Global Trendometer 2019
Essays on medium- and long-term global trends

STUDY

EPRS | European Parliamentary Research Service
Editor: Eamonn Noonan
Global Trends Unit
PE 646.111 – December 2019
GLOBAL TRENDOMETER 2019

Essays on medium- and long-term global trends

December 2019

Study
# Table of contents

Introduction 3  
Global Trendometer in a nutshell 5  
European democracy 4.0: Towards a deliberative anticipatory democracy? 6  
The future of EU social policy 14  
Instability scenarios in Northern Africa to 2030 21  
China’s social credit system: A 21st century panopticon? 31  
Auditing algorithms to avoid bias 34  
Collective nostalgia: Longing for a future in the past 37  
The history and future of life expectancy in Europe 39  
Space: Our final frontier? 42  
'MAGA' and the future of political language 45  
Annex I: Global Trendometer Output by trend, 2016-19 47  
Annex II: Mapping identified global trends 49
Introduction

Il faut tout examiner, tout remuer sans exception et sans ménagement
Diderot

The future is very present in discussions around and about the European Union. This spring, the European Parliament concluded its series of debates with Member State Heads of State or Government on the Future of Europe. A major European Union (EU) strategic foresight report, Global Trends to 2030: Challenges and Choices for Europe, was published not long after. A new legislative period began after the European Parliament elections, and the 2014-19 Commission has made way for a new executive, led by Ursula von der Leyen.

This edition of the Global Trendometer also looks to the future. Like its predecessors in 2016, 2017 and 2018, it identifies, tracks and analyses a selection of trends ranging across social, economic, and political subjects. It focuses on the medium- to long-term, and seeks to uncover implications for the EU. The purpose is to support the deliberations of EU decision- and lawmakers.

The opening essays in this edition cover the future of democracy and of social policy. We then provide a set of short scenarios, sketching possible - fictional - futures for several North African countries. Shorter pieces look at trends, uncertainties and disruptions on six further topics: the auditing of algorithms, China's social credit scheme, space, life expectancy, political slogans, and collective nostalgia.

The Trendometer is part of a systematic effort to develop a strategic foresight culture within the EU. This effort has proceeded not least through the framework of the interinstitutional ESPAS initiative. The allocation of responsibility for foresight to a Vice-President of the incoming European Commission is another step towards anticipatory governance in Europe.

European Strategy and Policy Analysis System (ESPAS)

The ESPAS initiative aims to strengthen the EU's collective administrative capacity for foresight. It seeks to provide informed, up-to-date analysis of medium- and long-term global trends and policy challenges, and the choices they pose for decision-makers within the participating institutions. ESPAS is a joint initiative of the European Parliament, European Commission, Council of the European Union and European External Action Service. Observer bodies are the European Committee of the Regions, European Economic and Social Committee, European Investment Bank, European Court of Auditors, and EU Institute for Security Studies.

As the saying goes, predictions are difficult, especially about the future. Human affairs are complex, and are buffeted by chance and indeed irrationality. This makes it impossible to predict outcomes with certainty. However, this does not mean it is futile to study the future. On the contrary, it is all the more reason to take a systematic approach to forward analysis.

Asking questions to which one does not know the answers is a good place to start. When examining a less than ideal situation, for example, it is worth addressing questions such as:

- Are misconceptions, oversimplifications and preconceived notions in play?
- What are the negative trends? Are they structural, accidental or attitudinal?
- How serious are the consequences of negative trends?
- What are the barriers to correcting negative trends?

Creating ‘safe spaces’ for open discussion is another critical step. A foresight process should allow the expression and consideration of professionally argued contrarian views. This improves the
chances of a balanced portrait of challenges and options, and in turn paves the way for better informed decisions at critical junctures in the future. Good choices depend on having a number of carefully prepared options to choose between.

The European Union has been compared to a supertanker. The emphasis on dialogue and consensus in EU decision-making means it is not easy to change course quickly. This adds to the case for enhanced strategic foresight capacity. A shared analysis of key risks and opportunities, and a common understanding of fundamental values, interests and goals, are European public goods. As we have seen in the past decades, trying to debate from first principles once a crisis hits only complicates the search for solutions. It is time to embrace an anticipatory approach, and to routinely develop options for responding to different eventualities. To borrow a phrase from Diderot, “examining everything, without exception and without ceremony”, is a step towards identifying the correct course, even in a storm.

_Eamonn Noonan_
_Global Trends Unit_

_December 2019_
Global Trendometer 2019 in a nutshell

<table>
<thead>
<tr>
<th>Topic</th>
<th>Megatrends</th>
<th>Positive (opportunity)</th>
<th>Negative (risk)</th>
<th>Noteworthy</th>
</tr>
</thead>
<tbody>
<tr>
<td>European democracy</td>
<td>🏛️fontsize=11</td>
<td>Harnessing technology to allow broader citizen involvement in decisions</td>
<td>Potential for bias, exclusion and manipulation</td>
<td>Spread of participatory initiatives</td>
</tr>
<tr>
<td>EU social policy</td>
<td>🏛️fontsize=11</td>
<td>Recognition of the need to rebalance economic and social policy</td>
<td>Increasing inequality creates new burdens on social spending</td>
<td>The EU Social Scorecard as a means to identify and spread best practice</td>
</tr>
<tr>
<td>Northern Africa</td>
<td>🏛️fontsize=11</td>
<td>Desire for change</td>
<td>Instability</td>
<td>Strong population growth</td>
</tr>
<tr>
<td>China's social credit</td>
<td>🏛️fontsize=11</td>
<td>Possible emergence of civil society pressure for protection of individual rights</td>
<td>Use of technology for political oppression</td>
<td>Stress on the economic rationale for controls</td>
</tr>
<tr>
<td>Auditing algorithms</td>
<td>🏛️fontsize=11</td>
<td>Push for transparency</td>
<td>Potential for discriminatory outcomes</td>
<td>Rapid advance of machine learning</td>
</tr>
<tr>
<td>Collective nostalgia</td>
<td>🏛️fontsize=11</td>
<td>Challenge to a 'business as usual' mindset</td>
<td>Intolerance of diversity and rejection of pluralism</td>
<td>Exploitation of technology to manipulate opinion</td>
</tr>
<tr>
<td>Life expectancy</td>
<td>🏛️fontsize=11</td>
<td>Use of technology for healthier ageing</td>
<td>Healthier ageing becomes a function of personal wealth</td>
<td>Continuing rise in life expectancy in Europe</td>
</tr>
<tr>
<td>Space</td>
<td>🏛️fontsize=11</td>
<td>Human settlement in space</td>
<td>Military rivalry/conflict</td>
<td>Focus on regulatory regimes for space activities</td>
</tr>
<tr>
<td>Political discourse</td>
<td>🏛️fontsize=11</td>
<td>Focus on communication with marginalised groups</td>
<td>Deep political and social polarisation</td>
<td>Enduring appeal of simplistic slogans</td>
</tr>
</tbody>
</table>

Source: EPRS.
European democracy 4.0: Towards a deliberative anticipatory democracy?

Danièle Réchard with Atte Oscari Ojanen

Introduction

Several studies suggest the world has been experiencing, for over a decade, a process of 'democratic retreat' (Freedom House, 2019). Even in long-established Western democracies, trust in political institutions is eroding (OECD, 2017). The 2019 ESPAS Report, 'Global Trends to 2030: Challenges and Choices for Europe', felt it necessary to ask 'how do we protect democracy?', even though it took a resolutely optimistic tone.

For all that, support for democracy remains strong across the world. In European Union countries, 68% of respondents agreed that 'there is no substitute for the democratic system, it is the best possible system' (Fondapol survey, 2019). A worrying element is that younger respondents are more sceptical: 76% of those aged 60 and over agree, but only 62% of under 35s. Among those in Europe who say that there is no better system than democracy, a significant proportion (41%) also indicate that democracy is not working well in their own country. Support for representative democracy in Europe is at 87%, while almost two-thirds (64%) approve of 'direct' democracy.

This diversity of opinion echoes the modern controversies about the theories of democracy and legitimacy of Habermas and Rawls. Innovations seeking to increase citizen participation in political decision-making have flourished. Many countries capitalised on technological progress to establish e-participation platforms, in order to make representative democracy more transparent and responsive. Initial optimism about 'e-democracy' (which was reflected in the 2015 ESPAS Report) has faded (EC RTD, 2019a, 59). Extreme polarisation, dissemination of misinformation, and manipulation have emerged as threats in digitalised democracies. Citizens seem disappointed in current, mainly online, forms of participation. Young people in particular want to contribute to decision-making, but are frustrated by the lack of avenues to do so (Youngs, 2018).

The emerging view is that meaningful participation goes hand-in-hand with thorough deliberation. It follows that citizens should be given the information, resources and time needed to make informed judgements.

This essay provides an overview of attempts to rejuvenate democracy, not the least at European level. Many innovations do not yet take account of the deliberative aspect; it is worth exploring the role foresight can play as part of citizens’ deliberations on the challenges facing Europe.

A growing aspiration to revitalise representative democracy

The dichotomy between 'representative' and 'direct' democracy is largely a conceptual one. In representative democracy, citizens elect representatives to initiate, consider and decide on policies on their behalf. In direct democracy, people themselves decide on specific issues, without any intermediate bodies, possibly on their own initiative (or at the behest of a given proportion of citizens). Direct democracy can involve referendums, e-democracy, and direct legislation. In practice, all modern democracies are representative, and they often have elements of direct democracy. There is no example of a purely direct democracy.

Many call for more direct democracy as an antidote to public distrust. The 'referendum d’initiative populaire' was one of the most widely shared political demands of the French Gilets Jaunes. Switzerland is an interesting case. It has direct instruments, such as popular initiative and optional referenda, to complement its representational system. Interestingly, according to Fondapol, the
Swiss massively support representative democracy (87 %), but are relatively less enthusiastic about direct democracy (67 %). This, in turn, is below the average of all countries surveyed (72 %).

Direct democracy has well-known vulnerabilities. The manipulation of referendums is a concern, especially by foreign actors or private vested interests. Voters can be ill-informed. There are also worries about the ‘tyranny of the majority’, and about insufficient incentives for compromise or cooperation (Bächtiger & Landwehr, 2018). In other words, direct participation is not a virtue in itself; it needs safeguards and frameworks.

Participatory democracy, like direct democracy, emphasises the involvement of the lay citizen in political life. This can involve, for example, citizen initiatives and town hall meetings. These have limitations; they may cover just a fraction of the decisions to be made (such as participatory budgeting), and their impact may be limited to influencing the position of a single elected representative.

We are increasingly aware that decision-making is not just about aggregation of votes, but about public debate and reasoned argument. Many innovations now focus on the quality of engagement, under the umbrella notion of ‘deliberative democracy’. In this model, decisions are finalised at the end of a process which enables citizens to discuss their political concerns. Deliberation takes place in carefully planned fora, often designated as ‘mini-publics’. Expert advice and moderation are offered to ‘citizens’ assemblies’, ‘citizens’ juries’, ‘deliberative polls’, ‘planning cells’, and ‘consensus conferences’. Citizens’ assemblies have attracted attention due to their relatively large size, representativeness, and deliberative qualities.

Participants in deliberative mini-publics are chosen by lottery (sortition). Random selection aims to secure representative participation across gender, age, geographic origin and economic status.

Some innovations of this kind have been institutionalised. Oregon's Citizens' Initiative Review (CIR) is an official part of Oregon's state elections. This is a citizens' jury, where 20 citizens study and deliberate over several days on an issue up for referendum. Trained moderators facilitate their work, together with independent experts and advocates. In conclusion, the panel communicates its recommendation to voters.
In Europe, many states and local authorities are setting up 'mini publics'. Ireland's Constitutional Convention (2012-14) and the subsequent Citizens' Assembly (2016-18) brought randomly selected citizens together to debate contentious societal or long-term issues including abortion, the ageing population, and climate change. After listening to experts and discussions in small groups, the Assembly recommended strong climate action, including a high carbon tax and investments in green infrastructure. Referenda approved same-sex marriage in 2015, and a constitutional ban on abortion was overturned in 2018. The Parliament of the German-speaking community of Belgium established a permanent Citizens' Council and Citizens' Assemblies as part of its legislature. The Council consists of 25 randomly selected citizens, who will decide on topics to be debated by Citizens' Assemblies. The Assemblies will meet for a number of days to produce a recommendation that the Parliament is then obliged to consider. The Ostbelgien Modell was developed in cooperation with G1000, a platform for democratic innovation in Belgium.

The 'deliberative turn' is now an established trend in political science literature, and among the public it seems to be the most popular path to democratic rejuvenation. Assessments of the experiments conducted so far are nuanced. Successful examples of mini-publics have been limited in scale, with only a small number of citizens involved. They consume time and resources for both the citizens and the organising authority. Nevertheless, research shows that citizens have the capacity to engage in productive deliberation, especially when facilitated by expert support (Bächtiger and Beste, 2017). Deliberation facilitates changes in panellists' views, voters find the recommendations helpful, and knowledge about the given initiative increases (Knobloch et al., 2014). On the other hand, independently of their limited scale, and their sustainability over time, mini-publics have weaknesses. Problems of power and domination also occur inside deliberative arenas, and there is a risk of instrumentalisation by external actors. They may also demand unrealistically high levels of popular participation (Gastil, 2018).
Citizens’ participation at EU level

Criticism of a ‘democratic deficit’ has been a recurring feature of European integration, and much has been done to address this. Much has been achieved since the European Parliament was first directly elected in 1979. Parliament’s powers have increased gradually over a succession of Treaties. Today, the European Parliament exercises legislative and budgetary power jointly with the Council over a vast array of policy issues. In the Council, no legislation can be adopted if it is not supported by Member States representing at least 65% of the European population. In some areas, the European Parliament is merely consulted, but this only concerns matters where unanimity is required among Member State governments – each of which is itself democratically elected. The European Union’s international agreements require the consent of the European Parliament. National Parliaments can also intervene in the European legislative process on the grounds of subsidiarity. The Parliament also exercises scrutiny over the European Commission, which is appointed by the Council taking into account the results of the European elections. The Commission can be forced to resign on the basis of a non-confidence vote in the European Parliament. Majority, transparency and ethical rules have also been strengthened.

Direct citizen participation in the European political system has also been encouraged. The mission statements of the European Economic and Social Committee (EESC) and the European Committee of the Regions (CoR) explicitly include promotion of participatory democracy and civil dialogue. This takes different forms: petitioning to the European Parliament (Article 227 TFEU), complaints to the ombudsman, and public consultations and citizens’ dialogues (CEPS, 2018, p. 9). Today the flagship participatory tool is the recently reformed European Citizens’ Initiative (ECI), first introduced in 2011 on the basis of the Lisbon Treaty. The ECI allows European citizens to call for the European Commission to propose or change legislation, by collecting one million signatures across Europe.

Citizens’ Dialogues hosted by the European Commission come closest to the deliberative ideals. In the manner of a town hall meeting, these public debates bring voters together with Commissioners, Members of the European Parliament, national authorities and civil society actors. The Juncker Commission held almost 1 600 dialogues with over 190 000 participants in 580 cities across Europe (EC 2019b). Ursula von der Leyen now proposes that the Commission organise a citizen-centred conference on Europe’s future, to start in 2020 and run for two years. The EESC and the CoR have endorsed citizen participation at the local level. Since 2016, CoR has organised nearly 200 citizens’ dialogues with over 40 000 participants, as part of the Future of Europe campaign. They are currently redesigning the European Citizens’ Consultations model into a more permanent and structured format (European Committee of the Regions, 2018). ‘European Citizens’ Consultations’ (ECCs), inspired by French President Emmanuel Macron, took place across Europe in 2018 and 2019, aiming at informing the European Council’s discussions about the future of the EU at the May 2019 Sibiu Summit with citizens’ insights on European affairs. Finally, the European Parliament, itself the main representative institution for European citizens, has taken initiatives in a similar direction, such as the biennial European Youth Event.

Despite these initiatives, the European political system continues to be perceived as distant from citizens’ concerns. The ECI has given rise to just four proposals, and none led to new legislation. Petitioning is largely unknown to citizens. Citizens’ dialogues are not interactive enough. The discussions are often confined to questions and answers sessions, and to methodology. They tend to be used by organised and expert interests, rather than by ordinary citizens. The self-selection of participants leads to skewed representation of citizens (people of a certain background and an interest in European affairs are more likely to participate than others). Moreover, most of the EU’s

---

participatory mechanisms are based on online participation, which is not conducive to genuine dialogue. The EU has tried to bolster citizen participation in policy-making, but citizens’ input is limited to the consultative phase, restricted to issues directly falling within the European Union’s remit, and there is little incentive for proactive participation. (CEPS 2018, pp. 37-39).

The EU efforts lack the deliberative element that is the key current trend in democratic innovation. Proposals for institutionalising deliberative mini-publics at European level and across Europe have been floated. One proposal is to establish a European People’s Assembly, made up of randomly selected citizens across the Union (Friends of Europe, 2019, p. 14). The EU institutions would be required to consider the Assembly’s recommendations. It might even be granted veto powers. Another suggestion is for a specific citizens’ body linked to the European Parliament. A proportion of the seats in the Parliament would be reserved for randomly selected citizens, who could examine legislation, initiate debates, make submissions and interact with Members of the Parliament on long-term issues (Boucher, 2018). Such suggestions have not entered into detail on matters such as the number of participants, how to ensure the representativeness of the random selection, costs, linguistic regime and so on.

Deliberating on the future of European citizens

Democratic legitimacy derives from both processes and outcomes. The efforts made so far have focused on enhancing citizens’ participation in institutional processes at European level, rather than on connecting citizens’ concerns to the political challenges facing the European Union.

Some research suggests that deliberation generates greater awareness of long-term problems and makes participants more responsive to the interests of future generations (Mackenzie, 2018). In order to deal with future challenges, the synthesis of knowledge from different sources and perspectives is critical (Hellström, 2019). If a series of ‘mini-publics’ was set at European level or across Europe, the methods of strategic foresight could help. Foresight is itself a deliberative approach; it too entails structured deliberation, pooling of expertise, harnessing of collective intelligence, and the consideration of alternative views – including provocative thinking.

The 2019 ESPAS Report could provide a common starting point for a European deliberative process. Today, new tools such as ‘exploratory modelling analysis’ (EMA, see text box) create the capacity to explore and visualise multiple scenarios, to consider different policy options, and to take account of the wider impact of a given national initiative.

It could appeal in particular to young people who are turning away from ‘democracy,’ where it is understood simply as casting a vote. While the Fondapol survey shows overall support for democracy, the indication that young people are less supportive than older cohorts is troubling. By a margin of 38 % versus 24 %, under 35s consider that ‘Other political systems might be just as good as the democratic system’, compared to those

---

**Exploratory modelling and analysis (EMA)**

With its algorithm-based workbench, EMA consists of using exploratory models for generating tens of thousands to millions of scenarios (called ‘ensemble of future worlds’), to analyse and test the robustness of policy options across this ‘ensemble of future worlds’ – in other words whether the outcomes are acceptable over the entire scenario space.

The strength of these new modelling techniques is that exploratory modelling can highlight human actions that would generate desired outcomes across all the possible futures. It can also identify the factors that are critical to any future possibility. If, for example, you want to avoid one of the multiple futures generated by the model, then you would want to know the critical factors underlying that future.

Finally, exploratory modelling can be used to model complex phenomena even with data gaps, as happens when modeling, for example, influenza outbreaks where information only becomes available over time.

(Burrows, 2019, p.12)
aged over 60 years. Almost exactly the same spread arises regarding the assertion that ‘it’s a good idea to have the government controlled by a strongman’ (38 % to 23 %). However, young people attach even greater importance to participating in the decision-making process than their elders (66 % versus 60 %). As Anne Muxel puts it: ‘This gap in perception may seem minor, but reflects a trending generational decline in the importance attributed to voting in the strictest sense, to the benefit of a growing, if poorly defined, demand for ways to circumvent the different forms of mediation inherent in political representation’ (Fondapol, 2019, p. 45).

Conclusion: towards a European anticipatory democracy?

How can we explain these worrying trends? The old idea that authoritarian regimes are better able to set long-term goals, and to steadily implement a strategy, seems to be returning. Democracy, by comparison, is seen as essentially short-termist, with the electoral calendar setting a clear horizon constraint. Short-termism is strengthened when emotions are aroused, provoking calls for immediate response. That said, authoritarian regimes have their own weaknesses: an elite that can be isolated, short-sighted and corrupt, and over-dependence on one ‘strong man’ (or indeed woman). History shows that authoritarian regimes sink more often and more abruptly than democracies.

There should be no better place than democratic institutions to harness collective intelligence, give a sounding board to dissenting voices and new ideas, and find sustainable compromises – including between generations. Democracy’s greatest strength is its never-ending self-correction and questioning (Rawnsley, 2018). This is also what foresight is about.

It is often suggested that the ‘democratic deficit’ is rooted in the absence of a political community of citizens sharing a collective destiny, rather than in the detailed institutional design of the European institutions.

An ‘ongoing conversation on global trends’ would provide an element of continuity and stability in the way future challenges are perceived by the public and addressed by policy-makers between institutional cycles. This could help turn global challenges into opportunities, and could generate positive visions to motivate change. It would also debunk the assumption of an enduring ‘democratic deficit’ in the European process.

Our long term challenges are huge; and they are shared.
References


Committee of the Regions, *Non-paper: Bringing the EU closer to its citizens: The call for an EU permanent mechanism for structured consultations and dialogues with citizens*, 2018.

Centre for European Policy Studies (CEPS), Representative Democracy in the EU: Recovering Legitimacy, Blockmans S., Russack S. (eds.) 2018.


Fondation pour l’Innovation Politique, *Democracies under pressure, a Global Survey*, edited by D. Reynié.


The future of EU social policy

Eamonn Noonan

Introduction

The European Union reframed its approach to social policy at the Social Summit in Gothenburg in November 2017. By proclaiming the European Pillar of Social Rights, leaders committed themselves to the right to fair wages and to health care; to the idea of a minimum income; and to principles such as lifelong learning, a better work-life balance and gender equality. 'The EU stands up for the rights of its citizens in a fast-changing world,' said Commission President Juncker. A reinvigorated social policy is seen as a path to better employment prospects, and better working conditions. It should lift vulnerable groups, and restore social solidarity.

These goals echo the ambitions expressed in Article 3(3) TFEU, which states that the Union shall work for balanced economic growth and a social market economy that aims at full employment and social progress. One background to the Summit was a growth in scepticism about European integration in the years after the 2008 financial crisis. As such, social policy has emerged as critical in several respects. It is not only about responding to citizens' concerns, but also about improving and rebalancing economic growth, and consolidating support for European cooperation.

The clear acknowledgement of a European dimension to social policy is significant. Throughout the EU's development, primary responsibility for social policy has rested at the national level. The key decisions – such as increases or reductions in benefit payments – are taken in national capitals. The principle of subsidiarity applies, and the legislative role of the EU institutions is limited. Yet the EU has a significant support role, for example through the European Social Fund. The Gothenburg Summit opened the way for a stronger EU role, exemplified by the Social Scoreboard and the creation of a European Labour Authority.

Social policy is not a new concern for European institutions. The mission of the 1951 European Coal and Steel Community was to contribute to economic expansion, employment, and the improvement of the standard of living. Article 56 of the ECSC Treaty made provision for bridging payments, resettlement allowances and retraining of workers who lost jobs due to technological change (Geyer, 2000). The same issues are again current, but on a vastly increased scale.

The following section looks at how the EU role may develop in the coming years. It examines in turn current trends, possible uncertainties, and possible game-changers around EU social policy. The conclusion considers possible future scenarios.

Trends

The pattern of inequality around Europe changes over time

The pattern of inequality and divergence in Europe has changed and is changing. The gap between East and West has narrowed on some key metrics (Ridao-Cano, 2018). Divergence between North and South has remained strong. This reflects the contrasting fortunes of creditor and debtor nations through a period of economic crisis. Italy, traditionally among the richer Member States, has seen stagnation and decline over the past two decades. Divergences within countries remain significant; in some cases, the gap between relatively prosperous capital cities and other areas has widened (EPRS, 2018). Differences are also increasing between demographic groups: old and young, majority populations and migrants, higher and lower skilled (European Commission, 2017). These realities will feed into adjustments of EU funding priorities in the coming years.
Four decades of ‘predistribution’ policies have prevented disparities from increasing as much in the EU as they have in the United States of America (USA) (Blanchet, 2019). Nor does everyone agree that there is a generalised increase in income inequality in the EU (EPRS, 2018; EIB, 2018). Yet inequality remains a live issue. There is now more research into wealth inequality, for example, and it points to greater disparities than previously reported (Alvaredo et al., 2018).

There are several different axes along which inequality can be measured: income, wealth, within countries, between countries, and across generations – to say nothing of the substantial gender pay gap. The trend of increasing inequality is not universal. Its intensity can vary depending on the chosen metric, and on the year chosen as a baseline. That said, it remains clear that a sustained effort towards a fairer society must involve an active approach to social policy.

Costs of social protection continue to rise

Costs arising from health and welfare services, including pensions, continue to rise. This creates a risk of unsustainability (ESPAS, 2015, p. 16; OECD). A variety of policy options are floated to redress the problem. On the expenditure side, these include cutting or limiting access to welfare programmes and payments. The perils of cutting benefits are vividly portrayed in a recent United Nations (UN) report on poverty in the United Kingdom (UK) (Alston, 2019). On the revenue side, taxation is the elephant in the room. One focus is to arrest the decline in the dependency ratio, as a greater share of the population is above retirement age, and a smaller share is of working age. Another is the shortfall in revenues arising from profit shifting and aggressive tax planning, and indeed tax relief for wealthier groups. The policy mix in Europe is likely to include both revenue and expenditure measures. The balance between them will depend on decision-makers' political and ideological preferences.

The emergence of evidence-based policy (EBP) as a tool of governance is relevant for the sustainability problem. When resources are finite, rigorous and systematic evaluation of the effectiveness of programmes is a path towards improved outcomes and the more efficient allocation of resources. Taking an evidence-informed approach means favouring programmes that are tried and tested, and requiring new initiatives to show cause to believe in future success. Encouraging the trend towards evidence-based approaches requires funding and infrastructure; yet it has often been difficult to secure expenditure today on the basis that this will bring savings tomorrow.

Digitalisation brings opportunities and risks

Technological innovation will affect social policy. Opportunities to improve social outcomes will emerge, as well as risks of adverse impacts. If digitalisation drives both increased inequality and political polarisation, the future may see a toxic stalemate: increased need for social protection, on the one hand; greater political reluctance to provide funding, on the other. Opportunities arise through new ways to deliver services to the public, and to improve the administration of both tax and welfare regimes.

These disparate trends call for policy tools and responses beyond the nation state level. While fiscal policy has a strong influence on levels of inequality within a given country, neither the causes nor the remedies for lagging prosperity lie entirely within the national sphere. The logic behind European cooperation on social issues remains strong.
Uncertainties

Loss of consensus on core principles

The idea that the state has responsibility for social welfare has long been a guiding principle in Europe. But the contrary argument, that the state should step back from the social arena, also has supporters.

The case against state responsibility for social security has especially gained ground in the USA. Influential figures around the Trump Administration frame governance in Hobbesian terms, emphasising the security dimension almost to the exclusion of other aspects. Since 2016, military expenditure has risen markedly, while several social programmes have been cut.

A more nuanced critique of social welfare accepts a state role in providing for citizens, but argues for major reforms and more room for entrepreneurship. Ann-Marie Slaughter argues that social provisions should not be about protecting from capitalism; others disagree, mindful that the financial crisis resulted in part from predatory capitalist practices.

In Europe, the response to economic crisis was heavily influenced by the idea that social expenditure needed to be reined in. This was apparent in the activities of the 2009-2014 European Commission (Brewer, 2019; Crespy, 2015). The insistence on austerity measures at a time of economic deflation was contested at the time, and has been heavily criticised since (Brunnermaier, 2016).

The idea of a smaller role for the state may continue to have less appeal in Europe. The USA provides a salutary example; a smaller role for the state has coincided not with better, but with worse levels of inequality and poverty. Social, economic and political dynamics in Europe differ from those in the USA, raising questions about the suitability of applying US solutions to European problems. Finally, the European approach is rights-based, and is entrenched in law (European Commission, 2016).

The European trend is towards reform rather than dismantling social protection. There is greater emphasis on investing in people and skills, as distinct from benefit payments. Social expenditure may become more about providing a trampoline than a safety net.

Greater political fragmentation

The European Parliament includes several political families with differing views on the way forward for social policy, also as a reflection of the debate on the extent of the State’s responsibility. In the 2019-2024 legislative period, differences between political groups, combined with the need to create multi-group alliances in order to win majorities, make it unlikely that one particular vision of social policy will dominate. Changing voter preferences point towards greater political fragmentation; this in turn can make it harder to build the support required to launch major new initiatives.

Differences about the best approach to social policy do not follow a simple left versus right paradigm. Objectives such as fairness and convergence continue to enjoy near universal support, but there are opposing views on what strategies and policies can achieve them.

Social policy as an EU priority

Through the Better Regulation initiative, the Juncker Commission centralised the EU policy development process to a greater extent than before. The College of Commissioners set overarching priorities, and teams of Commissioners worked together in specific areas. This allowed an active Commissioner for Social Affairs to promote social policy more vigorously than in the preceding Commission, paving the way for the Gothenburg Summit.
Some question whether the Juncker Commission’s emphasis on the European Pillar of Social Rights has been effective (Vanhercke, 2018; Claassen, 2019). Nonetheless, it seems clear that an engaged Commissioner will be well placed to advance social policy priorities in the new legislative period. The appointment of a Commissioner who was ideologically committed to reducing or privatising welfare systems would quickly change matters, but this seems to be unlikely.

A more open question is whether the future European Commission is likely to embark on a more ambitious rebalancing of social and economic policy priorities. Declarations about a more inclusive economy would need to be given substance, including predistributive and redistributive strategies. A major move in this direction would need cooperation between the European Union and the Member State levels, and could be impeded by dissenting Member State governments. Incremental reform appears a more likely outcome than transformative change.

Game-changers

**Embracing a European Social Union**

Strategic foresight is also about looking at major shifts in how things are done – at game-changers. Changes which would have a big impact, even if they are unlikely, deserve close attention.

A major push for a European Social Union can be categorised as a high impact, low probability event. One possibility is that it would develop as part of the promotion of fiscal union. This would herald a new phase of European integration. The European Union is an economic policy giant, but something of a social policy dwarf. This is ironic in view of Europe's historic role in creating the apparatus of the welfare state, and its current status as a world leader in social protection.

A programme offering a new balance of economic and social policy elements could potentially reduce scepticism towards integration. A Social Union could also be presented as part of the solution to problems attributed to globalisation.

In a European Social Union, the EU would take on new functions, and would need new tools. Substantial resources would be needed both to provide a shock absorber in a crisis, and to mitigate disadvantages across regions and countries over the long term.

This path therefore depends on whether a choice is made for more Europe. This does not entail that social policy in its entirety would in future be handled at European level. But it would mean that several major aspects could be handled at European level, if and when necessary. This would mean creating the option of migrating competences to the European level, in certain circumstances. It is difficult to see this happening without a treaty revision, and treaty revision is not likely in the near term.

**Social Scoreboard as a European law and policy exchange**

A further game-changer would be the systematic development of the potential of the social scoreboard as an instrument of governance. As part of the European Semester exercise, the scoreboard allows Member States to learn from each other. The best performers in different areas can be identified, and this invites closer study of the factors behind better performance. Tracking outcomes over time creates an objective frame of reference for judgements on which policies and programmes correlate with improvements. Member States can use this knowledge to build create a European legislation and policy exchange, dedicated to the diffusion of the most successful strategies.

This in turn can provide a defence against the problem of rent-seeking – the manipulation of policy decisions by vested interests. In the USA, for example, the American Legislative Exchange Council
has had considerable success in promoting legislation that works to the benefit of private stakeholders, but to the detriment of the general public (Jackman, 2013). The introduction of the profit motive in the social sector can be detrimental to standards of care; problems with for-profit prisons are an example. A systematic comparison of outcomes at EU level, coupled with a joint commitment to convergence towards better outcomes, has considerable merit simply from the perspective of good governance.

Global promotion of social protection

The right to social protection is not yet a reality for four billion people – over half of the world’s population (ILO, 2017). Changing this state of affairs calls for a vigorous, sustained, international effort in the coming decades. This is hard to envisage without strong support from the EU and its Member States, considering their tradition in promoting a rights-based approach at global level.

It may be far-fetched to envisage a dramatic improvement in access to social protection; but this would be a game-changer. The benefits for the vulnerable majority are obvious. This in itself is good reason for robust EU action. There are other reasons. International protection of social rights is compatible with Europe’s fundamental values. Jeffrey Sachs (2015) argues that social protection for all is one of the strategic transformations needed to bring about sustainable development. There is strong correlation between countries with high social standards and countries with high levels of prosperity. The dilemma is that developing countries rely on low wage conditions to attract inward investment, and then find low wages to be a barrier to better living conditions and better social protection.

European self-interest is also at play. The absence of labour standards can lead to unfair competition, with an impact on employment in Europe. Combating this imbalance can relieve pressure for higher trade barriers, with an attendant risk to employment in both exporting industry and in commerce.

The EU and its Member States have long been among the main supporters of the International Labour Organization (ILO), which this year celebrates its centenary. One continuing challenge is to press for the enforcement of core ILO Conventions, which must involve more effective responses to breaches. In an age where data is increasingly central to the formulation of policy, there is an opportunity to develop new indices to measure progress and its absence. A continuing challenge is to share the stories told by the data, in order to build momentum for meaningful reform.

Europe has a great deal of experience and expertise to share about its development of welfare as a public good. The EU should be well able to integrate this expertise into its support for international development. If it does develop the Social Scoreboard as a forum for policy exchange, it could in time use this to build an international equivalent, as a strategy to systematically support the identification and dissemination of successful policies and programmes.

Outlook

The main scenarios for the future of EU social policy are:

- A continuation of the present approach.
- A more ambitious approach, including a stronger commitment to both predistributive and redistributive elements, and possibly extending to a European Social Union.
- A more cautious approach, in which there is greater reluctance to embrace market-limiting measures in favour of disadvantaged groups.

A transformational change and the adoption of a European Social Union is unlikely in the near term. A scaling back of present levels of activity would entail a departure from the dominant ethos of the post-war era in Europe, and a step away from a remarkable historic legacy. In between these two
poles, there is considerable potential for incremental steps; this path can, over time, improve social policy outcomes across the European Union.

Voter preference will play a decisive role in the first instance. Elections have consequences; they set the parameters in which the contest of ideas among political tendencies is played out.

Core areas continue to enjoy broad consensus. There is a shared commitment to education, upskilling, and active labour market policies. More resources are being provided for the European Fund and related programmes. Social investment seems to have gained new impetus. Other areas are more contested: the extent of state responsibility for social welfare; the right balance between public and private services; the appropriate level of social expenditure; and where to find the necessary resources.

The EU can point to notable achievements in the social policy area, and a continuation of gradual reform can offer a path to more sustainable and more inclusive prosperity.

References


European Commission, The EU social acquis, 2016.


Jackman M., ALEC’s influence over lawmaking in state legislatures, 2013.


Instability scenarios in Northern Africa to 2030

Leopold Schmertzing

Introduction

Events in North Africa over the first half of 2019 highlight the issues the region is facing. Protests continue to change Algeria. Political division, strikes and unrest afflict Tunisia. Conflict in Libya takes new turns. Egypt’s reinstated military dictatorship is becoming increasingly repressive. Morocco is again stuck in a power struggle between democracy and monarchy. What if global or regional trends, or mis-steps by people in charge, or random events bring further instability?

The following scenarios focus on instability or sudden political change. Instability, if it is heralds the collapse of an unjust system, is not necessarily negative. This work is not a value judgement on the merits of continuity or change in North Africa. These scenarios are not predictions; they are fictional explorations of possible outcomes. North Africans, Europeans and others have the power to avoid bad futures and create better ones. A core purpose of foresight is to alert policy makers to this fact. North Africa can change in many ways – and Europe needs to reflect carefully on what might come.

Figure 1 – CrisisWatch: tracking conflict worldwide

Data source: CrisisWatch.

The methodology used follows that of the Stiftung Wissenschaft und Politik (SWP) and the European Union Institute for Security Studies (EUISS). In a first, brainstorming stage, experts identified possible events and developments. They then rated the importance, likelihood and time frame of possible events through a Delphi survey. The present work also draws on recent reports, newspaper articles and social media on the region, and on the new ESPAS report, Challenges and Choices for Europe. The scenarios are in different styles – stories, protocols, policy papers – and include explanatory boxes. They are fictional, intended to provoke discussion, and they leave matters open to interpretation. The aim is to enrich the strategic debate about North Africa’s future.
The development of these scenarios reflects explicit choices. First, there is an accumulation of misfortune, in order to explore how the destabilisation of countries in North Africa can affect the region and the European Union. Second, the European Union stays in the background; the focus is on the region and its relations with the rest of the world. Third, in all but one scenario a continuing failure to mutually agree a way forward on regional issues is assumed.

The scenarios are also based on megatrends identified in the ESPAS report. The population of North Africa is projected to double from 2005 to 2050. Rapid population growth creates many regional challenges, even if the youth bulge will decrease: the percentage of under 30s in the population should fall from 65 % today to 45 % by 2030. Socio-economic trends also feature. Inequality, already high, will rise even further. Climate change will affect this region more than others; the temperature rise is expected to be one and a half times the global average. Finally, urbanisation will create new problems in already crowded cities.

Figure 2 – Normandy Index data on five North African countries

Note: The Normandy Index (NI) aims to measure the level of conflict in the world. The Index has been designed and prepared by EPRS and developed by the Institute for Economics and Peace. It aims to provide a holistic picture of regions and countries through the prism of the pursuit of peace measured against eleven threats explicitly defined in the EU Global Strategy. Its objective is to provide a tool to help EU policy-makers design targeted external action instruments. Since each domain is weighted equally in term of threat significance, the final aggregated NI score can be calculated as the average of the eleven domain scores. The final NI score is a value between zero (most at risk) and ten (least at risk).

Data source: EPRS.
Country scenarios

Algeria 2022: Everybody happy?

In amazement, Abdelaziz Bouteflika, the former President of Algeria, sat in his wheelchair in front of a mirror, inspecting his new suit one last time. Three tumultuous years ago, when he had bowed to the young majority in his country – to a society he did not understand any more – and to the pressure of his former military supporters, he was sure he would soon die in prison. Instead, here he was. How did that happen?

After the 2019 protests, a transition process was negotiated and accepted by most groups, but was derailed by the one problem that followed many revolutions: while the heterogeneous revolutionaries had a hard time building permanent political parties, several older groups with established structures – parties, state institutions and unions – led the political transformation. Most protesters in 2019 wanted all representatives of the former regime gone, but only a few of them had the reserves to fight intimidation and surveillance, and engage in the formation of political movements. The small parties that were founded split the progressive vote in the first post-revolutionary presidential elections. The previously powerful Islamic opposition was slow to react and could not inspire ordinary citizens. The National Liberation Front and the military leadership – initially involved in a dispute over primacy – decided on a consensus candidate, a former military man, and won.

Many protesters did not feel represented by him and his circle. Police brutality and corruption continued as before. Infighting within the ruling elite became an annoyance to everyone. In addition, falling oil revenues, decades-long bad economic policies and the ongoing political indecisiveness following the revolution led to a worsening economic crisis. This again fuelled the anger of many who wished that real change would come. In 2020, social media revealed a discontent ready to explode at any time. No one dared to release Bouteflika from prison.

In March 2021, on the second anniversary of the original protests, longer and more serious protests fuelled by social media led to the resignation of the president. The leader of this protest movement, a social media star, was the clear winner of hastily convened elections: Tarek ‘Tizi’ Chalabi, a 40-year old French-born Algerian, an entrepreneur with links to big oil money, and a former spy. The new populist president had brought with him an ally that had – as it later turned out – deployed real revolutionary energy to get their man into power: Russia. President Putin openly supported Chalabi, who in return took a leaf out of Putin’s book. He proposed to act as the sole arbiter between vested interest groups and pushed them to create more jobs. He stirred up Algerian nationalism by evoking fabricated ‘threats’: the West, women, black Africans and the LGBTQ community. And he punished those who would not play along harshly.

Failed revolutions

This scenario is built on the Arab Spring experiences of Egypt and Tunisia, where existing political institutions ostensibly sought to implement the revolutionaries’ wishes while re-instituting small (Tunisia) or large (Egypt) portions of the former regime. There are differences between the Algerian protests and the Arab Spring, but the chance of a unified and institutionalised movement emerging from the revolutionary camp is low.
Chalabi’s enhanced strategic partnership with Russia made other actors like the EU or the USA initially hesitant, but later motivated them to compete with Russia by means of free-trade and visa agreements. Russia meanwhile achieved a more strategic position in the region. It limited what it thought was an overly pro-democratic western influence and quickly capitalised on Algeria’s huge natural resources by including the country in its global energy offer. Providing nearly 50 % of the EU’s natural gas supply, this new alliance could quickly increase profit margins. More gas revenue meant Algeria’s economy received a boost, and ordinary people stopped caring about politics. Remarkably enough, most political actors inside and outside Algeria were content with the outcome.

Later this day, three years after the original protests, Bouteflika will sit beside his successors, as well as the French and Russian Presidents, and all his old friends, celebrating the ‘new old’ Algeria; happy that his age and health would make it impossible for journalists to read the surprise on his face.

Egypt: Teaming up on China

+++ NatHistCom – 18:54:01:12:2026 – Beginning of Transcript +++

‘Also from my side a huge thank you for attending this hearing, sir. How about we start at the beginning? Where would you start?’

‘I think we should start in 2019 – it all looked so good then. Our President was to guide us until 2030, the economy was up and running, and fanatical fundamentalism was under control. But we underestimated how the continuing high youth unemployment ignited political opposition. One is always stuck to look for parallels to the past. So we invested all we had in the cities, the existing ones and the many new ones we built. We did not see that resistance this time would come from the countryside; from the poor and religious, who felt left behind.’

‘You mean the so-called 2024 Arab Flame uprising?’

‘Yes, it started with an unfortunate chain reaction. Due to rising sea levels, a drought, illegal quarrying of sand dunes along the Nile-delta coast, and major water loss because of the dams built by our neighbours, the Nile-delta suddenly received too much salt water, damaging local agriculture and drinking water reservoirs. We knew this might happen and tried our best to prepare. Many endured hardship peacefully and were compensated. But as we know, foreign agitators pushed the countryside into an angry eruption of violence.

‘In the midst of stopping this carnage we had to ask ourselves: Who would be able to create jobs for a population that was growing by 1.6 million people every year? The European Union forgot us soon after Libya stabilised and the refugee flow from there eased. China
was the only interested partner. It had already increased its political power in the region and was learning from its initial mistakes. You remember, it was the major investor in the joint China-Egypt Suez Economic and Trade Cooperation Zone. Our national prize, the Suez Canal, was China's strategic passage into the Mediterranean, to the markets of the EU, and they wanted to make it into a hub for Chinese companies. Sure, China expected payoff, not only economically, but also strategically and politically, but that was only fair. So when money came pouring in, when China's infrastructure and business investments made Cairo the city of opportunity, levelling with the old rival Istanbul, we did not want to see that a new order imposed by China would inevitably attract forces hostile to this order - a Behemoth to the Chinese Leviathan.'

'What do you see as the most important short-term factors of the crisis?'

'Clearly for me these were two. The more important was the BYT scandal. As you know, in October 2027, we closed the successful Cairo start-up BYT that had become a sign of progress and hope for our youth. We had no choice. This app was like an illegal bank, putting up illegal communal investment to build and rent houses. It wasn't at all about our vested business interests as the Islamists always say. Housing is a strategic service the nation needs to control. This brought the young people onto the streets again.

'While these rowdies were on the street, major defects became apparent in the fast-built Nile-delta irrigation systems. This made our government look incompetent. The Chinese were at fault. They promised to help fix the Nile, but clearly lacked the necessary know-how. So, even our government and the loyal part of the country were furious at our Asian friends, although I suspect xenophobia and blame-shifting had something to do with it too.

'Urban protests were raging, water and agricultural output ran low and the countryside became agitated again. Many in the administration fought over who was to blame. Still, I am sure we could have weathered this crisis too. But we forgot that our Chinese friends angered many others. In the background a coalition saw the chance to rid us, the so-called proxy, of our master. The EU and so-called civil society organisations were unhappy with our supposed human rights violations and involvement in the Libyan pacification. The Russians, whose middle class swarms our beaches, wanted us to do more for Syrian reconstruction. They were also eager to show the Chinese that the Middle East was not part of their soft underbelly. Turkey and Israel saw this as the right time to settle their scores with us. Sudan and Ethiopia used the Nile debacle and our weakness to try to renegotiate Nile water usage. Finally, everyone in Africa who was in debt to the Chinese was able to link up with these important players to show China they are able to defend themselves.'

'And how did it end?'

'Everybody knows how it ended!'

+++ NatHistCom – 19:11:01:12:2026 – End of Transcript +++

Libya: Torn apart

Policy Institute – Strategic Dispatch 15/25, 2.11.2025

The 2025 Paris Attacks and the Ongoing Libyan Civil War

Crisis background: After the 2011 military intervention by NATO based on UN Security Council Resolution 1973, the former dictatorial government was replaced by a wide array of actors, backed by different foreign powers, at times fighting over control. After a relative peace between 2012 and 2014, Field Marshall Haftar and his (eastern-) Libyan National Army (LNA) tried and failed to unify the country under their control. Since then the region settled into an UN-brokered peace that has unfortunately not stopped low-level violence within and between all actors.
**Current state:** Like former Somalia, Libya is divided into three entities: the not widely recognised Egyptian and United Arab Emirates backed Republic of Libya (RoL) in the east, led by competing factions of what was once the LNA. The south, Fezzan, is a formally UN-led autonomous region contested between Chadian and Sudanese actors and the proxies of the RoL and the internationally recognised State of Libya (SoL). SoL nominally controls the west, but actually only holds power in and around Tripoli. The rest of the SoL area – and some of the RoL area too – is controlled by a few strong independent cities and militias.

**Security situation:** With the exception of the largely autonomous, slowly recovering and often warring cities such as Zintin, Misrata, Tobruk, Benghazi, Al-Baida, Tobruk and central Tripoli, Libya is a giant no-go zone. Conflict parties, especially the LNA, ripped apart remaining communities that had survived all previous turmoil intact. In the absence of a functioning government, terrorist groups such as al-Qaeda in the Islamic Maghreb (AQMI) or the ‘real ISIS’ (RISIS) were able to fill voids, act as arbiters and even to control territory, especially in Fezzan. These spaces are also used as sanctuaries for attacks on neighbouring countries, especially the fragile Sudanese democracy, and now finally Europe. Over the years, Western drone strikes limited the terrorists’ operational abilities, but as we saw recently, not enough. Traffickers, oil smugglers and militias are successfully boycotting unification efforts so that their criminal businesses can thrive. New organised crime syndicates from China and South America, actors from neighbouring countries and Libyan groups and even terrorists are cooperating, especially in the smuggling of people, gold, drugs and weapons. Lawlessness made a whole different level of arms trade possible. It came to no surprise to experts that nerve gas from Libya was used in the Paris attacks, as there was ample intelligence on radioactive material and chemical and biological weapons trade in the region.

**Paris attacks:** The deadly nerve gas attack in Paris in October 2025 (see Dispatch 14/2025) has led to multiple surgical strikes against suspected RISIS positions and will likely lead to a broader intervention by France through the European Intervention Initiative. Evidence has linked both foreign RISIS fighters, Libyan terrorists and SoL state institutions infiltrated by Islamists to the attack. Unfortunately, past mistakes will likely be repeated. A few EU governments are unwilling to participate in any military action, thereby ignoring the invoked EU mutual defence clause. Entities inside Libya have again threatened Europe with an increase in migration. RoL might use the situation to try again to conquer the whole country. The overstretched French Armed Forces will be largely carrying the effort with some help from the UK, while the emerging North African security guarantor, China, is distracted by its recession and the USA is still dealing with the devastating after-effects of the failed Texan secession.

**Policy proposal:** This crisis could lead to another of many fruitless efforts to restart the political dynamics of this frozen conflict. With most other actors out of the picture, however, a window of opportunity might have opened for Europe. We again propose a federal state of widely autonomous political entities built on the currently mostly independent cities and regions, with limited national governance in foreign, security and energy questions, and a UN-led peace-enforcement mission in

---

**Libyan federalism**

The Libyan state has a long history of decentralised regional rule. Gaddafi used tribal and other divisions in a divide-and-rule fashion. Local organisational structures were often left to their own devices, first under Gaddafi, and later in the civil war. The main reason for the uprising against Gaddafi itself was the anger in eastern Libya over being neglected. The western coalition had no plans for the aftermath of the civil war, nor a willingness to impose a political order on domestic actors who feared western control. For a long time, the town or the tribe has been the only entity fixing problems, including justice and security, in Libya. The main political actors at present, the Libyan National Army (LNA) of Field Marshal Haftar, and the Government of National Accord (GNA), both depend on a large and heterogenous groups of municipalities, cities, tribes and militias. These in turn might be parts of other constellations and may have religious or criminal roots.
Fezzan and UN-peacekeeping between the entities. The time to stop this wound festering so close to the European Continent is now.

The Moroccan summer of 2026: A series of unfortunate events

Sixty-two-year-old Amira El-Maliki finally had the position in which she had always seen herself; as the most senior advisor to the King of Morocco. One of only a few women of power in the country – she had worked relentlessly for the king for over 20 years, translating the wishes of the sovereign into practical politics and policies. No matter the cosmetic democratic changes of recent decades, the Commander of the Faithful and Head of State was the only charismatic leader the country needed.

Morocco was on a good path. Solar power farms were built and Morocco became the world’s largest concentrated solar power energy generator, building dedicated long-distance lines to Europe and attracting energy-intensive European and Chinese industries. Energy self-sufficiency had not only started an economic boom, it also gave Morocco the longed-for independence from other countries in the region. Amira, originally from the sprawling international city of Tangier, had always felt that Morocco’s real home was Europe, not Africa, with its brutish dictators and failed states.

Unfortunately, another idea to jumpstart the economy – state investment in saline water agriculture – had not worked out that well. Not only was it draining national resources and not alleviating the food shortage, it also diverted energy and knowledge away from classical agriculture and advances in solar-powered green-housing and desalination. When one of the notorious climate-change related droughts hit the country in 2026, it caught the government unprepared. Reduced agricultural production led to food shortages and local unrest. While Amira had struggled to divert resources away from the King’s pet project, she had also made sure loyal media blamed the political parties in power.

To make things worse, radical Islamists used the cover of the food protests to stage a terrorist attack on tourists in Agadir, crashing the tourism industry and thereby dramatically worsening the country’s economy. Amira introduced drastic security measures without consulting parliament. This further annoyed the Prime Minister and led to more radicalisation in the cities.

One morning in late 2026, having relayed the King’s wishes to the bureaucracy all night, Amira entered the palace in the morning for her audience with His Majesty. She was immediately struck with the impression that something was wrong. Unusual movement, hesitant expressions, a reluctant palace official had admitted that an unknown illness had incapacitated the Monarch. He had had heart surgery before, but nobody wanted to share further details. Quickly, Amira took over the crisis communications.

Unfortunately for Amira, anti-monarchical factions under a former prime minister had seized their chance. Persuading the heir to the throne to give up much of the monarchy’s political power in exchange for the safety of the dynasty, its representative role and its extensive financial networks;
Amira was put out of a job, from one second to the next. She wasn’t out of tricks yet, however. As the army still did not know what was happening, she had only to tell them that the King was alive and needed protection from a coup …

Tunisia: Epicentre of the struggle over democracy and free trade

'Sirius! I’m having a debate tomorrow in school. I need an overview of the end of the First Tunisian Republic. Say 2019 to 2029, focus on the big picture.'

'Sure Fati. Wait a second… Here we go. You should see this historical struggle of the First Republic in the framework of a few important regional and global ideological struggles.

'First, this was the time of the midlife crisis of representative democracy. Many in the global elite and many ordinary people around the world thought democracy was ineffective and unfair. While authoritarianism returned to power in many new and a few old democracies, Tunisia became democratic in the wake of the Arab Spring. The region contained virtually no democracies and Tunisia seemed to contradict the widespread idea that Islamic and Arab states were unfit for government ‘of the people, by the people and for the people’. So, Tunisia became an important symbol for both sides.

'Second, this was the time of a regional split between two factions in Western Asia – then called the Middle East – and North Africa. Since the downfall of the revolutionary government in Egypt, made up of the Muslim Brotherhood movement, a long-standing split between their supporters and opponents in the region turned into an open war. Turkey and Qatar were on the supporting side, while Egypt, Saudi Arabia and the United Arab Emirates opposed them. Stand-in fighting already went on in other places, and Tunisia was a promising battlefield for both sides.

'Third, this was at the end of the ‘neoliberal consensus’ and nobody was sure what the next economic model would look like. Would free trade and the free market survive after propelling the world into several crises? The North African countries at the time were often rentier states – where oil and gas paid for everything – with nationalised economies, where the state and companies controlled by the ruling elite monopolised most sectors. Tunisia, still caught in the old ways, wanted to change to a more market-based western economy. Twenty years ago, this would have been a winning recipe, but at that time nobody knew.

‘Your choice of this particular starting date would assume that you know of the first part of the history of the Republic?’

'Sort of…'

‘Democratic Tunisia developed under two men from different sides of the political spectrum who cooperated against all odds. This also meant that that consensus was paramount however, and new roads were not taken.’

'Yes I learned that: President Essebsi and Rached Ghannouchi; the secularist and the Muslim-democrat! Why do Als make everything sound simple and difficult at the same time!'

'Sorry, I am still learning to fill in as your tutor. Yes, you are right, and 2019 was the year that these men withdrew from the front row, and new figures took over their parties. Later that year, though – by luck and to everyone’s surprise – a female academic, who was not from one for the main blocks, was elected President. Addressing many popular grievances, she had emerged as a unifying figure for the ongoing civic protest movement. This improved relations with Europe, but in Tunisia it increased discontent with many factions with vested interests. Foes until the day of the election, senior officials, businessmen and clerics then joined together to bring the country to a standstill and to start a violent campaign against the President’s media and political supporters.
It became clear that this was a coordinated coup, but the EU hesitated. It did not want to be dragged into another armed conflict in North Africa. The President was forced to go into hiding, while Tunisian and Libyan militias with Egyptian backing took control of the key infrastructure. Unfortunately for them, the outbreak of the Iranian-Saudi war meant that the Egyptian support quickly faltered and manpower was increasingly stretched thin. Countrywide popular resistance and belated but decisive Tunisian military action brought back the President after only seven weeks.

Together with the African Union, she brought forward a plan for the whole region, which was enthusiastically taken aboard by the youthful new President of Algeria, and at a later stage by the new democratic government in Egypt. Realising that neither the EU nor anyone else would lift North Africa out of its problems, the Treaty of Tunis founded the North African Customs Union, or NACU. It seized all foreign-held raw materials and heavy industries and transferred them and state-owned enterprises into an inter-sovereign wealth fund. It forbade the export of unfinished resources, and it quickly liberalised trade, giving Member States access to each other’s markets.

By 2029, Morocco and Libya had acceded to NACU and Tunisia had finished its constitutional convention, ironing out issues regarding the President, Supreme Court and the bureaucracy. Thus started the Second Tunisian Republic, a guiding light to the region and…’

‘Ok, ok, thanks, enough. How about the new episode of ‘The Rise and Fall of Sanctuary Moon?’

Conclusion

These scenarios are fictional and not meant to supply straight-forward policy advice. Rather, they serve to highlight key uncertainties that decision-makers may have to face in the future:

How important will China or Russia prove as players in the region, and what risks and opportunities could this involve? What is the future of democracy, and how might the global contest about governance affect North Africa? How can Europe ensure its own security while respecting the will of others to write their own history? What tools are needed to deal with possible social and economic stasis or revolution in North Africa? How will climate change, digitalisation and societal change affect this region over the coming decades?

Europe is already involved in North Africa. But for many, the EU seems to be more a spectator than an actor in the European neighbourhood and beyond. North Africa has not been able to find a unified voice to solve many of its common problems. Europe and North Africa seem to talk past each other.

Stability or instability is a false dichotomy, as Europe will be called to respond both to situations of rapid change and to deal with the causes of stasis. There might be new actors and ideas on the horizon, but perhaps things will stay as they are. Both options hold surprises – surprise is a constant in foreign policy – but thinking on your feet is no option for as big a player as the European Union.
Europe has to be fast and decisive, but also stockpile ideas for eventual futures. It needs to repeatedly challenge its assumptions about the future and have a strategic conversation about what is possible and preferable. Some in Europe and in North Africa pretend that leaving each other alone would help to bring about a more sustainable and positive future, but in a world full of surprises, this is not an option.

The author thanks the anonymous participants in the associated online brainstorming, delphi and review processes.

References


Agence France Presse, Egypt’s fertile Nile Delta threatened by climate change, 7 December 2018.


Alterman J. B., Middle East Notes and Comment: A New Arab Spring?, CSIS, 15 April 2019.


Ghiles F., China’s deep pockets in Egypt - Egypt must be mindful of the fact that more of China’s investment in massive infrastructure projects abroad are turning sour, The Arab Weekly, 17 February 2019.

Guerin O., Algeria protests: Youth lead the movement for change, BBC News, 14 April 2019.


Pairault T., China in Africa: Phoenix nests versus Special Economic Zones, 2019, hal-01968812.

Peters D. and Sydow C., Gigantisches Bauprojekt, Ägyptens Mega-Metropole in der Wüste, Spiegel Online, 12 August 2018.

China's social credit system: A 21st century panopticon?

Eamonn Noonan with Henry Eviston

Background

'Dear passengers, people who travel without a ticket, or are disorderly, will be punished according to regulations. The behaviour will be recorded in the individual credit information system. To avoid a negative record of personal credit, please follow the relevant regulations and help with the orders on the train and at the station.'

This announcement welcomed passengers on a high-speed train from Beijing to Shanghai in 2018. Around the same time, a BBC reporter agreed to have his face inserted into a local Chinese police station's wanted list, and then walked around the city's streets. He was arrested after seven minutes.

China's new state surveillance systems have a wide reach. A network of 200 million surveillance cameras is equipped with facial and gait recognition. A new programme, the social credit system (SCS), may ultimately monitor and grade the behaviour of each of China's 1.3 billion citizens. After several years in development, the blueprint for a SCS was formalised in 2014, in a planning note by the National Development and Reform Commission (NDRC). At present, the SCS is not yet a unified, rationalised system; it is a collection of pilot programmes managed by companies and local governments. The NDRC aims to launch the SCS as a single, unified system in 2020.

The SCS has a vast scope. It uses data on 'credit history, contract fulfilment history, personal characteristics, behaviour, preferences and friendships,' collected from internet companies like Tencent, Alibaba and WeChat. Non-compliant behaviour leads to blacklisting. This also applies to business; a company can lose access to credit and trading licences. Citizens can face, for example, restrictions on their ability to travel.

For its proponents, the SCS aims to improve governance, in particular in three areas:

**Financial surveillance.** For the authorities, SCS aims to improve transparency in an opaque financial system. China has a substantial shadow banking sector, and this is a potential risk to economic stability. A further aim is to broaden access to credit. The absence of a credit history often means that small businesses and rural citizens cannot apply for loans. A credit score could be established for such actors through SCS. This can stimulate economic activity in less-developed areas.

**Effective regulation.** Blacklists are currently most active in the effort to tackle fraud. The SCS will link administrative records directly to company leaders, rather than just to the company. It will not be possible to escape scandal simply by opening a new company. Public sector corruption is also a target.

**Moral standards.** The government seeks to improve levels of trust throughout society. The theory is that SCS rewards ‘good behaviour’.

For some, SCS is a way to put the state-citizen relationship on a better footing. 'The proposal stems from a lack of social and economic trust that has engulfed Chinese society since its turn to market economics in the 1980s'. Some opinion polls suggest that most citizens trust the SCS.

For others, the SCS is a 'cunning paradigm shift', a 'method of social control dressed up in some points-reward system'. It has been called 'Amazon's consumer tracking with an Orwellian political twist'. The spectre also lurks of a return to old practices of denouncing others for personal or political motives.
Main trends

In China, as elsewhere, new technologies herald an era of **ultra-transparency**. The activities of both private citizens and public officials are increasingly subject to scrutiny. Mobile devices and online transactions create extensive data sets, often without the users’ knowledge or consent. The emphasis in China is on one-way transparency; on political control and policy enforcement. The idea of the right to privacy is nowhere evident in the development of the social credit system.

The SCS may tighten existing **restrictions on freedom of speech** in China. Disapproval of practices ranging from homosexuality to certain forms of religious worship is apparent in the censorship of social media; they may also feed into the SCS. The wide reach of the SCS opens new avenues for political repression. China has signed, but not ratified, the International Covenant on Civil and Political Rights; there is no sign that it plans to do so, or to enhance the protection of individual rights.

The SCS is seen as an **opportunity for Chinese enterprises** to build expertise in big data, and thus gain an advantage in the further development of AI technology. China already has considerable AI expertise, and it has fewer privacy constraints than the EU. Chinese exports of surveillance technology may continue to increase.

Systematic surveillance may lead to greater individual **accountability** in an economy with significant informal and opaque activity. If the SCS indeed creates **access to credit** where this was previously impossible, smaller economic actors and remoter regions can benefit.

Key uncertainties

Will there be a ‘techlash’ among the Chinese public? Some reports point to growing awareness of privacy issues amongst Chinese internet users, and growing public concerns over the use of intrusive technologies such as facial recognition. The government published a new set of standards last year which effectively tightened restrictions on data collection and retention.

Will the SCS be seen to be **fair**? One indicator will be the degree to which officials – including high-ranking officials – face a comparable level of scrutiny to other citizens. Another will be the ability of the grading system to accept mitigating circumstances. If a missed payment is the result of illness, can this be grounds to impose a sanction?

What impact will SCS have on **Western citizens** and companies working in China? Will it make China a more or less attractive place for business, study and research?

The adoption of international **privacy** norms could be a barrier to the international marketing of Chinese surveillance technology and the wider adoption of social credit systems. This is especially the case if norms reflect the model of the EU’s GDPR. The rise of national security concerns about dependence on Chinese technology further complicates this picture.

Possible disruptions

The Chinese banking system is a long way from matching international standards of transparency and accountability. In one scenario, the SCS could uncover large-scale, **unsustainable lending** in the shadow banking sector. This could cause a loss of investor confidence and damage economic growth.

Targeting entire populations – such as the Uighurs – could fuel regional conflicts, while excessively **harsh sanctions** could provoke public protests. Either eventuality would undermine the credibility of the authorities as an impartial enforcer of desirable standards of behaviour.
Is the SCS too big to manage? Can unity and coherence be maintained across a country the size of China? The vast amounts of data gathered, the varying levels (municipal, regional) at which the system operates, and potentially divergent behavioural parameters, could limit the ability of the scheme to meet its objectives.

There are several reasons for the authorities to exercise caution in the further roll out of the SCS, rather than move quickly to universal application. These include vulnerability to fraud and data theft, and indeed the possibility of espionage by foreign actors. There is a strong incentive to develop robust cybersecurity.

References

BBC, *In Your Face: China’s all-seeing state*, 10 December 2017.
Botsman R., *Big data meets Big Brother as China moves to rate its citizens*, 2018.
Kostka G., *China’s social credit systems and public opinion: Explaining high levels of approval*, *Sage Journals*, 2019.
Liu J. *Is China’s social credit system really the dystopian sci-fi scenario that many fear?*, Science Nordic, 6 December 2018.
Parasol M., *China isn’t the AI-powered dystopia you think it is*, Technode, June 2018.
Auditing algorithms to avoid bias

Eamonn Noonan with Atte Oskari Ojanen

Background

As learning algorithms can process data sets with precision and speed beyond human capacity, artificial intelligence (AI) applications have become increasingly common in finance, healthcare, education, the legal system and beyond. But for all its promise, widespread reliance on AI carries risks, most especially where decisions are made without human oversight.

Machine learning relies on pattern-recognition within datasets. Problems arise when the available data reflects societal bias. An algorithm based on biased training data can itself yield biased results. Automated decision-making can therefore perpetuate social divides. Some hiring algorithms have been found to be biased against women, for example. Even data points such as hobbies or hair colour can give rise to discriminatory outcomes. Nor is AI being developed in a diverse environment: developers have been drawn from a narrow segment of the population. A richer mix of backgrounds and values could lessen the risk of unintentional bias against under-represented groups.

The trustworthiness of the processing method is another problem. Many AI algorithms are like black boxes: the decision paths remain opaque. Algorithmic transparency and explainability are possible solutions. An algorithm’s decision-making mechanism has to be both open to inspection and understandable to users. Otherwise bias will be harder to detect and to prevent.

Authorities need to balance the transparency of algorithms with respect for intellectual property rights. Developers have expressed concern about trade secrets and copyright protection. However, a lack of transparency can lead to breaches of individual rights, for example protection from discrimination. This is becoming critical in areas as diverse as judicial sentences, access to credit and employment, and medical treatment.

Citizens need have recourse to explanation, correction, and compensation mechanisms. Algorithmic audits and certification, supervised by ethics boards, is one option. Government bodies or trusted third parties are given a right to probe, monitor and review algorithms for reliability and fairness. Steps include checking data integrity; defining success; accuracy; replicability; and the measurement of long-term effects. Oversight agencies need clearance to access an algorithm’s source code and its training data. In turn, authorities could certify algorithms that have been audited. Certification could become a requirement for use in specific market sectors. Developers and corporations would need to prove that their algorithm meets predefined accountability standards.

Technical barriers to auditing include the difficulty of translating an algorithm’s internal logic into an understandable form – even for the system’s developers. Machine learning and neural networks are hard to track, let alone understand. In a trade-off between an algorithm’s accuracy and its explainability, should we opt for easily-explained models over alternatives that provide better outcomes? Another challenge is that neither end-users nor policy-makers tend to be experts in algorithms.

The desire to gain a competitive edge can also lead firms to downplay algorithmic transparency. Opaque algorithms allow companies to treat individuals differently through targeted advertising. This can lead to institutionalised discrimination. Public-private partnerships in the form of data trusts have been proposed as a remedy. Governments would provide public sector datasets to private partners that meet certain auditing standards. Firms would thereby use more representative datasets, leading to fairer algorithmic outcomes where all sides benefit. However, bias and privacy concerns still remain.
Main trends

Artificial intelligence is progressing rapidly on such fronts as deep learning. This is driven by the availability of data and by innovations such as reinforcement and adversarial learning. Major advances are seen in speech and facial recognition; autonomous vehicles are on their way. Medical imaging, language translation and other kinds of automated processing are greatly improved. This wave of innovation adds urgency to the debate on ethical and political implications.

Europe sees ethics-by-design approaches as critical to the development of algorithmic decision-making. Since 2018, Parliament and the European Commission have backed the inclusion of transparency and explainability in the development process. The Commission's High-Level Expert Group on AI published ethics guidelines for trustworthy AI in April 2019. These highlight the importance of transparency and fairness in combating bias. The idea of ethical rules around AI seems to have broader support in the EU than in the USA or China.

The EU's General Data Protection Regulation (GDPR), in force since May 2018, gives people a right to know how an automated decision was made. In cases of automated processing, such as profiling, individuals have the right to demand meaningful information about the logic behind the decision, and to contest this decision. The full legal extent of this 'right to explanation' is vigorously debated.

On the technical side, Explainable AI (XAI) is emerging. This is a sophisticated effort to clarify the rationale, data processing and decision-making process behind algorithms. XAI would allow humans to interpret which factors most contributed to the algorithmic decision, thereby building trust in the system. Bias-detection software and other measures are also being developed.

Key uncertainties

How stringently will existing regulations, such as GDPR, be enforced? Will government regulators have sufficient expertise and resources to conduct audits?

Can the EU cooperate with other major powers to enforce a common set of standards and avoid a race to the bottom? The emergence of national security concerns around Chinese enterprises now pose a problem for international cooperation on cutting edge technology.

The legal framework also remains uncharted territory. How does existing legislation concerning property rights and business secrets apply to algorithmic context? Which algorithms can be patented? Can algorithms be sued? How will conflicting rights be managed, for instance the individual’s right to protection against discrimination?

Possible disruptions

Large data breaches and scandals such as the Cambridge Analytica case may increase public pressure on companies to embrace transparency and support regulation. Breaches of trust could lead states to seek more radical supervision of AI applications.

Badly designed regulation can stifle innovation, however. Demanding that every AI decision is explainable could result in less accurate and efficient systems in some cases. Onerous regulation also increases barriers to entry, but so does lack of regulation. The challenge is to find the right balance.

Hostile use of algorithms could have enormously damaging consequences. A discovery that algorithm manipulation had corrupted an election and delivered victory to a losing candidate would have far-reaching consequences. The systematic use of algorithms against minorities is likewise a deeply disturbing prospect; and this is a current concern regarding the Uighur population resident in China, for instance.
References


Turek M., *Explainable Artificial Intelligence (XAI)*, DARPA.


Collective nostalgia: Longing for a future in the past

Christian Salm

Background

Old is new – for many people, especially across the western world, a return to the past has become a more promising prospect than moving into a new era. A 2017 Global Attitudes Survey by the Pew Research Center, asking people how far life today is better or worse than 50 years ago, clearly indicates this is a widespread sentiment. In the United States of America, more people say life today is worse, rather than better, than before (41 % to 37 %). In African countries such as Nigeria and Kenya, a majority says that life is worse today than 50 years ago (54 % and 53 % respectively). In Europe, half or more of those surveyed agree: 50 % in Italy and 53 % in Greece. A 2018 study by the Bertelsmann Foundation concludes that two-thirds of Europeans think that the world used to be a better place. A majority of the European public can therefore be classified as nostalgic. For many, the desired future seems to be a return to the past.

The social trend of collective nostalgia has several sources. It is a mechanism to cope with fear and insecurity in a period of upheaval. Political, economic and technological changes in an age of globalisation create anxiety and induce a feeling that there is less social and economic security than before. The liberal belief in progress and the achievement of the liberal social model has less influence on views about the future. Literary scholar Svetlana Boym suggests that nostalgic thinking is intrinsically prospection; fantasies of the past are determined by the needs of the present and have a direct impact on desires for the future. The sociologist Zygmunt Baumann argues that job insecurity, falling incomes, rising inequality, and declining social mobility make people yearn for previous times when governments seemed to do a better job in protecting their citizens, prompting desire for a return to policies of the past.

Collective nostalgia has in turn become politicised. President Trump's promise to 'Make America great again' (or 'MAGA') encapsulates the aim of bringing back 'lost' glory. In EU countries, populist parties react to globalisation by demanding a return to a time when the nation state was (or appeared to be) a stable political reference-point. There are other examples of nostalgia-driven political ambitions: President Xi calls for a great rejuvenation of the Chinese people, Turkish President Erdogan expresses neo-Ottoman aspirations, Japanese Prime Minister Abe adopts the 19th-century Meiji Restoration as a political leitmotif, and Brazilian President Bolsonaro pays homage to the military regime of 1964-85.

An identity-political element is critical to the politicisation of collective nostalgia. Resurrecting the past should help to reaffirm identities that are challenged by the rapid societal changes. However, a desire to restore the past can be linked to both right-wing and left-wing-political concepts. That said, the Bertelsmann study suggests that a majority (53 %) of Europeans who feel nostalgic place themselves on the right of the political spectrum; a majority (58 %) of those who do not feel nostalgic place themselves on the left.

Nostalgic sentiment is found across all age groups in Europe. Data shows little difference between 36 year olds and 65 year olds, despite the assumption that nostalgia increases with age (Bertelsmann Foundation survey). Even in the 16-25 age group, a slight majority (52 %) believes that the world used to be a better place. This suggests a strong influence of current events and political developments, such as the current European refugee crisis. Those who think the world used to be a better place are more likely to have more negative views on immigration. Some 78 % of people with nostalgic feelings agree with the statement that 'recent immigrants do not want to fit into society'. With regard to European integration, a majority of both nostalgic and non-nostalgic people in Europe have a favourable opinion of the EU: 67 % and 82 % respectively want to remain in the EU.
Main trends

Throughout the world, collective nostalgia has become a powerful political tool to resurrect the past in order to respond to peoples' anxiety about social and economic security. It is also used as a political tool aimed at reaffirming identities that are supposedly challenged by societal changes.

The politicisation of collective nostalgia has shaped a new political rhetoric. Many political campaigns feature the idea that the past holds the solutions to present-day societal problems (see the vignette on ‘MAGA and the future of political language’ in this publication). In addition, the politicisation of collective nostalgia carries a narrative of decline and crisis.

As outlined by the 2018 Bertelsmann study, nostalgic sentiment in Europe overlaps with concerns about immigration. Those with nostalgic feelings seem to fear the consequences of migration more than their non-nostalgic counterparts.

Key uncertainties

According to results of the latest World Values Survey, there is no fundamental reversal of trend with regard to the liberal social model, but rather a continuation of a belief in social and economic progress. This finding contradicts assumptions that collective nostalgia could function broadly as a breeding ground engendering a crisis of liberalism and rebuilding past authoritarian regimes with nation states as the core political reference point.

Collective nostalgia is not a completely new social trend. Almost every epoch has had phases in which past times are glorified. The humanists of the Late Middle Ages praised Christian antiquity. In the 19th century, a great enthusiasm for historicism existed, especially a kind of idealisation of the Middle Ages. These examples of historical re-enactment indicate that nostalgia has always been a significant social trend.

Economic situations are crucial indicators of whether people develop nostalgic sentiment. In countries with strong economic progress in recent decades, a large majority of people say that life today is much better than 50 years ago. The 2017 Pew Research data confirms this. For example, large majorities say that life is better today in countries such as Vietnam, India and South Korea, whose economies have been transformed since the 1960s (88%, 69% and 68% respectively).

Possible disruptions

A person's economic situation strongly affects the tendency towards nostalgic thinking. Economic growth leading to greater job security, higher incomes, more equality and greater chance of upward social mobility can ease the fear and insecurity that serve as precursors of nostalgia.

Greater attention to empirical facts may counter a false restorative nostalgia. Life expectancy and material wellbeing are generally better today; a return to the past is no guarantee of social improvement.
The history and future of life expectancy in Europe

Leopold Schmertzing

Background

Every day, for Europeans, life expectancy increases by five to six hours. Life expectancy has been on the rise for over two centuries: first, Europeans reduced premature deaths due to hunger, violence and infectious diseases; more recently, major illnesses, such as heart attacks and cancer, became less deadly, and people have learned to care about the health of their bodies. Today, the European fight is on to reduce chronic and degenerative illnesses such as Alzheimer’s and Parkinson’s. While scientists continue to argue over the possibility of an upper limit to life expectancy, its prolongation already has effects: for the OECD as a whole, public pension expenditure has risen by about 2.5 % of GDP since 1990. People also live longer with illnesses: Austrians live around 30 % of their lifespan with a long-term illness that restricts their quality of life.

Defining life expectancy

Eurostat defines life expectancy at a certain age as ‘the mean additional number of years that a person of that age can expect to live, if subjected throughout the rest of his or her life to the current mortality conditions (age-specific probabilities of dying, i.e. the death rates observed for the current period)’. Lifespan is defined as life expectancy without premature deaths, and maximum lifespan as the lifespan of the oldest humans recorded.

Short history of life expectancy

European (and worldwide) life expectancy was stable until the seventeenth century. Women died in childbirth, but otherwise lived longer than men, so average life expectancy was similar. Reaching old age mainly depended on access to sufficient food. Up to every second child died before reaching twenty years of age. This had a great influence on calculating life expectancy: if one child dies shortly after birth and the other reaches 70 years, the cumulative life expectancy would be 35 years. Those who survived had a good chance of reaching old age. From 1200 to 1745, European 21-year-olds would reach an average age of anywhere between 62 and 70 years – except for the 14th century, when the bubonic plague shortened life expectancy to 45 years. Lifespan was not radically different in stable pre-modern societies, but life expectancy was, and that mainly due to high child mortality.

As water and sanitation improved, best practices spread and famines became less common, people grew older more regularly and child mortality fell. Medicine also played an important role, especially the introduction of the smallpox vaccination in the 18th century and the advent of antisepsis in 1880. Rising wealth and a consistently high birth rate meant a rejuvenation of the western population in the 19th century. This drove European industrial and imperialist expansion, as well as emigration to the New World. Society eventually caught up; birth rates in Germany fell from close to five children per woman in 1875 to 1.8 in 1934. A large proportion of young people grew old, while at the same time the birth rate declined, ushering in the era of societal ageing.

Rise in life expectancy since World War II

In the UK in 2005, the risk of dying was very roughly 1:1 000 at the age of 35 years, 1:100 at 60 years and 1:10 at 85 years. Since the last major decrease, due to World War II, western life expectancy has grown by about two to three months every year. Where per capita income per year is less than around US$7-8 000, there is a strong correlation between income and life expectancy. After that, low income countries with decent national health care, low obesity and tobacco and alcohol consumption rates have on average the same life expectancy as richer countries lacking such factors. Another clear statistical factor is the ‘southern bonus’: Regions in the European south have
a longer life expectancy. When GDP levels are factored in, inhabitants in Southern Europe live up to eight years longer than their northern counterparts.

Main trends

The rise of life expectancy will continue. The proportion of people aged 80 years or over in the EU is expected to more than double between 2020 and 2060, from 5.9 % to 12.1 %. More than 50 % of babies born since 2000, in countries with long life expectancies, will celebrate their 100th birthdays. Healthiness is the most important guarantor for the ongoing extension of life expectancy, and this involves better care for one's body and mind, more effective medical care, more knowledge (especially about how to improve your wellbeing), and a safer environment.

The overall global and European record is mixed: for some in Europe, healthiness increases faster than life expectancy. This means leading longer, healthier lives in terms of physical and cognitive ability. Unfortunately, this depends where you live and on your socio-economic status inside the country. As stated above, Austria, a fairly rich country, has a low score, and the figures deteriorated further between 2010 and 2016. Meanwhile, Cyprus has a higher score and is making decent advances on this front. A recent study in Germany found that men who earn less than 60 per cent of the medium income live for 8.6 years less than high income earners – and that the gap is widening. The main factors are unhealthy lifestyles that result in a doubling or even tripling of the risk of heart attack, stroke, diabetes or cancer. To counter this trend, the authors propose several political and policy interventions: limiting working hours, improving the health service, more services for children and the elderly, greater social mobility, and fairer taxation.

Some researchers no longer regard ageing as an unstoppable natural process, but as a disease that can be treated. Another argument deployed is that, by trying to delay ageing, we can better understand illness. Recent advances include the replacement of failing organs and cells, the development of anti-ageing drugs, especially compounds that revitalise senescent cells (older cells that have deteriorated and stopped dividing), the use of nanotechnology and big-data-AI-assisted diagnosis and intervention, as well as better, science-based diets and lifestyle recommendations. The most wide-reaching advances are in gene sequencing technologies, which are reshaping healthcare from curing sickness to the prevention of illness and ageing.

Key uncertainties

Is there a natural limit to the human lifespan? The maximum lifespan reached a temporary, but significant, plateau with Jeanne Calment, who died in 1997 at the age of 122 years. Some argue that a genetically determined fixed life-history strategy of our species stands in the way of radical life extension. Others are not convinced and point to many former forecasts that have all been exceeded, as well as to the sheer potential of science.

An extension of the human lifespan may have a huge impact, depending on the speed and quantity of change, and how far it outruns improvements in healthy ageing. Older and healthier citizens would mean a potential to expand the labour force by people working longer, or would expand the social class and political power of healthy and active retirees. Older, but less healthy citizens, could derail the social contract between workers and retirees. What if we have more healthy and older people but no jobs, due to automation? There are many unknowns and second-order effects to consider. For example, even if people might be healthier in general, a rising number of very old people could mean higher costs due to illnesses such as Alzheimer’s.

When considering recent advances, it becomes more likely that technology will find ways to prolong life and that at a certain point we will be able to repair our body at will. Techno-optimists from the life-extension movement are predicting the first taste of immortality: when the rise in life expectancy comes close or overtakes time passing (for every month that passes the average lifespan...
extends for more than a month); they speak of a longevity escape velocity. For now, their projections still have to convince most of the scientific community.

Possible disruptions

The line between maximising and extending human lifespan might become all but meaningless. This, in turn, makes it hard to choose which medicine is fighting an illness or prolonging healthy life, and what difference this should make for decisions such as research and treatment funding. Even if the state decides not to support life extension, private wealth might be invoked to decide whether people live normal or radically extended lives. What price equality, solidarity and democracy in such a world?

What if people habitually live up to the age of 150 years? How would this alter individual's choices about their lives? How would it change politics, society, the economy, and how could it affect national pension and health systems? What would happen to humanity, if scientists discovered ways to prolong life forever? Even more radical than that, scientists and philosophers working on artificial intelligence are asking: what happens, if the border between machine and human vanishes, or when intelligence and consciousness become transferable?

References

BBC, How long can we live?, BBC Inquiry, 8 April 2019.
Space: Our final frontier?

Freya Windle-Wehrle

Background

Earth is the cradle of humanity, but mankind cannot stay in the cradle forever (Konstantin Tsiolkovsky)

Space explorers and pioneers

Sixty years ago, Earth’s first artificial satellite was launched, starting a space race between the only countries then capable of major enterprises in this field, the United States of America and the Soviet Union. Cost was the biggest impediment to escaping Earth’s atmosphere. No individual or private company could have considered such an undertaking without state support. Since 1957, space exploration has seen major transformation, most especially in recent years.

National space programmes initially drawn up for military use brought both strategic and economic benefits. Commercial spin-offs ultimately enabled global telecommunication and geolocation services. International cooperative programmes such as the International Space Station (ISS) demonstrate the resilience and benefits of this cooperation as a diplomatic tool. Galileo and shared missions fostered joint scientific projects. The digital revolution also changed space-related technology and helped drive growth. Together with the internet, these developments created a range of new options, ranging from Earth observation to meteorology, communications and navigation. Archaeology from outer space is a striking example of what is now possible.

New Space, a game changer for our societies

In recent years, technological advance has revolutionised the space industry. Additive manufacturing, miniaturisation and artificial intelligence have reduced costs and increased commercial interest, spurring growth. The global space economy reached €309 billion in 2017. Since 2005, the sector has seen an annual average growth of 6.7% – twice that of the global economy. The leverage effects of technological and scientific developments are unmatched: for each euro invested, the estimated return is between €7 and €30.

New actors have taken the stage: private firms, wealthy individuals and emerging countries, such as Brazil and South Africa, challenge the dominance of the early pioneers. China, India Russia and the United Arab Emirates are also on the starting blocks with ambitious space programmes.

Elon Musk’s SpaceX is the best-known example of a commercial space company. It develops, amongst other things, technologies to allow space launch vehicles to be reused. Reusability sharply reduces the cost of access to space, in the pursuit of his idea of multi-planetary life.

The trend towards public and private sector cooperation has created new products and services. In June 2019, SpaceX lifted two dozen satellites into space as part of the US Department of Defence’s Space Test Programme. The US National Aeronautics and Space Administration (NASA) recently signed an agreement with Blue Origin for the use of a rocket test stand, with a view to the agency’s return to the Moon.

Nano- and micro-satellites are now central to the smooth functioning of civil and military technologies. Growing private investment increases their availability. This leads to greater multinational and multisectoral engagement with space, opening avenues for economic growth and innovations such as the extraction of natural resources.

Global reliance on critical space infrastructure

Space is more relevant to our daily lives than ever before. Modern society relies greatly on the continuous operation of critical space infrastructure systems (CSI). Upstream, CSI involves
developing infrastructure by sending more objects into space. Downstream, commercial activities use the data provided by satellites. This is transformed into actionable intelligence in areas such as broadcasting, secure communication and navigation.

The downstream sector offers huge opportunities for growth. The industry needs experts who can translate upstream developments into downstream applications. Better ability to monitor and track trends is desirable in many areas, including Earth observation, disaster management, refugee movements, navigation services, and criminal activities.

**Competition and space governance**

Space remains an area of interstate competition. Military activities are increasing; space-based anti-satellite systems are being developed. These vary widely and may deliver both reversible and non-reversible effects; they may deceive, disrupt, deny or destroy existing space systems. Other options to maintain military advantage include cyber and electronic threats, missile defence, lasers, kinetic vehicles and radiofrequency jammers.

With more actors entering the domain and with the rapid rate of change in New Space, space governance has become a central concern. Space regulations date back to the 1960s; the last international treaty was published in 1979 – and is not universally ratified.

An updated, long-term framework is needed to underpin the engagement of spacefaring nations and entrepreneurs. Common objectives are to achieve a balance of peace and security; to maintain access, use and control of outer space as a global common. New regulations and updated protocols can help, particularly in view of expanding space traffic, demand for in-orbit services, and the prospect of asteroid mining. The recent revitalisation of the Space Council is a step in this direction. The London Institute of Space Policy and Law also has a role, to educate and inform present and future policy-makers, judges and lawyers about the sustainable use of outer space to the benefit of all. Geopolitical conflict giving rise to a new, hostile space race, is not a desirable outcome.

**Main trends**

Space debris management is a major challenge. Currently, more than 500,000 pieces (discarded rocket parts, defunct satellites) are tracked, orbiting the Earth at speeds of up to 28,000 kilometres per hour. These and smaller unmonitored pieces threaten satellites and spacecraft; collisions cause substantial damage and create still more debris. In a worst-case scenario, crashes could fatally contaminate orbital ranges, making them inaccessible for generations. Liability issues are also unclear.

The post-International Space Station phase envisions a lunar base station, which could serve as a gateway to Mars and deep space exploration by 2035, and the European Space Agency (ESA) is working towards this. China is planning a lunar sample return mission. Russia is developing a robotic lander, while a NASA capsule with an ESA service module should orbit the Moon before 2022.

Advanced technology will lay the cornerstone for the success of this global project. It will allow the use of lunar resources (metals, minerals, ice) and other celestial bodies of the Solar System. Inflatable habitats and 3-D printed protective domes can create a life-sustaining environment, allowing researchers to understand how the human body responds to deep space. Further steps involve asteroid mining and additive manufacturing of critical equipment, avoiding costly transport from Earth.

**Key uncertainties**

International norms remain elusive, and there is no global consensus on new laws. What implications does this have for property rights, access, control and protection of space?

Can space exploration move on from the Moon to Mars: Will humans be travelling to Mars by 2035?
Space tourism has experienced many false dawns, but is the most promising commercial market in space. What if it becomes reality, possibly in combination with a functioning lunar economy?

The growing strategic value of CSI and the lack of space regulation increases the risk of conflict. How will this influence a future digital economy or society?

Hazardous space debris is proliferating, threatening the expanding global presence in space. What if a collision destroys a key communication satellite and this is interpreted as a hostile attack?

Looking to harness energy from space, will space-based solar power provide a new source for limitless and sustainable energy to Earth?

**Possible disruptions**

**Space-based terrorism**: What if the Low Earth Orbit becomes a venue for geopolitical tension? Malicious attacks could substantially disrupt daily life (e.g. deactivating global positioning systems or damaging ground services).

**Extended human presence**: Fully functioning sustainable environmental control and life support systems would enable long periods in space, the installation of manned outposts and possibly even space colonisation.

**Terraforming**: Self-replicating machines and self-organising robots could deliberately modify another planet's topography or ecology to make it habitable. This could create alternatives to Earth, possibly even safe havens in space.

The use of extra-terrestrial resources through asteroid mining could enable in-space manufacturing creating a 'Made in Space' label.

Terraforming could allow the development of organisms that are genetically adapted to other planets.

Robotic construction of a lunar base station could accelerate the start-up of a gateway to deep space exploration.

However, a solar eruption creating huge storms could have a devastating effect on all efforts performed.

**References**


'MAGA' and the future of political language

Vadim Kononenko

Background

Judging by its resonance among the US public and worldwide, 'Make America great again' (MAGA) has been a highly effective and very timely slogan. Even if Donald Trump had not been elected in 2016, his campaign would have featured prominently in textbooks on political communication. Its success has several factors. In its style, it reflects the trend of ‘dumbing down’ of political language. Modern-day political communication uses simple, short sentences. In its content, the MAGA slogan combined two trends: towards nostalgia, and away from traditional left-right divisions. Nostalgic discourses have arisen in many areas, from fashion and culture to politics. The implicit message of MAGA is that America has lost its ‘grandeur’ and needs to recover former glory (under Trump’s leadership, obviously). A similar premise underlies other political campaigns; Brexit is a prominent example. The political language of such campaigns implies that the past (real, forgotten, imagined, but always better than the present), has the solutions to the problems of the day. Going backwards and undoing the present thus becomes a political goal in itself. The MAGA slogan also exploits the blurring of traditional political boundaries between left and right. ‘Make our country great again’ is a slogan that can appeal to both sides. Both Bill Clinton and Ronald Reagan used similar ‘great again’ slogans in their own campaigns. Obviously, Trump did not create these trends, nor did he invent his political slogan from scratch. However, he took full advantage of existing trends. As other politicians use similar rhetoric, ‘make our country great again’ has made its mark on today’s political language.

The multiple crises – economic, financial, climate – of the first decades of the 21st century provide an historical explanation of the rise of the ‘great again’ discourse. These global crises undermined the 1990s consensus about the benefits of liberal market capitalism. On the level of political rhetoric, one can talk of the demise of the ‘there is no alternative’ (TINA) discourse. Around the turn of the century, TINA was the hymn sheet of countless political campaigns across the political spectrum. MAGA disrupted this discourse, notably in promising to reverse globalisation. However, it also extended it, in that Trump still presents economic growth as the main indicator of a country’s greatness. Thus Trump’s ideology has been called a nationalist version of neoliberalism.

Trump’s disruption of neo-liberal language has opened the way for alternative rallying cries, in the USA and also globally. Though dominant, MAGA is not the only appealing slogan. Indeed, part of the appeal of ‘great again’ is that it can fit many political platforms, not just one occupied by Trump or neoliberal nationalists. Discourses such as MEGA (‘make Europe great again’), calling for the revival of European integration, and ‘make the Earth great again’, calling for action against global warming, can be seen as rebuttals or repurposing of Trump’s MAGA. The use of similar communication strategies shows that Trump and his followers do not hold an exclusive right to such discourses.

Main trends

The crises of recent decades and the demise of the neo-liberal hegemonic discourse created space for successors, with MAGA and other nationalist-liberal variations of ‘great again’ rhetoric currently leading the way. MAGA as Trump’s official slogan accelerated the existing trend towards simplification of political rhetoric. It also linked to widespread anxiety about the future and veneration of the past.

The advent of digital social media in the 2000s further challenged the formal and somewhat technocratic language of TINA, and served as a fitting medium for MAGA-related discourses. It is deeply ironic that technological progress and the spread of Twitter and Facebook paved the way for political discourses that were seen during previous decades as archaic and out of date.
The global economic recession helped the rise of ‘great again’ populism, but it also brought other ideas to prominence. An interesting variant of a post-TINA discourse, and a possible alternative to ‘great again’ rhetoric, promotes self-limitation over greatness. The ‘good enough life’ discourse is about finding the right balance between one’s own needs and those of others. Where MAGA emphasises competition and a drive for unlimited greatness, the ‘good enough’ philosophy sees unnecessary conflict and waste of resources.

Key uncertainties

‘Make our country great again’ is popular, but as stated, it is not the only discourse. Others, such as the ‘good enough life’, could gain similar traction among the public. The possibility of rapid dissemination through digital media and the accelerated pace of political communications has to date been favourable to new ideas of all kinds. However, social media has become weaponised and ‘spontaneity’ can be easily manufactured. Huge resources – and funding – are mobilised to promote certain viewpoints, and to discredit dissenting views. This may hamper the spread of new ideas. The more viral a campaign gets, the more likely it is to produce a mirror campaign with the opposite message. The political debate then quickly degenerates into a standoff between two seemingly irreconcilable worldviews.

The durability of MAGA and the rise of alternative discourses will be tested in the 2020 US Elections. The outcome will determine whether political language will move away from the trend for nostalgia.

In the wake of the 2019 European elections, it remains to be seen if ‘great again’ rhetoric is embraced by pro-Europe liberal and centrist parties. To date, it has mostly been appropriated by right wing and nationalist circles. Gains made by European green parties suggest increased interest in the ‘good enough’ idea, given its emphasis on sustainability over unfettered growth.

Possible disruptions

Changes to democratic systems, such as a possible move towards deliberative democracy, may generate demand for a different kind of political language. New discourses setting new goals may emerge. There is no shortage of candidates: for a new social contract; green new deal; no decisions about us without us.

The increasing use of artificial intelligence applications may disrupt the way political language is constructed. In future, algorithms may be used not only to forecast the electorate’s response to certain ideas but also to generate these very ideas. Slogans for political campaigns may be created not by activists and political technologists, but by machines.

The growing influence of China will help the international spread of Chinese political concepts and discourses such as wangdao, or ‘social harmony’, said to be based on the values of fairness, justice and civility. English is likely to remain the dominant global language, but China may play a disruptive role in promoting and injecting new narratives, meanings and slogans.

References

Alpert A., The Good-Enough Life. The desire for greatness can be an obstacle to our own potential, New York Times, 20 February 2019

Lockhart M. (ed.), President Donald Trump and His Political Discourse. Routledge, 2018


Cornelissen L., The ‘new right’ is not a reaction to neoliberalism, but its offspring, openDemocracy.net, 16 July 2019
Annex I: Global Trendometer – Output by trend, 2016-19

Social change

Essays:
- The future of EU social policy, 2019
- The return of redistributive tax policies, 2017
- Sub-Saharan Africa: Demography is not destiny ... if women are empowered, 2017
- Increasing inequality: from social and political challenge to economic problem?, 2016
- The future of migration, EPRS, European Parliament, 2016

Vignettes:
- Life expectancy in Europe, 2019
- Collective nostalgia: Longing for a future in the past
- Remittances, 2018
- The hollowing of the western middle class, 2017
- The surplus of men in China: A gender issue or a social threat?, 2016

Economic transition

Essays:
- The future of trade and investment, ESPAS Ideas Paper, 2019
- The future of the labour share of income, 2018
- Between multilateralism and protectionism: Prospects for international trade, 2017

Vignettes:
- Economic waves, 2018
- Public procurement, 2018
- The Asian century: economic powerhouse or stuck in transit?, 2016
- Jobless growth: will robots and computers destroy our jobs?, 2016
- Additive manufacturing in 2030: how the next Gutenberg revolution may bring production back to Europe, 2016
**Technological change**

**Essays:**
- Democracy in the age of artificial intelligence, 2018

**Vignettes:**
- Auditing algorithms to avoid bias, 2019
- Space – our final frontier?, 2019
- The future of artificial intelligence, ESPAS Ideas Paper, 2019
- Deep fake, 2018
- The digital future of news media, 2017
- Blockchains and trust: a revolution, reformation or just another tech-toy?, 2016
- Mobile internet and democracy: less citizen-empowerment than we thought?, 2016

**Environmental challenges**

**Essays:**

**Vignettes:**
- Geo-engineering, 2018
- Food security in China, 2018
- Disappearing sand: A limit on the development of urban infrastructure?, 2017
- Water re-use, 2017

**Geopolitical shifts**

**Essay:**
- European democracy 4.0: towards a deliberative anticipatory democracy?, 2019
- The future of warfare, ESPAS Ideas Paper, 2019
- The future of India: aligning ambition and potential, 2018
- Foundations of US military power in 2030: leading from the front or from behind?, 2016

**Vignettes:**
- Instability scenarios in Northern Africa until 2030, 2019
- China’s social credit system, 2019
- MAGA and the future of political language, 2019
- Automated weapons: Making wars ‘safer’, 2017
- The US Republic after Trump, 2018
- Russia and China in 2030: authoritarian alliance or geopolitical rivals?, 2016
- Democracy in the Middle East and North Africa in 2030, 2016
Annex II: Mapping identified global trends

The Global Trends Unit follows the work of ESPAS and tracks trends identified in its reports. The most recent ESPAS report was published in April 2019. Annex I has an overview of topics from earlier Trendometers.

<table>
<thead>
<tr>
<th>ESPAS Global trends</th>
<th>EPRS Trendometer analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trends identified in the ESPAS report</strong></td>
<td><strong>Direction of Trend</strong></td>
</tr>
<tr>
<td><strong>ENVIRONMENT</strong></td>
<td>Climate change</td>
</tr>
<tr>
<td></td>
<td>Destruction of biodiversity</td>
</tr>
<tr>
<td><strong>GLOBALISATION</strong></td>
<td>Pace of economic growth</td>
</tr>
<tr>
<td></td>
<td>Growth of global trade</td>
</tr>
<tr>
<td></td>
<td>Geopolitisation of trade</td>
</tr>
<tr>
<td></td>
<td>Geopolitisation of financial markets</td>
</tr>
<tr>
<td><strong>TECHNOLOGY</strong></td>
<td>Innovation as a key growth factor</td>
</tr>
<tr>
<td></td>
<td>Digital disruption of traditional business models</td>
</tr>
<tr>
<td><strong>SOCIAL CHANGE</strong></td>
<td>Pressure on welfare system</td>
</tr>
<tr>
<td></td>
<td>Inequalities</td>
</tr>
<tr>
<td></td>
<td>Ageing</td>
</tr>
<tr>
<td></td>
<td>Migration and mobility</td>
</tr>
<tr>
<td><strong>SOCIAL POLITICAL CHANGE</strong></td>
<td>Role of social institutions (family, churches, trade unions, political parties)</td>
</tr>
<tr>
<td></td>
<td>Legitimacy of current political system</td>
</tr>
<tr>
<td></td>
<td>Empowerment of the individual compared to that of the state</td>
</tr>
<tr>
<td></td>
<td>New forms of political engagement</td>
</tr>
<tr>
<td></td>
<td>‘Social nationalism’ Intolerance &amp; Identity politics</td>
</tr>
<tr>
<td><strong>GEOPOLITICS</strong></td>
<td>Role of states compared to nodes</td>
</tr>
<tr>
<td></td>
<td>Expansion of democracy</td>
</tr>
<tr>
<td></td>
<td>South/south cooperation</td>
</tr>
<tr>
<td></td>
<td>Attacks on multilateralism</td>
</tr>
<tr>
<td></td>
<td>Return to power politics</td>
</tr>
</tbody>
</table>
The Global Trendometer is produced annually by the Global Trends Unit of the European Parliamentary Research Service (EPRS). It seeks to contribute to the process of identifying medium- and long-term trends, and addressing their implications for the European Union. This publication does not offer answers or make recommendations. It presents summarised information and analysis derived from a range of carefully selected sources. This edition also includes some imagined scenarios.

This issue considers the future of democracy and of social policy in Europe, and sketches different possible scenarios for Northern African countries. It also includes short pieces on subjects ranging from China’s social credit system, the auditing of algorithms and increases in life expectancy, to space as a new frontier.