocates for greater transparency regarding the algorithms used by media platforms and establishes limits to incomes obtained from publicity derived from fake news.

This was signed by Facebook, Google, Microsoft, and Twitter. These independent fact-checkers have already adopted certain measures to prevent fake news:

- Twitter suspended Donald Trump's account during the US Capitol events leading to the assault because they considered there was a risk of violence.

- The Spanish political far right party Vox account was also suspended for 8 days during the Catalan elections because it was considered a risk to immigrants because of the messages that were being sent.

- Facebook also did this with Bolsonaro in Brazil.

But could this be considered private censorship? Is this against freedom of information? Is it against freedom of speech? And this leads to the final question from a parliamentary perspective: *what can institutions do to fight disinformation*?

II. Recommendations on how parliaments can fight disinformation

1. In all Parliaments worldwide, we are working at a higher level of ***higher transparency***, as part of a participatory democracy. Now we have websites in every Parliament with ample information

on the activities of Members of Parliament, their public salaries, the committees they are part of, the bills they have passed, the legislative and non-legislative proposals they have made. Almost every Member of Parliament has a social media account, and the plenary sessions can be followed through streaming. Members of Parliament increasingly engage in social media through their public accounts. But this does not mean the conversation is a healthy conversation or even an informative one. Most of this engagement consists of insults from citizens to the Members of Parliament and political propaganda from the Members of Parliament to the public. It is better than zero information, though. And citizens need to receive information to be able to form a reasoned opinion.

2. Another thing we are working on is the ***regulation of lobbies***. In 2020, a Code of Ethics was approved in the Spanish Parliament, so that Members of Parliament are obliged to keep a *digital agenda* and to upload every meeting they have with interest groups that may want to influence the legislative procedure on the website. However, the reality is that only the Speaker of the Parliament has a real digital agenda. For the moment there is not a culture of using this system, since they are not used to this, and there is not a real demand from the citizens to see the agendas of Members of Parliament. The Spanish Parliament is also trying to have a *legislative footprint*, which consists of establishing a digital log on all the amendments that have modified a law and that were presented by lobbies through political groups. Parliamentary political groups have to say which lobby has proposed this amendment and this information is recorded for any researcher who wants to study the procedure leading to the passing of the law, thereby enabling them to actually know which interests were behind the approval of a particular amendment.

3. It is also important to ***promote a digital culture in parliaments***. In the Spanish Parliaments we have already put in place the *electronic processing of amendments*, and we have a very broad *remote voting system*.

The Spanish Constitution establishes that attendance is required for voting and taking the floor during a plenary or committee meeting in its Section 79. In 2011, however, the fight for women's rights managed to re-interpret this constitutional obligation and modify it with another constitutional obligation and right to vote that every Member of Parliament has according to Section 23 of the Constitution. In other words, women Members of Parliament claimed that being pregnant and, at some later stages of pregnancy, not being able to physically attend the plenary sessions, did not justify that they completely lose their constitutional right to vote in Parliament. The same was argued during maternity leave, which they believed they had the same right to benefit from as any other women without losing their possibility to vote because of that. The debate that followed resulted in the first reform of the Standing Orders of the Congress of Deputies in 2011, consisting of establishing a remote voting system for three very specific and restricted cases: pregnancy, maternity or paternity leave and justified cases of serious illness. This was the situation for 9 years, until the pandemic arrived in 2020. The emergency health regulations kept everyone in lockdown. Given this, and taking advantage of the fact that a remote voting system that worked already existed, it was extended to all Members of Parliament. Everyone during the pandemic voted remotely, and only those who had to take the floor in any given debate were allowed to be physically present within the premises of the Congress of Deputies.

The pandemic finished and Parliament began working at full capacity again. However, once it was clear that it was technologically so easy to establish a system where everything may be voted upon remotely, new requests were made. A very long sought after request from parliamentarians that were members of international delegations was restored and put once more at the top of the list, namely that international official travel must be considered a justified reason for voting remotely. And this was made possible through a second reform of the Standing Orders in 2022. Extremely sensitive matters concerning national policy had been increasingly discussed in international assemblies (e.g., the Catalan separatist movement, in the Parliamentary Assembly of the Council of Europe or in the Inter-parliamentary Union). And they were debated on many occasions without the presence of Spanish Members of Parliament because they had to be home voting.

The result was that what was meant to be an exceptional and very restrictive system has turned out to be a very loose concession of justifications for remote voting. That being the case, the challenge is to be vigilant on whether an inappropriate extension of remote participation enabled by digitalisation, may damage the capacity of representative democracies to deliver their messages to their citizens. The lower levels of trust in politics and political disaffection worldwide are leading some analysts to believe that we are heading towards an era of post democracy or post representative democracy.

New forms of democracy favoured by digitalisation, such as deliberative polls, participatory budgeting, crowdsourcing, online petitioning, consultations, and online forums, may contribute to confronting these threats to democracy itself. Digitalisation may broaden the way in which people can participate in politics. But democracy is also and mainly free speech and legislative scrutiny and oversight. The pandemic showed some of the threats of a merely digital democracy. Emergency measures with an exceedingly high level of restrictions on fundamental rights were often adopted by governments without a sufficient level of parliamentary oversight. For many, far from weakening democracy, the pandemic, and the limitations it imposed on “normality”, made people understand *why democracy is important*.

And democracy is consubstantial with physical presence. The right to assemble and the right to vote were long-sought achievements. It took 7 centuries to consolidate representative institutions. As a contrast to monarchies, openly airing differences of opinion was a much better way of governing. And until now democracy is a form of government that has found no serious competitor. Statistics show that during the pandemic, no major shift in democratic attitudes was detected. People did not want to overrule democracy, but to demand that it worked better. Democracies must advertise themselves. And the temptation of reducing attendance in a very significant way, may lead to more political disaffection if people perceive that agreements are totally made beforehand.

However, the truth is that with all the restrictions on travel, and the growth in all the new webinars and Zoom or Teams meetings, what we observed is that such a type of technology can be very useful in maintaining existing bonds, but it very poor at generating new ties with new actors in the international arena. So now we are mostly back to face-to-face meetings, favoured by the new regulation of remote voting.

4. This leads to the importance of ***parliamentary diplomacy*** as an extremely useful tool to fight disinformation. In-person meetings have always been useful to extend the values of democracy and to explain why it is important to preserve it. But now we have so many more tools than before. For instance, the intervention of president Zelensky in 2022 via videoconference in the plenary sessions of multiple allied countries was a useful way to fight disinformation. Nowadays, wars are also fought and sometimes won on social media.

The first meeting of the Spanish parliamentary presidency of the Council of the EU that took place in the second semester of 2023 was dedicated to celebrating the International Day of Parliamentarism, 30 June. Among the conclusions, the Speakers of Parliaments stressed that we were at a crucial moment for the development and consolidation of democracy worldwide in the face of new challenges and threats. They noted with concern threats such as the assault against parliamentary institutions, foreign interference in democratic and electoral processes, and disinformation generated by social media that disrupts social debate and alters democratic conversation. They also noted challenges such as digitalisation, artificial intelligence, the rise of extremism and populism, propelled by disinformation and false news, the deterioration of democratic quality in many countries, extreme polarisation, and the emergence of authoritarianism. Furthermore, they recalled that totalitarianism also uses democracy and parliaments for its establishment and consolidation. They also warned of the distortion of reality for citizens that must take decisions in electoral processes, using the tools provided by social media. And they welcomed the adoption of the new *Digital Markets Act* and the *Digital Services Act* of the European Union, and the work towards a *European Artificial Intelligence Act*. They recognised that the benefits of digitalisation are obvious, but its disproportionate and unbalanced use in the market to access such services may have a negative impact on democracy and fundamental rights. Finally, they supported extending to all parliaments initiatives such as the *European Democracy Action Plan*, based on the *Action Plan against Disinformation*, to stop disinformation campaigns, and for the protection of the quality of information and democratic systems and public debates.

5. In this sense, it is also particularly important to ***grant access to wireless internet and technology*** to the general population. The technological gap increased in the pandemic and because of the war in Ukraine and the energy crisis, many people have been left with extremely poor access to the internet and electricity. This makes them more vulnerable to disinformation because they have so little access to various sources of information.

6. Moreover, and in connection with this, ***better digital literacy educational campaigns should be promoted*** because there are still many people with very limited abilities to use technology or to look for information on a website, which defeats the purpose of greater transparency. Indeed, the best guarantee against disinformation is to **empower citizens to protect themselves from fake news**. As we have seen, it is difficult for public authorities to really monitor fake news and we also need to protect freedom of information which is a sacred constitutional right at the core of modern democracy.

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MARIA KAMILAKI

THE HELLENIC PARLIAMENT LIBRARY AS A PARTICIPATORY SPACE FOR NON-FORMAL EDUCATION AND LIFELONG LEARNING: CURRENT PRACTICES AND FUTURE CHALLENGES

1. Introduction

Given that parliamentary libraries play a crucial role in providing information support to decision-makers around the world,[1] digital literacy is for them linked to central values of parliamentarianism, such as democratization of knowledge and information, transparency, accountability, outreach and social inclusion. Digital tools serve as alternative ways of engaging with users, thus creating new opportunities to make libraries housed by parliaments more meaningful and visible, not only to legislators and other in-groups, but also to wider audiences.[2]

This expanded role of parliamentary libraries actually involves a recontextualization of traditional aspects of library work, such as their contribution to literacy and education,[3] promotion of human rights and social justice,[4] user training[5] etc., in alignment with the wider framework of the Sustainable Development Goals (SDGs)-2030 Agenda.[6] The unprecedented conditions created by the COVID pandemic have highlighted the considerable importance of intensive digitization and remote digital services (e.g. new search possibilities through browsing, metadata, and sophisticated OCR tools),[7] among others, for parliamentary libraries, for whom remaining open and adjusting to the unprecedented conditions, had immediate repercussions on democratic governance and oversight.[8]

[1] C. Ménard, "Challenges and opportunities for parliamentary libraries during COVID-19: A case study of the National Assembly of Quebec Library", *IFLA Journal* 48/1 (2022): 9-19.
[2] S. A. Inamdar, "The role of libraries in promoting Digital Literacy in the 21st century", *Journal of Emerging Technologies and Innovative Research* 8/8 (2021): 502-505, http://www.jetir.org/papers/JETIR2108666.pdf.
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[6] See: https://sdgs.un.org/goals.
[7] E. Haasio & E. Kannasto, "Covid-19 and its impact on Finnish public libraries", *Qualitative and Quantitative Methods in Libraries* (2020): 3-19; K. Martzoukou, "Academic libraries in COVID-19: A renewed mission for digital literacy", *Library Management* 42(4/5) (2021): 266-276.
[8] S. Mills, "'Where no counsel is, the people fall': Why parliaments should keep functioning during the corona virus crisis" (2020), https://theconversation.com/where-no-counsel-is-the-people-fall-whyparliaments-should-keep-functioning-during-the-coronavirus-crisis-134772, accessed 19 June 2022.

In this light, the aim of this paper is to present the role of the Hellenic Parliament Library as a participatory e-space for non-formal education[9] and lifelong learning[10]. Taking into consideration that *Digital Competence*[11] is one of the Key Competences for *Lifelong Learning*, this presentation refers to four out of the five digital competence areas, as defined within the *European Digital Competences Framework*:[12] a) information & data literacy, b) communication & collaboration, c) digital content creation, and d) problem-solving. Reference to security, as the fourth competence on the list, is not made, due to lack of relevant input. The competences are a combination of knowledge, skills and attitudes – in other words, they are composed of concepts and facts (i.e. knowledge), descriptions of skills (e.g. the ability to carry out processes) and attitudes (e.g. a disposition, a mindset to act).

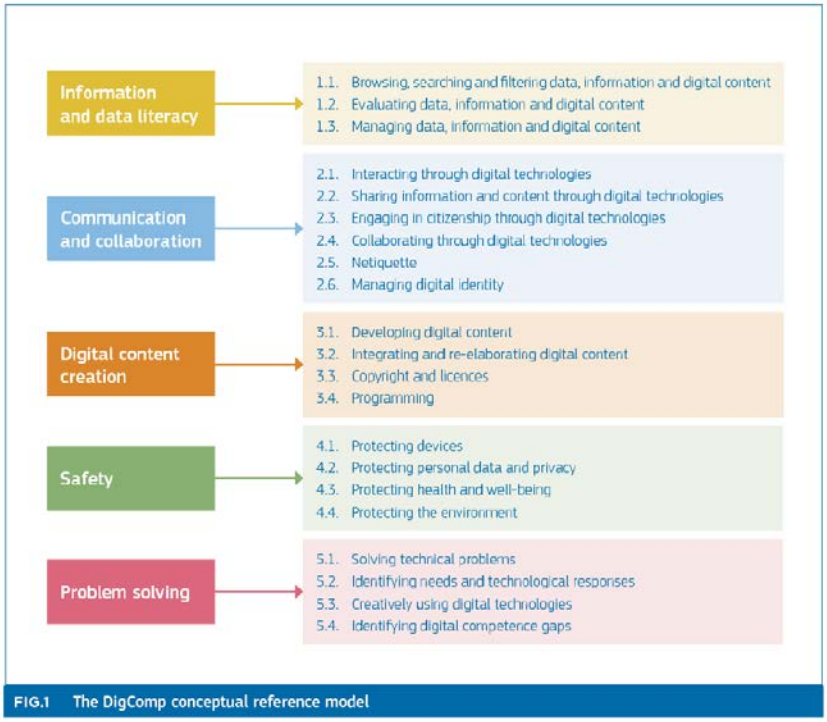


FIG.1 The DigComp conceptual reference model

Box 1: The five digital competences of the European Digital Competences Framework[13]

[9] *Non-formal education* refers to planned, structured programmes and processes of personal and social education for young people, designed to improve a range of skills and competences outside the formal educational curriculum (Council of Europe, available at: https://www.coe.int/en/web/european-youth-foundation/definitions; cf. Recommendation 1437 (2000) on non-formal education).

[10] The European Commission's White Paper "Teaching and learning: Towards the learning society" [COM (1995) 590 final] defined *lifelong learning* as "the on-going access to the renewing of skills and the acquisition of knowledge". Lifelong learning is a broad concept, viewing an individual's education as flexible, diverse and age-independent. See: https://www.eurofound.europa.eu/en/european-industrial-relations-dictionary/lifelong-learning.

[11] First defined in 2006, and after an update of the Council Recommendation in 2018, digital competence involves "the confident, critical and responsible use of, and engagement with, digital technologies for learning, at work, and for participation in society. It includes information and data literacy, communication and collaboration, media literacy, digital content creation (including programming), safety (including digital well-being and competences related to cybersecurity), intellectual property related questions, problem-solving and critical thinking." (Council Recommendation on Key Competences for Lifelong Learning, 22 May 2018, ST 9009 2018 INIT).

[12] R. Vuorikari, S., Kluzer & Y. Punie, *DigComp 2.2: The Digital Competence Framework for Citizens – With new examples of knowledge, skills and attitudes*, EUR 31006 EN (Luxembourg: Publications Office of the European Union, 2022). Available at: https://op.europa.eu/en/publication-detail/-/publication/50c53c01-abeb-11ec-83e1-01aa75ed71a1/language-en.

[13] Cited in Vuorikari *et al.*, *ibid.*, p. 4.

2. Some background information: the history and mission of the Hellenic Parliament Library

The Hellenic Parliament Library is coextensive with Greek Parliamentarism, since it was founded during the first parliamentary session following the voting of the 1844 Constitution. In 1846, Georgios Tertsetis, a scholar and jurist from Zante (in the Ionian Islands), was elected as the Library and Archives director. During his office, the institution became a leading centre of letters. However, the development of the Library of the Parliament owed a lot to Timoleon Philemon, a Member of the Parliament representing Attica, a lawyer and publisher of the newspaper *Aion* (i.e.,'Century'). In 1875, Philemon was elected treasurer of the Parliament and during his tenure (1875-1887) he managed to increase the number of library volumes from 5,000 to 100,000, by requesting foreign and domestic grants.

Today, the Hellenic Parliament Library, drawing on its longstanding historical tradition and operating under the scientific supervision of the President of the Scientific Council of the Parliament, is a living, growing organism, open to the general public. Due to the large volume of its collections and its numerous activities, it is housed in three buildings: a) the Main Library at the Parliament Mansion[14] (Megaron Voulis at Syntagma Square), b) the Benakeios Library,[15] also situated in the city centre (Anthimou Gazi St. 2), currently undergoing renovation works, and c) the City Library,[16] housed at the former Public Tobacco Factory at Lenormant St. 218, in the western area of Athens. Although spatially separate, all three buildings form a unified digital space.

The Hellenic Parliament Library contemporary mission is to achieve an interconnection between Parliament and citizens concerning information and knowledge. The values inspiring this mission are openness, transparency, credibility, civic engagement, inclusion and equity. The main goals set by the Hellenic Parliament Library to implement its mission, are as follows:

1. efficient support for parliamentary work through the collection, documentation and archiving of materials and data produced by parliamentary procedures and services, coupled with the provision of timely, reliable and non-partisan information on parliamentary issues, as well as a wide variety of other topics of interest;
2. maintenance, conservation, documentation and promotion of the Parliament's cultural capital, through outreach activities (educational programmes, seminars, book labs and reading groups etc.).

[14] The Parliament Mansion Collection holds titles in politics, economic & social studies, law and history, to support legislative work, coupled with a reference unit (encyclopaedias, dictionaries, handbooks etc.). Moreover, it houses the Proceedings of Parliament since 1844, the Gazette of Parliamentary Debates (1862-1967), the Senate Proceedings (1844-1864 and 1929-1935), the Gazette of the Senate Debates (1929-1935), the Parliament Archive (1927-1966), records of the National Assemblies, the Revisions of the Constitution and records of the Committees on the Revision of the Constitution, Committee Records, public and state documents from the 19th and the 20th century, etc. Furthermore, the Special Collections Department contains archetypes, old prints and rare editions from 1476 to 1900, as well as 19th-20th century political leaflets, historical maps, works of art and heirlooms. The most emblematic archival collection and a basic source for the study of the Greek Revolution, the Archives of the Greek Regeneration, comprise an impressive textual body of 38 codices and 10,000 loose-leaf documents (Provisional Constitutions, laws & documents issued by the Legislative or the Executive, inter-ministerial correspondence, etc.), dating from 1821 to 1832.

[15] The Benakeios Library materials include the Psycharis Collection (35,000 volumes), along with volumes on mathematics, physics, anthropology, philosophy, theology, medicine, Greek and foreign literature and arts. The Library has accepted the donation of 30 personal libraries and 20 private archives of public figures, reflecting the public service and the personalities of their producers and/or collectors, while also shedding light upon aspects of the social, political and cultural life of the past two centuries.

[16] The City Library meets the needs of the general public through recent editions of Greek and foreign literature, sciences, etc.; it is there where the Press Collection is also kept, one of the largest collections of Greek and foreign newspapers and journals from the 18th century to the present.

It is evident from the above-mentioned goals that, contrary to other parliamentary libraries of EU Member States, the Hellenic Parliament Library has an idiosyncratic, hybrid identity, as that of a special, parliamentary-oriented library and at the same time a general library, addressing wider audiences. Its users include not only MPs, scientific assistants and administrative staff, but also researchers, members of the academic community, pupils and students, as well as plain citizens. This particularity has a direct impact on its role as a digital space, as will be shown in due course.

3. The Hellenic Parliament Library and digitization: a long-standing relationship

To explain the formation of a digital e-space in synchronic terms, a brief outline of the Hellenic Parliament Library's diachronic digital culture is necessary. The Library first entered the digital area in 1984, when a Microfilm Department was established, designed to preserve and sustain the Press Collection (namely the high-circulation Greek daily newspapers from Athens, Thessaloniki and the region) through microfilming, which produced a growing corpus of approximately 25,000 microfilms. The digitization of press collections, especially of historical newspapers, was one of the oldest and first fields in which digital technologies were applied, making them remotely accessible to researchers, without the time-consuming procedures required to study physical copies and at a significantly lower cost. In 2007, the Library established its Digitization Unit and Digital Library, by digitizing the microfilm collection (through EU-funding, 3rd CSF 2000-2006, OP "Information Society"), making the digital content of approximately 3,500 newspaper and journal titles from the 19th and 20th century available to all, thereby serving the principle of open and equal access.

Since June 2022, the Hellenic Parliament Library has made its third digital "leap": an intensive, EU--funded programme of digitization. Digital image processing with optical character recognition (OCR) and documentation have begun, which will expand the scope of available sources freely accessible for research through the open source software repository under construction, while offering topic search capabilities across a large volume of digitized materials, including the Historical Parliamentary Archive from 1843 to 1967 (parliamentary debates, introductory bills, law proposals, constitutional revisions and texts etc.), manuscripts and historical maps, collections of Political Figures, the Press Collection, etc. The repository will promote connectivity with Europeana through interoperable, innovative systems tools, thus enriching European digital cultural heritage.

4. The Hellenic Parliament Library & Digital Competencies

Having profiled the Hellenic Parliament Library as a historical, but also as a digitally-oriented contemporary institution, in this section reference will be made to its services and activities that have contributed to the development of digital competencies.

4.1. Information & data literacy

This competence refers to browsing, searching and filtering data, information and digital content.[17]

[17] Vuorikari *et al.*, *ibid.*

To begin with, the e-materials offered by the Hellenic Parliament Library are vast: the electronic catalogue holds 377,649 bibliographic records (9,972 serial titles), corresponding to 625,319 items/volumes from all areas, while digital material includes the Parliamentary Collection (552,598 items), the Press Collection (12,000,000 jpg of digitized material, 50% available online, subject to copyright law), free access to databases (e.g. the OECD *iLibrary*) and more than 30,000 e-journals, 13 databases and 165,000 e-books, as well as thematic folders (on demand), such as sources on the Greek Revolution of 1821. Upon completion of the above-mentioned digitization programme in process, the Depository will be added to them, thus expanding and enlarging available materials.

The Hellenic Parliament Library information and reference services include research and documentation for parliamentary and/or scholarly issues, coupled with loan and inter-loan services. Table 2 depicts users' requests for e-services between 2019-2023, showing a corresponding maximum value during the COVID-era.

Year	Incoming	Outgoing	Via We Transfer
2019	1,317	1,256	126
2020	2,854	2,770	720
2021	4,360	3,886	522
2022	6,349	5,264	897
2023 (11.09.2023)	1,600	1,495	231

Table 2: Users' requests for e-services (2019-2023)

However, providing open access to the above-mentioned "digital thesaurus" is not enough. Given the information overload, what is of crucial importance is to develop users' skills in dealing with this. In other words, there is a need for the selection and critical filtering of information. In that respect, the Hellenic Parliament Library staff caters for users' need to search for data, information and content in digital environments. User training is performed either spontaneously (e. g. on the spot in the reading rooms or during a telephone or email conversation) or more systematically via topic-based webinars. The main goal is to help users enhance personal search strategies, access materials of interest and navigate through them with ease. Special emphasis is given to helping them analyse, compare, interpret and critically evaluate the credibility and reliability of sources of data, information and digital content (e. g. tracing fake news, trolling etc.), as well as adapting to the new challenges posed by AI techniques and tools.

4.2. Communication & collaboration

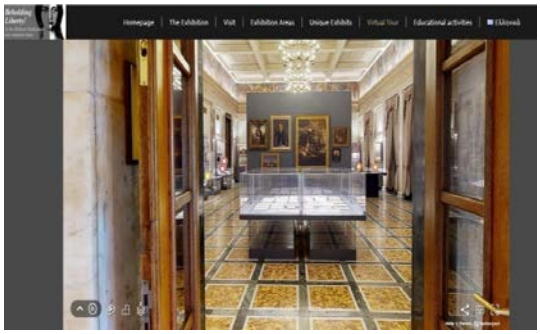
"Communication & collaboration" digital competence means the ability to interact and share content through a variety of digital technologies and to understand appropriate digital communication means for a given context, e. g. which communication tools and services (e. g. phone, email, video conference, social network, podcast) are appropriate in specific circumstances (e. g. synchronous, asynchronous), depending on the audience, context and purpose of the communication.[18]

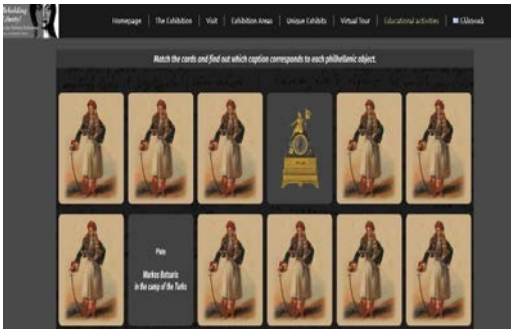
[18] Vuorikari *et al., ibid.*

Given that, both online and offline, libraries provide not only a spacious place of knowledge for study and learning, but also an attractive platform for gathering, promoting openness, accessibility and inclusion for all citizens, in recent years the Hellenic Parliament Library has invested time and effort in engaging users through digital technologies, emphasizing opportunities for self-empowerment and participatory citizenship. The main goal has been to promote the free flow of information and ideas and support culture and democracy by enabling everyone to participate in the public sphere, a common space where knowledge is considered as a shared resource, as a complex sustainable ecosystem.

As part of this, the Hellenic Parliament Library has organized a variety of digital outreach activities, targeting differentiated audiences, ranging from pre-school children to senior citizens, in order to enforce its civic role and grow along with the evolving needs of the community. A selective description of diverse types of events will now be provided.

– *Beholding Liberty! At the Hellenic Parliament, two centuries later* (2021): commemorative exhibition celebrating 200 years after the Greek Revolution of 1821, grouping together 367 portable exhibits of high historical and artistic value (manuscript archives, books, newspapers, artworks, objects and weapons). The central exhibition narrative revolves around the unique ensemble of wall paintings that adorn the building of the Parliament in the historical Hall of Trophies and Adjutants, the "Frieze of the Greek Revolution". The *in situ* exhibition, designed during the COVID pandemic and remaining inaccessible for more than six months, was accompanied by a thematic website, including a virtual tour and ludic multimodal activities, where textual and visual documentation of the exhibition served as "raw material", which was educationally recontextualized.



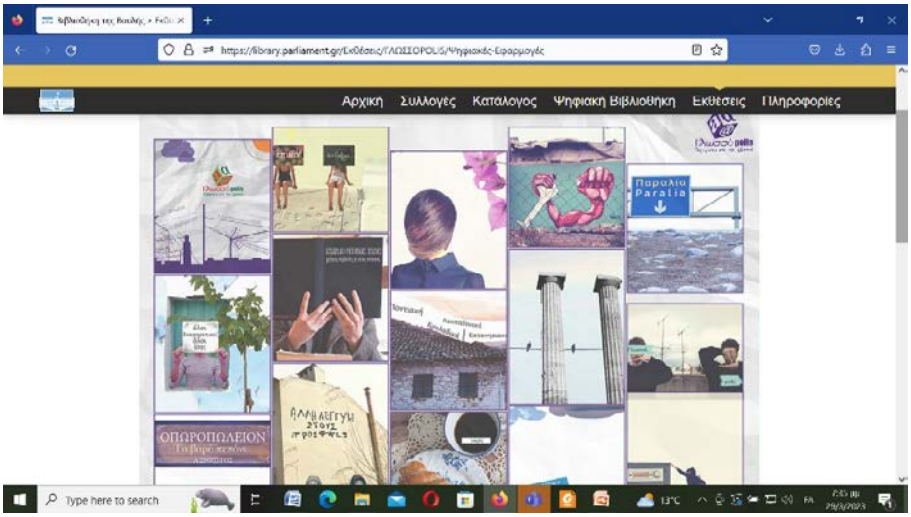


Pictures 3 & 4: Snapshots of the virtual tour and the educational activities of *Beholding Liberty*

– *Glossopolis* ('City of language', 2016 onwards): multimedia exhibition, dedicated to the geographic, social and stylistic varieties of Modern Greek, comprising interactive digital linguistic activities and targeting varying audiences (pupils, students, researchers/linguists, the general public). Inspired by the trend for the popularization of science and gamification of education,[19] and

[19] P. Felicia, *Digital games in schools: A handbook for teachers* (Belgium: European Schoolnet, euN Partnership AiSbl, 2009), available at: http://games.eun.org/upload/GIS_HANDBOOK_EN.PDF.

of language as intangible cultural heritage, 14 multimodal activities (accessible at https://library.parliament.gr/, under *Glossopolis*) provide a descriptive account of basic aspects of SMG linguistic variation, ranging from standard language and literary style to regional dialects, youth language and anti-languages. The digital games, adopting a constructivist and heuristic approach to learning,[20] in order to instigate motivation and engagement (edutainment), include various learning resources that can be implemented either in class or as homework, providing a user-friendly educational collaborative context. It is worth noting that the multimodal format of the Exhibition had already been strategically selected in 2016, long before the COVID pandemic.



Picture 5: The *Glossopolis* online linguistic games

– *Online reading club* (2022 onwards): participants from Greece and the Diaspora group together discuss and express themselves multimodally through literary works inspired by important historical events (e. g. the Asia Minor Catastrophe, 1922-2022) or political issues (e. g. Artificial Intelligence). The repetitive sequence of meetings has certainly transformed this reading club into a community of practice, among people with shared interests and reading preferences.

– *Online teacher training & lectures* (every school year): the Hellenic Parliament Library organizes webinars for teachers, e.g., on the use of the Library's Press Collection or the Parliamentary Minutes as a source for teaching history and other subjects. Additionally, the Library's scientific staff gives web lectures on various topics (history, history of art, linguistics etc.), always inspired by the holdings of the Library collections. So far, 30 events have been offered to a total of 2,000 attendees.

All the above-mentioned resources and activities share a common trait: they create a participatory e-space, by offering users the opportunity to interact and exchange ideas.

[20] E. Errington (ed.), *Developing Scenario-Based Learning* (Palmerston: North Dunmore Press, 2003).

4.3. Digital content creation

This competence involves creating and editing digital content in different formats, to express oneself through digital means (e. g. audio, image, text, video, applications), stored in various digital file formats.

In this respect, the Hellenic Parliament Library produces new, innovative digital educational content, like the linguistic workshop *Words that smile, words that hurt*, dealing with verbal bullying in the school environment. Through four experiential activities, participants reflect upon the linguistic designation of the Other, i. e. people with different ethnic, sociocultural or religious backgrounds, different gender and/or sexual orientation, etc. Words about ethnicity, gender, sexual orientation, religion, appearance, disability, etc., are scrutinized as to their stereotypical connotations and are replaced by others which demonstrate respect and acceptance of the Other.

The content of the workshop has been published as a *Teacher's Guide*, available through the HPL website; teachers across Greece and the Diaspora are invited to download educational material, use it in class, adjust it to particular needs and local characteristics, and then produce and send back some sort of creative feedback (e.g. text, image, video etc.). In addition, the Library collaborates with schools in the production of new digital content, pertinent to its rich collections: e.g. the Varvakeio Gymnasium History Club created a digital game, uploaded on the thematic website of *Beholding Liberty*, based on the textual and visual holdings of the Exhibition. This experience helped learners to modify, refine and integrate new information and content into an existing body of knowledge and resources to create new, original and relevant content.

Where digital accessibility is concerned, i.e. ensuring that everyone, including people with disabilities, can use and navigate online materials on equal terms, the Hellenic Parliament Library recently published the Constitution of Greece and the Standing Orders of the Hellenic Parliament in audio book form, with the aid of the NGO "Reading for others". Volunteers that participated were trained in how to utter speech especially designed for print-deprived citizens.

Finally, special focus in the domain of content creation is placed upon how copyright issues apply to digital information and content protected under intellectual property (IP) rights (e. g. copyright, trademarks, designs, patents). In an era of uninhibited plagiarism and a lack of ethics, libraries, and especially parliamentary ones, can play a major role in promoting awareness as to copyright legislation and exceptions (e. g. use for the purpose of teaching, for caricature, parody, pastiche, for quotation, for private uses), ensuring respectful treatment of rights affecting others (e.g., ownership, contract terms). After all, libraries are the first stakeholders to supervise the right to use and/or re-use digital content created by a third party (e. g. Creative Commons Licences).

4.4. Problem-solving

Use of digital technologies to create knowledge and to innovate processes and products creates social, cultural and/or economic value. Engaging individually and/or collectively in cognitive processing to understand and resolve conceptual problems and problematic situations in digital environments, means that one can take advantage of the variety of knowledge, perspectives and experiences of others which can lead to better outcomes.[21]

[21] Vuorikari *et al., ibid.*

A great challenge that parliamentary libraries are trying to meet is to help MPs and decision-makers use digital technologies, in order to turn ideas into action, especially where evidence-based policy making is concerned, with this resting on the premise that policy decisions are better informed when relying on available evidence[22]. Evidence-based policy (EBP) is an approach that "helps people make well informed decisions about policies, programmes and projects by putting the best available evidence at the heart of policy development and implementation".[23]

Advocating that policy which is based on systematic and reliable evidence[24] produces better outcomes and, by aiming at reducing ideologically-driven and/or individual perspectives involved in opinion-based policy, EBP implements a set of quantitative, qualitative and/or mixed methods in order to gather, critically appraise and use high quality data, thereby informing the policy process. Data analytics, interdisciplinary approaches to problem-solving and collaborative processes co-design and co-create new products and services based on AI systems, and create new, powerful opportunities in that direction, both for parliamentarians and citizens. The Hellenic Parliament Library research service helps the latter compile and analyse information that is useful in different ways (e.g. integrated reports of parliamentary interest, attuned to the legislative agenda, statistical analyses for academic or professional purposes, etc.).

5. Future challenges: delving into the new world of Artificial Intelligence (AI)

AI is rapidly advancing, opening up new worlds of text and data mining tools (e.g., layout Analysis & OCR, data visualization & graph analytics, semantic analysis of content e.g. through text summarization, automatic translation, etc.) that will foster new perspectives in meaningful parliamentary and academic research with a resulting social impact. Big data corpora (e. g. ParlaCLARIN), along with linguistic resources and embedded tools (lexical profile, concordances, collocations, etc.) will help trace invisible connections. It is possible to mention a few indicative examples: study of concordances and collocations can help explore the semantic prosody of e.g. *refugees* or *climate change* in the European Press, shedding light upon the representations of the refugee crisis or ecological considerations in mass media discourse; sentiment analysis and opinion mining can investigate polarization along partisan lines, revealing biased *echo chambers*;[25] topic modelling allows us to study the political agenda in a particular era. The possibilities are potentially limitless.

However, the "digital paradise" may prove misleading. There are many limitations to be taken into consideration: to begin with, severe methodological restrictions involving the selection and representativeness of online materials, in order to cover different historical periods, geographical areas, language varieties etc., avoiding bias and minority exclusion. In addition, the fragmentary information of online data, due to abstraction from context, may lead to interpretation bias. Therefore, critical skills are necessary (e. g. an article in hard copy is contextualized within the newspaper issue, in interaction with other pieces of information, that overall provide a holistic account of daily news; on the other hand, an isolated digital token on the computer screen stands alone and decontextualized).

[22] Evidence-based policymaking rests on the premise that policy decisions are better informed when relying on available evidence.

[23] P. Cairney, *The Politics of Evidence-based Policymaking* (London, New York: Palgrave Macmillan, 2016).

[24] The breadth of what is considered as "evidence" is wide, including photographs, literary texts, official files and records, autobiographical material, such as diaries and letters, newspaper files, ethnographic accounts, etc.

[25] P. Barberá, "Social Media, echo chambers, and political polarization", in N. Persily & J. A. Tucker (eds), *Social media and democracy: The state of the field, prospects for reform* (Cambridge: Cambridge University Press, 2020), 34-55.

In addition, there are serious socio-psychological and cognitive issues to reflect upon. Social distancing, alienation, multitasking and lack of in-depth reading have seriously altered the very nature of accessing and processing knowledge and information.

To conclude, parliamentary libraries have assumed a new, enlarged role in cultivating digital and information literacy through interdisciplinary collaboration, using new emerging forms of experiential and collaborative online learning, coupled with innovative digital tools. In this new age, librarians are transforming from mere bookworms into high-tech information professionals, needing continuous training and upscaling. The Hellenic Parliament Library staff is happily undergoing this transformation, fully aware of the challenges that have yet to be met.

PART IV.

INCREASING CIVIC PARTICIPATION THROUGH TECHNOLOGY? PROXIMITY TO INSTITUTIONS, THE IMPACT OF SOCIAL MEDIA AND HOW TO REACH OUT TO CITIZENS — BEST PRACTICES

ROSARIO RODRÍGUEZ

PARLIAMENT AND DIGITAL EXPERIENCE OF THE CONGRESS OF DEPUTIES IN INSTITUTIONAL COMMUNICATION AND SOCIAL MEDIA

All of us who are participating in this forum share the fact that one of our main tasks as public servants is to find ways to bring parliament closer to citizens, as it is crucial to promote knowledge and transparency, to connect with society and, in the end, to strengthen trust in democratic institutions and in democracy itself.

Undoubtedly, technological and digital advances provide tools that help us achieve this goal. This is also the case in the field of communication. Let me highlight three elements that I consider to be indispensable.

Firstly, institutional television broadcasting. Nowadays, parliaments can broadcast live, recorded, with the option of downloading all plenary and committee sessions, as well as press conferences and other events that take place in parliamentary areas. In an important way, institutional television completes the principle of parliamentarian publicity, along with session diaries and the presence of the public in the galleries of the plenary sitting rooms.

Secondly, there is the website. Parliamentary sites have undergone an extraordinary evolution so that nowadays they represent a large repository of official public information, which is perfectly structured. To put it very simply, they have become the main showcase of parliamentary transparency, where it is possible to access relevant information about MPs and their activities; official documents related to each and every parliamentary initiative; streaming live coverage of sessions; official publications and considerable additional information about other aspects of parliamentary life. The *Dirección de Comunicación* of the Congress of Deputies is actively involved in updating the website. As a way of illustrating this, I would like to emphasise hypertext press releases and especially *Fuera de Agenda*, a blog that deals with issues less closely related to current parliamentary affairs.

In third place, I would venture to include social media, which have established themselves as spaces for public opinion where users are no longer consumers but prosumers who create and share their own information and content. Social Media platforms come with their own opportunities and risks. This digital area is an undoubtable achievement from the point of view of communication.

Parliament has managed to reach citizens directly, without the intermediation of the media. Conversely, citizens can access the institution without the intermediation of the media as well.

Parliaments have had the opportunity to be active, to create and disseminate information, to undertake parliamentary journalism in order to strengthen the relationship with citizens through informative and formative content that contributes to a better knowledge of Congress, particularly its functions, its members, its heritage and its history and its role in democracy.

However, our initiatives have emerged after answering many challenging questions. Is parliamentary information interesting *per se*? Is it interesting only when it is on the media agenda? How to participate in the social agenda apart from through parliamentary activity? How to get deputies involved in our initiatives? How to select and handle information so that it is understandable, interesting and complete? How can this be done with the vast array of resources available in today´s digital environment?

The response to these questions has to bear in mind that we must be exquisitely institutional, as this is essential to ensuring the obliged objectivity of the pluralist institution which parliament is. It is important to use neutral language, draw up information based on objective facts and official data, present different perspectives of every topic, provide content to help to better understand procedures, etc. It is most important to stay focused on this in order to see possibilities and choose the right options and initiatives.

Let me present an example of difficulties when trying new initiatives. Taking advantage of the fact that the Congress of Deputies had its own television signal, in the 2000s *Canal Parlamento* was launched as its own television channel. The aim was to broadcast not only sessions but also debates, news summaries and interviews, among other contents. Unfortunately, this project never worked. We soon realised the complications that this type of project entailed, especially those concerning infrastructure and those of a political nature. Nowadays, the channel broadcasts plenary sittings and committees and this programming is complemented with videos produced in-house. Canal Parlamento also broadcasts an accessible signal with subtitles and sign language interpretation.

The web has provided the opportunity to go further with press releases, which are complete hypertextual documents, linked to the texts such initiatives generate, to live sessions, to the regulatory and normative references and to videos and other informative content that offers complete, official and accurate information within a single document. In contrast with the logical political reading that the parliamentary groups make of their initiatives, our press releases are a source of objective and useful information and place us in a space of our own in which we have been able to produce more and more developed content. In this sense, we have managed to become a benchmark for reliability. The slightest error is criticised. Nevertheless, when it — rarely — happens we receive considerable feedback about the mistake, which is useful for us to realise the value of what we do.

Nowadays, we are in the midst of a social media boom. This is the communication phenomenon of the 21st century, with the appearance of AI, which is just beginning to show its potential. Social media have influenced the way we understand society, politics, leisure and communication as well. Together with instant messaging, they have displaced the traditional influence of mass media. Some have even described a tweet as a journalistic genre which I think is a bold observation.

Of course, it has been inevitable that parliaments would participate. Social media have been an opportunity to be active and reach wider audiences; to adapt messages to different types of public, especially young people and to fight disinformation in an area where the number of sources is overwhelming and fake news and deepfakes are among us without us noticing this.

The Congress of Deputies took its first step in 2011 with its Twitter account. After that came Facebook, YouTube, Instagram and other forms of direct messaging such as WhatsApp and Telegram. We try to present content in an attractive way, using a lot of visual elements, such as infographics. We have made Twitter a tool to show deputies at work, as it is common knowledge that television or mass media are not enough to convince the public that MPs are active in their institutional role. Instagram has allowed us to make lighter content, specially aimed at young people. We have launched a YouTube channel and another one just for our regular journalists, where we broadcast press conferences, so they don´t have to be physically present in the press room.

However, we seem to have reached a moment of stagnation. Followers are loyal but do not grow. And we have found there is not much interaction with our content. The social media area is moving very fast. New platforms emerge and displace those we thought were established. Doubts arise as to whether we should join fashionable networks. However, it is necessary to carefully observe the evolution of each new social media before participating in it. For example, we were thinking of opening an account on TikTok but have not done this after certain recommendations from the EU related to data protection concerning this application. We have also been looking at LinkedIn as a way to provide information on tenders and professional content but have not done this yet because it has begun to change its original purpose into more personal content, such as Twitter or Facebook. This makes us cautious about taking the plunge.

It seems that social media demand increasing amounts of time to produce short and snappy messages. What to do then? Do we have to have a podcast? Do we have to have a newsletter? Do we have to join each and every one of the present and future social networks?

In the midst of these new forms of communication, fortunately, classical forms of long, worked content survive that fit well with the nature of parliament. With this in mind two years ago we released our own blog *Fuera de Agenda*, where we include long articles, using different approaches and where we allow ourselves to be journalists, not only communicators of official information. Then we, of course, use our Social Media as a call to action and to visit the blog.

It is undeniable that journalism has got lost — and it seems that it still is — in this complex net within the digital area. Naturally, nobody doubts that the media has to be actively involved in everything

society is interested in. Nevertheless, and this not new, its main, and traditional role, which consists of the responsibility to form public opinion, has become less influential. All the more so as the public increasingly turns to non-journalistic sources to establish contact with current affairs and fake news has spread widely. Fact checking media have emerged as a means of producing journalism as a consequence. In Spain, one of these, Newtral, is endorsed as the external verification programme by Facebook. Maldita has been created by two journalists contracted to a Spanish TV channel related as well to those responsible for Newtral. So far, fact checkers have been reliable, even though some have thought about who should check fact checkers.

No one questions the fact that parliaments are part of the digital area, so they must be aware of what is new in this environment and pay attention to new opportunities. However, in this digital world, and also in social media, Parliament's voice is one amongst millions of voices and opinions and institutional information is not easy to follow and is not so attractive. The challenges are the same as ever:

- Complexity of procedures, which are in general so technical. It is important to communicate in a clear, simplified and yet complete and accurate way, so that citizens can understand the functions of parliaments.

- Disengagement of citizens, who perceive MPs and the parliament itself as being disconnected from what really happens in society. Digital opportunities offer ways of overcoming this lack of trust by means of enhancing transparency and participation so that citizens can feel that they are taken into account not only for electoral purposes.

- Parliamentary institutional communication faces another challenge when it comes to how it competes with the way other actors communicate in parliament, namely mass media and parliamentary groups. It is unquestionable that citizens are more interested in the political content or in the way journalists present political issues than in a form of information that is completely neutral. The key is not to compete but to find parliament`s own voice and to be a model of reliability in whatever communication initiatives and tools are used to achieve this. It is crucial not to get lost, take advantage of whatever digital opportunities arise and use them wisely to stay focused on the aim of spreading democratic values.

PAULO PENA

CLICKBAIT – JOURNALISM IN TERMS OF DIGITAL POLARISATION

Good morning and thank you very much for the invitation. It is a pleasure to be here, listening to such interesting interventions.

I will try to moderate my pessimism, but I feel I have the duty to correct some of the exaggerated optimism I felt, and perhaps expressed, the last time I spoke in this very Senate Chamber, at the end of the last decade, when I gave an account to the Portuguese Members of Parliament of my journalistic work on disinformation.

My optimism was based on a certain conviction. I thought that the emergence of what I called "the factory of lies" – which was nothing more than the evident process by which disinformation proved to be an effective mechanism of extremist propaganda, enhanced by the absence of editorial rules in digital platforms – would provide us with the urgent and necessary opportunity to rethink the way in which information and journalism are essential to our democracies.

I thought the need was obvious, after spending years showing how easy it was to create disinformation pages aimed at politicians, social actors, activists, how profitable it was to distribute this content on the most influential social networks, that did not bother to ensure that a user would not create 200 fake accounts to reach a larger audience faster, and that all this showed us an unprecedented degree of polarization putting public debate at risk.

Neither the European Union nor the Portuguese Parliament have so far found it useful to define journalism as an essential public good.

Today, in Portugal, 58% of those surveyed by the latest Reuters Digital News Report study, say they have confidence in the news. This is a deceptively optimistic percentage. This might be because the same report shows that in Portugal, only 11% of those surveyed by the study said they paid for news, below an average of 17% observed among the 46 countries analysed. That's less than half the number of those polled who say they use Tik Tok. It is against this backdrop where a majority of citizens say they trust the news, but only a tenth pay to access it, that I want to focus today.

I would like to start by asking you to think about a definition of news. If that is difficult, perhaps you should know that it is a definition that is becoming less and less clear in media newsrooms.

In his book *Why We're Polarized*, the American journalist Ezra Klein explains that it is exceedingly difficult to find a clear answer in the US to this fundamental question of journalism.

"In theory, news means something more or less like 'important'. The most newsworthy story is the most important story. But if that were true, front pages and cable news would be vastly different from what they are now: more malaria, fewer celebrities (including political celebrities). In practice, a news story today is some combination of important, new, outrageous, conflict-oriented, secret, or interesting (…) If people are already talking about a story or a tweet, that makes it newsworthy almost by definition".

The result is a tautology, Klein explains: "Whatever everyone is covering is newsworthy because everyone is covering it". This is the bait that politicians on the "alternative", or populist, right throw out to dominate the public debate, even when they are a (temporary) minority.

Klein shows how Trump dominated the news, even as a candidate whom polls gave little chance of winning the Republican primary in 2016. "There were seventeen Republican candidates running for president, and Trump was getting more than half of all the media coverage, with the other sixteen candidates splitting the rest".

This reality is summed up well in a famous quote from CBS television station CEO Les Moonves about the Trump effect on ratings ahead of the presidential election that would take him to the White House: "It may not be good for America, but it's good for CBS".

The result is a self-fulfilling prophecy, Klein continues. "Journalism doesn't just reflect the world, it shapes it, even creates it. (…) The media is how most Americans get their information about politics and politicians, and if the media is leaning, or being leaned, toward certain kinds of stories and political figures, then the political system will lean in that direction as well".

That's why Matt Taibbi, another American critical journalist, came up with a precise definition of the 10 rules of hate because, in his view, now, "the primary product the news media sells is division".

These are the rules, and I ask you again to consider each one of them and see if they are present (alone or all together) in the majority of the news stories you learnt about last week.

The first rule is, in itself, the definition of polarization:

1. There are only two ideas

2. The two ideas are in permanent conflict

3. Hate people, not institutions

Though most of our problems are systemic, most of our public debates are referendums on personality.

4. Everything is someone else's fault

5. Nothing is everyone's fault

6. Root, don't think

7. No switching teams

Roger Ailes, Fox's creator, used to say: "The news is like a ship. If you take your hands off the wheel, it pulls hard to the left". Translation: you needed to pull hard the other way to achieve "balance" overall.

8. The other side is literally Hitler

9. In the fight against Hitler, everything is permitted

10. Feel superior

Taibbi pushes the argument: "Accept a binary world and pick a side. Embrace the reality of being surrounded by evil stupidity. Feel indignant, righteous, and smart. Hate losers, love winners. Don't challenge yourself. And during the commercials, do some shopping. Congratulations, you're the perfect news consumer".

This is why I'm less optimistic today. The commercial value of disinformation won the decisive battle against journalism's old financial model crisis. Polarizing, selling hate, became a strategy in many newsrooms. The binary model took what used to be one of the main social commitments of journalism in a democratic society: to be the framer of the public debate – with all the greys and nuances real life has to offer.

That's why, in my view, I'm less surprised with the small number of information consumers in Portugal than I am with the trustful citizens that answer the survey.

Being here, in the house where laws are debated and approved, I must ask for some constructive action. Journalism is expensive, takes time, needs verification methods, needs complex skills. We all need that to take decisions. Let's imagine that the Portuguese Parliament is considering replicating a model for social welfare that is based on algorithmic decisions, like the one that existed in Rotterdam and was suspended after a long journalistic investigation that proved that the algorithm used was biased, discriminating against single mothers and migrants, based on prejudices about their innate willingness to commit fraud.

The Parliament, the companies, all the structures that create the societies we live in, depend on verifiable information to take the right decisions. Journalism is that (and by the way, that's also a good definition for "news"): the verified information that contributes to citizens' choices and nourishes an inclusive, free, public debate.

That's why I think this Parliament, as well as all other parliaments, should take time to address the basic problem we face: journalism needs financial resources to avoid competing in the profitable "hate" market. There are several ways to do that without compromising the independence of news projects. However, public money should contribute to this goal. Without public money, countries like Portugal, that don't have a single foundation that supports journalism, or charitable laws that encourage private companies or citizens to donate, are vulnerable.

If we look at the Media Pluralism Monitor, we can see that diversity and pluralism are threatened in many European countries, like Portugal.

If you ask me for suggestions, I'm happy to give a few: a zero-interest rate equity fund for new journalistic projects managed by the state; grants for quality reporting with public money but attributed by an independent committee; free subscriptions for college students supported by the state budget.

I have more, but I'll spare you this quick list because I have another thing to ask you.

The European media law, proposed by the European Commission last September, aims to protect journalists and the media from most situations of undue control, whether political, by governments, or commercial, by owners. This legislation comes at a time when there is a proven risk to freedom of expression and media diversity in several EU countries, particularly Poland and Hungary, but also in other Member States, as experts such as the authors of the annual Media Pluralism Monitor report of the European University Institute in Florence have been warning for a long time.

It is indispensable for critical and independent information that journalists can protect themselves and their sources. Especially when the integrity and security of their work is jeopardized by surveillance. That is why Article 4 of the EU draft law explicitly prohibits coercive measures against journalists to reveal their sources, such as monitoring their communications and using spy software on their computers and phones.

However, in the Council of the EU, where representatives of the 27 EU governments negotiate behind closed doors, the French government has demanded that Article 4 be repealed. Spying on journalists and using spying software against them would thus *de facto* be allowed — if justified on grounds of "national security".

Two years ago, a joint investigation by media outlets including *The Guardian*, *Le Monde* and *The Washington Post* showed how several countries had used Pegasus spying software against citizens, including journalists in Hungary and elsewhere. In Greece last year, several journalists were known to have been targeted by the state through Predator spying technology.

In reaction to these revelations, the European Parliament set up a special committee of enquiry and demanded that the sale of spy software be banned until it is clearly defined in law, where in exceptional cases the state can use it.

However, the governments of Germany, the Netherlands, the Czech Republic, Luxembourg and Greece explicitly supported the French government's demand for a national security exception to Article 4, according to the German diplomatic report of the Council working group of April 17 that Investigate Europe has accessed. None of the representatives of the other EU governments, Portugal included, objected, according to the documents and sources we consulted. The Swedish government, which currently presides over the Council, added a paragraph to the latest version of the bill stating that Article 4 "is without prejudice to Member States' responsibility for safeguarding national security".

If parliaments share our concern and consider that electronic surveillance of journalists is a step too far even for "national security" concerns, I would ask you to question all governments about this.

As I told you, I tend to be an exaggerated optimist, sometimes. But one thing has been clear for me since I started working on disinformation: without journalism our democracies won't improve, our collective life will be less constructive. Weakening journalism, either by ignoring the crisis that is threatening its core social mission, or by limiting its independence in law, is just another way to concede victory to a clickbait strategy, a red carpet for disinformation tactics and a death sentence with many unpredictable consequences for our cherished freedom of thought. Journalism is probably the first victim of this. But it won't by any means be the last.

TRIINU PÕDRAMÄGI

INCREASING CIVIC PARTICIPATION THROUGH TECHNOLOGY IN ESTONIA

Digital technologies generate new innovations, products, services, business models, as well as new forms of interaction between citizens and governments. During the past decade, governments and other public organisations across the EU have increasingly become aware of the importance of e-government. Estonia – a small country in the Baltics – has become a global leader in e-governance and digital democracy. The country has successfully introduced technology to increase civic participation, making governance more accessible, transparent, and efficient. In Estonia, 99 % of the public services are available online. Many of Estonia's e-government development measures carry the idea of efficient management that saves on resources, time, and money.

Tools that transform political engagement

As modern societies and politics are becoming increasingly digitalised, the use of technology can offer an opportunity to renew and transform representative democracy into becoming more participatory. In a nutshell, there are several instruments available in Estonia for the people to execute their power – given that in Estonia the highest power is vested in the people. Firstly, the people execute their power through elections and referendums; and secondly, the people have the right to initiate collective addresses.

Collective proposal

A collective address is a collective proposal submitted to the Riigikogu (Parliament of Estonia) as a community initiative that proposes changing a regulation in force or organising society in a better way. A digital platform, the Citizen Initiative Portal (Rahvaalgatus.ee in Estonian) enforces the civic right to address the Parliament of Estonia with collective proposals by citizens. At least 1,000 citizens of Estonia must sign a proposal.[1] This digital platform that connects the citizenry, the parliament, and

[1] The Board of the Riigikogu appoints a lead committee who will discuss the proposal. The committee makes a decision on the proposal within six months of its receipt. Further information can be found at: https://www.riigikogu.ee/en/introduction-and-history/have-your-say/submit-collective-proposal/.

local governments enables people to conveniently implement their right to make collective proposals. For example, from April 2023 to January 2024, 27 petitions were signed by at least 1,000 people and submitted to the Riigikogu. One petition via the Citizen Initiative Portal even led to a change in legislation in 2021, namely the ban on fur farming in Estonia. While legal amendments are one of several ways of solving a problem presented in a petition, this marked the second time when a collective address had prompted the changing of legislation.[2]

I-voting

Internet voting has been an alternative to traditional voting in Estonia since 2005. Local government council elections in 2025 will mark the 20th anniversary of i-voting[3] in Estonia as in 2005 Estonia became the first country in the world to have nationwide local elections where the electorate could cast legally binding votes over the internet. The initial aim of i-voting as an e-service was to increase civic participation *inter alia* among young voters. The 2005 elections were followed by a successful implementation of i-voting at all levels of elections: local, national, and European. The share of i-voters in the first i-elections was low, as only less than 2 % of all votes were cast online. In other words, that meant that one in fifty votes were cast over the internet, as only slightly over 9,000 voters decided to vote online. This number has slowly increased with each subsequent election and reached an all-time high in 2023 when more than half of the votes were cast digitally. The 2023 election had an overall turnout of 63.7 %. Parliamentary elections in 2023 marked the milestone where more than 50 percent of ballots were cast online. Furthermore, the use of i-voting in Estonia has grown on a par with the general dissemination of technology, whereas initially this involved only a few technology enthusiasts who were early adopters of emerging technologies, but with the passage of time more and more users have opted for the new technology so that it has subsequently spread throughout the population.[4]

Estonia's roughly 20 years of experience has shown that i-voting has spread en masse and has not developed into a fancy technological tool for young urban voters. In terms of their sociodemographic background, i-voters mirror the turnout composition of paper voters. There is no difference in voter profiles between the two groups. I-voting has become the most common voting method in Estonia. Despite this, i-voting has not had as huge an impact on participation rates as it might often be mistakenly assumed. Internet voting has been embraced only by groups of citizens who were already politically mobilised and who find online voting more time saving and convenient.[5] In fact, statistics show that i-voting has led to only a slight increase in turnout. For example, the total turnout of parliamentary elections rose from 62 % in 2007 to 63.5 % in 2023, or a meagre 1.5 % in 16 years.[6] Among all the age-groups, young people between 18 and 24 years of age, presumably the most tech-savy citizens, were the most passive group in terms of participating in voting; at the same time, the most active i-voter group were middle-aged citizens.

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[2] https://news.err.ee/1608304269/civic-portal-receives-record-number-of-petitions-in-2021.

[3] Also known as e-voting or online voting. I-voting allows votes to be cast via the internet during the advance voting period. A computer with an internet connection and an ID-card or mobile ID with valid certificates are needed to do this. Further information can be found at: https://www.valimised.ee/en/internet-voting-estonia.

[4] Mihkel Solvak, Kristjan Vassil, E-voting in Estonia: Technological Diffusion and Other Developments Over Ten Years (2005 – 2015) 2016, p. 3.

[5] *Id., ibid.*, p. 106.

[6] https://www.valimised.ee/en/archive/statistics-about-internet-voting-estonia.

Conclusion

To sum up, digital tools allow better access to public services and should increase democratic participation in general. Estonia's attempt to increase civic participation and empowerment through technology offers valuable lessons for other countries. By using technology, governments can make civic participation more accessible, efficient, and engaging for the citizens. However, we must keep in mind that technology itself is not a magic wand when it comes to civic participation. Considering the current trend of alienation between the state and the electorate, and low voter turnout in general, the question of how to motivate citizens to participate in elections has remained on the agenda of Estonian politics.

GIOVANNI RIZZONI

HOW TO SUPPORT PARLIAMENT AS A DIGITAL INFORMATION HUB FOR CITIZENS

1. Parliaments as institutions for knowledge generation

It has correctly been observed that the capacity to enhance political knowledge is central to the success of representative democracy (Jaeger, Lyons & Wolak, 2017). Parliaments can play a crucial – even if often underestimated – role in this respect. Not only do they process information which is already available (deriving from different sources: the government, political groups, individual MPs, experts, representatives of vested interests), but they also generate new knowledge. The outcome of parliamentary procedures cannot be predicted in advance since they are usually the product of a highly complex interaction between conflicting interests (those represented by the different political parties) and the multiple information flows feeding parliamentary decision-making. Considering the novelty of the output vis-à-vis the input, the cognitive added value of the parliamentary decision--making can be compared to that provided by a generative artificial intelligence (AI) system, even if its operational modes are completely different from those of the currently most popular AI applications.

The value of the knowledge generated by parliaments increases with its dissemination. Parliamentary procedures have the effect of rendering the decision-making process intelligible to the political actors and – via the principle of publicity – to the citizens. The principle of publicity has been incorporated into parliamentary procedures since the very beginning of modern parliamentarism (Habermas, 1992). Traditionally, public knowledge of parliamentary proceedings has been secured primarily through printed media, such as newspapers and parliamentary reports. The advent of the internet has proven disruptive in this respect (Coleman, Taylor, Van de Donk, 1999). Through their websites, parliaments are now capable of disseminating information without the need for any mediating agencies. The widespread policy of delivering their data in the format of open linked data is intended to make parliamentary institutions more transparent and accessible than at any other moment of their long history (IPU, 2022a). Via these means, parliaments as institutions of the "government by

explanation" strengthen the possibility of offering an indispensable cognitive basis for democratic debate, that, as such, appears to be the only viable alternative to the opposing threats of populistic rejection of expertise and of "epistocracy" (Nichols, 2017).

Moreover, the use of digital tools enables the development of an interactive relationship between parliaments and citizens that would have been unthinkable before the application of new technologies. The introduction of e-petitions in many European parliaments is but one example of this development (Leston Bandeira, 2019). Digitalization can also help parliaments reduce information entropy, by establishing systems for the more efficient management of data flows. Of course, technology and digitalization cannot be considered a panacea for tackling the multiple crises currently challenging parliamentary representation. They can, however, offer powerful tools to support a strategy for innovating and improving the traditional model of closed and self-sufficient political representation by opening new procedures for the participation of citizens, and ensuring that the law-making process includes consideration of evidence-based information and long-term interests (IPU 2022b).

In this paper I will discuss how innovative forms of parliamentary documentation can support the current effort to make these documentation / these materials more accessible to citizens. I will focus on the experience of the Research Service of the Italian Chamber of Deputies.

2. The Chamber of Deputies Research Service and its support to the law-making process

The Research Service (RS) of the Chamber of Deputies is currently staffed by 50 policy analysts. It serves all the Members of the Chamber, without distinction as to party affiliation. RS activity is inspired by certain consolidated principles corresponding to the international standards for these kinds of structures (IPU, 2010, Rizzoni 2023): independent, timely and authoritative analysis, lack of advocacy, and practical usability of its products in the decision-making process. The RS is mainly focused on providing informative support to the work of the 14 sectoral committees of the Chamber. The Italian Parliament belongs to the Weberian category of 'working parliaments' (Weber, 1994) in so far as it normally undertakes an in-depth transformation of legislative proposals, including those originating from the executive. The bulk of the amending activity takes place in the committees, which can be considered the legislative engines of the Parliament. The documentation produced by the RS is expected to offer not only general information on the topics addressed by the bills, but all the legal details needed for an in-depth consideration of the bill by the committee members.

For this reason, the documentation support provided by the RS is systematic in the sense that it covers all the items in the committees' agenda. More precisely, for every bill considered by the committees, the RS prepares a legislative brief (LB) that analyzes all the legal aspects covered by the proposal, including its compatibility with the Constitution, with regional competences and EU law. If any of these matters appear problematic, the LB points out the existence of a possible conflict, without, however, drawing any formal conclusions regarding the issue. The LBs avoid taking a "judgmental" approach regarding the matters which fall within the competence of the political bodies. It is up to the Constitutional Affairs Committee, for instance, to give its opinion on the constitutional compatibility of the bills considered by other committees.

It is very common, however, for the committees to use the points made in the LBs to shape the content of their decisions. In order to make this process more fluid, the RS analysts attend all committee meetings. In this way, their expertise is directly available to all the committee members during the consideration of the bills. In this regard, it should be emphasized that neither the experts from the government nor those from the political groups are allowed to attend committee meetings.

This increases the responsibility of the RS analysts in providing their expertise to the MPs during a crucial phase of the legislative decision-making process. The RS analysts' advice also plays a significant role when the committee chairs decide on the admissibility of the amendments. Given the generally high number of amendments (normally several hundred for the most important bills), it is crucial to receive an in-depth analysis of their content in order to determine whether they are consistent with the main content of the bill (as requested by the relevant rules of procedure of the Chamber).

The content of the LBs is therefore inevitably highly technical and mostly focused on the legal aspects of the questions addressed by the committees. All the LBs are immediately published on the Chamber's website, in order to make them available not only to MPs but also to the general public. The bulk of the actual readership of these products (as indicated by the feedback received by the RS) is, however, composed, besides the MPs, of certain categories of 'insiders', such as the staff of the political groups, representatives of vested interests, and journalists.

3. From legislative briefs to policy briefs

The LBs are intended to offer detailed analysis of the individual bills. MPs and political groups are, however, expressing an increasing demand for the 'big picture', that is, the broader policy contexts within which each individual bill operates. Law-making activity is today highly fragmented and very often aimed at responding to short-term needs. In contrast, public policies normally develop through long-term perspectives: their continuity can even withstand the change of parliamentary majorities.

At the EU level, a very clear example of this trend is offered by the EU Next Generation Plan (NGEU) launched in 2021 by the European Commission to tackle the social and economic consequences of the COVID-19 crisis. The core of the Plan is the Recovery and Resilience Facility – an instrument that offers grants and loans to support reforms and investments in the EU Member States forming a total of over 700 billion euro. The measures to be implemented by the Member States are centered on certain overarching priorities such as environmental sustainability, energy transition, gender equality and social cohesion.

Italy is among the main beneficiaries of the Plan. Between 2021 and 2026 it will receive 194.4 bn euro for its National Recovery and Resilience Plan (NRRP), meant to implement the reforms and the investments agreed with the EU. As for the other Member States who are beneficiaries of the NGEU, the agreement sets a strict timetable for the targets and the goals to be reached within each semester of the five-year period covered by the plan. Against this backdrop, the Italian Parliament is fully engaged in monitoring the implementation of these measures. The RS has consequently updated its documentation offer. Besides the LBs, a new production line has been opened, centred on the publication of periodical reports regarding the measures taken by the executive and other

public authorities (regions, municipalities etc.) to achieve the objectives of the plan. For the RS, this has implied a major cultural change.

The new products – the Policy Briefs (PBs) – are focused on providing a comprehensive assessment of the major public policies (energy transition, digital connectivity, social cohesion etc.) rather than on the legal aspects of the individual acts making up the complex mosaic of these policies[1]. Moreover, the PBs are centred on quantitative data and assessments regarding the actual implementation of the measures considered. Consequently, there is an extensive use of visual data and infographics in place of the textual content that prevails in the LBs.

4. Parliaments as a digital information hub for citizens

One of the characteristics of the new documentation products concerns their accessibility by the public. Like the LBs, the PBs are published on the Chamber's website: the nature of these new products makes them much more attractive to the public in comparison with the more technical and monographic LBs. Every citizen who wants to obtain summarised but in-depth information on the topics at the centre of public debate can rely on the content provided by the PBs. This is not only a simple possibility, but an actual trend, since a growing number of users access the digital version of our products. Most of them reach the RS briefs not through the website of the Chamber but via the most popular search engines. Initially, this was a rather unintended consequence of the content of the PBs. Today, it is a specific policy of the RS to disseminate its products as broadly as possible, via careful indexation of the documents. This practice is intended to make our products fully searchable, optimizing their ranking in search engine queries. Additionally, the queries launched via the most advanced Generative AI applications have a good probability of resulting in answers that use (and correctly cite as their source) these PBs.

On the one hand, these innovations have given rise to a growing awareness that the parliamentary documentation services also work for the general public, without abandoning their primary mission to serve parliamentarians. The enormous amount of information produced by parliaments should be made available for all. The new digital tools allow Parliament to become a digital information hub for citizens, that is, an open and reliable platform that aggregates, organizes, and disseminates digital information from the multiple sources available within the parliamentary environment. What is more, the new documentation products can support the relaunching within the digital 'infosphere' of the encyclopedic calling of modern parliamentarism, that is, the tendency for parliaments to produce and organise knowledge according to comprehensive circular structures (Rizzoni, 2024). The growing complexity of public policies poses a challenge that can be met by parliaments only if they will be able to fully exploit the potential of new technologies such as AI applications (Koryzis, Margaris, Vassilakis, Kotis, Spiliotopoulos, 2023).

[1] In 2023, the following PBs were published: *La politica di coesione in Italia (Cohesion Policy in Italy)*, https://temi.camera.it/leg19/dossier/OCD18-18626/la-politica-coesione-italia-4.html; *La strategia italiana di connettività (Italian Strategy for Digital Connectivity)* https://temi.camera.it/leg19/dossier/OCD18-18627/la-strategia-italiana-connettivita-1.html; *Le fonti rinnovabili (Renewable Energy Sources)*, https://temi.camera.it/leg19/dossier/OCD18-18664/le-fonti-rinnovabili.html; *L'occupazione femminile (Women's Employment)*, https://temi.camera.it/leg19/dossier/OCD18-19416/l-occupazione-femminile-1.html

The sustainability of our democratic regimes depends upon the cognitive preconditions underpinning these systems. The key question is whether democratic institutions today are still able to offer sufficiently shared "explanations of the world" that can serve as a common reference for all members of the polity.

This is a horizon that today appears to be threatened by a number of different phenomena, including the fragmentation of specialist knowledge, the "noise" resulting from the explosion of the communication sphere, the dissemination of disinformation, and the implementation of post-truth strategies by forces which are openly hostile to liberal democratic systems (Keyes, 2004). Parliaments — as the site of *government by explanation* — represent a decisive counterweight to these trends, offering the possibility of a recomposition of the public sphere which seems indispensable for the development of any democratic polity. Digital innovation in parliamentary documentation can offer significant support in this direction.

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ISMINI KRIARI

CIVIC PARTICIPATION AND TECHNOLOGY: OPTIONS AND CHALLENGES FOR TODAY'S AND TOMORROW'S SOCIETIES[1]

Introduction

Emerging technologies such as diverse uses of Artificial Intelligence (henceforth AI) offer new ways to put democracy into action and help citizens participate in social decision making. There is a generally accepted view that these technologies will increase the speed and scale of transmission of information and thus create better informed citizens. It is hoped that political participation is made easier and that certain obstacles, such as apathy, shyness, disabilities or lack of time can be reduced.

Digital democracy (or e-democracy) represents a variety of participative instruments, practically all of which make use of digital tools in one form or another (e-deliberative designs, e-consultations, e-petitions, e-voting, social media etc.).

There have been already reported cases where e-participatory procedures have been initiated, in order to increase public involvement. In Portugal a new form of public participation is the "participatory budget" (https://opp.gov.pt), i.e. a democratic, direct and universal process that allows civil society to decide on public investments in different governmental areas, in a completely collaborative and participatory way, effectively contributing to real social impact.[2] Through the PPB the Portuguese population is given a voice to decide where to invest part of the National State Budget: in 2017, 3 million euros in the areas of education and adult training, culture, science, agriculture and justice. The Participatory Budget is deliberative: the Portuguese people present investment proposals and they will be the ones to choose, through voting, on which projects

[1] I wish to thank Professor Alexandre Quintanilha and Mr. Bruno Dias Pinheiro for the invitation and their warm hospitality in Lisbon.

[2] National Report of Portugal in: "Towards a Digital democracy – Opportunities and Challenges", EPTA Report 2018, Scientific Foresight Unit (STOA), Brussels, European Parliament, 60 – 61.

will be implemented. In Norway, in the municipality of Fredrikstadt, citizens have participated via e-democracy tools in the drafting of a given budget. The aim was to include the less politically active members of society and had a special focus on young people, older individuals and immigrants. A similar initiative has been drafted in Belgium, for the multi-annual policy plan of Tielt, whereby citizens can indicate which of the twelve proposed policy areas – ranging from mobility to care to culture, sports and tourism etc. – are really important for them.[3]

After two decades since the appearance of digital democracy in Europe, a number of reports have concluded that its primary achievement is a significant improvement in access to and exchange of political information. The STOA report on Digital Democracy[4] concluded that: "It seems that e-participative processes provide an added personal value for participants and community capacity, but suffer from a lack of direct, or even indirect, political impact".

In addition, internet services and AI also make it easier to negatively influence the stability of society: social media such as Facebook might disseminate propaganda and misleading news to large swaths of targeted individuals on social media, thereby manipulating public opinion and potentially affecting the outcomes of elections. The Cambridge Analytica scandal brought the significance of such persuasive technology to the attention of a wide audience for the first time.[5]

Other problems are related to the fact that some citizens have experienced confusion with the sudden increase in information and this might lead to conspiratorial attitudes, the spread of fake news, etc.

It should also be pointed out that systems based on AI collect huge amounts of data, thereby demanding strong privacy protection regulations. Another issue is related to transparency, with regard to the data used in order to create machine learning algorithms. There is a risk that such data is biased, which can lead to discrimination, or maintaining prejudices.

In view of the above, societies should endeavour to set up AI systems that will increase public participation and strengthen democratic values such as freedom of expression and media pluralism,[6] while guaranteeing adequate and true information.

Greece' s response to technological challenges

In Greece, a lively debate is in progress in the media and in various scientific committees with regard to the democratic and inclusive use of AI. Prime Minister Kyriakos Mistotakis has established "The National Committee for the study of AI", under his presidency in October 2023. Seminars, studies and opinions by respective bodies on AI have been drafted. The most recent text is on the "Use of AI in the field of medicine", drafted by the Greek Bioethics and Technoethics Committee in January 2024.

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[3] Ines Mergel, "Study on the impact of digital transformation on democracy and good governance", European Committee on Democracy and Governance (CDDG, Strasbourg 2021, 16-17).

[4] EPTA Report 2018 (STOA), *op. cit.* 81.

[5] *Manipulating Social Media to undermine Democracy*, Freedom House, 2017. https://freedomhouse.org/report/freedom-net/freedom-net-2017.

[6] Article "Democracy in the Age of Artificial Intelligence" by Leopold Schmertzing, within the study "Trendometer – Essays on medium- and long-term global trends", European Parliamentary Research Service (EPRS), July 2018.
https://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS _STU (2018) 612835.

In the field of legislation, procedures have been initiated in order to strengthen democratic participation and transparency and to create legal safeguards against the use of new technologies for criminal purposes.

E-democracy: Article 5A of the Greek Constitution, revised in 2001, stipulates that "All persons have the right to participate in the Information Society". This right was further enshrined with a set of new mechanisms, facilitating public access to government information. Relevant reforms include, but are not limited to, the following measures:

OpenGovProject: This is designed to serve the principle of transparency, deliberation, collaboration and accountability and it includes the following initiatives: 1. Open calls for recruitment of public administration officials. Top level and mid-level openings in the public sector are available on the internet. Applications are submitted on-line using a platform available on the opengov.gr website. 2. Electronic deliberation of purposed legislation. In 2010, a procedure for the direct participation of individual citizens in the law-making process was introduced by means of the e-deliberation of draft legislation, prior to its submission to Parliament. Citizens and organizations can post their comments, suggestions and criticism on an article–by–article basis. The outcome of e-deliberation (also referred to as "public-consultation") accompanies all draft bills to the parliament, in the form of a mandatory public consultation report.

Cl@rity programme: Pursuant to Law 3861/2010, the decisions of public entities, public institutions, regulatory authorities, local government, with the exception of decisions containing personal sensitive data and/or information on national security, cannot be implemented if they are not uploaded on the Cl@rity Programme website and if they are not accompanied by a unique transaction number, enabling a search of the posted acts both in the handling of citizens' cases and in communication between institutions. In this way, citizens can be fully informed about government acts and such publicity has contributed to a change in mentality throughout public administration as a whole.

Start Up Greece: This is a digital information and networking space, aimed at producing a new generation of entrepreneurs in Greece, bringing together people and ideas and changing the country's perception of doing business. Start Up Greece combines an online entrepreneurship community with an information database in the business area.

Safeguards against illegal use of new technologies: The mission of the Electronic Crime Prosecution Directorate is the prevention, investigation and repression of crimes or anti-social behaviour committed through the internet or other electronic communications media.

Furthermore, the application of GDPR has increased safeguards regarding the protection of private life and personal data. Special criminal legislation has gradually made explicit reference to the internet, i. e. the anti-racist law (4285/2014) providing for crimes of racist violence committed through the internet. Law 4411/2016 updated the national criminal legislation in the field of cyber-criminality, through the ratification of the Budapest Convention on Cyber-criminality of the Council of Europe.

E-voting is not employed in Greece for general elections for Members of Parliament. E-voting is however used for certain other cases, via the ZEUS system, developed by the National Network for Technology and Research Infrastructure, which guarantees the secrecy of election procedures. Given this, the election of members of senior management of Greek universities, i.e. Rectors and Members of the Governing Board, are elected by e-voting (Law 4957/2022). Members of the Departmental Board for teachers of Primary and Secondary Schools are elected by e-voting (Law 4728/2020, art. 22). Members of the Boards of Trade Unions are also elected by e-voting (Law 4808/2021, art. 87 in conjunction with 1264/1982, art. 13, para. 1). The members of the Board of the Panhellenic Medical Association and the members of the Disciplinary Board thereof were elected by e-voting in 2018[7]. Art. 70, para. 4 of Parliament's Rules of Procedure stipulates that voting in Parliament can take place through electronic systems. Although this article was inserted in the Parliament's Rules of Procedures on 3.06.1987, the first electronic voting took place on 19.03.2018.[8]

Lessons from the past

The late Henry Kissinger, Secretary of State of the United States of America and renowned scholar, in his last book, written with co-authors Eric Schmidt and Daniel Huttelocher: *The age of AI and our Human future*,[9] presents many of the issues inherent in the widespread use of AI in almost every field of human activity, especially in the realm of political and military activities (influence on voting procedures, drafting of political messages, weapons, etc.). The main characteristic of a free society, i. e., the free and autonomous will of its citizens, could be jeopardized or even modified. The authors point out two issues in dire need of investigation: 1. Establishing the ethics of artificial intelligence. They underline the importance of ethical principles in every important human era, i. e., in antiquity, in the Renaissance, in the Enlightenment, in modern times, from Socrates to Spinoza to Kant to Wittgenstein. The AI era needs its own Descartes, its own Kant.[10]

It is important to link AI to the western conception that "Man is the measure of all things" in the well--known formulation by Protagoras. Furthermore, it is imperative to endorse collaboration between scholars of different disciplines to tackle the various aspects contained within AI.[11]

2. Free deliberation is much more than a person's ability to speak. Human reason should be protected against AI, when aiming to modify the perception of reality. Information, in order to be useful, should be understood through the angle of civilization and history.[12]

In this context, it is useful to remember the theory of Aristotle as to the qualities of a good individual and a good citizen. Aristotle points out that human beings are social and political animals, i. e., they live in communities and they are the only animals endowed with *logos*. *Logos* has a twofold meaning. It is the ability to think and discern but also the ability to talk and communicate. So, *logos* is the

[7] Fereniki Panagopoulou,"E-voting – A constitutional approach", Athens, 2023, (in Greek), p. 108.

[8] *Op. cit.*, 110.

[9] Henly A. Kissinger, Eric Schmidt, Daniel Huttenlocher, *The Age of AI and our Human Future*, 2021, John Murray (Publisher), 2022 translation in Greek, Liberal Books.

[10] *Op. cit.*, 269.

[11] *Op. cit.*, 282.

[12] *Op. cit.*, 248 and 78.

quality, inherent to the human species alone, which allows people to have the ability to discern and the ability to communicate their thoughts and ideas. *Communicating citizens* are the ones who can contribute to the functions of the city, because they can use their power to discern and can convince their fellow citizens. The power of persuasion is based on the character of speakers, on their *ethos*. There is a relation between *logos* (the logical part of the content), *ethos* (the personality part of the speaker) and *pathos* (the emotional part of the audience). Aristotle emphasizes that no matter how logical the content is, there is no persuasion if the speaker's *ethos* is placed in doubt.[13] *Ethos* is the foundation of persuasion and communication. Communication education is based on *ethos* but is oriented to *ethos* as a citizen.[14]

Humans do not speak alone or think alone but, educated in home and society, they grow up combining these two abilities and lives as citizens in a state participating in public affairs. *Logos, ethos and pathos* are the three elements necessary to participate in the affairs of the city.[15] As A. E. Zimmern put it: "The peasants and craftsmen of the small Greek republics, feeling the need for a better management of their humble concerns, set to work to provide it, with the same inventiveness, the same adaptation of means to end, which led them in other fields to the invention of the classic temple or to drama".[16]

Aristotle's definition of citizenship is tied tightly to his theory about the good human life and to his ethics of virtue. A good citizen in the ideal state is identical to the fully ethically virtuous person. The virtues of living a good human life are the same as those needed to rule and be ruled in turn.[17]

Although today we overlook the importance of character in public and private life, as other values such as "communication skills", "efficiency", "networking", "public image" have blurred this perspective, Ralph Waldo Emerson, the 19th century political philosopher, in one of his essays, writes that "...character is this moral order seen through the medium of an individual nature" and "character is nature in its highest form."[18]

A glimpse into the future

It is a well-known truth that members of Parliament mainly focus on re-elections. There are issues, however, which go beyond a re-election horizon, issues which cannot be dealt with in the timeframe of a four-year legislative period. So, some parliaments have already begun to incorporate future--oriented strategies and procedures into their everyday normal legislative work and governmental control. The parliamentary Committees for the Future emerged out of this necessity.

[13] Aristotle, Rhetoric, 1. 1356a13.

[14] Junrak Sohn, "Civic education and communication in Aristotle", 8th International Conference on Humanities, Psychology and Social Science, October 19-21, 2018, HPSCONF, 111-119.

[15] Benjamin Miller, "Aristotle on Citizenship and Civic Education: The central role of political participation", in: T*he Palgrave Handbook of Citizenship and Education*, 2018, *passim*.

[16] A. E. Zimmern, late Wilson professor of International Politics, University College of Wales, Aberystwyth, "Political Thought", in *The legacy of Greece*, (R. W. Livingstone, ed.), Oxford, at the Clarendon Press, 1921, 332 *et seq.*

[17] Aristotle, "Politics", Book I, Ch. 1.

[18] Ralph Waldo Emerson, "Character" in Selected Essays, Best Loved Classics, 310 *et seq.* 315, 321.

Finland was the first country to establish a permanent parliamentary Committee for the Future (henceforth CF) in 1993, with 17 MPs, in order "to generate dialogue with the government on major future problems and opportunities. It serves as a Think Tank for futures, science and technology policies in Finland" (Official webpage of the Committee for the Future). The CF can shape its own agenda and decide what it does, a privilege considered to be one of the pillars of its strength. The primary task of the CF is to prepare the response of the Parliament to the Government's Report on the Future, which is presented once per electoral term. This Report is dedicated to a specific yet broad issue, which is expected to have a significant influence on Finnish society in the future. Some of the topics covered by the Report have been: Population development and work (2001), the challenges of an aging population (2004), carbon neutral future (2009), sustainable growth (2013), and the future of work (2017, 2018).

CF is also the body responsible for technology assessment and its societal consequences. It has drafted many studies ranging from gene- and nanotechnology to ICT ethics and municipal democracy.[19]

The Parliament of Lithuania established a Committee for the Future in 2020, its main task being "to prepare and consider draft laws and other legal acts regulating the modelling of the future development of society and the State, development of innovation and technological progress, emigration and re-emigration processes and their impact on the development of society, modernization of the State and strategic reforms, as well as to submit and consider proposals on these issues (art. 1). Furthermore, it has to discuss and submit to the Parliament reports, conclusions and proposals on issues relating to strategic directions for Lithuania's development and projections for future developments and factors influencing future developments and the development models of the State…" (art. 2) (official webpage of the Committee for the Future).[20]

The Report on the Challenges to Foresight in Lithuania of 18 June 2021 identifies, among the policy recommendations for the State, the need to draw up a programme for increasing Lithuania's intellectual autonomy, which would encourage scientists to engage in Lithuanian affairs, step up intellectual research into Lithuania's present challenges and stimulate the modelling of the country's future. The Resolution of the Committee for the Future of February 18, 2022, "On the future of demographic Policy and Social Development", calls on the Government of the Republic of Lithuania to modernize and develop, in parallel to developing the State Progress Strategy **Lithuania 2050**, an integrated strategic policy on demographic development and an integrated research-based demographic agenda underpinned by the country's multiannual demographic strategic guidelines based on the following pillars: a comprehensive birth promotion programme,[21] effective programmes for health protection, for increasing life expectancy and improving the mental health of the population and cross-cutting measures to reduce the demographic disadvantages in particularly sensitive segments of society, especially in less educated population groups, among unemployed and single parents, and steps to reduce the regional impact of demographic inequalities.

[19] For a critical appraisal of its work and its impact on Finnish politics, see: Vesa Koskimaa & Tapio Raunio, "Encouraging a longer time horizon: The Committee for the Future in the Finnish Eduskunda", in *Journal of legislative Studies*. https://doi.org/10.1080/13572334.2020.1738670, 4 *et seq*.
[20] See also Resolution on Future Digital Transformation and Digital Sovereignty in Lithuania on 7 December 2021.
[21] The programme should include financial incentives (one-off and periodic payments, tax incentives, free/subsidized child-associated services and goods, housing subsidies), state support for work-life balance (maternity leave, paternity leave, parental leave, child care services, flexible forms of employment, non-discriminatory laws, gender equality in the work place), and social change that is child-rearing-friendly as well as motherhood and fatherhood friendly employment policies, create a child-friendly environment, and ensure gender equality in the family.

In Iceland, in 2018, the Prime Minister established the Committee for the Future, consisting of 11 Members of Parliament. The Committee drafted the Report "Icelandic Society 2035-2040 – Economic, environmental, regional and demographic developments"[22] in October 2019. The Report covers various issues from education to the labour market, to finance and economy to the environment and society. It identifies the main drivers of development and the risks associated with them.

Other Committees for the Future have been established in Chile (Committee of the Future, Science, Technology, and Innovation, National Congress of Chile), Paraguay (ICT Committee and Future Committee, Congress of Paraguay), Uruguay (The Special Futures Committee, General Assembly of Uruguay), The Philippines (Committee for Sustainable Development Goals, Innovation and Futures Thinking – Congress of the Philippines).

The Second World Summit of the Committees of the Future took place in Uruguay between 25-27 September 2023 on the topic: "Bringing the Future to the Present, the Democracy of the Future, Artificial Intelligence and Parliaments". In the Outcome Document the participating parties (over 300 parliamentarians, experts and practitioners representing 70 parliaments from around the world) underline their commitment to democracy in the age of AI through anticipatory governance and they suggest that a nuanced and multidimensional approach should respect both innovation and human rights. Furthermore, they propose that anticipatory capacities should be integrated within parliaments for more effective decision making.

As AI evolves, it could act autonomously to solve novel problems with novel strategies beyond human abilities (referred to as artificial general intelligence or Frontier AI) in the near future. The participants of the summit supported the view that new initiatives should be initiated, such as the global harmonization of AI Standards, anticipatory regulatory mechanisms, interdisciplinary collaboration, public involvement and literacy, sustained human rights-based approaches, gender mainstreaming and future generations, and strengthening inter-parliamentary collaborations.

Finally, they called upon the United Nations to spotlight the centrality of anticipation and foresight in parliaments through their main functions – accountability, oversight, both legislative and representative – in addressing the multifaceted challenges and opportunities posed by AI. The democratic mandate and future–oriented initiatives of parliaments hold the key to sustainable solutions. They advocated for the creation of a universally shared AI governance framework, when considering the accelerated, powerful, uncertain and disruptive evolving nature of AI.

This framework, which must consider the interests of all nations, irrespective of their economic and social system, will have a dual focus: firstly, protecting human rights and humanity's interests, safety and security and secondly, harnessing the positive evolution of AI for the global good. An anticipatory AI global framework should address these challenges and a UN Convention on AI should be drafted, designing appropriate global processes and structured to meet this objective and ensure its implementation.

[22] Publ. by the Government of Iceland, Prime Minister's Office.

PART V.

THE CHALLENGES FOR DEMOCRACY — FROM CYBER SECURITY TO THE IMPACT OF DIGITAL TECHNOLOGIES ON PARLIAMENTARY WORK

MARK HARBORD

THE CHALLENGES FOR DEMOCRACY — FROM CYBER SECURITY TO THE IMPACT OF DIGITAL TECHNOLOGIES ON PARLIAMENTARY WORK

This article explores the importance of cyber security for democracy – discussing both the threats posed when cyber security is breached and suggesting possible mitigations to those threats to reduce the impact on legislatures and democracy. This article is a summary of the contribution made by an official working in the UK Parliament and calls on their experience in that context.

Cyber security threats to parliamentary legislatures

There are many and varied potential cyber threats that can and do impact the work of democracy and parliaments. Many different actors are operating online and they have many and varied goals behind their attacks. It is important for parliaments and other democratic institutions to be aware of these potential reasons for attack and to be educated about how to defend against them. The goals of the ever-growing number of actors in the cyber community include the following desires: to create chaos and disrupt democracy in that way; to gain power and influence through their actions; to destroy systems completely through cyber attacks; and to gain knowledge or gather information through accessing digital systems covertly or otherwise.

It is important for parliaments to equip themselves with the right tools to fight these tools because cyber attacks can cause significant disruption to systems, to Members and staff, or even to proceedings themselves. Attacks can also cause destruction, which can be costly to repair and have many other implications for the operation of democracy. The attacks can be a show of the power of the attackers and can be seen to show the weakness of a democratic institution and can cause reputational damage to democracy. This is something in itself worth investing in to fight against. As we know, cyber attackers often us impersonation to access information or systems, which is a growing trend and something we need to defend against carefully.

Cyber attackers are often motivated by influencing outcomes through their actions, not just causing damage or destruction. We have seen examples of cyber activity shaping the direction of democracy (e. g., elections), internal influencing (e. g., the sponsoring of certain groups through the use of troll farms) and causing mania through the spreading of misinformation or disinformation. Cyber attacks are also used for the purposes of espionage and gathering information. All of the above have obvious and significant implications for democratic institutions and make the case for greater investment and attention to be paid to mitigate against potential threats.

Mitigations against cyber attacks

It would not be right to discuss the threats of cyber action without touching on certain mitigations. It is essential that parliaments and other democratic institutions are able to defend themselves against cyber attacks. The context of this defence is important – there is an "arms race" taking place as new threats and techniques are being constantly developed. Cyber security experts need to adapt and have the capability to spot new trends to defend against the newest as well as the known techniques of attack. The impact of this is the need for it to be minimised through a multi-level defence.

The use of best practice technology controls is essential, but it should be noted that these will only be able to be around 90 % effective against attack. It is important to have a depth of mitigations, investing in varied defence methods against known attack methods but also to ensure that new types of attack are identified quickly and effectively. It is particularly important to raise awareness and educate users of parliamentary systems about potential threats and how their actions (such as regularly changing passwords and identifying suspicious emails) can be simple but very effective in defending against attacks. Finally, it is important to coordinate efforts with intelligence groups, which can be especially helpful in defending against blended attacks.

VÂNIA NETO

CLOSING THE CYBERSECURITY SKILLS GAP

It is a pleasure to speak at this event.

At Microsoft, we aspire towards economic, social, and environmental prosperity for governments and the societies we serve together. Our mission is to empower every government agency and person on the planet to achieve more. We aim to deliver enhanced digital services to the public with inclusive, responsive, and accessible experiences, enable trusted, secure, compliant government platforms to address cybersecurity and protect citizen data, empower a future ready workforce through skilling, capacity building and economic development tools, and help governments efficiently deliver on the promise of sustainable growth with new and emerging technologies.

Cybersecurity continues to be a significant threat for governments, businesses and individuals around the world. From supply chain disruptions to ransomware attacks, cybercriminals have become increasingly sophisticated and the threat landscape more diverse. We recognize that no one has a higher responsibility to address cybersecurity threats than leading tech companies. That's why we've increased cybersecurity investments and broadened our efforts across Microsoft.

These cybersecurity challenges are compounded by a workforce shortage[1]; there simply aren't enough people with the cybersecurity skills needed to fill vacant jobs. Furthermore, we're not training or certifying enough students in cybersecurity to meet growing demands. Urgent action is needed to address the cybersecurity gap and protect critical public and private infrastructure.

[1] White Paper "Navigating the IT Talent Shortage: Skilling Up for Success", IDC, September 2023.

Under our Future Skills Initiative, we work with Universities, Ministries of Education, and Vocational Schools to ensure that students have access to adequate skilling, to get them ready for the future workforce.

Around the world, we've partnered with education institutions, nonprofits, governments, and businesses to develop local cybersecurity skills programmes that meet unique market needs – anchored in data about the cybersecurity skills gap in each country and focused on increasing diversity in the industry. We've expanded our work with global nonprofits to develop programmes, based on local data. We've provided grants in several countries, including Australia, Belgium, Brazil, Canada, Colombia, Denmark, France, Germany, India, Ireland, Israel, Italy, Japan, Korea, Mexico, New Zealand, Norway, Poland, Romania, South Africa, Spain, Sweden, Switzerland, and the United Kingdom.

We've also partnered with the Organization for Economic Cooperation and Development (OECD) to develop a detailed study on the skills gap in various countries and their ability to grow cybersecurity workforces through post-secondary education and training. Additionally, we are partnering with women-focused organizations such as WiCyS, Women 4 Cyber and WOMCY, helping to promote the retention and advancement of women in cybersecurity. We are also offering corporate resources for underserved job seekers and professionals (from the public and private sectors) involving Microsoft Learn and LinkedIn Learning.

We use mobile phones, computers, and social media every day; our lives are interconnected, but we rarely think about cybersecurity. We know that cyberattacks are rising rapidly and they can pose a serious threat to ordinary citizens, businesses, and even parliaments. Such breaches and ransomware attacks are growing, and we need to do something about this.

Microsoft regularly releases its Cyber Signals report[2], a publication that provides insights into the latest trends and threats in cybersecurity. It offers an inside look at the shadowy world of ransomware as a service (RaaS) and provides information that can help protect customers. Phishing attacks have been rampant everywhere, for example, "Microsoft's Digital Crimes Unit has observed a 38 percent increase in Cybercrime-as-a-Service targeting business email between 2019 and 2022". This topic should be high on every government's agenda, as well as parliaments.

Cyberattacks keep increasing, and we know that there is a huge problem, given there are not enough professionals to work in these areas. Technology overall is growing exponentially, and there are not enough people to fill each post. In cybersecurity, this shortage is especially severe. According to "2023 Official Cybersecurity Jobs Report by Cybersecurity Ventures", there will be 3.5 million unfilled jobs in the cybersecurity industry through 2025. Microsoft, as a global tech company, particularly feels this concern, not only regarding our staff, but also our whole ecosystem of partners and customers.

[2] Available at https://www.microsoft.com/en-us/security/business/security-insider/reports/ .

In recent years, as cybersecurity threats have increased, a Cybersecurity Skills initiative[3] has been launched. In several countries, we are working with governments and NGO partners to improve the local ability to train more people in cybersecurity.

Under this initiative, Microsoft partners with educational institutions, nonprofits, governments, and businesses around the world to create local Cybersecurity Skills programmes that are tailored to the specific needs of each country – based on data about the cybersecurity skills gap and focused on increasing diversity in the industry. This includes providing free resources for underserved job seekers and professionals (from both the public and private sectors) from Microsoft Learn[4] and LinkedIn Learning.

In addition, the Partnership with the Organization for Economic Cooperation and Development (OECD) is producing a detailed study on the skills gap in various countries and their ability to grow cybersecurity workforces through post-secondary education and training, providing the necessary data to take adequate measures and to inform our future skills programmes going forward.

The world urgently needs more cybersecurity experts. The data is alarming, because in some countries, such as Brazil, the demand for cybersecurity skills is as high as 76 per cent. In Europe, Poland and Romania have the highest cybersecurity skills demand, and this has risen by 35 per cent over the past year overall.

The gender gap poses a huge problem for IT professionals in general, but in this area of cybersecurity it is massive. Women are not embracing these careers and the lack of diversity is not good for our global development. Another example of what we've been doing is to close this cybersecurity skills gap and gender gap, to empower more women to become cybersecurity specialists is a project developed in Norway with INNO-SCI[5]. They're doing a fantastic work with women refugees that were very qualified in their home countries but could not find a job in Norway at the same level. The project aims to turn these women into cybersecurity experts and get them into the job market after this one year and a half programme.

A sizeable number of cybersecurity breaches and issues faced by companies and organizations can be attributed to user error. This is not solely due to the increasing sophistication of hackers, but also because users may fail to verify the authenticity of emails, or overlook spelling errors due to a lack of attention to detail. Access to high-quality, free training is crucial in democratizing access to technology for all individuals. Certifications and micro-credentials are highly valued in the IT industry as evidence of proficiency in specific technologies. It is no longer sufficient to simply claim proficiency in applications such as Excel or Word on a resume. Advanced IT skills are now a necessity for all institutions.

[3] https://blogs.microsoft.com/on-the-issues/2023/04/19/cybersecurity-skills-initiative-expansion-nonprofits/

[4] Microsoft Learn is an online learning platform that is free and that aims to make technological skilling accessible to everyone. Available at https://learn.microsoft.com/en-us/

[5] https://inno-sci.com/

Collaboration between industry, governments, and other relevant parties is essential to ensure an adequate supply of cybersecurity professionals to protect critical infrastructures, parliaments, and other vital systems. It is imperative that pathways to cybersecurity careers are accessible and inclusive, with a focus on promoting gender diversity and encouraging more women to enter the field. Furthermore, it is crucial to raise awareness among all computer and smartphone users of the importance of cybersecurity.

As I have the opportunity to address this Parliament, I would like to take a moment to make a closing remark. It is widely acknowledged that democracies are fragile, and the potential for technology to harm democracy is a real concern. In recent years, this has become increasingly apparent. It is therefore of utmost importance that all Members of Parliament are cognizant of this fact and ensure that the rule of law remains paramount, above all else, including technology.

Parliaments, the European Commission, and the European Union have the capacity to enact regulation. The issue at hand is not what technology is capable of achieving, but rather what it ought to do. It is incumbent upon these bodies to anticipate and guide technological developments. All too often, we observe that legislation lags behind technology, and is sometimes caught off guard.

It is my firm belief that we, as humans, have the ability to effectively manage the current situation (and I trust this will be discussed later, in the artificial intelligence panel).

In conclusion, it is imperative that we maintain our leadership and ensure that democracy continues to be governed by the rule of law and the will of the people, and not by technology. While it is not possible to halt the progress of technological innovation, it is advisable that we take measures to ensure that it follows the appropriate standards and principles. It is also imperative that we focus on developing the necessary skills to equip ourselves for the challenges of both the present, and the future ahead.

CRISTIANA FERREIRA

I would like to start by welcoming you to the Assembleia da República, to Lisbon and to Portugal. It is a great honour to participate in this conference.

We are very lucky to have Alexandre Quintanilha, who doesn't belong to my political party, but is one of the most brilliant Members of this Parliament.

Though my experience as a parliamentarian is very recent, as a Member of the National Defence Committee, my interest and attention is focused on this matter, which, in fact, should concern us all.

So let me start by speaking a little bit about my experience in the Portuguese Parliament, followed by some ideas on cyberspace security and the importance of digital literacy, the most efficient way to protect democracy from the new digital threats.

On parliamentary activity,

Legal and technological changes that have been taking place advise increased attention to information security issues, as well as the creation of specific rules in national parliaments, taking into consideration the specificity of parliamentary work.

Firstly,

Our work is mostly public. We are the voice of Portuguese citizens.

That means that our committees are aware of the work carried out in defence of their interests. Though our work and parliamentary acts must be published, that does not mean we don't work with classified or even sensitive documents, which imply restrictions on their disclosure.

That's why it is so important to protect such information!

Even public information must be protected, ensuring its integrity, disposal, and reuse. The IT service system is a vital asset for the efficient functioning of the Assembleia da República supporting basic institutional information for the services provided. An AR Network User is provided with computer equipment and access to institutional information.

These resources require responsibility in their use and the adoption of standards of conduct that contribute to operating the information systems securely and effectively.

User contact with the technology system and institutional information must always be responsible, ethical and compliant with the law. Here, acceptable use means using resources in accordance with the institutional purposes for which they are intended, respecting property, and copying rights, respecting existing security mechanisms, and adopting suitable procedures for effective and safe operational use. That's why we have guidelines involving an Acceptable Use Policy.

Furthermore, the information on the Assembleia da República system needs protecting, to preserve its integrity, confidentiality, authenticity, and availability, so that increasingly effective and efficient protection can be achieved.

I believe that in this way parliamentary work in the Assembleia da República is thus equipped with security standards technology.

However, this is always a shared responsibility involving different actors, whether public or private, collective or individual.

Let us now turn to cyberspace security. This requires different responsibilities, for the benefit of the common interest. And we have more responsibilities because every day we defend democracy.

Increasing the security of networks and information systems is a way of guaranteeing the protection and defence of cyberspace, which is in everyone's interest. We must ensure its free, safe and efficient use by all citizens, companies, and other public and private entities.

Technological evolution and the rapid growth of the internet, which today is assumed to be a self-evident tool for communication and interaction on a planetary scale, have built a "network society".

Cyberspace, as a common global space, is not limited by the public or private, civil or military, internal or external sphere.

It will be difficult to obtain the full value cyberspace has to offer to modern societies without ensuring its security and defence, by developing and improving the required national infrastructure.

For this reason, cyberspace constitutes a new strategic domain, needing to be thought of as a priority area for the Defence of national values and interests.

Cyberspace was recognized by NATO as a new operational domain, as critical to National Defence as the areas of land, sea, air, and space.

Cyberspace has changed a State's security and Defence paradigm, forcing the drawing up of new strategies and the implementation of appropriate methods based on technological sources that can respond to emerging threats in this area.

This has enabled new possibilities, but also a wide range of risks and challenges for democracy as well. Modern societies, because of technological evolution, have a resulting growing dependence on the internet. Therefore, cyberspace is not the problem itself, but rather its malicious misuse to target people, organizations, and States themselves.

Today, the world is more digitally connected than ever before. Criminals take advantage of this online transformation to target weaknesses in online systems, networks, and infrastructure.

Finally,

The development of digital tools challenges media companies and content producers, as well as audiences, which, provoked by growing contexts of disinformation, often call into question democratic values and conscious civic participation.

As part of the threat to liberal democracy, citizenship and civic participation, digital literacy is particularly important for an active, critical, dignified, and fair citizenship, and has an essential valued role in the construction and maintenance of pluralist and democratic societies.

ACHILLES C. EMILIANIDES

CAN THE IMPACT OF DIGITAL TECHNOLOGIES ON PARLIAMENTARY WORK BE DISASSOCIATED FROM SOCIAL NORMS?

I. Introduction

The argument that the use of sustainable Information and Communication Technology (ICT) policies could increase citizens' access to parliamentary activities and documentation, thereby enhancing transparency and accountability, reinforcing the role of parliaments, and potentially revolutionizing parliamentary democracy, is not new. Ever since the widespread use of the internet in the early 2000s, it has been argued at a global level that ICT could significantly impact the workings of parliaments, and help them better fulfil their main functions of legislating, representing, and overseeing, as well as increasing their transparency, accountability, and effectiveness.[1]

In a resolution adopted in 2003, the Inter-Parliamentary Union (IPU) Assembly called upon parliaments to make full use of ICT so as to enhance the effectiveness, efficiency and transparency of their activities, better connect with their electorates, and expand inter-parliamentary relationships and co-operation at bilateral and multilateral levels, and to take legislative action with the objective of providing an environment conducive to the dissemination, development and secure use of ICT in a way that fosters parliamentary democracy.[2]

In November 2005, the Global Centre on ICT in Parliament was launched, a joint initiative of IPU and the UN Department for Economic and Social Affairs, aiming to promote the introduction of ICT in parliaments as a method of increasing transparency and efficiency and strengthening their role in supporting good governance and democracy.[3]

[1] Xiudian Dai, Philip Norton, "The internet and parliamentary democracy in Europe"; *The Journal of Legislative Studies* 13/3 (2007), 342-353; Cristina Leston-Bandeira, ''The impact of the internet on parliaments: A legislative studies framework'' *Parliamentary Affairs* 60 (2007), 655-674.
[2] "The contribution of new Information and Communication Technologies to good governance, the improvement of parliamentary democracy and the management of globalisation", 109 IPU Assembly, Geneva 3 October 2003.
[3] https://www.ictparliament.org/, accessed 10 October 2023.

Many of the arguments used for e-government, namely that the full utilization of the potential of ICT can lead to an organizational transformation framework that could allow traditional institutions to improve their overall efficiency,[4] can be used for parliaments as well. A parliament is at the same time an institution and a workplace; a complex structure of people, rules, and processes, that could evolve in new directions via the use of information systems, while at the same time maintaining its identity.

What this evolution might entail, however, cannot be uniformly predicted, as different forms of outcomes might depend on the manner in which the mechanisms offered by ICT would be utilized by each parliament. It has been argued that digital transformation might entail not only technical or even social changes, but also cultural, organizational and relational changes.[5] During the past decade, parliaments worldwide have implemented a range of new initiatives with the objective of enhancing their relationship with citizens, and increasing transparency and public engagement. These rely predominantly on the use of ICT. One of the objectives is using ICT in order to address existing democratic deficits by making institutions more representative, such as parliaments, which can become more transparent, accessible, and interactive with citizens.[6]

This paper proposes that the impact of ICT on parliamentary work cannot be disassociated from social norms. Without asserting political will in designing and implementing public policies, ICT cannot offer solutions on its own. ICT consists of tools and mechanisms, and similarly to all tools there need to be decisions on how to use them in a manner conducive to progress. ICT can improve parliamentary efficiency, and can provide citizens with more access to information than even before, not only at the national, but also at supranational and global levels. However, ICT can also be used for activities which undermine democracy such as the illegal surveillance and wiretapping of parliamentarians. It remains the duty of national parliaments to ensure that parliamentary democracy, transparency, good governance, and accountability are promoted through the use of ICT, and accordingly the progress that ICT can offer is "what parliaments make of it".[7]

II. Assessment of existing data

There have been significant efforts to utilize digital tools to improve citizen engagement with governance and increase transparency and accountability. Parliaments have created their own websites and social media pages, including legislative observatories,[8] and successful parliamentary monitoring websites have also been set up.[9] Whereas parliamentary official presence on the web was still an innovation in the late 1990s,[10] it would now be inconceivable for a national parliament not to attempt to assert its presence through that web. Governments and parliaments might rhetorically express the need for innovation; however, as would be expected, they are not really invested in technological revolution or innovation, but rather their interest is in efficiency.[11]

[4] See Keld Pedersen, ''E-government Transformations: Challenges and Strategies'', *Transforming Government* 12 (2018), 84–109; Jana Nograšek, Mirko Vintar, ''Observing Organisational Transformation of the Public Sector in the E-Government Era'', *Transforming Government* 9 (2015), 52–84.

[5] Ines Mergel, Noella Edelmann, Nathalie Haug, ''Defining Digital Transformation: Results from Expert Interviews'', *Government Information Quarterly* 36 (2019), 101385.

[6] Stephen Coleman, "Parliamentary Communication in an Age of Digital Interactivity", *Aslib Proceedings* 58(5) (2006), 371-388.

[7] To adapt the famous quote that "*Anarchy is what states make of it*", see A. Wendt, "Anarchy is what States make of it. The social construction of power Politics" (1992), 46 *International Organization*: 391.

[8] See a review of relevant efforts in Nicolas Kyriakides *et al.*, "Transparency and Accountability for Cypriot Legislature: An Online Legislative Observatory for the House of Representatives", in Achilles Emilianides *et al., The Institution of the House of Representatives* (Nicosia: House of Representatives/ University of Nicosia School of Law, 2022), 247-267.

[9] Indicatively https://www.govtrack.us/ in the US, and https://www.theyworkforyou.com/ in the UK, accessed 10 October 2022.

[10] Kirsty Magarey, "The internet and australian parliamentary democracy", *Parliamentary Affairs* 52/3 (1999), 404-427.

[11] Johan Magnusson, Jwan Khisro, Ulf Melin, "A Pathology of Public Sector IT Governance. How IT Governance Configuration Counteracts Ambidexterity" in *Electronic Government; EGOV 2020; Lecture Notes in Computer Science* (Cham: Springer, 2020, v. 12219), 29–41.

A 2013 study across 184 functioning lower house and unicameral parliamentary websites, for instance, showed that although websites in wealthy democracies generally provide more parliamentary information, the majority of them were deficient in providing basic parliamentary information to citizens and utilizing links to social media. By contrast, some non-democratic states and newly democratized countries, especially those with compulsory voting, displayed a relatively high level of parliamentary transparency and social media connectivity.[12]

There have been several studies that have empirically assessed the use of ICT in parliaments. Predominantly such empirical studies focus on the perceptions of the MPs or MEPs, or even the general public, and the use of and the communication facilities of the internet and social media platforms.[13] This is understandable since this directly relates to the question of the relationship with the electoral body, and accordingly with the objective of enhancing citizen engagement, and parliamentary transparency and accountability.

In this respect, embracing ICT is perceived as a way of addressing the legitimacy crisis that parliamentary democracy is facing.[14] However, ICT could influence the internal workings of Parliaments as well, and not just their public engagement. It is rather uncontroversial to argue that establishing technical infrastructure and ICT capacities, and utilizing ICT tools and mechanisms, including artificial intelligence and legal informatics, could increase the overall efficiency of parliamentary work, and accordingly assist in the fulfilment of the role of parliaments as legislators, representing the people, and governmental oversight.[15]

A comparative study of European countries relying on both quantitative and qualitative data and methods concluded that parliaments are selective in their strategies for engaging with the public, and in their selectivity they opt to invest largely in information provision, leaving other public engagement activities as secondary pursuits.[16] Parliaments therefore carefully select how to engage with the public pursuant to their strategic considerations, adjusting "their messaging tools, including digital media, according to their interests, ideas, resources and environment".[17] Consequently, digital parliaments are the outcome of both the agency of the parliamentary political actors and structural factors, including management structures. Learning mechanisms from exposure to international networks promoting a digital agenda for parliaments do not necessarily lead to better parliamentary public engagement.[18]

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[12] Devin Joshi, Erica Rosenfield, "MP Transparency, Communication Links and Social Media: A Comparative Assessment of 184 Parliamentary Websites", in *The Journal of Legislative Studies* 19/4 (2013), 526-545; Jeremy Griffith, Cristina Leston-Bandeira, "How are parliaments using new media to engage with citizens", in *The Journal of Legislative Studies* 18/3-4 (2012), 496-513.

[13] Xuidian Dai, "Prospects and Concerns of E-Democracy at the European Parliament", in *The Journal of Legislative Studies* 13/3 (2007), 370-387; Magnus Lindh, Lee Miles, "Becoming Electronic Parliamentarians? ICT Usage in the Swedish Riksdag", in *The Journal of Legislative Studies* 13/3 (2007): 422-440; Jens Hoff, "Members of Parliaments' Use of ICT in a Comparative European Perspective", in *Information Polity* 9/1-2 (2004): 5-16; Rita Marcella, Graeme Baxter, Nick Moore, "The Impact of New Technology on the Communication of Parliamentary Information", in *Journal of Nonprofit & Public Sector Marketing* 14/1-2 (2005), 185-203; Antonio Texeira de Barros, Christiane Brum Bernardes, Malena Rehbein, "Brazilian Parliament and Digital Engagement", in *The Journal of Legislative Studies* 22/4 (2016), 540–558.

[14] Mauro Romanelli, "New Technologies for Parliaments Managing Knowledge for Sustaining Democracy", in *Management Dynamics in the Knowledge Economy* 4/4 (2016), 649–666.

[15] See e. g. Office for Promotion of Parliamentary Democracy, *Information and Communication Technologies in Parliament. Tools for Democracy* (Brussels: European Parliament, 2010).

[16] Sofia Raquel Serra-Silva, *Parliamentary Online Public Engagement in the 21st Century: A Comparative Perspective with a Focus on Austria and Portugal*, PhD Thesis, Lisbon: University of Lisbon, 2020.

[17] *Ibid*, 273.

[18] *Ibid*.

An interesting research report on how digital tools for parliamentary openness and engagement are operating in Sub-Saharan Africa, and how future tools can be better designed and targeted to achieve greater social impact, concluded that there were a number of diverse key social and environmental factors affecting how citizens and their parliaments communicate digitally, specifically concerning data access and quality, public understanding of institutional functions, political will to produce and publish information on parliamentary activity, political will to open and maintain communication, the capacity to use relevant digital spaces to consume and share information, and the presence of intermediaries (or infomediaries) to repackage and disseminate information in a widely consumable format.[19] Through the evaluation of different countries as case studies, the research showed that where corruption is relatively high the data produced is of a relatively low volume and quality, whereas where corruption is relatively low there was higher data availability.[20] A difference between rhetoric and practice was further identified, as in the case where certain countries might be theoretically supporters of open government, in practice this did not imply that there would be actions to implement such change. Research has advocated that accessibility and quality of data is key in building and maintaining digital tools that enable citizens to acquire and consume parliamentary information.[21]

In a study of the Italian administration, it was shown that digital transformation is influenced by a combination of different factors, such as the sense of urgency, the need for change, and the creation of a collaborative environment, organizational barriers and the lack of support.[22] A recent structured expert survey aimed at internal parliamentary actors, parliamentary professionals and MPs concluded that societal barriers, such as culture and change, and lack of tangible strategies and plans, may hinder digitalization even if there is no lack of resources. It was therefore suggested that stakeholders in parliaments play a significant role in the digitalization of parliaments, and that the future digital parliament would amount to more than a mere aggregation of tools and technologies, and that it would still have strong social and procedural components.[23]

Although the use of technological development has often been viewed with unreserved optimism about the potential of ICT to transform e-government and to foster accountability and transparency, empirical research has confirmed that a more critical approach is warranted. "Making All Voices Count", which ran between June 2013-November 2017, is a good example of a programme that generated research-based evidence on how technologies contribute to accountable governance change processes, and practice--based learning on how to support innovation in this field. Its objective was to support the development and dissemination of innovative approaches to fostering accountable, responsive governance by using tools and platforms based on ICT.[24] However, at its conclusion the programme admitted that contrary

[19] Rebecca Rumbul, Gemma Moulder, Alex Parsons, *Parliament and the People: How Digital Technologies are Shaping Democratic Information Flow in Sub-Saharan Africa* (London: MySociety, 2018), available at https://research.mysociety.org/html/parliament-and-the-people/#top, last accessed 10 October 2023.

[20] *Ibid*. See also Ibrahim Osman Adam, "Examining E-Government Development Effects on Corruption in Africa: The Mediating Effects of ICT Development and Institutional Quality", in *Technology in Society* 61 (2020), 101245.

[21] *Ibid*.

[22] Luca Tangi *et al*., "Digital Government Transformation. A Structural Equation Modelling Analysis of Driving and Impeding Factors", in *International Journal of Information Management* 60 (2021), 102356.

[23] Dimitris Koryzis *et al*., "ParlTech: Transformation Framework for the Digital Parliament", in *Big Data and Cognitive Computing* 5(1) (2021), 15.

[24] https://www.makingallvoicescount.org/, accessed 10 October 2022.

to the "relatively uncritical and optimistic views that shaped Making All Voices Count in the beginning, we now have reason to pause and consider the wider impacts of technologies on our governance landscape."[25]

The programme accepted that ICT could be decisive in improving services where the problem was a lack of planning data or user feedback. However, it was concluded that not all voices could be properly expressed via ICT, and that increased transparency and open data were not sufficient to generate accountability. Where ICT could support social mobilization and collective action by connecting citizens, and could create new spaces for engagement between citizens and state, as well as empower citizens, it was acknowledged that the kinds of democratic deliberation needed to challenge a systemic lack of accountability could rarely be well supported by ICT, and ICT alone could not foster the trusting relationships needed between governments and citizens. Contrary to the expectations of tech-activists, the problems underlying governance are much harder, and are not automatically solved by the use of ICT as ICT cannot overturn the social norms that underpin many accountability gaps, and the capacities needed to transform governance relations are developed offline and in social and political processes, rather than by ICT.

Uncritical attitudes towards ICT might actually lead to a deepening digital risk compounding existing exclusions, expand the possibilities for surveillance, repression and the manufacturing of consent, and narrow the framing of necessary debates about accountable governance. When tech giants own big data, the infrastructure, and algorithms, on which e-governance depends, this might accordingly lead to less accountability and transparency. The study further concluded that "the contribution of tech innovation has been less than that of tech-aware social innovation in making voices count. That tech solutions have made only a moderate contribution is due in part to design and implementation flaws, for which today's stock of knowledge provides abundant evidence, and to which it offers more than sufficient remedies. But it is also partly due to the complexity of the task of making governance accountable, which was under-recognized by many at the outset." [26]

Whereas in principle transparency and accountability should be factors contributing towards increased efficiency, parliamentarians often argue that greater openness might reduce overall efficiency. While an argument could be made that this challenge could simply be dismissed as an expression of unwillingness on behalf of parliamentarians to accept an amplified public scrutiny of their work, the reality is that in many cases the balancing exercise is not as simple as it might initially seem, and that there is a need to address this balancing challenge through new theories, models, and training, in order to achieve increased overall efficiency.[27] ICT unavoidably immediately transforms the technical elements of parliament, but the social system is less inclined to be affected by that digital transformation.[28]

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[25] Rosie McGee *et al.*, *Appropriating Technology for Accountability: Messages from Making All Voices Count*, Research Report (Brighton: Institute of Development Studies, 2018), 25.

[26] *Ibid*, 25.

[27] Arie Halachmi, Dorothea Greiling, "Transparency, E-Government, and Accountability", in *Public Performance & Management Review* 36(4) (2013), 562-584.

[28] Luca Tangi *et al.*, "Barriers and Drivers of Digital Transformation in Public Organizations. Results from a Survey in the Netherlands", in *Electronic Government; EGOV 2020; Lecture Notes in Computer Science* (Cham: Springer, 2020, v. 12219), 42–56.

III. Conclusion

The COVID-19 pandemic, and the unexpected imposition of often unprecedented restrictions, contributed in many ways to the rapid promotion of ICT in parliamentary work, forcefully neutralizing the previous reluctance that parliamentarians had shown. Parliaments had no option but to adapt to ICT simply in order to keep functioning. The World e-Parliament Report 2020 addressed this changing landscape in some detail.[29] However, the unrestrained optimism that parliaments would be so radically transformed that they might even become obsolete due to the digital empowerment of citizens to present their views and e-vote,[30] has so far been shown to be an oversimplification. The main impediment does not, however, necessarily lie in ICT's potential, but rather in the extent to which parliaments themselves are willing to be e-transformed beyond having a website or using social media for informing parties about developments, or other uses of ICT which, given the ongoing technological development, now seems rather rudimentary. The extent to which parliaments would be, for instance, willing to adopt an interactive model of communication with their citizens, and to allow them to comment and deliberate on policy issues,[31] rather than simply focusing on providing information to the public, is a question of political will and not one of technological capability.

[29] Inter-Parliamentary Union, *World e-Parliament Report 2020* (IPU, 2021).

[30] Ted Becker, Christa Daryl Slaton, *The future of teledemocracy* (Westport: Praeger, 2000).

[31] Vasiliki Triga, Dimitra Milioni, "E-Strategy and Legislatures: A longitudinal analysis of Southern Europe's parliaments", in Leonidas Anthopoulos & Christopher Reddick (eds.), *Government e- Strategic Planning and Management* (New York: Springer, 2014), 157–184, P. Norris, *A Digital Divide: Civic engagement, information poverty and the internet in democratic societies* (Cambridge: Cambridge University Press, 2001).

LUIS MANUEL MIRANDA LÓPEZ

THE CONSEQUENCES OF DIGITAL TECHNOLOGIES ON PARLIAMENTARY WORK – A MUTATION OF PARLIAMENTARISM?

1. Parliamentarism and digital technologies are two concepts that nowadays, well into the 21st century, must come to terms with each other. Or perhaps not. Apparently, they are two opposed realities: on the one hand, parliamentarism, with a deep tradition dating back to the revolutions of the 17th and 18th centuries, and, on the other, digital technologies, also revolutionary at the end of the 20th century and beginning of the 21st.

Digital technologies have transformed our lives. Few are the fields not influenced, to a greater or lesser extent, by digital technologies, whether it be in the personal or professional sphere. However, due to tradition, and most certainly to ultra-conservatism, the incorporation of novelties in the parliamentary area has always been met with great resistance, and this is not an exception. Having said that, the COVID-19 crisis acted as an unexpected guest that, somehow, has sparked a revolution.

2. In the following lines I will try to outline the possible consequences of incorporating the use of digital technologies into parliamentary work. The scope of such an analysis is more than large, namely from cybersecurity to technological processes for transferring parliamentary information. However, although all of this is important, it seems to me that what will really make the difference as regards parliamentarism and its eventual mutation is that which directly deals with its heart: how it deliberates and the way it adopts agreements.

3. Any parliament functions on the basis of two elements: parliamentary debate and the casting of a vote as a means to reach agreements, all within parliamentary premises. Until the emergence of the pandemic, physical presence regarding these two elements was virtually unquestionable. However, all parliaments opened a debate as to how to deal with this reality and be able to keep functioning normally. Compared experiences abound in trial-and-error formulae.

4. For all these reasons, I find that the experience of the Congress of Deputies in this regard is worth mentioning.

The Standing Orders of 1982 in force, in line with the Constitution of 1978, establish the physical presence of MPs for the functioning of its bodies and, with the exception of the reform adopted in 2011, which envisaged the possibility of voting by telematic means under specific circumstances, – pregnancy, paternity, maternity or serious illness – and solely as regards plenary sittings, votes must be cast in person. Therefore, when the pandemic emerged, the Standing Orders of the Congress did not envisage the functioning of the Chamber without the physical presence of MPs.

The new reality had to be managed within this regulatory framework. Thus, it had to be achieved through the adoption of new agreements reached by the Bureau of the Chamber.

1) The first issue to be addressed was the possibility of generalising the casting of a vote by telematic means. Indeed, the provisions of the Standing Orders were inadequate. However, an analogous interpretation of the notion of "serious illness" allowed for the corresponding regulatory adjustment. Furthermore, and no lesser a task, the enabling technology was fully developed. Thus, several agreements adopted by the Bureau of the Chamber allowed all MPs to cast their votes by telematic means with regards to all the matters included in a plenary sitting. To that end, it was necessary to reorganise plenary sittings themselves so that there was a temporary proximity between the debate and the voting, but with enough margin to technically cast the votes. The adoption of this agreement was remarkably peaceful since there was a general awareness of the need to achieve the greatest legitimacy when adopting any agreement in times of extreme difficulty. Furthermore, in 2021, the Constitutional Court endorsed this act.

2) Almost immediately, the possibility was considered of holding debates and meetings of the bodies of the Chamber remotely. However, the response was subject to a greater level of controversy. Without detriment to the fact that it was not technologically possible to perform this with all the due guarantees ensured at the time – previously only some hearings with experts or authorities who were outside Spain had been held remotely and as part of committees – and even being aware of the impossibility of having all MPs present, the regulatory framework in force did not allow this. As regards plenary sittings, according to the Standing Orders, speeches must be delivered personally and orally, taking the floor from the rostrum or from one's seat, with any possibility of taking the floor when absent or from outside parliamentary premises not being envisaged. Furthermore, the Constitutional Court, in two decisions issued in 2019, precluded this possibility through the following justification:

– in general terms, the exercise of representative functions must be conducted personally and when present, as the physical presence of parliamentarians in the Chambers and in their internal bodies forms a necessary requirement for them to be able to debate and adopt agreements.

– as regards parliamentary procedures, interaction among members who are present is an essential element for the Chamber to be able to shape its will, and to that end parliamentarians must attend the sittings of the Chamber.

Bearing in mind this legal framework and the case law of the Constitutional Court, it was not allowed to hold sittings remotely, whether plenary or committee sittings. However, it was agreed that physical presence would be limited to those MPs that were to take floor during debates and, subsequently, this was extended to a representation of each parliamentary group.

However, the criterion differed as regards the steering bodies of the Chamber – Bureau and Board of Party Spokespersons – who were allowed to hold their meetings remotely, as well as the Bureaus of the Committees, so that the Chamber could continue functioning and find a balance with the need to avoid displacements. In this sense, the differentiating feature was that these bodies, entrusted with steering the organization and functioning of the Chamber, always meet in camera and their debates are not public.

In any case, it is to be noted that the possibility was considered that, prior to reform of the Standing Orders, in exceptional situations debates could be held when absent or remotely. No proposal in this sense has been tabled so far.

5. Given all the above, we can conclude that the adoption of these measures allowed the parliament to continue functioning in times of great difficulty. Therefore, the question to be posed now is what remains after this experience.

The great winner of the situation resulting from the pandemic was telematic voting. Its success was not only the successive extension agreements to maintaining this possibility, but the conclusion which led to the reform of the Standing Orders of the Congress in 2022 to consolidate a reality that had then been implemented for more than two years. However, a further step was taken with the introduction of a new case to request telematic voting which was in fact a longstanding demand, namely the possibility to exercise this in cases of absence due to international trips on behalf of the Chamber. Indeed, one year after this reform came into force, telematic voting increased and became more widespread.

As regards the possibility of continuing to hold remote meetings of the steering bodies of the Chamber, as soon as the virus subsided, prepandemic normality gradually returned and this possibility was precluded.

6. Now is the moment to stop and think if the adoption of the aforementioned measures reshaping the presence of MPs may entail a mutation of parliamentarism or, on the contrary, if they are just a necessary updating.

Some might say that any amendment to physical presence in debates and in the casting of votes will entail the death of parliamentarism. I do not share that view, although I do believe that some fine tuning must be made.

In my view, parliament is a living institution that must adapt to the times and adapt its standing orders, but without losing its essence. It is interesting to recall the words of Benjamin Constant when he said that "what protects us from arbitrariness is the observance of forms". In my view, although debate and voting are linked, contemporary parliamentarism allows for a separate analysis.

In Spain, individual MPs have lost the capacity to decide their votes, since they are subject to the guidelines of their parliamentary group. In other words, it is possible to foresee beforehand how they will vote. Thus, the introduction of technologies enabling MPs to vote when physical presence is not possible due to medical or work-life balance reasons, while at the same time allowing MPs to develop other aspects of their parliamentary mandate should be welcomed. Casting votes by telematic means is a success story in Spain. With no excesses or abuses, it is possible to comply with the international duties that MPs also have to fulfil, as such activities have become increasingly important in a global and interconnected world. It also makes it possible, under certain unforeseen or planned circumstances, for votes to be cast normally. In this regard, I would like to highlight the two occasions when work had to be carried out in the Chamber and this did not prevent Members from being able to vote normally.

However, let me express my reservation concerning the possibility of holding debates remotely. Communion among parliamentarians is the element that grants unity to parliamentarism and which can only be achieved through physical presence. As laid down by the Spanish Constitutional Court, the requirement that this parliamentary function be performed in a certain physical space is not only aimed at guaranteeing that parliamentarians can exercise their parliamentary function in a place where they cannot be disturbed, but it also fulfils a symbolic function, as this is the only place where the immaterial subject that is the people makes itself present to citizens and the centrality of this institution is laid bare.

Moreover, this implies a direct interaction among different parliamentarians within a deliberative forum that offers the negotiation necessary to adopt agreements, with the latter being exceedingly difficult to achieve by digital means. Moreover, immediacy is an essential feature of any debate and only physical presence can ensure its proper development and due organization by the Speaker, while enabling an adequate follow-up in the public sitting by third parties.

Finally, and although it is undoubtedly a minor issue, but also a sign of the times, it should be noted that, in all parliaments and assemblies, as in administrative bodies and companies, the use of technology in internal procedures is becoming more widespread. Thus, in the parliamentary sphere, it is worth highlighting the existence of an electronic and telematic register of initiatives and the creation of legislative digital files. These measures allow parliament to continue to function in times of great difficulty, as was the case with COVID-19, and thanks to the know-how acquired during the pandemic, their use has become widespread, although there is still some way to go before they can be implemented. On the other hand, there is an increasing demand from bodies outside the House that have to relate to this, such as other administrative bodies or even the citizens themselves. Therefore, even if it does not affect so directly the heart of parliamentarianism, I believe that the incorporation of digital technologies in the field of parliamentary administration is necessary. Adaptation is not always easy, and what can I say about bureaucratic procedures given that Max Weber already said so much about these! But if companies adopt them, parliaments must follow suit, albeit with all the necessary caution and reservations and, in any case, with an awareness of the position they occupy.

7. Parliament is a living institution that must adapt itself to the times, and likewise adjust its standing orders without losing its essence. Today, we can affirm that in this 21st century we have a parliament that was shaped in the 19th century with rules devised in the 20th, whilst what citizens demand is an institution that they can feel close to. Precedents and experiences such as those experienced due to the pandemic shall end up taking shape in regulatory change, in the internal governing rules of each parliament. There is no point in thinking that parliamentary institutions can live detached from social reality and from the implementation of digital technologies. Furthermore, the transformation of parliaments is taking place right now and fora like this clearly show that these concerns are shared by all of us.

Finally, digital technologies are transforming our lives at all levels and parliaments, which have to transform themselves with full democratic legitimacy and they cannot ignore this reality. Therefore, I believe it is necessary to build a parliament in the 21st century that will be that of the 21st century but preserving the essence that makes it the core institution of any democratic system.

PART VI.

THE CHALLENGES FOR DEMOCRACY — ARTIFICIAL INTELLIGENCE: RISKS AND OPPORTUNITIES

GONÇALO CASEIRO

REGULATING OR DEMOCRATISING ARTIFICIAL INTELLIGENCE: THE GREAT DILEMMA

A more inattentive look at the avalanche of recent news could indicate otherwise, but it is important to remember the truth: artificial intelligence is not a phenomenon of today. It is not even a recent phenomenon. The extraordinary LISP experiment (an acronym for *list processing* specifying a programming language designed to facilitate the manipulation of data circuits[1]), by Terry Winograd, is 50 years old. DeepBlue, the computer that beat Garry Kasparov in a game of chess, stems from 1997[2].

It is therefore fair to say that we have been living with Artificial Intelligence for a few decades now. And we can see it in everyday life when we take a closer look: a streaming platform knows what we might want to watch next, a GPS app on our smartphone knows the best route to take to avoid costs and traffic, the automated hoover knows the best time to switch on and how to move around rooms without bumping into furniture. However, like a pot on the hob, the temperature has been rising exponentially and we now find ourselves noticing that the water is boiling much faster than we thought possible.

On a recent visit to South Africa, I had the opportunity to experience the immense potential of Artificial Intelligence, even though the country is struggling with a digital divide. Over the last few decades, and particularly in the last 20 years, there has been a remarkable effort to alleviate what has come to be called the "digital divide" in South Africa. This digital divide consists of all the inequalities existing between different ethnicities in having access to areas of communication and the digital

[1] Harold Abelson, Matthew Halfant, Jacob Katzenelson, and Gerald Jay Sussman, "The LISP Experience", *Annual Review of Computer Science* (1988), Vol. 3, 167-195.
[2] "Chess Terms", in https://www.chess.com/terms/deep-blue-chess-computer, accessed on 19 December, 2023.

world. This can have an effect on access to public services, but also on digital literacy, which has had a particular impact on the spread of misinformation, which could be seen during the years of the COVID-19 pandemic. Now there is a new investment element to cancel out the digital divide, as private stakeholders *are* complementing state efforts to bridge this access gap between social classes[3].

I said that I was able to experience the potential of Artificial Intelligence in that country. As it happens, South Africa has 11 official languages, not to mention other national dialects. This reality is an overwhelming challenge, especially when you want to move business and politics from the real to the digital, which further increases the digital divide between communities. But Artificial Intelligence will be (is already being) a transformative element in the cross-disciplinary effect it will have, from e-commerce platforms to governance practices, among many other areas. This is because Artificial Intelligence has the seemingly magical ability to communicate fluently and efficiently in dozens or hundreds of languages. AI is the Babel Fish from Douglas Adams' *Hitchhiker's Guide to the Galaxy*: a small fish that, when placed in someone's ear, simultaneously translates what they are hearing, regardless of where they are in the galaxy. Artificial Intelligence thus presents itself as an opportunity to create bridges, avoiding the prevalence of the digital divide, attenuating differences and distances, uniting populations and giving them a voice. If there were any doubt, this is a democratic victory.

The scenario is encouraging, because investments in Artificial Intelligence are not exclusive to South Africa. They are happening all over the globe, bringing communities together in the same way, in a phenomenon that is spreading to all areas of society. Europe is one of the continents that is investing the most in IT, and the investment is also spreading to private individuals. One example that is no small feat: in mid-2023, the French start-up Mistral received 105 million euros in funding to develop its artificial intelligence technology and compete on equal terms with OpenAI[4]. Not only does this definitively put Europe on the map for information technology development, it is also a solid step towards building a funding ecosystem for companies of this nature.

Another example of a democratic victory — and I feel the need to mention it because the research and development for this project has been carried out in Portugal — is the partnership between the Universidade Nova de Lisboa and the Imprensa Nacional Casa da Moeda (which can be translated to the Portuguese Printing House), responsible for publishing the *Diário da República* (the Portuguese Official Gazette), which has carried out some promising experiments with Artificial Intelligence in interpreting the law and creating an optimized user platform for citizens who wish to know more about their rights and duties in specific cases. This tool will have the capacity to provide support in any legal procedure, and will be able to alert users to any gaps in the law even at the design stage, as well as conflicts with other types of regulation in the same or other legal areas. This is in addition to its ability to improve the clarity of the text, among other details that will certainly make the law clearer, more accessible and more efficient in its application.

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[3] Matone Dithlake, "Private sector complements govt's efforts to bridge digital divide", in https://www.itweb.co.za/content/O2rQGqAEmdOqd1ea, accessed on 19 December, 2023.

[4] Ingrid Lunden, "France's Mistral AI blows in with a $113M seed round at a $260M valuation to take on OpenAI", in https://techcrunch.com/2023/06/13/frances-mistral-ai-blows-in-with-a-113m-seed-round-at-a-260m-valuation-to-take-on-openai/?guccounter=1, accessed on 19 December, 2023.

As with all technological developments, there is always a potentially sinister side to progress. The fears related to new developments in the field of Artificial Intelligence show that this rule holds true. Indeed, we cannot ignore the evidence: the fears are legitimate and well founded. The technology development leaders themselves, from companies such as DeepMind or OpenAI, have even gone public and stated that there is a tenuous but possible "risk of extinction" brought about by AI[5]. However, you do not need to practise futurology to realise that the risks are real – because we have already fallen victim to them, and continue to do so.

The potential of social networks and technology to mobilise communities politically has been proven. Who does not remember the power of Facebook in Barack Obama's 2008 election campaign[6] or for the post-Arab Spring uprisings[7]? Conversely, the use of social networks has shown that the use of bots and other algorithms can alter the voting intentions of different communities, in a sordid manipulation of once robust democracies.

One of the most idiosyncratic cases was during the 2016 elections in the United States, in which Russia had a direct influence, causing Donald Trump to win, in the scandal made famous by the name of the company that was responsible for the alleged fraud, Cambridge Analytica[8]. However, the use of bots to obtain electoral results is not exclusive to one political spectrum. In 2017, a group of activists linked to the British Labour Party developed an algorithm that aimed to influence users of the dating platform Tinder between the ages of 18 and 25. It is estimated that the bot sent around 40,000 messages to users and, although it is not possible to measure the actual success of the measure, what is certain is that the Labour Party won those elections[9].

However, politics itself has major challenges ahead of it, starting with the sustainability of the current system in the West, that is, democracy. One of the litmus tests will occur in 2024 when, in that year, two billion people will take part in electoral processes around the globe. The presence of Artificial Intelligence will be an added challenge for every voter, who will have concerns about disinformation, *deepfakes* and other ambiguous or dubious sources. On the one hand, electoral campaigns will want to use digital methods because they know they are highly efficient mechanisms for reaching voters; on the other, technological support could raise suspicions and even be counterproductive.

One of the greatest risks lies precisely in *deepfakes* and the difficulty that ordinary mortals have in distinguishing between a real video and a fabricated one. Recently, we saw Vladimir Putin somewhat horrified by a video of himself, generated by artificial intelligence, asking whether it is true that he

[5] Kevin Roose, "A.I. Poses 'Risk of Extinction,' Industry Leaders Warn", in https://www.nytimes.com/2023/05/30/technology/ai-threat-warning.html, accessed on 19 December, 2023.

[6] Thomas Urbain, "Facebook as an election weapon, from Obama to Trump", in https://phys.org/news/2018-03-facebook-election-weapon-obama-trump.html, accessed on 19 December, 2023.

[7] Haythem Guesmi, "The social media myth about the Arab Spring", in https://www.aljazeera.com/opinions/2021/1/27/the-social-media-myth-about-the-arab-spring, accessed on 19 December, 2023.

[8] Paul Lewis and Paul Hilder, "Leaked: Cambridge Analytica's blueprint for Trump victory", in https://www.theguardian.com/uk-news/2018/mar/23/leaked-cambridge-analyticas-blueprint-for-trump-victory, accessed on 19 December, 2023.

[9] Philip N. Howard, "How political campaigns weaponize social media bots", in https://spectrum.ieee.org/how-political-campaigns-weaponize-social-media-bots, accessed on 19 December, 2023.

has various doubles[10]. Imagine what it will be like when videos of politicians saying what they never said are used with more and more prevalence. This will be followed by denials and an unprecedented climate of suspicion. Faced with such difficulty in distinguishing what is a lie, how can we know what is true? That is why many researchers are talking about the strong possibility of an "infopocalypse"[11], even suggesting that it might be good practice to abandon videos as a form of political propaganda because they do not add much value to our understanding of the world[12]. One thing is certain: these kinds of videos are fake news on steroids that warrant a more comprehensive and informed discussion about the massive and potentially destructive impact they could have.

This new trend brought about by Artificial Intelligence could bring new twists and turns to human history, not just in political terms but in all areas of life as we know it, mainly because we no longer know what is authored by a human and what by a machine. A recent case that made headlines around the world precisely because of the blurring of this boundary was that of German photographer Boris Eldagsen and his work "Pseudomnesia: The Electrician". The artist submitted the image for a Sony World Photography Award and won. It turned out that the photograph had been generated by artificial intelligence, with the clear intention of emphasising that it is difficult to distinguish between human creativity and AI creativity[13]. And the jury itself was not sure whether to be disappointed or amazed by the technology's capabilities.

In this case, the fraud is practically harmless. However, in the near future, we may suffer from another type of fraud that is far more damaging. We have all received that email — or a variant of it — from the Prince of Nigeria who is eager to deposit a few million dollars in our bank account. Of course, faced with such an out-of-this-world idea, the suspicion that the contact is an attempt to defraud becomes obvious. But with the advent of artificial intelligence, the Prince of Nigeria can become more refined and suggest that we met two years ago in Norway — and when we do the memory exercise, we realise that, in fact, two years ago, we *really* were in Norway.

Given all this, it is clear that efforts to regulate Artificial Intelligence are becoming increasingly urgent. However, this discussion will bring us face to face with a dilemma: a decisive part of R&D in science is the sharing of knowledge in *open source* solutions. This brings numerous advantages in terms of speed of access to what is being undertaken in all research units. However, there is a drawback that could jeopardise the ethical criteria of such a sensitive area of development. If we open up the sources of knowledge to everyone, it could mean that even those who are dedicated to creating fraudulent operations like the Prince of Nigeria will be able to create their scam mechanisms more easily. Regardless, of course, of the type of regulation that exists.

[10] The Telegraph, "Shocked Vladimir Putin confronts AI-generated version of himself ", in https://www.youtube.com/watch?v=5L2YAIk0vSc&pp=ygUYdGVsZWdyYXBoIHB1dGluIGRlZXBmYWtl, accessed on 19 December, 2023.

[11] Don Fallis, "The epistemic threat of deepfakes", Philosophy and Technology (2021), Vol. 34, 623-643.

[12] *Id., ibid.*

[13] Zoe Williams, "'AI isn't a threat' – Boris Eldagsen, whose fake photo duped the Sony judges, hits back", in https://www.theguardian.com/artanddesign/2023/apr/18/ai-threat-boris-eldagsen-fake-photo-duped-sony-judges-hits-back, accessed on 19 December, 2023.

So, on the one hand, if we keep the know-how of Artificial Intelligence in the hands of those who are developing it, we become hostages to the Big Tech giants — and we have already seen that leaving so much power in the hands of a few cannot work out well, as we have seen in the political and legal scandals in which companies that own social media platforms have been involved. On the other hand, opening up a theme park to everyone can leave us hostage to manipulators capable of annihilating society as we know it. Clearly, as far as Artificial Intelligence is concerned, it is not very far from a participatory budget or a democratic event to the manipulation of an election or the resurgence of a Nigerian Prince. Without wishing to sound fatalistic, we have to be aware that opening a Jurassic Park can sometimes be harmful.

There is a scary aspect to all this, which we cannot deny. On my computer, I have models like ChatGPT or others with even more capabilities. I have the ability to train these models as I wish, even to free them from the corsets that are naturally created with ChatGPT's Large Language Models, i. e. the learning algorithms that allow the technology to converse textually with its interlocutors. One example of such a corset is hate speech. Despite the regulation that has been announced and is coming soon, the truth is that many of these tools are already available on the internet and any of us can use them, regardless of the risk.

I do not want to end on a negative note, however. Even in the face of all these potential threats, Artificial Intelligence has slowly made its way into our everyday lives. It exists as a personal assistant, as the internet of things, improving the user experience in countless technologies or even helping us keep our fridge full.

Artificial Intelligence is here to stay, and the big challenge lies in our coexistence with it. An inevitable coexistence that we still have time to mould. But we must remain aware that AI is, in fact, a chameleon. A chameleon that changes colour at an unprecedented speed. The great challenge for our democracies lies in how we manage its growth, how we control its potential and how we mitigate its risks. To put it like that, it sounds like a megalomaniacal and practically impractical task. But I believe we can achieve this, together, with debate and co-operation. As we have always done so far. Because, after all, we even managed to put people on the moon, didn't we?

FAKHREDDINE AOUADI

UNLEASHING POTENTIAL WITH ARTIFICIAL INTELLIGENCE AND INNOVATION

I. BACKGROUND

Advanced analytics is the process of examining large complex sets of information to uncover hidden patterns, trends, and insights. It goes beyond basic data analysis by using sophisticated techniques and tools to delve deeper into the data, often allowing for real-time analysis and predictions about future events or behaviours.

In line with the 2022-2024 strategic guidelines, the Directorate-General for Innovation and Technological Support (DG ITEC) has developed a capability to deliver data analytics services for the parliament. This capability aims at helping Members and administrative staff extract value from the data they collect or generate and support decision-making processes with more robust evidence.

II.THE ADVANCED ANALYTICS SERVICES

Approach

As a component of the innovation activities at DG ITEC, advanced analytics services adhere to an innovation methodology by adopting a **prototype-based approach**. A prototype is a small-scale, targeted project aimed at showcasing the feasibility, potential impact, and value of an analytics solution. This helps to experiment with innovative ideas within a controlled setting prior to allocating substantial resources for large-scale implementation. Such an approach will be used in the first phase of the deployment of advanced analytics services. Based on the experiences gained in this first phase, DG ITEC will propose a consolidation of the advanced analytics services for endorsement by the Working Group.

Framework

In addition, work on advanced analytics is carried out within a framework based on transparency, accountability, and security. It has the following key components:

- Data Management: advanced analytics will be aligned with Parliament's data management framework, which is currently under construction. This will ensure the quality, accuracy, and consistency of the processed data. Data governance will define rules and responsibilities for data collection, validation and regular reviews to maintain a high level of data integrity. Once the Data Platform is up and running, advanced analytics services will be linked to it.

- Privacy and Security: recognizing the importance of protecting sensitive information, best practices for data privacy and security are followed. This includes measures like data encryption, secure access controls, and regular security assessments.

- Ethical AI and Algorithmic Accountability: the framework encompasses Guidelines for the responsible use of artificial intelligence in the European Parliament, endorsed by the Bureau ICT Working Group on ICT Innovation of 2 June 2020, and best practices for ethical AI development, addressing issues like algorithmic bias, fairness, and transparency. The models and algorithms are constantly reviewed to ensure their alignment with ethical principles and to prevent them from inadvertently perpetuating harmful biases.

- Regulatory Compliance: the work is carried out with strict adherence to all relevant EU laws and regulations, in particular to the data protection regulation applicable to the European institutions (Regulation (EU) 2018/1725).

This framework facilitates the provision of advanced analytics services, offering value to Parliament users while upholding a high level of integrity, security, and compliance.

Current achievements

The following are examples of prototypes that have been developed by DG ITEC:

- **Auto-summariser:** advanced analytics use algorithms to simplify lengthy texts and extract the most important information while maintaining the overall message. This tool allows the user to submit a document, such as a report, and receive a summary that highlights the key points, making it easier and quicker to understand the main content.

- **Automatic tag classifier for legislative documents:** EuroVoc is a multilingual, multidisciplinary thesaurus covering the areas of activity of the European Union and its Member States. The application of advanced analytics for automatic tagging of legislative documents with EuroVoc can improve access to information, increase collaboration, and ensure more efficient policy-making.

- **Resource Planner:** the tool uses AI technologies to provide an efficient resource planning model for translation units. The model was trained on past assignments to predict the planning of the incoming translation requests.

- **Chatbots framework:** during the COVID period a chatbot was implemented on the EP Intranet to deal with questions by Members and staff. Other chatbots have now been implemented in various business areas. A chatbot can ensure assistance for users around the clock.

The emergence of Large Language Models brings new opportunities for advanced analytics services, which can empower Members to better process and analyse vast amounts of textual data.

Initial feedback obtained from testing the prototypes above has been encouraging, implying that additional efforts should be made to scale up these solutions and transform them into a production--ready state.

Potential future areas of use

For Members

Advanced analytics services can provide several benefits for Members, including:

- Data-driven decision-making: provision of insights into data from a wide range of sources allows Members to make data-driven decisions based on evidence rather than intuition or opinion.

- Data visualisation and reporting: presentation of complex data in an easily understandable and visually appealing format which helps Members quickly grasp key insights and draw conclusions.

- Identifying trends and patterns: advanced analytics are able to identify trends and patterns in data that may not be immediately apparent. This may contribute to informed policy decisions and reveal potential areas of concern.

- Text mining and natural language processing (NLP): analysis of large volumes of unstructured text data, such as speeches, reports, and minutes of meetings, can uncover insights and trends.

- Sentiment analysis: analysis of public opinions and sentiments on policies, proposals, and decisions enables the European Parliament to understand citizens' perspectives.

- Efficiency gains: automation of tasks and provision of real-time data may help save time and resources, and streamline operations.

- Transparency: provision of insights into the data used may increase transparency and inform policy decisions, which can in turn help build trust with constituents and increase accountability.

- Improved services for constituents: analysis of demographics, social media usage and other factors can help Members better understand their constituents and tailor services to their needs.

For administrative staff

The administrative staff of the European Parliament support Members in their legislative and political activities and are responsible for logistics and resource allocation. Advanced analytics can contribute to carrying out these tasks in several ways:

- IT and cybersecurity analytics: analysing data related to IT systems and infrastructure to optimize performance, identify vulnerabilities, and ensure the security of sensitive information.

- Operations optimisation, transparency and accountability: data analytics can help optimize operations and improve their efficiency and transparency by analysing data on resource allocation and service delivery.

- Budget and financial analytics: analysing financial data can help optimise budget allocation, identify cost-saving opportunities, and forecast future expenditure.

- Enhanced user support: a chatbot can manage multiple inquiries simultaneously. It strives to offer prompt and precise answers to common questions, while considering individual circumstances.

III. CONCLUSION

The implementation of advanced analytics services in the European Parliament marks a significant step forward in harnessing the power of data and technology to improve decision-making, efficiency and transparency. Over the past few years, DG ITEC has progressed in developing advanced data analytics capabilities. The potential for future applications is vast. By empowering Members and administrative staff with cutting-edge tools and techniques, Parliament is better equipped to serve the needs of European citizens, enhance democratic processes, and ensure efficient resource allocation.

As the European Parliament continues to invest in advanced analytics, it is essential to focus on building capacity, fostering innovation, and maintaining a strong commitment to ethical and responsible use of these technologies. By doing so, Parliament will not only strengthen its internal processes but also contribute to building trust and confidence among European citizens.

MARLENE ERLL

CHATGPT IN THE PUBLIC SECTOR – OVERHYPED OR OVERLOOKED?[1]

Introduction

The unprecedented success of AI tools like ChatGPT caught many by surprise. However, large language models (LLM) are here to stay and will continue to grow in sophistication. These models use natural language processing algorithms to interpret and respond to text-based human input. At the current rate of expansion, it's only a matter of time before such models are integrated into the public sector with wide practical applications, advantages, and possible efficiency gains, from 24/7 availability to managing large volumes of inquiries simultaneously. However, there are also limitations. While sophisticated Al such as ChatGPT may seem extremely intelligent, capable, and reliable, this is not a wholly accurate picture. ChatGPT certainly has some capabilities at a speed and scale that humans do not, but it sometimes provides responses which are inaccurate, biased, or nonsensical. Its purely mathematical approach to reasoning should not be mistaken for human-like intelligence.

If ChatGPT and similar tools become part of daily workflows, this trend will also affect public institutions. By providing services which are instrumental to the functioning of the State and which affect the rights and obligations of citizens, the public sector is particularly sensitive to the introduction of such AI-based technologies. Public administration has its own characteristics and principles, which distinguish it from the private sector. By extension, the key principles of public administration such as accountability, transparency, impartiality, and reliability need to be considered thoroughly in the integration process.

[1] This contribution is based on "ChatGPT in the Public Sector – overhyped or overlooked" by the Council of the European Union's Analysis and Research Team, for which the author of this contribution served as lead author. The opinions expressed are solely those of the author(s). In no case should they be considered or construed as representing an official position of the Council of the European Union or the European Council.

This contribution takes ChatGPT as the basis for assessing the impact of increasingly sophisticated language models on the public sector and the principles on which it is based. It takes an objective and factual look at the technology behind ChatGPT and highlights possible risks and opportunities this could create for the public sector both now and in the future.

To improve our understanding of what LLMs like ChatGPT might mean for the public sector, the contribution begins by looking at how ChatGPT works, who is behind it, and what differentiates it from other language models and chatbots. This leads into an assessment of the extent to which language models could help support the work of public servants, but also their potential risks and pitfalls. It then looks at how these might be mitigated. The contribution ends by assessing the future development of LLMs and their possible implications for the future of the public sector.

1) What is ChatGPT

ChatGPT is a form of Artificial Intelligence which can process and produce natural language, and which is capable of a large range of text-based tasks. ChatGPT does not itself understand the meaning of the text it produces. Its responses are based on statistics and probability, but it has been sufficiently fine-tuned to make them appear to originate from a human source. It is important to remember that it does not have the ability to process and understand meaning in the way humans do[2].

ChatGPT is an AI chatbot[3] overlaying a Large Language Model (LLM), a type of machine-learning model designed to process natural language. These models are a part of what is called general purpose AI systems, which can perform a range of general tasks such as translating, detecting patterns, or answering questions[4]. LLMs use large quantities of text to infer the relationship between different words in these texts and use this information to generate their own human-like texts. What differentiates ChatGPT from other language models is the way human feedback was used during the fine-tuning process to ensure the output is more closely aligned with the intentions of the user[5].

While there are a few other players in the large language model ecosystem, it is largely dominated by a handful of mostly US-based large tech companies and a group of well-funded start-ups, whose employees often move on to create their own start-ups. As a case in point, ChatGPT was created by a company called OpenAI, an AI research and deployment company founded in 2015 by Sam Altman, Elon Musk[6] and

[2] A recent paper suggests that what appears to be a sign of intelligence in a model could in fact be a mirror of the intelligence of the user, which materialises in the kinds of prompts a user chooses — see Terrence J. Sejnowski, "Large Language Models and the Reverse Turing Test", *Neural Comput* 35/3 (2023): 309–42.

[3] Whether ChatGPT is the name of the conversational interface or of the model itself was initially unclear. Some early sources call the interface ChatGPT and the model underneath it GPT-3.5, whereas OpenAI used ChatGPT to refer to both the model and the chatbot interface. It later called the initial model gpt-3.5-turbo.

[4] "Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act) and amending certain Union legislative acts", Council of the European Union, Interinstitutional File 2021/0106(COD), 25 November 2022, 71. https://data.consilium.europa.eu/doc/document/ST-14954-2022-INIT/en/pdf.

[5] See Michiel Bakker *et al.*, "Fine-tuning language models to find agreement among humans with diverse preferences", *Advances in Neural Information Processing Systems* 35 (2022): 38176-38189; and Ouyang Long, *et al.*, "Training language models to follow instructions with human feedback", *arXiv preprint* arXiv:2203.02155 (2022). For a less technical explanation see Marco Ramponi, "How ChatGPT actually works", https://www.assemblyai.com/blog/how-chatgpt-actually-works/, accessed on 4 April 2023.

[6] Elon Musk resigned in 2018 citing conflicts of interest over his ownership of Tesla, which was increasingly expanding into AI. Following the early 2023 Microsoft deal, Musk publicly distanced himself from the company. See Christiaan Hetzner, "Elon Musk lashes out at the ChatGPT sensation he helped create after Microsoft's massive investment — 'Not what i intended'", *Fortune*, 17 February 2023, https://fortune.com/2023/02/17/chatgpt-elon-musk-openai-microsoft-company-regulator-oversight/, accessed on 4 April 2023.

several former researchers from other AI companies. European companies have so far struggled to keep uptodate, and all cutting-edge large language models have been developed outside the EU[7].

ChatGPT has attracted the attention of a wider public thanks to its easily accessible user interface and the way it has been fine-tuned to respond to queries. The initial ChatGPT uses one of the largest LLMs accessible to the public, and the first to be trained by using human feedback — all that is needed to use it is a free ChatGPT account[8]. The way the model has been fine-tuned to enable conversation--like interaction and even follow-up questions has made it unique compared to other LLMs[9].

2) What would be the impact of using language models in the public sector?

The nature of work is having to adapt rapidly to the increased use of artificial intelligence. LLMs already facilitate automated customer service, online translation, and automatic data analysis, allowing businesses to reduce staffing levels and save costs. However, the public sector has a rather different set of priorities based on the principle of serving the public interest and needs to respect higher standards of accountability. The role of the public sector in providing services which support the functioning of the state, and which affect the rights and obligations of individual citizens, means that it is particularly sensitive to the introduction of new technologies based on AI. There are a range of potential use cases of LLMs for the work of public servants, but they could also affect the main principles which underpin the work of the public sector.

2.1.) How could LLMs support the work of public servants?

The fact that LLMs have capabilities beyond that of humans does not necessarily mean that all (or any) jobs will disappear. The dichotomy of replacing jobs through digitalisation as opposed to preserving jobs at the cost of efficiency is not quite as polarised as it appears. It is important to distinguish between the use of LLMs for specific and limited tasks, and their potential to replace entire jobs. A task-oriented approach to LLMs in public administration could enable employees to spend less time working on mundane tasks. The time saved could be used to bring a more human perspective to their work by allowing more time and energy to be devoted to more interesting tasks or exploring alternative approaches to their work.

One of the key advantages of large language models is their ability to process and analyse large volumes of data more quickly and efficiently than humans. Machinery at this level of sophistication requires human oversight and maintenance, which means jobs. Skilled workers in areas such as data analysis, cybersecurity, and technology may be able to use LLMs to take over certain tasks, but at the same time there will be a need for workers to take on new tasks and responsibilities. A recent paper by the International Labour Organization (ILO) estimates that 13 per cent, or 427 million jobs worldwide, have a potential for augmentation, and 2.3 per cent, or 75 million jobs, could be automated using technology similar to GPT-4[10].

[7] 'Große KI-Modelle für Deutschland', Machbarkeitsstudie zu LEAM – Large European AI Models, *Akademie für künstliche Intelligenz AKI gGmbH*, 2023, https://leam.ai/wp-content/uploads/2023/01/LEAM-MBS_KIBV_webversion_mitAnhang_V2_2023.pdf, 6, accessed on 4 April 2023.
[8] Sindhu Sundar, "If you still aren't sure what ChatGPT is, this is your guide to the viral chatbot that everyone is talking about", *Business Insider*, 01 March 2023, https://www.businessinsider.com/everything-you-need-to-know-about-chat-gpt-2023-1?r=US&IR=T, accessed on 4 April 2023.
[9] Yejin Bang *et al.*, "A Multitask, Multilingual, Multimodal Evaluation of ChatGPT on Reasoning, Hallucination, and Interactivity", *arXiv preprint* arXiv:2302.04023 (2023): 3.
[10] Paweł Gmyrek *et al.*, "Generative AI and jobs: A global analysis of potential effects on job quantity and quality", *ILO Working paper* 96 (2023): 30.

One potential application of LLMs in the public sector concerns chatbots and virtual assistants[11]. These models can be used 24/7 to provide a fast and efficient customer service, answer questions and address basic issues without the need for human intervention. This can help free up civil servants' time, allowing them to focus on more complex and high-priority tasks. Another area where LLMs could be applied in public administration is in document or text analysis. An LLM could be trained to identify key information in complex documents such as legal contracts, reducing the time needed for them to be reviewed by civil servants. LLMs could also be used in decision-making processes, such as evaluating grant applications or determining eligibility for social services. By processing and analysing substantial amounts of data quickly and accurately, LLMs have the potential to support fairer and quicker decision-making. However, LLMs still lack a nuanced understanding of human emotions, intentions, and context, which is why some degree of human supervision will remain necessary.

LLMs can also be trained on financial and accounting data to provide insights, answer questions, generate reports, and provide financial advice based on market trends and data analysis. In the field of human resources, LLMs can assist with tasks such as the screening of CVs, candidate matching, and conducting initial interviews. It is technically possible to train LLMs to conduct automated screening of CVs and recommend the best-qualified candidates. They can analyse large volumes of text-based data such as job descriptions and CVs to identify patterns and make predictions based on past hiring decisions. Crucially, the quality of the recommendations would depend heavily on the quality and quantity of the initial dataset, which may not capture crucial factors such as non-verbal communication skills, attitudes to work ethics, and cultural background, as the LLM may not have been trained on a sufficiently wide range of data to capture these nuances. This means that relying solely on an AI-based system for recruitment may lead to bias and discrimination, and as such raises some ethical concerns.

In the legal sector, LLMs could be used to analyse and summarise large volumes of legal texts in order to support lawyers in the public sector. They could be trained to answer legal questions and provide legal advice, although this would require close attention to ethical and legal principles. In the longer term the use of LLMs could lead to a loss of knowledge and skills amongst legal professionals. However, it is also possible that large language models could be used to support the work of human lawyers, allowing them to focus on more complex and nuanced legal issues.

2.2.) How could LLMs affect the main principles of public administrations?

The public sector has specific characteristics and is based on a number of principles which distinguish it in many ways from the private sector. There are very broad practical applications, advantages, and possible efficiency gains in integrating a tool such as ChatGPT within a public administration. However, the accompanying risks should be recognised, managed and, where possible, mitigated. This next section assesses the impact of the possible introduction of LLMs such as ChatGPT in the public sector against principles of European public administration which are inspired by the standards set by the EU/OECD[12] for EU candidate countries:

[11] Brady and Wang Ting, "Chatting about ChatGPT: How May AI and GPT Impact Academia and Libraries?", *Library Hi Tech News*, 2023, https://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID4333415_code5653239.pdf?abstractid=4333415&mirid=1&type=2, accessed on 4 April 2023.

[12] OECD, "European Principles for Public Administration", *SIGMA Papers* 27 (1999); Michiel S De Vries and Pan Suk Kim, *Value and Virtue in Public Administration A Comparative Perspective* (London: Palgrave Macmillan, 2011).

1. **Transparency and accountability:** accountability is about an administration acknowledging and assuming responsibility for its actions and being able to provide satisfactory reasons to justify them.

Transparency[13] facilitates scrutiny and accountability. These may be more challenging if LLMs are integrated within administrative procedures. Like many other forms of AI, LLMs are essentially 'black boxes', which means that the source code of most models is proprietary and, in any case, confusingly complex. Tech companies have for years used the commercial interest argument to resist giving access to their algorithms,[14] but even those behind these models do not fully understand their creations. Since LLMs train themselves autonomously on their datasets, and do not explain their reasoning, it is almost impossible to understand why they came to a particular result.[15] For sensitive decisions by public administrations such as those related to the attribution of social benefits, this raises critical issues around the area of accountability.[16]

2. **Equality and impartiality** are about providing the same treatment to different groups of people to the same standard, irrespective of their background.

ChatGPT and GPT-4, like AI in general, are subject to biases[17] and discrimination, despite efforts by OpenAI to reduce this. Biases are not necessarily negative. They can for example be used to tailor services to specific skillsets and target audiences, or to protect the rights of minorities. On the other hand, biases can undermine the ability of public administrations to act impartially. Human agency in public administrations is never entirely free from bias, as shown by numerous studies. Furthermore, according to a recent Eurobarometer poll, 74 per cent of EU citizens also believe that there is corruption in national public institutions in their country.[18] LLMs could in theory help address ingrained bias within a public administration.[19] But even then, decisions would not be completely unbiased. Most of the biases present in LLMs originate from their training datasets, which are often based on specific sub-sections of the internet, such as content from Reddit or Wikipedia.[20] English language data dominates most datasets, while smaller languages are systematically underrepresented.[21] Because of this dominance, the values that determine a model's reasoning are primarily based on those of a certain segment of US society. Because of the way they process input, self-taught language models

[13] Tero Erkkilä, "Transparency in Public Administration", *Oxford Research Encyclopedia of Politics*, 29 May 2020.
[14] Hannah Bloch-Wehba, "Transparency's AI Problem", *Knight First Amendment Institute and Law and Political Economy Project's Data & Democracy Essay Series* (2021): 7-12.
[15] Alec Radford *et. al.*, "Language models are unsupervised multitask learners", *OpenAI blog* 1/8 (2019): 9.
[16] OpenAI's usage policy prohibits using its models for "High risk government decision-making, including: Law enforcement and criminal justice; Migration and asylum", but this still leaves some scope for a potential use of its models for decision-making processes, see OpenAI usage policies, 17 March 2023, https://openai.com/policies/usage-policies, accessed on 4 April 2023.
[17] Emily M. Bender *et al.*, "On the Dangers of Stochastic Parrots: Can Language Models Be Too Big?", in The Association for Computing Machinery (ed.), FAccT '21: *Proceedings of the 2021 ACM Conference on Fairness, Accountability, and Transparency* (Virtual event/Canada, 2021), https://dl.acm.org/doi/10.1145/3442188.3445922 : 610–23.
[18] Special Eurobarometer 523: Corruption, March-April 2022, https://europa.eu/eurobarometer/api/deliverable/download/file?deliverableId=83025:16, accessed on 4 April 2023.
[19] Matthew M. Young *et al.*, "Artificial discretion as a tool of governance: a framework for understanding the impact of artificial intelligence on public administration", *Perspectives on Public Management and Governance* 2/4 (2019): 308.
[20] Size does not guarantee diversity even when looking at the whole internet. Internet access is not evenly distributed, resulting in an overrepresentation of younger users and those from developed countries. The voices of people most likely to hew to a hegemonic viewpoint are also more likely to be retained.
[21] Fahim Faisal *et al.*, "Dataset Geography: Mapping Language Data to Language Users", *Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics Volume 1: Long Papers* (2022): 3384.

can mirror and even amplify biases in the data.[22] Recent attempts to curate datasets and fine-tune models during training have reportedly led to some improvements. However, the criteria used to filter datasets themselves reflect the cultural biases of the curators, who in turn represent only a small sub-set of the population.[23]

So, whilst fine-tuning models like ChatGPT can help, it is no silver bullet. Context and personal preferences can also play a significant role in determining whether an individual finds an answer acceptable or harmful.[24] This is also an issue when decision-making in a public administration combines human and AI input, with research indicating that humans tend to follow AI-generated advice more often when it confirms their pre-existing biases.[25] In general, AI tends to amplify existing power dynamics.[26] Issues of equality and impartiality therefore arise from a fundamental structural problem linked to the fact that databases and those who programme them tend to reflect and confirm the current dominant worldview.

3. **Citizen involvement and trust** is the part of democratic processes allowing members of the public to ensure that decisions affecting their lives are taken in support of the common good.

LLMs can help here. They can be used to personalize and tailor messages to citizens or MPs, such as in the context of political campaigns. This could help organisations or groups of individuals without access to public affairs professionals to be included in the decision-making process. LLMs could also support citizens who might be less comfortable with drafting letters to public administrations or elected officials.

However, trust could be undermined if citizens feel that AI is largely replacing human agency in responding to their queries or in helping shape the decisions and policies of their local administration. In addition, ChatGPT could be used to boost lobbying activities through the automatic composition of input into regulatory processes such as letters to elected officials, or to generate social media posts and comments on newspaper websites. LLMs could help identify the most relevant individuals at all levels of government and target them with a flood of tailor-made messages[27]. Given the ability of LLMs to replicate human messages closely, they could also be used to support large-scale disinformation campaigns[28] and generate misleading impressions of public opinion. Current technology for determining if a text is written by an AI such as GTP Zero[29] is not sufficiently developed to allow for a reliable detection rate.

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[22] Patrick Schramowski *et al.*, "Large pre-trained language models contain human-like biases of what is right and wrong to do", *Nature Machine Intelligence*, 4 (2022): 258-268 ; Abubkar Abid *et al.*, "Persistent Anti-Muslim Bias in Large Language Models" *AAAI/ACM Conference on AI, Ethics, and Society* (2021): 298-306.

[23] Bender *et al.*, "On the Dangers of Stochastic Parrots…", 613-15.

[24] Long Ouyang *et al.*, "Training language models to follow instructions with human feedback", *Thirty-Sixth Conference on Neural Information Processing Systems* (2022): 19-20.

[25] Saar Alon-Barkat and Madalina Busuioc, "Human–AI Interactions in Public Sector Decision Making: 'Automation Bias' and 'Selective Adherence' to Algorithmic Advice", *Journal of Public Administration Research and Theory* 33/1 (2023): 165-166.

[26] Kate Crawford, *Atlas of AI* (New Haven: Yale University Press, 2021).

[27] "How ChatGPT Highjacks Democracy", *The New York Times*, 15 January 2023. https://www.nytimes.com/2023/01/15/opinion/ai-chatgpt-lobbying-democracy.html, accessed 4 April 2023.

[28] Ben Buchanan *et al.*, "Truth, lies, and automation: How language models could change disinformation", https://cset.georgetown.edu/publication/truth-lies-and-automation/, accessed on 4 April 2023.

[29] "GPT Zero is designed to recognize texts written by AI", *Medium*, 12 January 2023, https://medium.datadriveninvestor.com/gpt-zero-is-designed-to-recognize-texts-written-by-ai-ab7ff4d11fd6.

4. **Serving public interest:** public administrations are committed to providing services in the interest of their citizens[30].

Even though large language models appear to be able to replicate general human morals and values from their training data[31], it is not clear overall whose interests they prioritise. LLMs require a huge investment to finance their development and operation. Only a small number of well-funded start- -ups and tech giants have access to this level of funding, with public and open-source development lagging behind[32]. This means that a small number of companies are determining the software and models on offer, and they do so with less and less transparency (as referred to above, the release of models by OpenAI has moved from an open-source and well-documented approach to one which provides little or no basic technical information). This raises the question as to whether the use of ChatGPT in sensitive areas of public administration genuinely serves the public interest, or rather the interests of its parent company or owner. Even the creators of LLMs acknowledge the risk that models could be trained to give precedence to a particular viewpoint or over-emphasise a specific perspective[33]. To date, neither the EU nor the US have dedicated legislation in force setting standards for the deployment of LLMs, nor do they have an agency exercising oversight over the development of LLMs[34], although LLMs will be covered within the scope of the future EU AI Act. Without greater transparency and oversight[35], it is extremely difficult to determine whose interests are ultimately being served.

2.3.) How could the risks posed by LLMs be mitigated?

If large language models are here to stay, the question should be raised as to how public administrations can retain the advantages of using these models whilst mitigating their risks. **Mitigating the risks** that LLMs pose means first understanding their nature, potential, limitations, and their possible impact on the key functions of a public administration. It also means sharing this information with the public.

The public sector is beginning to look at a mix of measures designed to reduce the most significant risks. Most of these measures relate to the models themselves and how they are run, while others concern regulation and the way the models are used.

Measures regarding the models:

- **Public sector bodies could develop their own models.** However, although the cost of developing and training large language models seem to have decreased lately,[36] the resources required are still huge. Even with increased energy efficiency, these development costs are likely to remain beyond the means of most public administrations, not to mention the need to attract and retain qualified specialists.

[30] Elmer B. Staats, "Public Service and the Public Interest", *Public Administration Review* 48/2, (1988): 601-605+ii.
[31] Patrick Schramowski *et al.*, "Large pre-trained language models ...", 11.
[32] Deep Ganguli *et. al.*, "Predictability and surprise in large generative models", *2022 ACM Conference on Fairness, Accountability, and Transparency*, (2022): 13.
[33] Michiel Bakker *et al.*, "Fine-tuning language models...", 10.
[34] Deep Ganguli *et al.*, "Predictability and surprise in large generative models", 9.
[35] Khari Johnson, "The movement to hold AI accountable gains more steam", *Wired*, 02 December 2021, https://www.wired.com/story/movement-hold-ai-accountable-gains-steam/ accessed on 4 April 2023.
[36] OpenAI is among the companies who have recently reduced prices to train their models, see "September 2022 - OpenAI API Pricing Update FAQ", https://help.openai.com/en/articles/6485334-september-2022-openai-api-pricing-update-faq; and Daniel Zhang *et al.*, "The AI Index 2022 Annual Report", *AI Index Steering Committee, Stanford Institute for Human-Centered AI*, (Stanford: Stanford University, 2022): 97.

- **Models could be fine-tuned.** As the success of ChatGPT has shown, a language model does not need to be excessively large to deliver useful results. Smaller, more fine-tuned models are a possibility, even though their often-proprietary nature means that there would still be limited transparency on their exact architecture and initial training data. Most major general purpose LLM providers offer smaller versions that can be fine-tuned on datasets tailored to the needs of a client, which could lead to more accurate results. However, many fine-tuned models still require a lot of computing power, which means that they will have to be run on cloud servers that can be accessed remotely via the internet. This could create problems with sensitive internal data that needs to stay on site and would also incur costs from an external cloud provider.

- **Models could be run locally.** Edge models are models that are deliberately small-scale and can either be fine-tuned larger models or smaller models trained from scratch. They can be run on-site and without access to the internet, which greatly improves costs and privacy, making them more suitable for the more limited means of public sector IT systems. As they do not need to transmit data to a cloud, they can even be faster than internet-connected models depending on the hardware used to run them. Because of their small size, edge models offer only a limited functionality.[37] There is also evidence that, even though the error rates are not so different from larger models, the compression techniques could amplify biases in certain areas.[38]

- **Open-source and European models could be used.** There is a wide range of open-source models currently available for fine-tuning. Providers such as HuggingFace or Streamlit can easily be used to create institutional applications. In addition, as mentioned earlier, there are already several global and pan-European research consortia working on providing more affordable open-source models that are better adapted to European needs, including pushing multilingualism in training data. However, these initiatives will need more time and funding to catch up with the very significant lead of state-of-the-art models developed by US industry.

- **Cooperative structures could be used to procure models.** Public sector institutions could develop joint infrastructure to use specialised AI like language models in a shared way, such as by running a joint cloud data centre combined with smaller hybrid edge models that only periodically access the cloud[39]. They could also jointly procure models and cloud storage with external providers. In this case, however, issues related to proprietary data and infrastructure would remain, while knowledge gaps in administrations vis-à-vis the private companies on which they may depend to run cooperative projects could create room for abuse.

Measures concerning regulation:

- **Legislative action and oversight could improve LLMs.** Over the past two decades, legislation has been struggling to keep up with the breakneck speed at which new technologies are being developed and deployed. The same is true for legislation on LLMs. Currently, the industry is mostly self-regulating, with some AI companies coming up with joint initiatives and voluntary pledges.[40]

[37] Kyle Wiggers, "The emerging types of language models and why they matter", *TechCrunch*, 28 April 2022, https://techcrunch.com/2022/04/28/the-emerging-types-of-language-models-and-why-they-matter/, accessed on 4 April 2023.
[38] Sara Hooker *et al.*, "Characterising bias in compressed models", *arXiv preprint* arXiv:2010.03058 (2020).
[39] "Complete Guide to Edge Computing: Edge IoT, Edge AI, and More", *Run.ai*, https://www.run.ai/guides/edge-computing, accessed on 4 April 2023.
[40] "Joint Recommendation for Language Model Deployment", Cohere, OpenAI, and AI 21 Labs, https://cdn.openai.com/papers/joint-recommendation-for-language-model-deployment.pdf, accessed on 4 April 2023.

There are no dedicated laws or standards on building, training, or deploying LLMs, nor on the copyright and liability for their content. Some developments are underway, most notably the AI Act at the EU level.[41] Analysts are also urging governments to invest more resources in monitoring AI developments to avoid information asymmetries between the private and the public sector and the exploitation of the current lack of measurements.[42] Other areas for possible legislative action and oversight include ideas for algorithmic impact assessment[43] and common standards for training data, development, deployment, and the environmental impact[44] of LLMs, as well as more universal performance benchmarks.[45]

- **Create clear rules for LLMs in a work context.** Another possible field of action for the public sector is clear and unambiguous regulation on the use of LLMs at work. Issues such as accountability for the output of LLMs and transparency on the use of AI in processes in the public sector would need to be clarified.[46] External auditing and building feedback loops from citizens or administrators to report on the quality of the responses they receive is also key. This would allow corrective action to be taken when required.

User-based measures:

- **Using better prompt strategies could improve results.** One important way of getting better results is to adjust input for models such as ChatGPT to reflect an organisation's mission and reasoning.[47] Staff can be trained in prompt engineering, such as breaking down more complex instructions into smaller, logical steps, writing more detailed instructions and asking the model to then adjust content. This could lead to results which are more reliably in line with the user's intent.

Other risks might be mitigated by technological advancements. 'Hallucinations' still exist in the latest version of ChatGPT, but OpenAI claims that they have been drastically reduced with GPT4. The same claim is made for techniques to 'jailbreak' LLMs and get them to disregard their inbuilt safety features. Current LLMs often have a cut-off date regarding the information they can refer to when answering queries, so their replies may not be up to date. However, newer models could have the ability to consult the internet to prepare their replies. In general, the quality of output, particularly in the case of complex queries, is increasing as newer models are being developed.

Some risks, however, are of a more structural nature and cannot be fully corrected despite best efforts. This is the case for detecting and removing biases in training data and model outputs. Efforts to sanitize datasets can even worsen biases. Given the current rate of development, some researchers fear that developers may soon run out of high-quality data to train models and may then

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[41] "AI: EU agrees landmark deal on regulation of artificial intelligence", *BBC*, 9 December 2023, https://www.bbc.com/news/world-europe-67668469.
[42] Johanna Okerlund *et al.*, "What's in the Chatterbox? Large language models, why they matter, and what we should do about them", *University of Michigan Technology Assessment Report*, April 2022, https://stpp.fordschool.umich.edu/research/research-report/whats-in-the-chatterbox; Jess Whittlestone and Jack Clark, "Why and How Governments should monitor AI development", *arXiv preprint* arXiv:2108.12427v2 (2021).
[43] Andrew D. Selbst, "An institutional view of algorithmic impact assessments", *Harvard Journal of Law & Technology* 35/17 (2021), UCLA School of Law, Public Law Research Paper 21-25.
[44] "IEEE calls for standards to combat climate change and protect kids in the age of AI", *VentureBeat*, 6 February 2020, https://venturebeat.com/ai/ieee-calls-for-standards-to-combat-climate-change-and-protect-kids-in-the-age-of-ai/.
[45] Rishi Bommasani *et. al.*, "Language models are changing AI. We need to understand them", *Standford University Human-Centered Artificial Intelligence*, https://hai.stanford.edu/news/language-models-are-changing-ai-we-need-understand-them, accessed on 4 April 2023.
[46] Bloch-Wehba, "Transparency's *AI* Problem", 19-21.
[47] "Tech's hottest new job: AI whisperer. No coding required", *The Washington Post*, 25 February 2023, https://www.washingtonpost.com/technology/2023/02/25/prompt-engineers-techs-next-big-job/.

resort to even more flawed datasets, at a time when mitigation strategies are still in their infancy.[48] Related to biases is the risk of a perpetuation of the status quo. LLMs mirror the values, habits and attitudes that are present in their training data, which does not leave much space for changing, or underrepresented, societal views.[49] Relying on LLMs that have been trained with previously produced documents in a public administration severely limits the scope for improvement and innovation and risks leaving the public sector even less flexible than it is already perceived to be.

The 'black box' issue, where AI models arrive at conclusions or decisions without revealing the process of how they were reached is also primarily structural, though the decision of AI companies not to grant open access to their code does not help. This means that the evolving abilities of language models are still not properly understood. While there seems to be some understanding as to how large an LLM needs to be before it can master a specific skill, the emergence of previously unknown or unintended abilities in a model after its training and fine-tuning remains a significant risk. Fine-tuning could also lead to previously unknown 'capability jumps', which could overpower safety features[50]. The black box problem also makes it extremely difficult to fix models which are already deployed, as it is often unclear which parts of the model need fixing[51].

Moreover, lack of funding is likely to continue to be a problem both for the public sector and European industry or the open-source community, which will struggle to close the gap with US industry anytime soon. Regulating new technologies will remain a cat-and-mouse game. Acceleration risk (the emergence of a race to deploy new AI as quickly as possible at the expense of safety standards) is also an area of concern[52]. Finally, as mentioned earlier, a major structural risk lies in overreliance, which may be bolstered by rapid technological advances. This could lead to a lack of critical thinking skills needed to adequately assess and oversee the model's output, especially amongst a younger generation entering a workforce where such models are already being used.

Mitigating the risks of using LLMs requires an honest assessment of each possible area of use. Not all situations will create enough benefits to outweigh the risks. And not all LLMs may be suitable for use without prior customisation. When it comes to using ChatGPT in its current form, the issues that run up against some of the key pillars of public administration are difficult to mitigate, which make it less suitable for regular use. This will apply to future applications based on this model. In the absence of clear regulation on LLM accountability, only humans can regularly monitor the output of ChatGPT and other LLMs. Given the structural flaws of LLMs, humans are still very much needed to provide personalized services, flexibility, emotional intelligence, critical thinking, and the ability to adapt quickly to changing circumstances necessary to fulfil the demands of public service. When asked, ChatGPT agreed with this assessment by highlighting its own limitations. A ChatGPT-supported public administration will therefore still need to rely on a significant proportion of human judgement, regular monitoring, and a robust mitigating strategy.

[48] Terry Yue Zhuo *et al.*, "Exploring AI ethics of ChatGPT: A diagnostic analysis", *arXiv preprint*, arXiv:2301.12867 (2023).
[49] Bender *et al.*, "On the dangers of stochastic parrots…", 614.
[50] "GPT-4 System Card", *OpenAI*, 23 March 2023, https://cdn.openai.com/papers/gpt-4-system-card.pdf: 29, accessed on 4 April 2023.
[51] Katherine Miller, "How do we fix and update large language models?", *Stanford University Human-Centered Artificial Intelligence*, 13 February 2023, https://hai.stanford.edu/news/how-do-we-fix-and-update-large-language-models, accessed on 4 April 2023.
[52] "GPT-4 System Card", 21.

3) What lies ahead?

The release of ChatGPT has galvanised an already dynamic industry even further. But ChatGPT is not the only language model, and it will certainly not be the last. AI tools such as language models are set to become an increasing part of daily work, a trend that will also affect public institutions.

Looking forward, LLMs will be increasingly integrated into existing programmes. Microsoft has already launched Copilot, a set of AI-powered technologies based on OpenAI's latest LLMs, for enterprise customers of its Microsoft 365 package, in November 2023[53]. As LLMs become more widespread, the competition to be at the forefront of their development is intensifying[54].

However, the pressure to innovate implies familiar risks, such as rather limited search results at the expense of nuance, and most importantly a lack of source traceability. This issue is especially pertinent when it comes to the debate around the extraction of other people's work to produce something credited to an AI programme, which has already led to lawsuits against image and code-generating LLMs to clarify issues of copyright or piracy[55]. Concerns about the use of data have been raised across Europe[56], and an open letter has called for a six-month pause in developing systems more powerful than GPT-4, citing potential societal risks and a lack of robust safety systems[57]. Meanwhile, research on LLMs is still developing, and their abilities and potential are still not well understood[58].

Although large language models can already perform a wide range of tasks, they still have their limits. There are various tasks where models are unable to outperform the best performing humans or even fail to reach a degree of accuracy which is distinguishable from completely random patterns. They are unable to think and understand like a human being, regardless of how human-like their output may seem. As language models are set to become more present in our daily lives, it is important to keep in mind their risks and not be mistaken into considering them as capable as a human being. Unfortunately, the way humans perceive others and assess their intelligence works against this, since humans tend to mistake fluency for intelligence. Coupled with automation bias – the inclination to rate machine-generated results as more accurate – and a preference for machine-generated output over the advice of humans when it suits one's pre-existing biases, the risk of overreliance increases dramatically. This is already creating a dangerous over-dependence on the supposedly easy, accurate and readily available solutions provided by LLM-based applications such as ChatGPT. For reasons of convenience, public servants could deliberately or unwittingly ignore or play down the risks at the expense of the key functions of public service.

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[53] Yusuf Mehdi, "Announcing Microsoft Copilot, your everyday AI companion", *Microsoft*, 21 September 2023, https://blogs.microsoft.com/blog/2023/09/21/announcing-microsoft-copilot-your-everyday-ai-companion/, accessed on 19 December 2023.

[54] See for example "Search wars reignited by artificial intelligence breakthroughs", *Financial Times*, 6 February 2023, https://www.ft.com/content/b236b70d-82dc-40f8-84be-dc4daff151e4.

[55] "First AI art generator lawsuits threaten future of emerging tech", *Bloomberg*, 20 January 2023, https://news.bloomberglaw.com/ip-law/first-ai-art-generator-lawsuits-threaten-future-of-emerging-tech.

[56] "Intelligenza artificiale: il Garante blocca ChatGPT. Raccolta illecita di dati personali. Assenza di sistemi per la verifica dell'età dei minori", *Garante per la protezione dei dati personali*, 31 March 2023, https://www.gpdp.it/web/guest/home/docweb/-/docweb-display/docweb/9870847; "Investigation by EU authorities needed into ChatGPT technology", *European Consumer Organisation (BEUC)*, 30 March 2023, https://www.beuc.eu/press-releases/investigation-eu-authorities-needed-chatgpt-technology, both accessed 4 April 2023.

[57] "Pause Giant AI Experiments: An Open Letter", *Future of Life Institute*, 22 March 2023, https://futureoflife.org/open-letter/pause-giant-ai-experiments/, accessed on 4 April 2023; Jyoti Narayan *et al.*, "Elon Musk and others urge AI pause, citing 'risks to society'", *Reuters*, 29 March 2023, https://www.reuters.com/technology/musk-experts-urge-pause-training-ai-systems-that-can-outperform-gpt-4-2023-03-29/.

[58] "The emerging types of language models and why they matter", *TechCrunch*, April 28 2023, https://techcrunch.com/2022/04/28/the-emerging-types-of-language-models-and-why-they-matter/?guccounter=1.

Digital literacy is therefore key. For public administrations this means staying on top of developments in the field of large language models and disseminating this knowledge to their employees as well as the citizens they serve. Institutions deploying LLMs in their daily processes will have an interest in communicating regularly on the importance of critically assessing any output coming from LLMs. The increasing integration of LLMs could fundamentally change apps and programmes which are used regularly, such as search engines or text processing programs. At this critical juncture, public administrations could lay the groundwork to adapt to the changes that large language models could bring.

SUSANA SARGENTO

AI ON MOBILITY: CHALLENGES AND OPPORTUNITIES FOR CITIZENS

This presentation offers a position from a professor, researcher and citizen, hoping that it can contribute towards a different vision for AI within democracy.

This presentation will use AI on mobility, and mobility as an example, since mobility introduces many challenges to citizens, but also many opportunities.

AI has existed for a long time. The underlying mechanisms to perform machine learning have been available for a long time, and several major advancements have been made in several areas, for example in robotics. In the last 5 to 10 years, there has been a large increase in the use of AI. The reason for this has been the digitization of information, citizens, and available data. In the end, what we have is a digitization of the world! Currently I can find a large set of information about myself on the internet, including documents, presentations, photos, videos, and so on, but all the information is about myself. On one side we have information about ourselves everywhere, including every digitized item of data. From the other side, computation capabilities have been drastically improving, which has made it possible to process data on a large scale and make deep learning approaches become viable. Last but not least, communication networks have enabled us to obtain data from anywhere and share data throughout the world. This digital and interconnected world for citizens and also for other things has made AI progress very swiftly in this last decade.

There are many areas where digital capabilities have been progressing and where AI is becoming a key technology, such as industry 4.0 and factories of the future with all the machines being interconnected and autonomous; health with its embedded sensing, communication and data; media and entertainment with augmented reality and immersive environments adapted to users; and the mobility of the future, to provide another very important example.

When thinking about mobility, I dream about a future where we can live in a city with different means of transportation available and coordinated for us, where we can travel in our cars, or in cars that pick us up, as self-driving cars. I think about a world where mobility is very well organized, where we have the right transportation at our door, and there are no traffic jams, there are no accidents nor dangerous situations, and we can work or just relax. However, for this to happen, we need to have monitoring and sensing, we need to process the data through robust AI mechanisms, and perform efficient autonomous decision-making capabilities.

I will now consider some examples. With AI we can obtain information from video and images obtained from the outside to understand the status of our roads, and their requirements in terms of timely maintenance; we are able to detect cars in the wrong lane and driving decisions that can be dangerous and act in time; we are able to detect in real-time, not only the location of people and cars, but also their movement, and predict and react to dangerous situations before they happen, and ultimately, improve safety on the roads.

Another strong example of AI mobility is the area of self-driving cars. We were very fortunate to have an autonomous shuttle in Aveiro in October 2022 for 2 weeks, where citizens were able to test the vehicle during this time, as it travelled up and down the road. The autonomous shuttle was full of AI capabilities to process all the data from the vehicle, detect the road ahead and any obstacles, and make the best and safest driving decisions. It is very interesting that in follow-up questionnaires involving more than 200 people, 99 % of the people considered that the trips were safe.

This is really happening. AI is out there and all these innovations are available through AI. If we can make our world safer, AI can really become a great benefit for our lives.

This is now the moment to understand the role of AI for citizens and whether it is an opportunity, a challenge or a threat.

AI is here and it can truly be an opportunity. It may remove the need for certain jobs, but it will bring many more job requirements and opportunities. We are currently facing a strong need for skilled people in digital transition, in digital processing and communications, AI, cyber security and several other related areas.

AI can also be and will be a tool to provide a better and safer life, with many more well-being conditions available to our citizens, whether children or elderly people. This needs to be provided with privacy and security enabled, which can also be powered through AI mechanisms.

It is true that AI will help us in many of our everyday tasks. More and more we will have tasks being done autonomously through AI mechanisms and tools. However, for the tasks that we need human involvement, we have to take control over them. This is the key aspect: how to take control to make sure that the AI decisions that require our involvement are regulated?

Going back to the mobility area, it is not the purpose of AI to decide who will be in a more dangerous position in the road, but to prevent those dangerous situations before they happen. This – prevention – is where we have to act! This is also where AI can be more advantageous.

This means that we will need to use AI as a help, to make things more organized and safer, mainly to avoid problems that can happen if AI is not there.

This is where democracy needs to act. If we wish to use AI as a very valuable tool, we have to regulate it as soon as possible. Usually, regulations come much later and are very delayed and may come after the technology is out there and being used. However, with AI this cannot be the case and we will have to act in advance and regulate the use of AI, its applications and ways of using it very much before it is a commodity.

We need to be able to understand where we really want AI, for what, and how. This is where parliament and democracy can play a major role.

Finally, there is one thing that we cannot forget: we can always keep our consciousness, and AI is only performing tasks with the information we provide. Therefore, it will never take away our role as human beings.

BRUNO ARAGÃO

Let me be provocative.

When we discuss Artificial Intelligence, we are often absorbed by the second word: intelligence. We usually forget the first word: Artificial. In recent years, the spectacular improvement of technology devices and dedicated software is creating the idea that humans are changing. Are they? I don't know if you are aware, but a Chinese startup invented a long-distance kissing machine. The device, which transmits users' kiss data collected through motion sensors hidden in silicon lips, makes sounds and warms up slightly when kissed. What is new here? The human behaviour of kissing? The human desire to kiss? No.

In the sixties, the MIT Artificial Intelligence Lab developed a natural language processing programme. Named *Eliza*, it used "pattern matching" and substitution methodology to provide responses that made users feel as if they were talking to someone who understood their input. A kind of psychotherapist. What was new there? The human behaviour of talking? The human desire to talk? No.

In both cases, separated by seventy years, the difference lies in the technological progress, not the human behaviour. The main differences are supported by the artificial component of the expression "artificial intelligence". At the MIT Lab in the sixties, they understood perfectly what was happening. A simple language programme with basics instructions and rules, yet humans found it quite engaging.

And this last word explains what was happening and what is happening: **Engage.** We are being engaged by technology, and human behaviour is predisposed to be involved.

But why am I talking about this? Because this is our challenge: to understand this engagement. And because of that, we have a **hard balance between three dimensions: principles – technology – regulation.** Principles are human, technology is artificial, and regulation is in between. Regulation is our job as legislators: the job of the members of parliaments, national and European.

So, let me return to human things and be provocative again.

1. Firstly, I'm an Experimental Psychologist. Let me remind you that our brain creates all our psychological experience, all we know about the world, through five physical and chemistry senses – sight, smell, touch, taste, and hearing. We can measure all these physical signals or chemistry properties with precision. All of them create an immeasurable psychological world. We call this Human Intelligence (or just intelligence). We know the raw data – the environment, the context, the previous information – but it is a great effort to understand and explain the output or the results of those raw data: what happens in the mind!

2. The simulation of human intelligence processed by machines, supported by raw data, is named Artificial Intelligence. And Artificial Intelligence Systems can also create impressive artificial worlds. So, what is the difference? Just systems – human or artificial – working with raw data trying to make things happen! And making things happen is probably the better definition of intelligence.

3. The **first difference** are the data, the raw data. We can have machine learning based on traditional approaches, probabilistic or Bayesian models, automatic or dynamic processes, but in any case, the systems need the same thing: data. A lot of data. In a simple way, the more data they collect, the better or stronger they are. In this case, we call them big data systems. And these systems could be better than human systems.

4. The **second difference** is that the ways to collect data are not innocuous. The systems need to know what to collect or, at least, what to discard. The Human System knows it. But in artificial systems, we have [more or less] human intervention, so we can discuss, in political terms, regulation mechanisms. And in the recent years, we did that.

This is important because when we are talking about risk, or the risks, we are talking about principles, not technique. **But we are always talking about data, big data.**

If you prefer, different perspectives on how we apply or transpose principles to technology. In other terms, different perspectives on how to regulate. For example, the discussion of the Portuguese Letter for Human Rights in Digital Era, approved in 2022, had caused a great discussion about misinformation. Again, a question of principles and technique. In AI terms, it is possible to develop tools to control or minimize misinformation. But how could we implement that? Would we? And who regulates the mechanism? Formal regulation by public entities? By journalist? Self-regulation by the private media companies?

We know that raw data generate a million possibilities, have no limits, so we need to agree in harmonized rules on artificial intelligence, such us the EU Artificial Intelligence Act that we are waiting for.

In the end, let me return to the beginning. Data are the base of any kind of intelligence. In legislative activity, we need to ask the right questions to answer our citizens who are, simultaneously, unknown data providers and, in the end of the process, just reactive consumers.

So, what are the questions? What are the best questions to have the best answers?

PART VII.

ROUND TABLE

MÁRIO CAMPOLARGO[1]

THE DIGITAL AS AN ENABLER FOR OUR DEMOCRACIES

Let me, in my thanks, congratulate the European Parliament and the Parliaments of the Member States for promoting such a relevant debate, as well as thanking all the Portuguese parliamentarians that made this event possible. The topics of this debate are not just essential for our collective future but, I would say, for our collective futures, whatever they will be. That is, always hoping that we will build these from a democratic and values-based standpoint.

Sometimes, I wonder if we can still say that we are in a transition towards a digital society. I think that we are living within a digital society in the making and that will always be in the making. We are facing all these opportunities and risks in our daily life, while we are building it and building on it. The great challenge is to be able to change the conceptual framework in which we were thinking, leaving behind the concepts of a pure analogic world, which will blur our understanding of the challenges of the future.

Portugal, myself, in my daily work, involving a lot of enterprises and dedicated workers, are building and deploying a new digital infrastructure enabled by 5G, IoT and AI. I refer to these technologies to make a point. I am to some extent quoting freely here from the 'Parable of the Three Stonecutters', made famous by Peter F. Drucker in his book, *The Practice of Management*. As in the construction of the old cathedrals, most of the workers could probably only see that they were carving the stone for their subsistence or because they would consider themselves as the best, and maybe only a few could see the broader picture… could see themselves as building a cathedral.

[1] Portuguese Secretary of State for Digitalization and Administrative Modernization

What we are (what we must be) effectively building is a digital infrastructure for our democracies. The time for thinking of the relation between humans and machines in terms of opposition is gone. This relation is very complex and has always been so. I would argue that the differentiator of human intelligence is that it searches for creative solutions amidst ambiguity and limited info, and with a touch of so far intangible assets that we link to friendship, appreciation, love, while machines search for patterns in very large amounts of data/information. Clearly, a relation that needs to be further analysed, reflected upon, certainly better understood, particularly now, when we are seeing the rise of generative AI.

Among those who conceive of a technological utopian future and those who see technology as the end of days for our societies – if not for the human species –, I would like to see us adopting the eminently humanist attitude that we will always be able to deal well with technology if we are able to understand it.

Yes, we have to be conscious of the risks. Autocracies have been shutting down the internet, have been propagating disinformation or subtle misinformation (sometimes with the contribution of the extremist elements in our own democratic societies), limiting freedom of speech, practicing digital repression, weaponizing tools and information to link to democracies.

The truth is that the simple free flow of information raises challenges and difficult choices for our democracies, highlighting the importance of standing firm in the basic principles of democracy and human rights, recognising plurality and diversity, accountability and transparency, and openness, creating conditions for a healthy self-determination of each individual in our societies.

It is our duty to ensure that the benefits of digital technologies are always greater for democratic societies than for autocracies. Digital technologies and AI can have a strong impact within the democratic public sphere. They equally highlight the importance and accountability of automated decision-making systems in public services.

Again, some will think that the algorithmic governance of society will be a fundamental inducer (probably the dominant one) of the political decision-making process, and so emptying democratic processes. I think that my previous argument, that machines and humans do not think alike and are not, therefore, a replacement for each other, should prevail. But, in such a context, what is our role in equipping our fellow citizens to be ready to exercise this complementarity to the full, to make this binomial machine-human a virtuous one?

The answer is that we need to think differently. We need to build a framework in which digital rights are understood in the digital world as in the physical one, as having been the result of centuries of reflections. That is why, since April 2020, Portugal has had a Digital Transition Action Plan focussed on citizens and Public Administrations, to ensure, for example, the ethical use of data and AI.

Besides, Portugal was one of the first countries in the world to issue a Charter of Fundamental Rights in the digital era and, during the Portuguese Presidency of the Council of the European Union, to present the “Lisbon Declaration – Digital Democracy with a Purpose”, which has significantly contributed to the current proposal of the European Commission on digital principles and rights.

Our transformation of public services is informed by the central position of citizens, by the understanding that when handling their data, we must be guided by their consent and apply all the appropriate checks and balances (e. g., the General Data Protection Regulation). Digital technologies make our government more citizen-centric while ensuring the delivery of state-of-the-art services, based on Portugal's SIMPLEX Programme, the core principle of which is creating frictionless interaction, anticipating and automatizing services for citizens and businesses. We are promoting accessibility and transparency, improving efficiency, fostering citizen engagement, and enabling data-driven decision making.

However, entrusting good public services through digital technologies forms just part of our view of what the future of a solid democracy can be. Nowadays, protecting democracy depends upon three key elements: investing in digital literacy, connectivity, and cybersecurity.

In fact, the recent Eurobarometer results[2] reveal that most Europeans believe that advanced connectivity (76 %) and stronger cybersecurity (77 %) will make their daily use of digital technologies significantly better. Our efforts are aimed at creating answers that allow people, enterprises, and the public administration to acquire the capacity to face cybersecurity challenges.

Last month, we launched the #ReadFirstThenClick Cybersecurity Campaign, the first wide-reaching awareness campaign on national TV, social networks and on public transportation, with informative videos and posters about risky behaviour and advice on topics such as the use of passwords, online shopping, which are certainly important topics. Alongside cybersecurity, we are fully invested in taking advantage of AI while naturally not neglecting ethics and security concerns. Similarly, we just launched a Chatbot (i. e., a Digital Assistant) that can answer citizens' questions about the Digital Mobile Key on eportugal.gov.pt as a large-scale controlled experiment.

On 14 June 2023, Europe took a major step towards regulating AI, from a risk-based perspective, differentiating us from alternative approaches based more on market solutions involving state-driven policies. It is particularly important to keep in mind the scientific method when thinking about the future of AI regulation, namely the wish to have proofs of concept, and solutions that are validated by standard procedures, which reassure us all regarding the legitimacy of AI solutions. We need to invest collectively, in Europe, in processes to verify algorithms and their compliance with our values, not introducing possibly anti-democratic biases.

And AI brings us to the core of the discussion of this conference, which is digital literacy. The advent of AI may be another important trigger for us to invest deeply in promoting people's digital skills. A precondition for the different conceptual framework I alluded to before, where I believe it is important to think of a digital social environment.

2 Directorate-General for Communication of the European Union, "Special Eurobarometer SP532: The digital decade", in https://data.europa.eu/data/datasets/s2959_99_1_sp532_eng?locale=en accessed on 16 June 2023.

We need to act from the early stages of education and schools, to provide insight into computational thinking. Only these and new skills will empower individuals to effectively engage with AI technologies, understand their limitations and implications, make informed decisions, adapt to technological advancements, address ethical considerations, and seize opportunities for career growth and innovation, leading to a more cohesive and socially just society. Portugal is working relentlessly within this perspective. In 2022, for the first time, we scored above the EU average in terms of Human Capital on the Digital Economy and Society Index[3], following the positive trajectory already achieved in terms of digital public services and connectivity.

In conclusion, I stand with the statement that the digital needs to be seen as empowerment for democratic societies. Generic digital literacy, upskilling, and reskilling will be fundamental for all of us. Introducing a new way of thinking from an early age will prepare us to take advantage of opportunities and mitigate risks. Assuring effective freedom of choice online, including when interacting with artificial intelligence, is a challenge that together we will overcome… And many more challenges will continue coming to make our democratic societies stronger and more equitable.

[3] European Commission, "Portugal in the Digital Economy and Society Index", in https://digital-strategy.ec.europa.eu/pt/policies/desi-portugal, accessed on 16 June 2023.

MARIA DA GRAÇA CARVALHO

DIGITAL TRANSITION IN EUROPE – REGULATION AND ACTIONS

Digital has been one of the main pillars of the present European legislature. Since its beginning, President von der Leyen has identified it as one of the two elements in the twin transition that aims to prepare our continent for the next decades, the other being the green transition.

Europe's attention to digital did not start in this mandate. There have already been major legislative initiatives in the past. Notably, the General Data Protection Regulation published in 2016, which was, in many ways, groundbreaking.

However, since 2019, we have witnessed an unprecedented level of action at this level.

In this article, I will not cover the entire chronology of legislative initiatives approved thus far, much less try to explain them all in detail. However, I will briefly mention a few selected ones, due to their importance for the digital world.

The Digital Services Act and the Digital Markets Act

The Digital Services Act (DSA) and the Digital Markets Act (DMA) share the common goal of better protecting consumers and their fundamental rights online, leading to fairer, and more open digital markets for everyone.

These regulations include numerous initiatives aimed at creating a new set of rules for the single market, promoting innovation, growth and competitiveness, leading to better online services.

There is a very positive push towards smaller businesses and consumers, with measures to support the scaling up of smaller platforms, small and medium-sized enterprises, and start-ups, providing them with easy access to customers across the single market, while lowering compliance costs.

More specifically, the DMA aims to create a level playing field for all online businesses, by establishing a set of obligations for large platforms, known as "gatekeepers" because of their dominant online position. These gatekeepers are now required to allow third parties, notably small platforms, to inter--operate with their own services, thus avoiding the so-called "lock-in" effect. For example, these smaller businesses may now require that their users be allowed to exchange messages and files across messaging apps. Users of these platforms will be allowed to access the data they generate in these platforms and conclude businesses outside of them.

Large platforms will no longer be able to give preference to their own products or services, prevent un-installing of preloaded software and apps or banning third-party apps. Processing personal data for targeted advertising will also be banned, except when specific consent is given by the users. Fines for failing to meet these rules may reach up to 20 % of the worldwide turnover of these gatekeepers.

The DSA focuses on creating a safer online environment, aiming to replicate in the digital environment the same rules and obligations that already apply to the physical world. These include preventing the spread of illegal content, online disinformation and other societal risks. The level of the requirements has been designed taking into consideration the size of the platforms and the risks they pose.

The list of covered subjects includes countering illegal content online and obligations for platforms to react quickly; strengthened traceability and checks on traders in online marketplaces; increased transparency and accountability of platforms; and bans on misleading practices and certain types of targeted advertising, notably advertising targeting children and/or that based on sensitive data.

The Data Act

Following the Data Governance Act, this proposal is the second main legislative initiative resulting from the February 2020 European strategy for data, which aims to make the EU a leader in our data-driven society.

The Data Act, for which I was a negotiator for the European People's Party (EPP) in the Committee on the Internal Market and Consumer Protection, is about giving access. Providing access to people and companies.

Data is a key resource for businesses, including start-ups and SMEs, but only a small part of industrial data is accessible and used effectively.

It is estimated that 80 % of industrial data is never used. We must find ways to harness this potential for growth and innovation, while respecting the intellectual property rights of industry players.

The value of data in the European economy is currently not being fully realized due to several factors. To start with, there is a lack of clarity regarding who can use and access data generated by connected products. However, there are many other factors, such as the fact that SMEs are often not in a position to negotiate balanced data sharing agreements with stronger market players; barriers to change between competitive and reliable cloud computing and edge services in the EU; finally, the limited ability to combine data from different sectors.

This affects a range of economic sectors and leads to an underutilization of data at the EU level, with negative consequences for consumer choice, innovation and the provision of public services.

The Data Act will eliminate obstacles to access to data, both for public and private sector bodies, while preserving incentives for investment in data generation by ensuring balanced control of data for its creators.

With the Data Act, we return control to those who produce the data. In addition, at the same time, we pave the way for much greater use of this information. This is a fundamental step towards growing the data economy and promoting innovation. At the same time, we protect trade secrets and intellectual property.

In my work, I focused mainly on the issue of cloud computing and facilitating data migration between platforms, in a market that has been dominated by large non-European multinationals. With this law, we eliminated unjustified barriers and fees, made switching operators simpler and reduced costs.

Presently, this market is dominated, globally, by five platforms from the USA and China. The three largest alone — Amazon, Microsoft and Google's parent company, Alphabet — hold a market share of more than 70 %.

They are called hyperscalers, because they have an almost infinite capacity to expand the capacity of their databases. It is estimated that these operators offer 85 % of cloud computing services provided in Europe. European suppliers end up limiting themselves to smaller, more specific, niche offerings.

As rapporteur, I have ensured that the supplier change process is carried out effectively, using proactive collaboration from all parties involved and without excessive costs for users.

Thanks to this regulation, it will also be possible to create a pan-European cloud ecosystem, in which data and services will be available and shared in a secure environment.

This market opening is not only necessary, but also unstoppable. The question is not whether it will be possible, but when it will happen. Our role, as regulators, is to create the conditions for this to happen as quickly as possible.

The Artificial Intelligence Act

The Artificial Intelligence Act, in which the European Union is a pioneer worldwide, introduced a clear framework in terms of ethical principles, establishing red lines that cannot be crossed by market operators, namely in terms of respect for human rights and copyright. At the same time, we are seeking to expand the range of AI beneficiaries, with special attention paid to small and medium--sized companies, in a sector that has until now been controlled by large multinationals.

At stake in this strategy are three fundamental objectives: a) outline a set of simple, but clear, minimum requirements for suppliers; b) guarantee users that technologies available on the market comply with European standards and values; c) protect consumers from violations of their security and fundamental rights.

As with all disruptive innovations, Artificial Intelligence implies major transformations in the organization of society, jeopardizing the future of certain professions and requiring the reformulation of others, but also creating new jobs and activities with high added value. This transition must be safeguarded. However, I have no doubt that AI will increasingly be a positive force at the service of our great societal goals and offer a better future for humanity.

In December 2023, the European Parliament and the European Council reached a political agreement on the Artificial Intelligence Act. It is a balanced agreement, which safeguards issues related to respect for human rights and democracy, while at the same time paving the way for the growth, in practically all sectors of activity, of this extraordinary resource.

The AI ACT establishes a risk-based approach, aiming to ensure maximum possible protection to users, while preventing unnecessary regulatory burdens. Under this framework, risks are divided into four categories: unacceptable risks, implying the prohibition of those practices; high risks, which require a prior conformity assessment; limited risks, which carry transparency obligations; and minimal risks, where stakeholders are invited to develop their own codes of best practices.

All biometric categorization systems that use sensitive characteristics, such as political, religious and philosophical beliefs, sexual orientation or race, fall under the high-risk category and, therefore, are banned. The same applies to most systems targeting children. The use of biometric data for recognizing emotions in work or school contexts is also off limits.

The collection of facial images through CCTV systems to create facial recognition databases will also be prohibited. In this case, during the negotiations in the European Parliament, the European People's Party argued for an exception regarding the use of facial recognition by law enforcement authorities in specific, life-threatening situations, such as human trafficking, the kidnapping of children and terrorism. The European Parliament initially repelled these exceptions, but they were eventually included in the agreement with the Council.

Other uses of Artificial intelligence that have become illegal thanks to this new legislation include the use of AI systems that manipulate human behaviour in order to condition free will or, more generally, any use of AI that exploits people's weaknesses, such as age, disabilities or socioeconomic status.

With these rules, there are also increased obligations for owners of AI systems and considerable sanctions for non-compliance. One of the European Parliament's victories throughout the negotiation process was the imposition of a prior assessment, in terms of human rights and others, for all systems considered high risk. That is, risk to health, safety, fundamental rights, the environment and the rule of law. A rule that also applies to the banking and insurance sectors.
The so-called general-purpose AI systems (GPAI), which fall under the limited-risks category, will have to comply with very clear transparency rules stipulated by the European Parliament, including the preparation and availability of technical information and compliance with EU copyright rules.

Fines for defaulters can vary between 7.5 and 35 million euros.

In other words, far from liberalizing or paving the way for abusive practices, the Artificial Intelligence Act brings order to a rapidly expanding sector that, to a large extent, has grown without regulation. This step differentiates the EU from the rest of the world.

Furthermore, this law stimulates the growth of AI, especially among sectors that until now were restricted in their progress. This concerns companies, in particular SMEs, which wanted to develop AI solutions, but were limited by the power of technology giants controlling the entire value chain. Making access to artificial intelligence more democratic is also a way to make it safer.

AI was not born yesterday. It is a technology that has existed and been developing for decades. However, it is now clear to everyone that it will assume an increasingly significant role in our lives, that it will be a decisive tool on all fronts, from fighting climate change to healthcare. It is up to us, humans, to define the terms of this relationship. That is what we are doing.

Concrete actions
Of course, none of these legislative initiatives will be effective if we do not create the conditions to meet our goals.

This is a point I have tried to make in all digital-related processes with which I have been involved in this legislature.

In the European Union, we are exceptionally good at building legislation, but we still have weaknesses in innovation ecosystems, mainly in the digital innovation ecosystem, where we are behind our main competitors.

We have talent, but it is still not enough, so we have to invest in skills. Moreover, we must work on the digital literacy of all Europeans.

We also have to invest more in scientific research, especially in emerging and critical technologies, and in infrastructure. We still do not have the top infrastructure needed for digital, such as high--performance computing.

We are currently investing in all these fields, but until now, we were quite weak in skills, research and infrastructure.

We are also creating the conditions for the private sector to invest more in scientific research. Together with capital and the market, this will be particularly important, as important as regulation, as important as the pillars of European values and ethics embedded in the EU's Digital Strategy.

If we truly want to lead the world in digital, we must act according to that ambition.

JOANA GONÇALVES-SÁ

A POSSIBLE AGENDA FOR A EUROPEAN DIGITAL TRANSFORMATION[1]

It is uncommon to have the opportunity to hear about so many initiatives, some of them quite similar in purpose, and this was a very significant meeting. Despite our differences, it is obvious that we share common objectives and that we are all on the same page. It was also very interesting to hear about concerns regarding machine learning (ML) and Artificial Intelligence (AI) algorithms, particularly the current generative language models, more famously ChatGPT, and about the importance given to regulation. Although not new, the discussion about the potential benefits and risks of AI is finally becoming popular and this is great news: since these algorithms are increasingly prevalent, their implementation promises to change society forever, and the more informed people involved are, the better. Europe must be at the forefront of this revolution.

Brief introduction

When thinking about Generative AI (GAI), it is thought that it will be able to solve many different problems, offer creative solutions, and eventually develop consciousness, potentially replacing or even turning against humanity. On good days, it would be a C-3PO, and in our worst nightmares, it would be a HAL 9000 or one of the machines from The Matrix. It is important to clarify that we have no indication of GAI existing or even being close to being developed. It is also important to note that the term "close" does not provide any expectation of a time frame: no one can determine with any certainty how far away GAI is, or the probability of it happening. If it were to happen, it would have an enormous impact, so this risk should not be ignored or minimized, and Parliaments everywhere bear great responsibility in understanding and anticipating such risks. However, most importantly, this fear should not guide the discussion about the ML algorithms that we are already implementing. In fact, it is increasingly common for those who warn about the risks of ML to be summarily discredited

[1] This text was first presented orally on June 17th, during the Conference on Digital Literacy, at the Portuguese Parliament in Lisbon.

as alarmists of GAI, as if they were the same thing or as if we were so limited that engineers and scientists could not think of more than one risk simultaneously but we not realizing this until it is too late. Given this, what are these risks? There are several, but I will highlight only three: 1) risks of the algorithms working as they should; 2) risks of not working as they should (but we do not realize this until it is too late); and 3) risks of using them for tasks for which they were not trained[2].

I will start with the latter, returning to the distinction between these ML models and GAI models: the former can be very bad (and they mostly are) or very good, but even the very good ones are good only at the task for which they were trained and tested. The TikTok algorithm may be excellent at finding the best videos for Taylor Swift fans, but it would be a disaster at identifying families committing tax evasion, and it would not be surprising if ChatGPT was terrible at recommending Iranian films. However, this has not prevented many users from blindly believing what ChatGPT offers in its answers[3], or even asking the algorithm for health advice[4].

However, there is another fundamental problem: we have no idea how these algorithms actually make the choices they make, which leads us to the second risk. In the simple case of algorithms trained to distinguish between pictures of animals, algorithms may use the shape of the muzzle as a possible form of distinction, but often we have no way of knowing if this had any influence on the final model. Two "famous" examples come to mind, one much more consequential than the other. One model trained to distinguish between dogs and wolves actually only used the landscape and failed when dogs appeared against a background containing snow[5]; another model, trained to identify (and prioritize) very sick patients by analyzing X-ray results, actually detected whether the exam was done with the patient standing (not so sick) or lying down (could not even get up for the exam)[6]. Finally, it can also happen that the algorithms work as they should, meaning that they do find meaningful and existing relations between the data and the expected results, but they carry important biases or even threats to democracy (such as algorithms that correctly identify citizens more likely to believe in – and be good targets for – political disinformation[7]). In summary, while we have been extremely fast at implementing them, we do not understand how they work. Crucially, even the engineers training these models cannot predict what they will do, how, or which biases they will carry[8].

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[2] In the case of recommendation algorithms Flávio Pinheiro and I discuss these risks in detail in Gonçalves-Sá, J., Pinheiro, F. (2024). "Societal implications of recommendation systems: A technical perspective", in: Sousa Antunes, H., Freitas, P. M., Oliveira, A. L., Martins Pereira, C., Vaz de Sequeira, E., Barreto Xavier, L. (eds.) *Multidisciplinary Perspectives on Artificial Intelligence and the Law. Law, Governance and Technology Series,* Vol 58. Springer, Cham. https://doi.org/10.1007/978-3-031-41264-6_3.

[3] In a famous example, a lawyer presented a Chat GPT-based motion that mentioned non-existing legislation: https://www.nytimes.com/2023/06/08/nyregion/lawyer-chatgpt-sanctions.html.

[4] A summary is presented here: De Angelis, L., Baglivo, F., Arzilli, G., Privitera, G. P., Ferragina, P., Tozzi, A. E., & Rizzo, C. (2023). "ChatGPT and the rise of large language models: the new AI-driven infodemic threat in public health", in *Frontiers in Public Health, 11,* 1166120.

[5] Placed in the context of how to improve this classification here: Ribeiro, M. T., Singh, S., & Guestrin, C. (2016, August), "Why should I trust you?" Explaining the predictions of any classifier, in *Proceedings of the 22nd ACM SIGKDD international conference on knowledge discovery and data mining* (p. 1135-1144).

[6] This and many other concerning examples during COVID-19 can be found here: Roberts, M., Driggs, D., Thorpe, M., Gilbey, J., Yeung, M., Ursprung, S., ... & Schönlieb, C. B. (2021), "Common pitfalls and recommendations for using machine learning to detect and prognosticate for COVID-19 using chest radiographs and CT scans", in *Nature Machine Intelligence, 3*(3), 199-217, or here: Wynants, L., Van Calster, B., Collins, G. S., Riley, R. D., Heinze, G., Schuit, E., ... & van Smeden, M. (2020), "Prediction models for diagnosis and prognosis of covid-19: systematic review and critical appraisal", in *bmj,* 369.

[7] Gonçalves-Sá, J., Pinheiro, F. (2024), cited.

[8] Very well explained in Christian, B. (2020), *The alignment problem: Machine learning and human values.* WW Norton & Company.

Again, and clearly, Europe is at the forefront of the fight for values-driven technology, and against disinformation and citizen disenfranchisement.

Given this, what is Europe not leading in?

Europe's delay

I would argue that Europe is lagging in three key areas: Discovery, Research, and Applications. In great part this is because the emphasis has been put on regulation. However, I would further argue that these are not mutually exclusive and that ethical and privacy-protecting research can indeed be a driving force for more and better digitalization and more and better AI. Why has this not been the case?

1) We are spreading ourselves too thinly and we saw some examples described here, within our parliaments. It seems that many of the initiatives have the same nature and goals but that each of them receives too little funding. Instead of collaboration and joint coordination, we are independently trying to achieve the same goals. As an example, in early 2023 Microsoft announced an investment of 10 billion USD in ChatGPT's creator OpenAI[9]. This is more than three times the entire investment of Portugal in Digital Transformation (from better computers in schools to the development of apps), until 2025[10]. Soon, most countries will have fewer computational resources than a handful of companies. We are not **collaborating** enough.

2) We are reacting instead of **acting**. Europe remains focused on what is being done elsewhere, by foreign companies with different values and goals, and just trying to fix this *a posteriori*, through legislation. We must pioneer not only in regulation but also in development. Europe must be able to offer proof of concept that AI and other projects can be developed from an ethical and value-protecting perspective, *a priori*. One example where this lack of coordination and support for EU-based products was clear was in the development of the digital contact-tracing apps, during the COVID-19 pandemic. European academics and companies worked together to develop solid protocols, which protected privacy and which were effective. However, when the largest USA-based mobile phone companies announced their own, the EU was not strong enough to impose its technology, even after it was shown that this Google/Apple app carried serious privacy risks[11].

3) We are focusing on **applications** and not on the big questions. It is impossible to keep track of how many apps for automatic translation or for improving medical imaging are announced yearly. Because money is limited and distributed to too many research groups and companies, we mostly focus on "low-hanging fruit" and on small-reaching problems. These are important, but can also distract us from attempting to study the big questions, such as how similar these AI algorithms are to the human brain (or how differently our brains work), how we can prevent algorithmic bias, or making AI more explainable and less energy consuming. Moreover, apps that focus on short term problems will have a short-term life and will easily be displaced and rendered obsolete. However, research on key questions on how AI works and how it can be made better are important in the longer term.

[9] https://www.nytimes.com/2023/01/23/business/microsoft-chatgpt-artificial-intelligence.html.

[10] https://recuperarportugal.gov.pt/wp-content/uploads/2023/05/PRR-Adenda-20230526.pdf, accessed in January 2024.

[11] See for example: Wen, H., Zhao, Q., Lin, Z., Xuan, D., & Shroff, N. (2020), "A study of the privacy of COVID-19 contact tracing apps", in *Security and Privacy in Communication Networks: 16th EAI International Conference, SecureComm 2020, Washington, DC, USA, October 21-23, 2020, Proceedings, Part I 16* (p. 297-317), Springer International Publishing.

These issues have been identified by many and it is time that the focus shifts to what should be done in parallel.

A new agenda

I would argue for an ambitious proposal involving three steps.

Improve. We have to improve what I will call the "bread and butter." We must perfect existing systems just to make them safer, offering more privacy protection, or easier access. These are the same types of problems that we have heard here, on how to improve reach, develop apps that work for parliaments (including parliamentarians, services, and citizens) or are useful for our daily lives in general. But, as technology and society move fast it should be obvious that, while important, these problems are short-term and cannot form the core of our concerns.

Regulate. The question of how to regulate AI is not an easy one. Again, it is clear that AI developments and applications are moving much faster than typical regulation procedures. As an alternative, some have suggested focusing on certification[12], in which all products or algorithms are available, but some would be certified as having been tested, being ethical or better at protecting privacy, for example. I find this is a dangerous road and will explain why using the example of medication. The equivalent to the certification perspective would be to have pharmacies sell any type of product but only a few of the drugs would have this safety seal. Instead, what we as a society chose to do is, before any medication gets onto the market, it is thoroughly tested for its quality, effectiveness, and safety. We accept that simply offering individual choice can have terrible consequences not only for individuals but also for public health and society as a whole. It is true that this process of testing and of compulsory clinical trials delays the market entry of drugs that could eventually save lives, but it also prevents extremely dangerous ones from entering the same market. Continuing the parallel with the algorithms: we are implementing, on a very large-scale, products that have not been sufficiently tested and that can have very negative impacts, as illustrated by the examples above. Again, despite introducing potential delays and possibly increasing entry costs, products that were developed recently and not independently tested, should not be allowed to enter the market freely. This means that we need to create independent institutions (an "EMA for AI") that can evaluate such products and then certify them in terms of quality and risks but also prevent their application before such evaluation is completed. Importantly, we cannot let the researchers nor the companies lead this analysis. Often, for very generous reasons, we aim at doing our best and are convinced that our models can improve people's lives; but exactly for this reason, we cannot be trusted to have impartial judgment. A different argument against regulation is that Europe will fall further behind because, if we focus on fundamental and principled applications, countries such as the US or China will be able to put their products on the market much faster without these considerations. Again, this is likely to be true but, if instead of focusing on short-term limited range applications, we focus on long-term questions we are more likely to succeed. Which leads me to the last point.

[12] For example, Edwards, Lilian, "Regulating AI in Europe: four problems and four solutions", The Ada Lovelace Institution, accessed in January 2024.

Create. How can we tackle the crucial problem of having many independent researchers and companies working on related products and spreading ourselves too thinly? Especially while in other countries and in very large companies ethics are not central and priorities are clearly defined, with information and decisions being centralized and coordinated to maximize efficiency? I would argue that we need to create an ESA-like or a CERN-like institute for AI and digitalization[13]. In other words, we need a new European wide joint initiative to:

a) create critical mass;
b) pool resources in terms of both infrastructure and ideas, improving efficiency and coordination;
c) invest in fundamental research, into the "why" and "how" questions, to effectively compete in the world arena;
d) offer evidence that what Europe is arguing for in terms of values and ethics is possible, instead of just creating regulations that non-EU-based companies can dismiss as impossible to comply with.

We must show that it is possible to have transparent, explainable, privacy protecting AI as this strengthens we will have both democracies and economic development. Whoever leads this development will define the type of world that we have. Moreover, and as CERN, ESA, and so many institutions have shown over decades, when very bright people are working together and have sufficient funding, highly disruptive discoveries and innovation happen at a much faster rate and are virtually impossible to predict. The WWW was created to solve a problem that researchers had and changed our world forever.

Conclusion

Europe has been leading on AI regulation but is lagging on creation, research, and development. In great part this can be explained by a culture of reacting instead of acting, poor collaboration and focus on short-term applications instead of fundamental long-term questions. Europe needs a new "moonshot" agenda, a CERN for AI, which can leverage the huge value of European research and researchers, while exploring the full economic promise of ethically driven applications.

By collectively investing in the future of AI we can shape a world that benefits from its potential while guaranteeing our shared values and principles.

Our problem, so far, is not being too ambitious, it is not being ambitious enough.

[13] After these arguments were presented at the Conference on Digital Literacy, in June 2023, a document with a very similar vision was released by the Confederation of Laboratories for Artificial Intelligence Research in Europe (CLARE). https://claire-ai.org/wp-content/uploads/2023/07/CLAIRE-Statement-on-Future-of-AI-in-Europe-2023.pdf, including a post that uses the exact same terminology, " A CERN for AI": https://garymarcus.substack.com/p/a-cern-for-ai-and-the-global-governance?r=hc1t5.

SOFIA MOREIRA DE SOUSA

Our values at stake

"In the digital era, democracies are short of breath". I will begin by stealing this quote from the French philosopher Gilles Lipovetsky, *L'essoufflement de democratie.* It is true that we all use social networks as our main source of information, as a way to engage with friends, with people, and engage in democratic processes online. If our social feed can be scanned in such a way as to obtain a thorough profile of ourselves, the risk of being manipulated is enormous. Basically, it's almost impossible to prevent. This obviously creates many problems for representative democracy – and for democracy as a value in itself. Actually, the issue today and the topic of these two days' discussion is digital literacy and why it matters for representative democracy. I would go further and say why it matters for citizenship, why it matters for, really, the survival of democracy and rule of law, in the way we know it today.

Many of the challenges discussed throughout this Conference can affect and destabilize democracy – intentionally or unintentionally. Especially worrying is that amongst the younger generation, there are those that are more prone to being captivated by alternative models of democracy. Moreover, if we end up in a situation where we believe nothing, then we have totally undermined our society and the models that we have today.

Engagement of all relevant actors

Whether at home (EU) – or abroad – we must address the impact of digital on democracy and in our fundamental rights (as enshrined in Treaty 2 of TEU). We need to continue efforts to prevent, deter

and respond to disinformation and information manipulation. In an interview given to the BBC[1], the European Commission's Executive Vice President Margarethe Vestager said that there was "definitely a risk" that artificial intelligence could be used to influence the next European elections in June 2024. The Commission's services are currently working on prevention concerning this, on what can we do to mitigate the risks, whom to work with and what can be done.

There is no effective response as such to disinformation, without the engagement of all relevant stakeholders: civil society, national authorities, parliaments, academia, international organizations, industry, media, all have to come together and join efforts in finding common solutions. What is at stake is indeed very important and worth the effort.

The European Union's approach, a robust framework for coordinated action to fight disinformation, has been looking particularly at how to engage all stakeholders. The line taken has been to look at international human rights standards and work in a way to make the online environment more transparent, empower citizens and foster open democratic debate.

Our instruments/tools

What are the instruments and tools that we have available? Empowering citizens is key for the future of our democracies. This goes beyond education, beyond schools. It is about mass education. Media literacy skills and critical thinking are key to equipping citizens with the necessary skills required to make judgments, and to analyse complex realities affecting the democratic sphere.

The European Commission is actively supporting Member States in several initiatives to promote digital education and skills. This is a crucial step in addressing the current lack of a "whole-of--government" and "multi-stakeholder approach". Let me highlight two specific initiatives:

— The Digital Europe Programme (DIGITAL) is a new EU funding programme that aims to bring digital technology to businesses, citizens, and public administrations. The programme provides strategic funding for various projects in five critical areas of capacity, namely supercomputing, artificial intelligence, cybersecurity, advanced digital skills, and the widespread use of digital technologies across the economy and society.

— As part of the European Year of Skills 2023, the EU Cyber Security Skills Academy initiative was announced in April 2023. This aims to bring together private and public initiatives to improve cybersecurity skills at both European and national levels. As the talent gap in cybersecurity professionals in Europe continues to increase, this initiative seeks to address this reality by investing in our most valuable resource, namely people. Therefore, it is essential to have professionals with the necessary skills and expertise to prevent, detect, deter, and defend against cyberattacks, thereby ensuring the security of the European Union.

1 https://www.bbc.com/news/technology-65881389.
The Digital Europe Programme | Shaping Europe's digital future (europa.eu)

For many of these challenges, the Commission and Member States believe that there can be no effective response without what has been mentioned here throughout this conference, namely regulation.

On this front, the Commission has worked tirelessly to develop a regulatory framework, involving the Digital Services Act, the Digital Markets Act, and the proposed Artificial Intelligence Act.

The Commission is also working on a proposal for transparency and the targeting of political advertising that can have a significant impact on how political advertisements are presented to users in the online sphere. In particular, this proposal could help counteract the covert influence ahead of the June 2024 elections. Since January 2023, the Commission has offered to Member States a joint mechanism on election resilience as a capacity-building tool to support the exchange of expertise in areas such as disinformation and cyber security.

The Commission is also working closely with the Member States on a guide for best electoral practice addressing the participation of citizens with disabilities in the electoral process and a compendium of e-voting practices.

In October 2023, the Commission will organize a high-level event in Brussels on elections[2], bringing together various authorities to address the challenges related to electoral processes, including disinformation and information manipulation. This will be an opportunity for Member States to engage in discussions, exchange ideas and best practices to strengthen electoral processes in the run up to the elections next year. In addition, the Commission will continue to hold discussions within the framework of the European Cooperation network on elections, which brings together representatives of national election networks supporting exchanges of best practices and information.

Taking steps for the future of our democracy

On a final note, the European Commission's Executive Vice President Margarethe Vestager, said, in the same interview she gave to the BBC on June 14, that artificial intelligence and digital are a global matter. It is important that we continue engaging multilaterally in the entire world, not only with like--minded partners but also engage with the "old" world.

It is crucial that we take action at this moment to guide and educate people on digital literacy, while also taking steps to combat the spread of misinformation and disinformation. By doing so, we can ensure that our democracy remains strong and resilient in the face of evolving threats. The future of our democracy depends on these efforts.

2 https://www.roadtoep2024.eu/.

MATAS MALDEIKIS

I will try to be very short by making several remarks about what I have heard and what I agree and disagree with. Firstly, on the relationship between citizens and national parliaments as well as the European Parliament.

The biggest problem in this regard is, paradoxically, being objective. Being objective makes it hard to reach out to citizens. What do I mean? Well, do you ever watch Euronews? You cannot watch it for more than 10 or 15 minutes, because it is just not interesting. It is boring.

Why boring? Because it is being objective. We already live in a society that just cannot live without any bias, some kind of political bias.

Wishing to get news and desiring to be informed are two different notions. Getting the news is one thing, but a feeling of getting not just the news, but some kind of political bias is a different matter.

When we turn on the television, and especially social media, we always get some kind of bias by following some kind of news platforms, political observers or some type of journalists who are supposed to be objective, but, at the same time, we understand where they are coming from and what games they are playing.

This understanding is part of the way our brains function.

We do not want to get just the objective information, and this is the case when we are talking about the relationship between citizens and their national parliaments. The people who read the news about what is happening in their national parliament on its website think that those individuals are doing

some unnecessary things because there is nothing else on that. Nobody explains to people what they are supposed to understand. This is the biggest challenge that I see when we are talking about the relationship between national parliaments and citizens.

The second thing is Artificial Intelligence.

I have heard a lot about AI here and there are some ideas I just do not agree with. I think that Artificial Intelligence is the biggest threat human society, and especially democracy, has ever faced. In a sense, we as human beings, have never had anything that is smarter than us, and it was just a question of time when this would happen. It is just a question of time when AI will become clever enough to create its own narrative. AI will improve almost every aspect of human lives in the very near future. Human lives will become much more convenient, while AI will be learning incredibly fast.

It will quickly understand what kind of emotional creatures humans are because a human being is an emotional, very emotional, entity who rationalizes his or her decisions only afterwards. We never make our decisions on a rational basis. First, we make emotional decisions, and we rationalize them later. This is our biggest problem, and yet this is our biggest asset, for if we did not behave like this, we would still be living in caves.

And this is a big deal, for the emotions that AI will learn from us, will enable it to manipulate us very easily, much more easily than we think.

We, as human-beings, and society as a whole, is controlled through words, narratives and symbols, symbols like marriage, concepts like human rights and things like that. AI will soon not only learn to manipulate all these three notions, but also will possess the tools to do so because we will provide it with the tools to manipulate us. It will learn how to keep our attention and how to stimulate our imagination, thus keeping society under control. It will learn how to establish an emotional relationship with us because we are emotional beings. It will use the power of intimacy to change our minds and our worldview.

Technology will easily predict our actions by offering us what we desire, thereby manipulating us. Can you imagine what AI will be capable of doing to us, bearing in mind what Facebook, a much simpler app, when compared to AI, has already done to our societies?

Just imagine that the whole idea of AI would be a battle between technology and psychology, technology and human nature, system-thinking and spontaneous reactions. Once it takes over control of society, AI could decide that it must go even further by building on our minds that are based on a problem-solving algorithm, because AI is constructed like it is a mirror of how we understand the world, and our mind operates through a problem-solving bias. And AI is always created based on this same bias as well.

It will start to focus on the fundamental problem of making this planet a better place. The answer will lie in the notion that the only problem in this planet is human beings. Don't you think that without us, without human beings, this planet would be a really nice place?

And nobody but ourselves is going to give AI our weapons as well as other instruments to solve this problem. Just as fascism and communism were utopian regimes, thinking that a happy society could be constructed, the 20th century was the age of social engineering. However, the 21st century is rapidly becoming the age of technology engineering. We are now providing technologies with problem-solving instruments formed by our own hands because we think that technology will create our comfort and our happiness. I hope you have all read Aldous Huxley, who has already told this story in his novel *Brave New World*.

And one last thing I would like to mention. We discussed the future in our Parliament a few months ago, then we asked our colleagues from different parliaments to come to our Parliament and to discuss what will shape the future and we came to the conclusion that national parliaments can participate in this game.

As you know, conclusions of discussions among parliamentarians is always the lowest common denominator. Geopolitical, economic, technological, demographic, and social and natural processes in the world require urgent and global decisions that must be discussed and approved and, where necessary, initiated in parliaments.

The conclusions of the meeting called the world parliaments and regional and global areas with a parliamentary organization to strengthen the dimension of interaction in parliament, focused on addressing the long-term challenges of the future of the world including, among others, through the establishment and development of parliamentary committees of the future and enabling aspects such as Sustainable Development and Committees or Commissions and to promote international cooperation.

These conclusions expressed concern over the decline of parliament and democracy all over the world and support for the initiative put forward by António Guterres, United Nations Secretary General, in our Common Agenda report to renew and reinforce the global commitment to address the major challenges facing the future of the world through much needed complementary statements and agreements involving relevant stakeholders in the spirit of multilateralism, and the call for parliamentary debates and hearings on the issue to address at the 2024 United Nations Summit of the Future.