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Futures of Social Confrontations and Effects on European Democracies 2040

Scenarios and Policy Implications

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SUMMARY

Social confrontations signify the struggle about how we want to shape our futures. Rooted in different narratives represented by different social groups they are often competing for the sovereignty of interpretation of what a particular future may look like and how we are to achieve it. These diverging perspectives are usually rooted in past collective experiences and value systems and their interpretations and constitute a point of reference for a personal identity that reinforces a person belonging to a certain group. Social confrontations are not a singular phenomenon; instead, we live in a world of multiple social confrontations, and they co-exist, overlap, and compete. The divides social confrontations create can go across all spheres of life: education, care, health, nutrition, energy, mobility, communication, race, gender, political power, migration, etc.

This policy brief explores how these developments have been perceived in science and society and how they are likely to impact the futures of democracy in Europe. To this end, we present four scenarios that chart diverging pathways on how social confrontations could evolve in the next 15 years under various drivers and trends and what role they could play for the democratic development in the EU. Finally, the policy brief presents conclusions implications for R&I policymaking from the scenarios.

The four scenarios discuss various development paths - they are intended to explore divergent possibilities and do not constitute a normative position. They do not always depict a preferable future. From our view, scenario 1 (“A Resilient and Consensual European Confederation”) is the most positive one of the four and it is helpful to filter the preferable developments that can be influenced by R&I policy making. But also, for the other three, less preferable scenarios (“European Democracy defending itself against totalitarian tendencies”, “The European Fortress”, “Cultural Hegemony Through Global Capitalism”) it is necessary to identify negative developments that could be contained or prevented by R&I policy making. Each scenario is equally important, however, in that it explores alternatives.

In concluding we present implications for R&I policy making in four categories. The first category raises the question how R&I policy on the macro-level can have an impact toward more equity and equality and can shift the benefits of R&I investment more towards society as a whole. This part discusses option on how to apply social criteria for public R&I funds, such as human dignity, solidarity and justice, environmental sustainability, transparency and co-decision-making and their relevance for projects and companies. A further option is to combine social innovations with technological innovation in order to give marginalized groups a chance of participating from the benefit of innovation outputs.

The second part is dedicated to the notion of more democratisation and participation in the process of R&I priority setting and how different social groups can be involved. This includes, for example, structures that prepare decision making on R&I investments. New approaches to democratize the decision-making processes on how investments in R&I are taken may lead the way forward. To such end, it might be important to include employees and other social groups in the decision-making process, so to have a better representation of people who will be affected by the consequences in the future, e.g. the younger generation. An additional set of suggested changes involves the governance structures of decision-making processes as such: new procedures need to be learned and taught to achieve results that are acceptable for society as a whole and for social groups in particular.

How R&I policy could be geared towards the stimulation of more socio-ecological transformation is the focus of the third part, discussing the point on how to limit the footprint of R&I outcomes. The climate crisis will be a major cause of adversity and desperation in our society in the future. It will bring about more inequity, more inequality and more social confrontation. Accordingly, containing and mitigating the effects of the climate crisis needs to be the focus of socially responsible R&I policy that

gives answers to the question if ecological transformation and economic growth are contradictions or if they can be reconciled.

The fourth and final part of the policy implications looks into some future European R&I focus areas of relevance to the four scenarios, especially on artificial intelligence and technology platforms as well as on the future of housing and living. The latter one is discussing options of affordable housing that respond to the changing lifestyles and climate change paradigm. Topics for Artificial Intelligence and Information Technology include new approaches to assess the quality and reliability of information and sources as well as socially responsible products that pay tribute to our diverse populations and cultures.

This brief is the result of one of eight Deep Dive Foresight Studies in the project 'European R&I Foresight and Public Engagement for Horizon Europe' conducted by the Foresight on Demand' consortium for the European Commission. During the spring of 2023, an expert team identified factors of change and organised two scenario and one policy implications workshops also engaging experts from academia, business and public administration around Europe. The process was also supported by discussions in the Horizon Europe Foresight Network. Further information and room for interactive discussion is provided on the project's website: www.futures4europe.eu

1. INTRODUCTION: ANALYZING SOCIAL CONFRONTATIONS

Social confrontations signify the struggle about how we want to shape our futures. Rooted in different narratives represented by different social groups they are often competing for the sovereignty of interpretation of what a particular future may look like and how we are to achieve it. These diverging perspectives are usually rooted in past collective experiences and value systems and their interpretations and constitute a point of reference for a personal identity that reinforces a person belonging to a certain group. Social confrontations are not a singular phenomenon; instead, we live in a world of multiple social confrontations, and they co-exist, overlap, and compete. The divides social confrontations create can go across all spheres of life: education, care, health, nutrition, energy, mobility, communication, race, gender, political power, migration, etc.

1.1 Overview on the study of social confrontations

From an analytical point of view, the borders between social mobilization, social involvement and social confrontation have been blurring. Social theorists from the last century saw social change driven by the antagonists of (political) leaders on the one hand and citizens on the other. This demarcation does not work anymore in the 21st century as new fault lines have emerged (with nature, with colonies, and with technologies, as well as the changing regional and global demographics). While Olsen (1989) defined social mobilization as “leader-initiated” with a “downward” dynamic, social involvement as reciprocal from both leaders and citizens, he states that social confrontation involves an “upward” dynamic from the citizens against the leaders. Similarly, the notion that social conflict is always rooted in structures of domination (Oberschall, 1978) has gained many more facets. Social conflict analysis overlaps with macro-sociological theories about stratification, social change, group formation and collective action.

Today we witness many lines of confrontation, not only between leaders and citizens but also among different groups of citizens. To name just a few, there is an increasing confrontation against independent women (even increasing numbers of femicides in European countries), as well as women’s liberation movement in Iran (Kaiser, 2020) or the ‘me-too’ revelations. Just recently we saw confrontations of the anti-immunization lobby with vaccination proponents (Prainsack, 2022). Young people are organizing in groups to protest against climate change and some even take more drastic measures than just taking to the streets. These groups are not (only) protesting against governmental leaders but against their parent’s generation and lifestyle as inappropriate for the following generations. (Dirth, 2019; Fabel et al. 2022).

While in the past most social protest was demanding more equality and democratisation (e.g., the proletariat, women’s movement, students’ protests in the 1960s, movement of the landless, etc.) (see also Dahrendorf, 1959), today there are confrontations focussing on democracy. There are attacks against democratic institutions (US: Jan. 6 Capitol attack (see Kleinfeld 2022), Reichsbürger planned attack on German Parliament (see Keil 2022), as well as citizen protests to maintain democratic institutions that are endangered by ruling governments (Israel and Georgia, March 2023).

Important factors in 21st century social confrontations are, of course, digitalisation, social media and artificial intelligence (Ebner, 2023). One radical form is the troll army installed by the Russian Internet Research Agency that operated highly divisive accounts such as “Secured Borders” and “Blacktivist” during the US 2016 election (Kirby, 2016). The role of social media and information technology amplifying and acceleration social confrontation is highly complex. In some cases, these phenomena

function as amplifiers of features that already exist in society. In other cases, they ignite protest movements and contribute to the bi-partisan divide of society (Törnberg 2022). In any case, confrontation in the current system is unlikely to decrease.

The analysis of such social groups and social confrontations has mostly focused on more or less prominent protest groups. Some of the first prominent theorists have been Karl Marx and Friedrich Engels (1848). In their publications they studied the success factors of the proletarian movement. They developed a theory of the social forces struggling for social hegemony, their material preconditions, ideologies and strategies. Today, this branch of political-philosophical approach is reflected in “Critical Theory” and in some of the discussion on discourse and hegemony (Brand, 2005; Brand, 2006; Demirovic, 2010, Laclau & Mouffe 2006). This school of thought also refers to Antonio Gramsci, Italian political philosopher a hundred years ago, who said that the hegemony of a ruling class is propagated by the cultural hegemony of this class, meaning capitalism at that time. In order to rise from lower social status, the working class would need to define their own culture and defeat the bourgeoisie.

More recent analyses of social confrontations and protests are embedded in the study of social movements and became more prominent during the 1950s and 1960s, especially in English-speaking countries. Quite a variety of approaches have been developed and contested to explain this phenomenon. This work is primarily dedicated to the analysis of success factors of mobilising social movements, their strategies, political and discursive structures, struggle for resources, forms of protests, identity and collective interpretative patterns (Rucht, 1994; della Porta, 2009; Meyer & Tarrow, 1998). Such analyses mostly concludes that social protest arises primarily from deprivation or collective discontent of certain groups. But eventually, this explanation did not seem sufficient, thus further research focussed on factors of social structures, theories of resource mobilisation (McCarthy & Zald, 1977): social protests embedded in social movements depend on the availability or lack of resource, determining the role and impact of actors. A further approach was the theory of political opportunity structures which states that the degree of openness or closure of a political system and its ability to absorb political protest and demand for change is crucial for the performance of protest groups (Eisinger, 1973; Kitschelt, 1999).

Referring to the assumptions of the political opportunity structure, more recent approaches argue that social protest movements depend to what is called the “framing” of the interpretation of reality. Social and political protest can take off when activists manage to frame certain events, grievances, and topics in such a way that their followers can make sense in participating in this movement (Snow et al. 1986). The frame serves as a kind of sense-making interpretation of what is going on in the world and in a participant’s life. Or in more recent cases even the “invention” of truth (Götz-Votteler & Hespers, 2019).

Political polarization cannot always be explained through traditional behavioural – rational analysis. The study on affective (versus ideological) polarisation states that not only in the US but also increasingly in Europe is the animosity of the disliked political parties on emotional, unreflected roots tying certain partisan proponents stronger together (Reiljan 2020; Gidron et al., 2019; Wagner 2020). Narrative thus more and more plays a crucial part in identity creation and possible social confrontation.

Post-structuralist approaches as propagated by Laclau and Mouffe are further developing the above-mentioned opportunity structure model. They say that there is no prior structure on the side of the protesters. Rather, their formation as a group encountering some kind of establishment is contingent: It is through contingent opportunity that certain people and/or groups identify the same interest or goal and form a protest group (for some time) but without an original identity.

Figure 1: Fraction of countries with social unrest events 12 month moving average. Bartlett et al. 2022

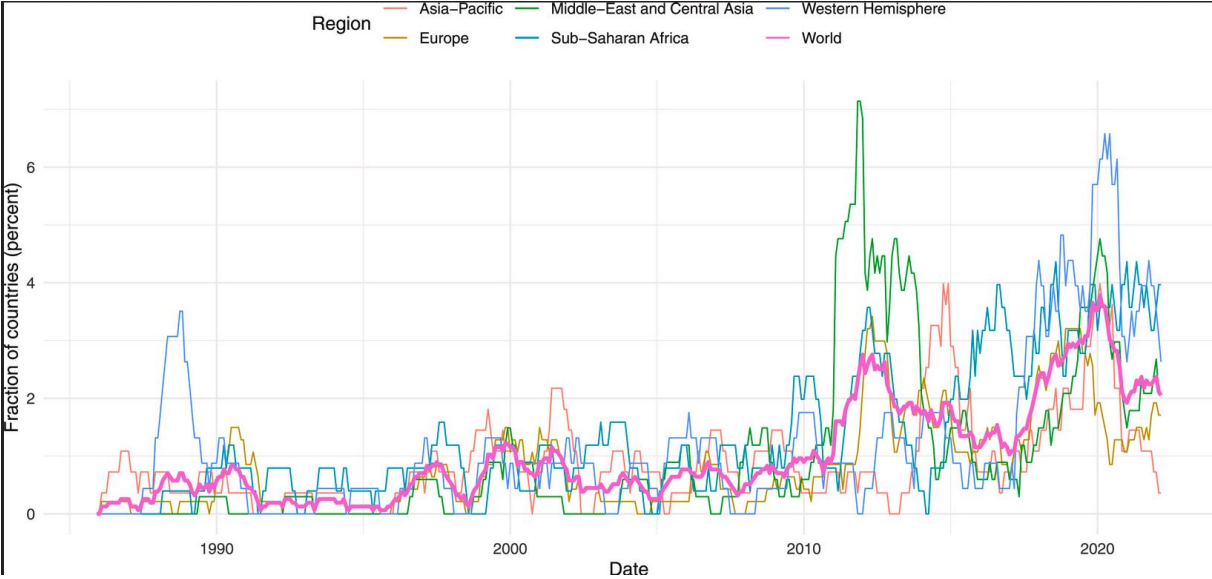
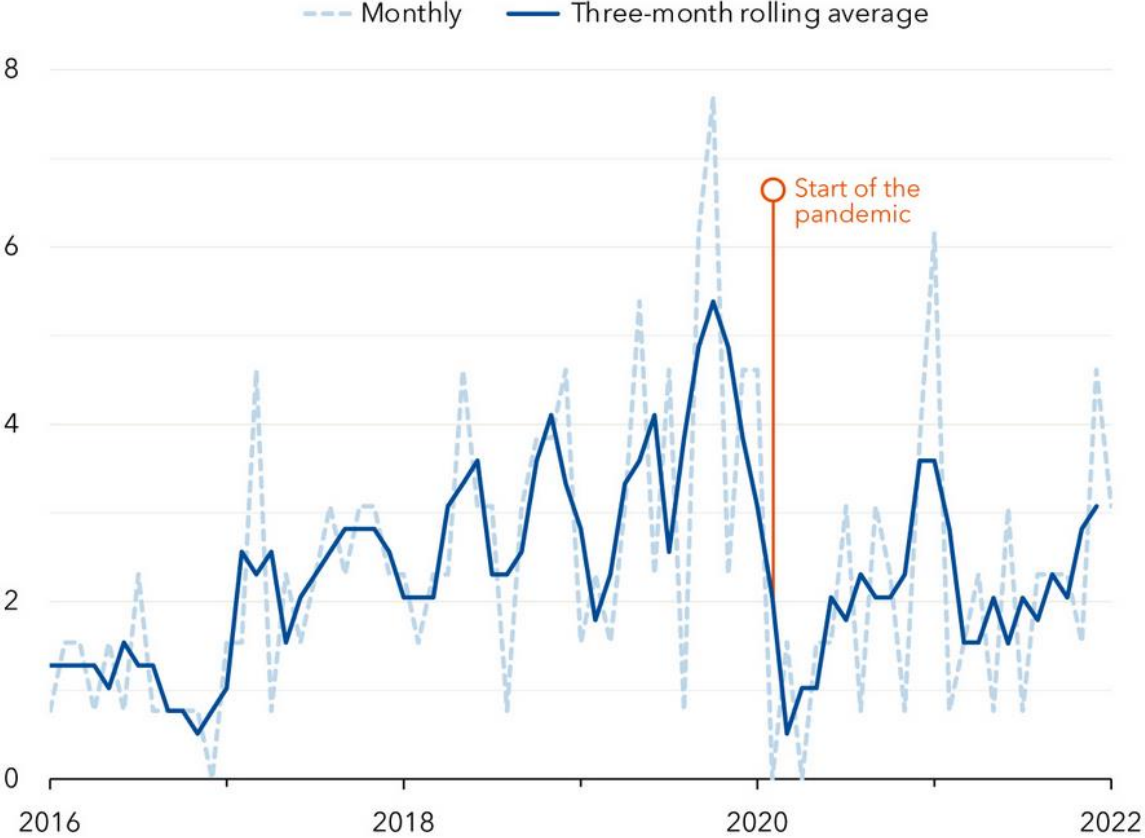


Figure 2: Social unrest events are rising but remain below pre-pandemic peaks (% of countries with reported Social Unrest Index-identified events) (Bartlett et al. 2022)



Source: IMF staff calculations.
 Note: Due to differences in media coverage and perception across countries, social unrest events (defined as large peaks in country-specific series) are a more robust measure of international trends in unrest.

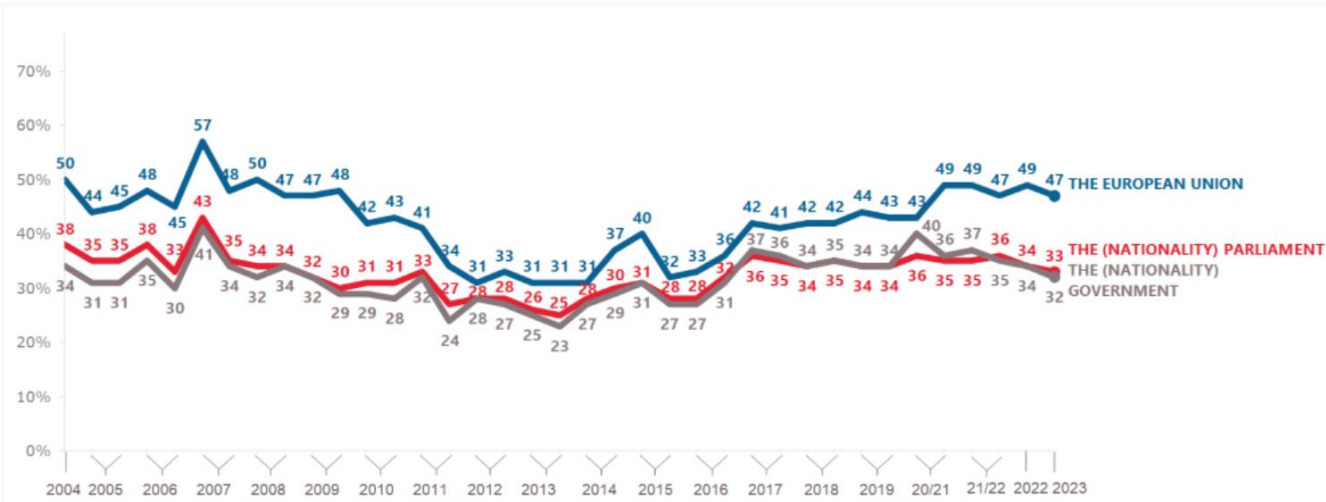


Today we are confronted with the question: Are we witnessing an unusual rise and new quality of social confrontations? Figures 1 and 2 indicate such a trend (see also Bartlett et al. 2022; Carnegie Endowment for International Peace 2023; V-Dem Institute 2023). While in the past there seem to have been protest groups forming some kind of critical mass and an identity for a longer period, some even having an impact on economic, political, social developments. In contrast, most of the current social confrontation movements and incidents do not seem to have a longer lasting effect or homogenous identity. Even though they sometimes reach a (political or other) goal, they do not offer a continuous narrative for personal or group identity or cultural hegemony. Instead, social confrontation is very much fragmented and heterogenous (Vey, 2016). Today, most of the emerging protest groups don't seem to have the same degree of "closure" as former movements used to have. Yet, they can still be as harmful to challenging existing structures, institutions, or actors.

1.2 How to Avoid Social Fragmentation and System Breakdown?

A number of tendencies seem to conspire together to threaten societies with forms of social dysfunction and perhaps breakdown. Social cohesion and social capital have declined very substantially over the last generation (Wilkinson/Pickett 2009, 2019). So too have levels of trust – not only in how much people feel they can trust others, but also public trust in national governments and in parliaments (see figure 3 below, Standard Eurobarometer 98 - Winter 2022-2023). Many occupations command much less respect than they used to, including politicians, the media, the police, banks and big business. (Arrighi et al. 2022)

Figure 3: How much trust do you have in certain institutions? Question A6 Standard Eurobarometer 98 - Winter 2022-2023



At the same time democracy is increasingly threatened by factors such as growing political polarisation, caused not only by the increasing numbers of people who believe in conspiracy theories (Keil 2022), but also by the growing importance of money in politics, by the growth of inequality and the rise of populism and the far right (Wilkinson/Pickett 2009; Carother/Wong 2020). To this mix will be added high levels of disruption and unemployment caused by the development of AI. As many argue, jobs in every category are likely to disappear (Inayatullah, 2022). While these developments on the societal level challenge the nature of work and meaning, we should also pay attention to recent trends at individual level. There have also been adverse trends in the psychological characteristics of populations. Jean Twenge (2010) and others have shown major rises among the US population in narcissism, a sense of entitlement, materialism and in anxiety and depression over the last half century or so. Similar, though less pronounced changes have also been shown in Europe. These social and

psychological changes make societies less adaptable and less able to make the changes required by a transition to environmental sustainability (Wilkinson/Pickett 2019).

Against that background, governments attention will be increasingly taken up by ever more frequent emergencies and disruption caused by the climate crisis, including increasing international conflict, more frequent new diseases and attempts to deal with increasing numbers of refugees and migrants. This governmental “actionism” is both the source, and consequence, of the multiplication of think tanks, monitoring systems and social media dealing with the poly-crisis. At the same time, the focus for long-term solutions gets lost. In fact, it is not only the climate response that suffers but all long-term government planning functions.

The difficulty of dealing with these issues is likely to be exacerbated by underfunded, and consequently inadequate, public services. In this hectic, perhaps chaotic, context, policies to minimise or adapt to the climate crisis will not get the attention they urgently need, and protective environmental targets will be missed.

If people find that the systems and services on which they rely, cannot be relied upon and life seems increasingly difficult, there may well be a tendency for frustration, political apathy and the susceptibility of people to populist promises of “easy” solution. This is especially the case when the image of the future promised is in conflict with the reality of today, and the likely future that will emerge from it. This image contradiction is at the root of social confrontations – the world that is expected or promised is not the reality that is emerging. This is especially the case with the demographic transition that is unfolding, wealthy and aged societies confronted a youthful poorer society (Inayatullah, 1999, 2016).

To avoid further social disorder and forms of social breakdown, some social and political scholars say, our societies need to be able to produce coherent and coordinated responses to new threats and adversity (Habermas 2011; Frazer 2022;). The key lies not just in the competence of government and institutions, but also, very substantially, in the cohesion, mutual support and cooperation of populations. These are all powerfully affected by the level of economic inequality in society. Fairness must be at the heart of policy. More equal societies are more cohesive, have higher levels of trust in political institutions, lower levels of violence and people are more cooperative and mutually supportive. Risks of social disorder and breakdown are substantially lower in more equal societies. More egalitarian societies are more resilient, adaptable and better able to ride out the storms that societies and the world economy face. (Wilkinson/Pickett 2009; Dörre 2022)

While the above section is focused on the theoretical framework, below we focus on possible futures. Thus this project explores how social confrontations can evolve in the next two decades and in what effect they could have on social cohesion the quality of democracy in the EU. The scenarios below raise the question how social confrontations could aggravate and if and how such developments could be alleviated by policy measures. While the challenges are global, they are addressed especially from the perspective of the European research and innovation policy.

We consider root causes of social confrontations (values, social problems, access to resources, environmental issues) and escalation of conflicts (both online and offline). We take a global perspective, relating to the positioning of the EU in the world and focus on social confrontations undermining the foundations and institutions of the EU, including R&I.

The following questions gave guidance to the thematic exploration:

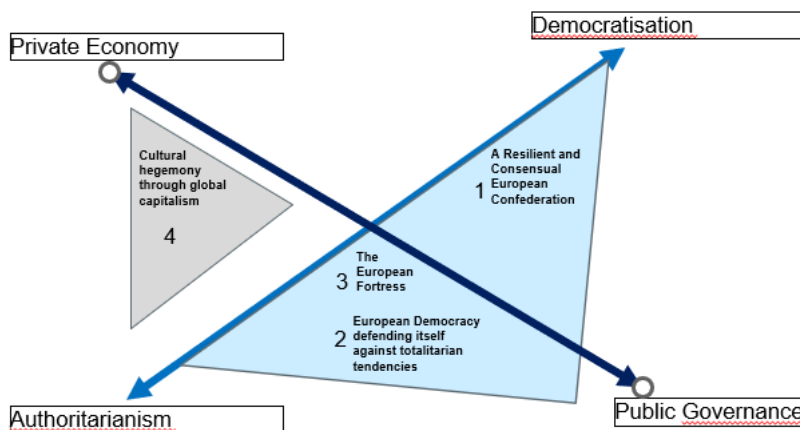
- Will new threats reduce or increase confrontation?
- Will the tech platforms stay in just providing the fora or will they also participate in confrontations?

- Will the governments take action? Will they, for example, engage in life-long learning so as to break the silos of the mind as well as silos in organizations?
- What will be the effects of changing views of democracy and democratic practices in the EU?

2 SCENARIO DEVELOPMENT

For the creation of a small set of scenarios that look into the development of social confrontation up to the year 2040, the expert group made use of the quantitative data and synthesised qualitative information from scanning to describe the major influencing factors of change (see Annex). To give the creation of the scenarios an anchoring point, we used two archetypical dimensions of governance challenged by social confrontations that develop in extreme directions: democratisation vs. authoritarianism and growing influence of the private economy vs. increasing significance of public governance (see figure below). In three scenarios the public governance gains more significance because social confrontation is often (though not always) a conflict with the ruling class and the ruling authorities (in terms of structures, processes and actors). One of those depicts a society that experiences more democratisation (“A Resilient and Consensual European Confederation”), whereas societies in the other two scenarios experience a move toward more authoritarianism: “the European Fortress” and “European Democracy Defending Itself Against Totalitarian Tendencies”. One scenario, the “Cultural Hegemony Through Global Capitalism”, describes a development toward more consumerism and control by large tech companies. The notion of liberty here is very subjective but constitutionally, the societies have not changed from today. While there are numerous other scenario methods, this was considered the most efficient and wisest way to ensure that the extremes were well presented.

Figure 4: Critical Uncertainties for Scenario Development



Source: FOD 2023

The following four sketches summarise the scenarios and illustrate the broad variety future pathways of social confrontations could chart. They are not meant to be realistic.

- 1. A Resilient and Consensual European Confederation:** social confrontations take bifurcations in many directions and social spheres and become an important element of political and institutional reform. Civil society participates in many social groups to claim more influence in policy making, seeking new forms of structured dialogue with different stakeholder groups, new forms of reconciliation, and critical reflection, and thus contributes to social transformation.

2. **European Democracy Defends Itself Against Totalitarian Tendencies:** right wing extremists openly and covert try to take over democratic forces in the EU and to dissolve major democratic institutions of the EU. More states exit. Social confrontations go in both directions: in countries where civil rights are infringed, citizens take on the streets for protest. There is the pendulum response to extremism.
3. **The European Fortress** defends its borders against all sorts of external attempts of infiltration, undermining of its sovereignty directly as well as indirectly, including subversive attacks from foreign troll armies. The defensive position is also taking measures against migration from outside Europe. Still there are various forces and groups within and outside Europe that wage social confrontations within the European society. Europe, self-sufficient in itself, e.g. through geo engineering, autarchy, EU internet instead of global internet. New technologies help build and reinforce the fortress.
4. **Cultural Hegemony Through Global Capitalism** has ended almost all social confrontation. A few multinational tech companies have taken over the control of all communication around the globe and have designed autonomous algorithm that are optimising the digital technologies in order to infiltrate people toward more consumption and less social protest.

The main features and differences of the scenarios are summarized in the table below.

<i>Scenario title</i>	<i>A Resilient and Consensual European Confederation</i>	<i>European Democracy defends itself against totalitarian tendencies</i>	<i>The self-sufficient European fortress</i>	<i>Cultural hegemony through global capitalism</i>
Core driver	Solidarity leads the way	Data and confrontation lead the way	International affairs lead the way	Personalized technologies through corporate capitalism lead the way
Social/politics	Deep democracy	Mafia-like tribal structures	Fragmentation	Individualized and corporatized realities
EU agency	EU has soft power	EU in decline	EU defends	EU corporatizes
Research focus	Research is participatory	Research reflects a society in deep conflict and tension. It is used for political purposes	Research for technologies that enhance self-sufficiency	Research for consumption
Core metaphor	The connected community	Fragmenting bridges	The fortress	The tech giant

It is worth noting that the scenario context are drivers based on current conditions. These were used to develop the uncertainties. We did not use emerging issues analysis or methods to explore extreme outliers and disruptions (Molitor, 2003; Inayatullah, 2015). Thus, the scenarios are developed within the framework from today and not within the unknowns of tomorrow. The scenarios thus should be recognizable to policymakers and the implications for research and innovation considered as within actionable frames of reference. For example, we did not imagine EU run by mostly AI systems or social confrontation between humans and AI systems or the end of 90% of all jobs. These while interested

were outside the terms of reference of this project. We stayed driver focused with scenarios emerging from core uncertainties. (see Annex)

2.1 Scenario 1: A Resilient and Consensual European Confederation

As a response to the dramatic conflicts with the illiberal anti-Western empires and especially with Russia and China that took place in the late 2020s, the European states entered a phase of re-solidarization, similar in certain aspects to the post-WW2 one. In the *mid-2030s*, in order to cope with foreign competition and to protect themselves against the anti-European threats, the European Union's Member States decided to accept the progressive transfer of most of their competences in the military and political fields to the reformed EU institutions, where the Parliament and the European Citizens' Assembly – a wide and inclusive popular parliament selected through sortition – concentrate most of the decision-making power. Hence, by 2040, the transformation of the EU into a confederation close to the model of post-national constellation (Habermas, 2011) is almost complete and reflects the Europeans' renewed trust in democracy to enhance the prosperity and well-being of the citizens.



Figure 5: A Resilient and Consensual European Confederation

Source: GettyImages

The path to this democratic post-national reconciliation has been anything but smooth. By the end of the 2020s, the public acknowledgement about the devastating effects of the severe socio-economic polarization, of climate change and of many governments' authoritarian slide was general and pushed numerous European citizens from all over the continent to engage in an increasingly effective set of actions, such as general strikes, boycotts, protests, occupations, riots and overt civic disobedience. While the initial reaction of the member states' authorities was to quash the protest movements severely and violently, the widespread economic and societal deadlocks made the governments aware of the huge potential of vulnerability in the eventual case of foreign military or hybrid attack. Consequently, under the pressures of civil society, on one hand, and of the top-EU's supranational bodies, on the other, most national governments accept, one by one, to open a social, political and environmental dialogue with their wider societies. Public debates are initially limited to a series of punctual claims, and rapidly expand to wider topics, as the "undomesticated" interlocutors refuse to resign themselves to accepting the rather superficial reforms proposed by the decision-makers. Their insistence, combined with the maintain of the massive street meetings, finally pays in that the national dialogue meetings progressively reshape from roundtables to permanent self-empowering organs, claiming the moral and legitimate right to propose constitutional amendments. As there is a process of "contamination" from one country to the other, the emerging national citizens' organs created a pan-European platform – a demarche that was strongly encouraged by the European Commission and by the European Parliament, who are directly interested in reforming both the national and the EU institutional frameworks and practices to strengthen the supranational level.

The result of these unexpected but very substantial grass-route initiatives that turned into trans-European platforms is the launch of series of reforms both in terms of constitutional arrangements and in terms of political practices. By 2037, most of the EU states were about to complete their constitutional revisions. The new political frameworks are much more inclusive than the previous, providing strong guarantees for deliberative and participatory democracy, wider and less biased political representation, and the inclusion of all types of minority groups into the decision-making structures at all levels

and into the societal frameworks. On the social and economic side, the new constitutions recognize, among other things, the principles of economic fairness and of enhanced social cohesion and the universal opposable right to housing. The right to a healthy environment is literally concretized in the new constitutions by adding a series of specific bidding provisions on green energy and decarbonization.

At the same time, the EU commits itself to a deep process of institutional reform. Following the unequivocal demands of the European citizens, the EU leadership promotes a project of enhanced integration, switching the center of gravity of the decision-making processes from the European Council and the Council of the EU to the EU Parliament, the latter being seconded by a European Citizens' Assembly, which is composed of several hundred regular citizens selected for two-and-a-half-year terms through sortition (selection of public officials using a random representative sample). The role of this wide and inclusive popular assembly is to co-work with the EU Parliament to adopt legislation that genuinely reflects the European citizens' variety of interests and opinions. These major changes made the Union more open to the candidate countries – Moldova, Serbia, Montenegro, Albania, Kosovo, Bosnia and Herzegovina, Macedonia, and Ukraine – which joined the EU between 2037 and 2039 by using a new fast track of European accession.

Within this newly created framework, social conflicts have become less frequent. Although recent, this new institutional arrangement seemed to have succeeded in considerably reducing the degree of violent social antagonism, while allowing at the same time for a more equitable representation of the different and sometimes competing interests. By putting in the core of the new democratic deal the participation of the very diverse citizens and groups of the EU's member states, the reformed national and European institutional frameworks succeed now to manage in a rather smooth and pacific way the ideological, religious, ethnocultural, moral and social differences among the confederation's 520 million citizens. As virtually all types of claims raised by the Europeans reach consent-oriented policy-making and decision-making levels thanks to the renewed and reinforced petitioning, participatory, deliberative, and direct democracy mechanisms, their inclination to protest against the institutional systems and the political collective leadership is by far less prominent as in the past. Internet fora and platforms play an important part for the exchange of opinion and for developing innovative solutions to societal problems. A crucial factor for the mediating role of such tools is that they are regulated in terms of size and controlled in terms of content. Regulations stem also from participatory discussions and consent making approaches.

Moreover, in order to handle dissensus at the micro- and meso- levels, the authorities set up a series of institutions and practices that function according to the principle of subsidiarity. Thus, any contending issue should be solved at the closest level possible to the individuals, their groups and their communities. A flexible process based on the empowerment and the accountability of the local and regional authorities, which are at their turn increasingly assisted by citizens' assemblies, guarantees to a higher extent the prompt acknowledgment of the problems for which immediate action is required. While contentious issues are still present at all levels and the contending actors' demands are even more audible than in the past (as the actors are more confident that their claims will be solved if made public), the degree of antagonism and especially that of irreconcilable conflictuality have importantly diminished.

In the process of emergence of this new order, digitalization has played a key role, providing tools for the citizens to create and to develop virtual transnational European and global communities and to overcome in this way some classical obstacles such as costs, money, distance, availability etc. Keen to support the new wave of civic democratic engagement, the European Union increased the budgets for inclusive digitization and for fighting against the technological gaps in society. Moreover, the enlarged EU's decision-making bodies articulated a systematic and pro-active long-term strategy to finance and politically support the pan-European research institutes, such as the renewed European Institute of Technology. Research and innovation became both more important in terms of policy priority and

more appreciated by the European citizens, as they reflected a double transformation: on one hand, the decisions for investing in fields such as green and digital technologies became progressively democratic, with the cooperation of all the relevant societal actors, and on the other hand, the profits resulting out of the investments were much more equitably socialized.

International research activities are flourishing. There is an active exchange of actors within the EU and between the EU and other countries to tackle technological and social challenges in basic as well as in applied research. Diversity and inter-disciplinarity are guiding transnational research strategies. A lot of emphasis is put on future orientation and the way people want to live. Thus, people likely to be affected by research and innovation outcome are integrated into the design and / or assessment of research strategies and projects and their implementation.

The implementations of social contracts reinforced the collective resilience at both the national and the European levels, which facilitated the fulfilment of a higher degree of European strategic autonomy. While cultivating the Euro-Atlantic close partnership within NATO, the EU became more self-reliant in its relationship with the US in terms of security and foreign policy. By concentrating their resources, focusing their efforts and speaking on a single voice, the EU and its member states are about to become strong global economic competitors for China and the US. In the Global South, thanks to the better targeted investments and to the more overt and efficient policy of conditionality, the European Union succeeded to surpass the ghost of the colonial past, to largely regain its influence and to contain the expansion of the Russian and Chinese illiberal influence. This allowed for the negotiation of a new development-migration deal: by investing in key sectors of the Southern states' economies, such as critical infrastructures, decarbonized energy and intensive education, the youth encounter now many more opportunities to find decent jobs without leaving their home countries. Thus, by 2040, the South-North and East-West sizable migration fluxes diminish, and the EU's mix of soft power contributes to the stabilization of several countries in Sub-Saharan Africa, Latin America, Middle East and South-East Asia.

2.2 Scenario 2: European Democracy Defending Itself Against Totalitarian Tendencies

Data supremacy, that is to say the control over data – who owns and controls data - plays a crucial role in this scenario. The coalition between populist political parties and social media in some European countries generates ever new narratives on supposedly lingering threats to European society, or rather what these populist parties define as European society, that is white, male, of Caucasian ethnicity, and with regular income. However, European society is so diverse that the majority is quite the contrary, that is of multiple ethnicities and with migration backgrounds, of diverse gender, with an overload of people at the higher end of the age pyramid. Many of those narratives have the tenor that migration and everything foreign are destroying traditional European society, identities, and values. Fake news, conspiracy theories, manipulated surveys, populist influencers and the like find a lot of followers and they drive frightened voters into the arms of right-wing populists. These parties gain power in more and more European countries, inside and outside of the EU. If they manage to keep their power over longer periods check and balances are manipulated or disempowered step by step; media pluralism is destroyed. Many of the other social groups feel infringed of their civil rights and protest against the political developments in their countries. Compared to 2023, the EU has become smaller, some countries left after having turned authoritarian; other were excluded after the EU had reformed its decision-making procedures.

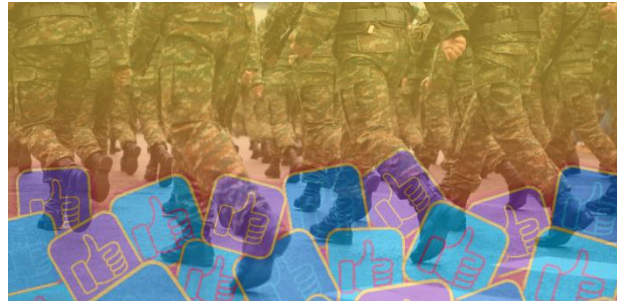


Figure 6 European Democracy Defending Itself Against Totalitarian Tendencies

Source: GettyImages

With help of social media and client data from retail companies but also by the use of face recognition the behaviour of the population is monitored, and deviants can be identified and easily separated. Diverse data pools are combined and smart algorithms can filter what is appropriate in the sense of the ruling government and where opposition might evolve eventually.

All over Europe but also beyond, governing populist leaders learn from each other how to maintain their power even if they lose their strongholds in their countries, they manifest their power through alignment of the media and the judiciary with the government's course. With help of (social) media that is propagating right-wing populist views such leaders and their parties are present everywhere in the public space whereas alternative policy makers hardly have the chance to be visible.

Climate change incidents wage social confrontations. Severe floods in coastal regions and river basins on the one hand, long-lasting droughts in large parts of Europe on the other hand deprive many Europeans of their material possessions, their savings, jobs, even their family members. Many are desperate and have to leave their home regions. But the lack of solidarity and the fear of falling among the wealthy or middle-income families make it hard to re-integrate the deprived people – even within the same country. The crime rate rises as people who have not much left to lose are looting whatever is left in the deprived regions and also in the still functioning regions.

Regional, national, and European governance mechanism are overburdened and not fit to deal with the poly-crisis situations. Corruption which is very common within these structures makes it almost impossible to restore the authority of government institutions and rule of law. This negative development contributes to the desperation of the people who cannot participate in economic wealth. Trust

in institutions is diminishing and people get cynical about justice, democracy and their own future and that of their families.

Some see the only option to turn to mafia-like clan structures where the illusion of being all part of a big family where the members are helping each other in the end lead to a crime-haunted society.

Those European countries still having a functioning democracy in the traditional (post-Cold-War) sense, however, are shaken by social confrontations as well. Some social protest groups use violent methods to point to the fact that climate change is the most severe threat for humans and their environment – at least in their eyes. Some groups protest peacefully by marching on the streets or blocking car and air traffic with their own bodies. Other groups are more violent and sabotage the infrastructure that is crucial for individual transport. Not all these groups are local. They form Europe-wide networks and coordinate their attacks.

But sabotage attacks are also carried out by right-wing extremist groups in democratic EU countries. They directly target democratic institutions and persons. Their means include attacks on power infrastructure causing local black outs. There are bomb attacks on institutions of the public administration, police, courts, ministries as well as directly on politicians, unfortunately with fatal casualties. The ultimate goal of such group is to undermine democracy and establish an authoritarian regime.

The ideologies and means of the very extreme or even radical right- and left-wing groups cannot be reconciled it seems. However, some countries have made very positive experiences in finding solution of opposite social groups on single issues. New forms of participation and experiments further developed the set up of citizen councils, for example, to solve traffic problems in some cities, the expansion of LGBTQI rights, privacy of data, taxation of millionaires, integration of migrants, unconditional basic income, location of new power plants etc. Through complex but transparent procedures that involved a large scale of citizens representative of the individual country or region with guidance of professional facilitators acceptable solutions could be found that subsequently were implemented by policymakers and eliminated at least some issues of social confrontations. Here also, communities and countries learn from each other, coping and adjusting success models.

Despite this progress, it is hard to build bridges in order to overcome the genuine cleavages and eradicate the roots of social confrontations.

In this scenario, R&I cannot be “neutral”. It is always politicised to either one direction or the other:

1. Authoritarian governments use science and technology to control the population, for their propaganda in public debate, and to quash opposition.
2. The political divide reaches scientific institutions. Part of science goes underground; thus social divides are reflected in science.
3. Scientific mobility – outward – increases, whereas science in authoritarian countries faces repression if not aligned with the government’s course.
4. For authoritarian governments some science projects serve prestige purposes to show that the country can compete at the scientific edge with other countries and confirm the government’s ideology and policies.

In short, R&I does not stop the confrontations but reflects them.

2.3 Scenario 3: The European Fortress

In the last 35 years Europe faced a number of multiple crises. Some of them were

(i) imported,

- such as the previous war between the Russian Federation and Ukraine
- or the Covid-19 pandemic,

(ii) some were partly to blame, like

- the effects of the sub-prime crisis
- or the refugee crisis

(iii) and a few, unfortunately, were home-made, like

- the erosion of European policies by some member states,
- the social unrest caused by antisocial and conflict-laden policies by right-wing parties and
- the failure to establish an own European military defence.



Source: GettyImages

Now in 2043, Europe is turned in towards itself and has decided to adopt a defensive position. Caused by the disappointments of the last years, a cohesive basic understanding has developed in most of the European countries and their populations that Europe must go its own way and can no longer rely on United States or on a naïve approach to globalisation. The coalition with the US has ultimately led to the EU suffering significant losses in the economic war with China. The break with the U.S. was sobering, especially in the context of the American withdrawal from Ukraine after the conflict was frozen.

The nationalist narrative of right-wing parties has been replaced by a European supra-national narrative. The engineering of a "national" European identity is facilitated by the continuing threats from outside. This new "national" social populism has become a hallmark of far-right parties. On the one hand, the predominantly right-wing to centrist governments are implementing a strict almost-zero-migration regime at the EU's external borders supported by high-tech surveillance, without shying away from armed violence. Family reunification of former migrants is handled restrictively, which motivates some people emigrating again. On the other hand, the EU is facing high internal migration from southern Spain and other parts of southern Europe due to the collapse of agriculture triggered by climate change. It increasingly also faces domestic re-settlements caused by flooding of coastal areas.

In the last 20 years, there has been an increase in social fragmentation that has greatly challenged society as a whole. "Identitarians" have faced multicultural urbanites, LGBTQI+ movements confronted neo-Catholic family supporters, climate and animal activists challenged passive consumers, and so on. Although the political parties have taken sides (mostly the conservative side), no group has been able to gain real dominance. Overall, the EU remained a diverse society with local togetherness and, in some cases, tolerated coexistence with cautious self-governing structures for very heterogeneous social groupings. Even right-wing governments try to maintain nowadays an integrative polity domestically in order to keep ethnic, religious and social tensions under control. They do not shy away from using AI to monitor potential trouble spots. However, the enemy is no longer seen so much at home, but abroad, which has led to a "unit behind the flag" feeling. Of course, this also led to internal hostility

(e.g. towards Chinese and the Orthodox Church) if a connection to external enemies could be established.

To ensure public peace, many community centres and other public spaces where individuals meet and engage in dialogue have been established to improve living together. Relatively high transfer payments as well as an indexed basic income and a relatively relaxed housing market due to the reduction of external migration and the fading of the baby-boomer generation contribute to an elastic society that looks for balance and aims to absorb social confrontations at the local level.

Social democratic parties are increasingly able to commit themselves to the new European model of a self-sufficient fortress, which secures an acceptable level of equal opportunities and social justice within the borders of the EU. Social democratic parties are thus increasingly again represented in quite some of the national governments, although some of the parties had previously undergone processes of secession.

Apart from a few religious extremist and radical left and anarchist splinter groups, European identity paired with a certain degree of multi-culturalism, and social justice is seen as a value in itself by the heterogeneous European population. The soul of Europe is a frozen melting pot that wants to become highly self-sufficient economically, politically and militarily and to emancipate and separate itself from the rest of the world. Significant investments are made in military armament, technology development, and education and training programmes to promote European cultural sensitivity and European identity.

Global engagement is limited to cooperation with a number of foreign states that follow a third path between the poles USA, China and India. The few developing countries among them receive costly economic support from the EU in return for certain raw materials (including solar energy).

The European Court of Justice and the European Parliament have been upgraded in relation to national institutions. Qualified majorities are necessary for decisions. There is no longer a right of veto. Exclusion procedures are negotiated against those countries that do not participate in this Europeanisation process.

New technologies play a central role in driving this transformation to make the EU autarchic. Technological progress is focused and used to a large extent for (i) the green transition (including climate change adaptation and geo-engineering), (ii) for the substitution of raw materials (including rare earths) and labour (by increased robotics) to make the EU's economy independent from risky suppliers and competitive against wage dumping countries, and (iii) for a CO₂-neutral energy turnaround to become self-sufficient at a low price for end consumers. There are also great efforts in the field of medicine and public health. This investment in science and technology is accompanied by wide-ranging efforts and propaganda to boost people's confidence in technological progress. The implementation of radical new technologies is supported by social experiments and participation to minimize resistance to technological change.

The social sciences are understood primarily in instrumental terms and are commissioned accordingly to better understand crisis phenomena and trouble spots in order to be able to implement appropriate countermeasures. Critical social sciences, however, are being thinned out financially. Humanities are experiencing a minor renaissance due to their contribution to tourism, cultural diversity and the perceived importance of European identity.

The bulk of R&D funding, however, is invested in strategic technologies that help to make the EU as good as possible at self-sufficiency. This is based on a technocratic understanding of politics. 3d printers, cellular agriculture, and embedded AI lead the way to ensure food and production are localized and tailored for European needs.

The focus on 30 central missions, of which about two-thirds also have a technological component and half of which even depend centrally on technology breakthroughs, also changes the European and national research (funding) system. The twelfth European Research Framework Programme essentially emphasises the implementation of the technology-relevant missions, but the share of collaborative research declines sharply compared to the predecessor programmes. Two thirds of this by far largest European funding pot will go directly into research carried out by a few European research institutions. These are pan-European research institutions concentrated under European law but distributed across several European locations. They are new establishments, but not greenfield investments. They have emerged from various mergers of large national research institutions. Only companies that are predominantly European-owned can become shareholders, but the bulk of the funding (85%) comes consciously from the public sector. However, Europeans are destined of being trapped into a dilemma engaging in mission that are very costly but will never generate any profits, e.g. building one European spaceship for costs they will never recover in contrast to other nations such as China that does it for profit.

In 2043, almost 80% of Europe's youth enjoy higher education. But universities change fundamentally. They mainly become educational institutions in which research hardly plays a role anymore. Moreover, university education becomes much more flexible and is not be limited to one or two physical locations but is composed of virtual curricula from a wide range of providers.

Technologically, Europe is investing heavily in seawater desalination plants to support agricultural areas affected by climate change, but this is not a solution for landlocked countries like Northern Macedonia and Kosovo. Massive investments are also being made in wind energy, solar energy and hydrogen technologies. A preferred partnership has been negotiated with Morocco in order to secure energy needs for the next decades, even in winter, by means of sustainable solar energy supply. The recycling rate is significantly increased through improved collection systems and recycling technologies (which already start with product design). Europe becomes a global leader in renewable energy and sustainable development, with significant investments in clean energy technologies and the creation of green jobs.

However, some of these economic activities are not globally competitive and are protected by high tariffs. These are considered temporary but make it difficult to export European products because other countries also put up tariff barriers. Overall, economic activity is therefore increasingly shifting to the European single market, whose growth is supported by generous monetary policy and extensive public investment. In 2043, the European single market includes all EFTA countries, all South-Eastern European countries, as well as Ukraine.

2.4 Scenario 4: Cultural hegemony through global capitalism

Capitalist culture takes over and cohesive digital platforms

In this 2040 scenario, cultural hegemony through global capitalism has ended almost all social confrontation. A few multinational tech companies with origin in the U.S. and China have taken over the control of all social experience and systems around the globe. There is hardly any corporate competition. Instead, a handful corporate executives have established a cartel-like structure of tolerated corporate co-existence, always innovating in ways to appease and satisfy the customers. The world is run and organized by these digital amazons. Capitalist growth is the superior value that guides most parts of the world. Coherent digital platforms (like those formerly known as metaverse but now invented and regularly recreated through advanced artificial intelligence) are designed by autonomous algorithms in order to infiltrate people toward more consumption and less social protest. The platforms started from social media and online shopping and are now taking over every aspect of human life: education, e-governance, health, and finance, etc. People are highly individualised and isolated from each other except for digital communication, which weakens local community ties and divides society based on their own thoughts and values. Profiting are only the big tech companies and their shareholders because the big tech companies control the consumption activities of their consumers. New smart technologies are always surveying not only the consumers' purchases but also all other activities of their lives, thus the tech companies are always able to suggest new products that promise to make the consumers' lives easy and rosy. They anticipate the changing needs of citizens.

Since the digital platform individualises the people, each person's need is satisfied – however, only if it is beneficial for the tech companies. The processes and products are tailored, each person experiences what they need. Feminist and LGBTQ+ movement were integrated into market economy where many apps (for chatting, dating, etc.) and products aim for people with any kind of sexual orientations. Social movements have been replaced by fun and pop culture of consumption whereas legal status for sexual minorities has not improved. There are myriad virtual communities for any kind of people's preferences and orientations. However, those communities have no strong solidarities to each other. Rather they are divided through their ideologies and opinions, which is sometimes intentionally induced by misinformation to control the population. In fact, some members of communities are just chatbots, not real humans. 2nd live platforms – also controlled by the tech companies – offer an illusionary escape from the miseries of climate change and provide colourful and flashy visions of what the future could bring if we all just consumed more. Everyone is different, everyone can enjoy their individual lives; that is fine as long as it makes money.... Identity, while tailored, is also fluid, and becoming. Distinguishing between environments – physical and virtual, augmented, and traditional – is nearly impossible. Reality is no longer what it used to be. Groups live in their own imagined and created worlds.



Figure 8: Cultural hegemony through global capitalism

Source: GettyImages

European cohesion only for economic purposes

The tech companies cooperate with the governments as both are looking for driving economic growth for their own benefits. Accordingly, the political-industrial complex release misinformation to manipulate the people to align to the official policies. EU laws do not have the power to contain them, or policy makers do not have an interest to take actions. The European market is well unified primarily for economic purposes, not for political and social ones. There is a single European market, but it is mostly only for the companies not for consumers. Everything about innovation is supported by EU policies. As a result, services can be better for consumers. Labour laws are not unified but depend on national policies. Abusing those differences on national policies, immigration mediators facilitate exploitative immigration. Exploitation of illegal migrants on low-skilled labour such as agriculture generates forms of modern slavery.

Big tech companies provide all infrastructures for governance mechanisms in the EU and the MS. It is hard to tell if they are appropriate or not. In any case, opposing voices do not have any chance to be heard or spread, except through hacks. There is a tight network between policy making and the tech giants. The dependence on the industry's infrastructure has grown stronger over the years so that no independent alternatives could be developed. Low competition also leads to innovation lock-ins.

The ties between the tech giants and some populist parties have become extremely close as they cooperate to manifest their power. While the tech giants finance campaigns of these parties, they in turn, once in power, pass laws and regulations that help the tech companies to expand their business. Leader of the parties are shareholders of such companies.

Greenwashing and ignorance of the climate crisis

For the most part, the population as well as policymakers ignore the ongoing climate crisis, some even deny it. There is not much debate on it in the platform-controlled media. The economy is business as usual: striving for growth driven by competition and the craving for innovation. Not only a consequence but also a driver for this economic model is the demand for consumption. Consumption is also the quest for social acceptance, notwithstanding the ecological and social consequences.

EU policies from the 2020s to pursue digitalisation and a green economy are merely used as excuses for further production and innovation. For example, some tech companies sell several energy-intense geoengineering technologies (e.g., direct carbon capture technology) to the rich capitalists who are eager to conceal their high environmental burden ratio and create a good impression about their business for consumers and the governments. The EU and governments do not preserve or reserve green areas for CO2 capture and improvement of living quality, but rather implement costly geoengineering technologies such as solar radiation management into periphery area, burdening marginalised residence into unliveable condition.

Due to a lack of climate change mitigation, the incidents of climate crisis are punctual and in the form of singular events. But they keep coming and their effects are getting more severe every time. The effects are more dire in the global south and on the poorer part of the population. Also, in Europe, more and more regions are affected and only the well-to-do part of the society has the financial means to escape from such events in due time because they own various properties, can afford cooling systems against the increasing summer heat, can afford the rising prices of food, energy, mobility, housing, and to cope with the growing resource scarcity.

The race for resources that are getting scarce, not only rare earth, gas, or oil, but also water and arable land, is often the cause of military conflict between countries, especially in the global south. The race for ever-new innovations and profitable technologies, e.g., geoengineering leads to neo-colonialism. Military conflicts over resources accelerate, and tech companies prioritise profits rather than people.

These consequences contribute to the migration and refugee movement, to inequality and impoverishment of large shares of society.

The demographic shift has a slow but steady impact on the developments of this scenario. The aging population in the highly developed countries demands more high-tech solutions for everyday life as well as cheap care givers who often are migrants from the global south. At the same time, a growing middle-aged population from the global south expects to participate in growing wealth and economic prosperity that is (falsely) propagated in the social media of the highly developed countries.

Climate migration

The increasing climate crisis brings about more and more refugee movements, not only to Europe but in other parts of the globe as well. Even in certain areas of Europe, people have to migrate, e.g., from flooded coastal areas to the inner land or even to neighbouring countries. Even though it is not perceived in the mainstream (social) media, migration to the EU causes a lot of social confrontation, because EU inhabitants are not prepared for foreign cultures and the need of deprived people from abroad. Thus, while tailored products by corporations leads to low confrontation within Europe, there remains confrontation with migrants. The migrants are usually not compatible with the high-tech European labour market, only in the low-skilled segment can they find jobs, but these don't pay enough to ensure their participation in the mainstream economic and social life. It makes their integration difficult. Thus, this causes additional confrontation but hardly anybody notices or engages in dialogue on these and other salient issues.

Playing the nuclear card

After a long and destructive war in some countries of the global north, there was a period of a political vacuum and some thugs and spies smuggled nuclear material and sold it to some developing countries in the global south via the dark web. Some countries that perceive themselves as exploited or underprivileged, now have the possibility to develop nuclear weapons and blackmail the global north. Some countries demand more participation in the capitalist production pattern via transfer payments, while others want Western companies and institutions out of their countries and use scarce resources on their own.

The illusory peacefulness in the EU Member States is occasionally distorted by foreign (mis)information. Hacked social media channels spread the information of the division of worlds, waging distrust between different social groups that have found their niches of social identity within the various sections of the tech platforms. It is hard to tell for the average media user and consumer what information is true or not. There is worrisome information about climate change incidents in various parts of the world, about power abuse, the media elite and new technologies that can either solve all problems or cause new ones.

Religions and consumption merge together. Religious practices go online and form worldwide networks. The online networks are in part sponsored by commercials that are launched by the big tech platforms, of which some even host certain religious groups. More and more separatist religious groups are growing, some call themselves spiritual, some exist as online communities only. Though certain religious groups openly oppose others and compete for followers there are hardly any confrontational developments. Only a few serious opposition groups with religious or spiritual background with focus on nature worship originate from the global south and find followers in niches in many other parts of the world, calling into question the dominant consumption pattern that exploits the resources and people that to a large share live in the global south.

Dark web protesters

Despite the gloomy narrative of this consumerist society in the global north, the imbalance of the capitalist system creates frictions that eventually cannot be denied. One radical guerrilla group uses the dark web to protest against the monopoly of information and the politico-industrial complex by leaking secret information on corruption, some covered up information on medical scandals such as manipulation on the human genome for profit-oriented purposes. Hacker groups from the global south, wish to confront the global north with the effects of climate change and the exorbitant capitalist economy that is destroying their countries and lives. The growing inequalities caused by the systematic exploitation add new dimensions of social confrontations.

Privatised science

Science plays a role for tech companies to promote their products and justify their economic activities. The tech companies in cooperation with the public sectors fund science and innovation research in public research institutes and universities. Research and development are evaluated based on the potential benefits for the economic activities. Therefore, basic research and non-profitable science such as medicine for rare disease or climate science are underfunded. In the meantime, results from pseudo-scientific research are published in academic journals without proper peer-reviewing process. The truths and facts change continuously every time when the tech political-industrial complex publish scientific work. There is no independent research and external assessment to check validity of science.

Research and innovation policy in this world of capitalist cultural hegemony is oriented toward the consumer market, looking for new short-term products with high functionality for the consumer not withstanding any side effects in ethical, social, or environmental terms. Thus, basic research has experienced a drawback and the R&I agendas are defined by the big tech companies. Any public investments are for the most part free-rider effects. Of course, there are public R&I funds for smaller player. Once successful on the market they are bought by bigger companies. Research organisations and university research institutes get their R&I fund mostly from the corporate sector to develop user-oriented solutions that sell well on the “free” market. Data-driven research dominates, without any considerations on social implications.

3 FEEDING THE SCENARIOS INTO POLICY IMPLICATIONS

The scenarios deal with various bifurcations social confrontations might take in the future and their impact on European democracy. Some extreme pathways for R&I policymaking in the context of these scenarios have been sketched as well. The following section summarizes further implications derived from the scenarios for R&I policy in different categories. They are not meant to be recommendations but rather inspirations for further debate. In this section, four types of R&I policy implications are differentiated:

The first part raises the question how R&I policy on the macro-level can have an impact toward more equity and equality. The second part is dedicated to the notion of more democratization and participation in the process of R&I priority setting. How R&I policy could be geared towards the stimulation of more socio-ecological transformation is the focus of the third part. The fourth and final part explores future European R&I focus areas of relevance to the four scenarios.

First reflections on R&I policy implications

Can R&I policy set steps toward more equity and equality?

The context of social confrontation and the four scenarios give us the unique chance to look at R&I policy for a social equity and equality perspective. This is usually not the policy arena for R&I but since R&I policy is at the crossroads of many policy arenas, we will make an attempt to link R&I to social implications. R&I policy at the MS level is more likely to play a role here than the EC, but the EC could implement good practice examples, e.g., by taking the following measures:

- Criteria for public R&I funds

When distributing R&I funds to projects, criteria can be defined on the common good quality of the project objectives and the recipients, for example: Human dignity, solidarity and justice, environmental sustainability, transparency and co-decision-making

- Socializing the profits of publicly funded innovations

When allocating R&I funds to projects, the project plan could entail approaches how the benefits of innovation can be socialized in a fair manner, so that the taxpayer can benefit from the investments at least in a second order, e.g. as each taxpayer benefits from the public school system.

- Social innovations and the opportunity for integrating marginalized groups

Stimulating and funding social innovation is the way to integrate marginalized groups and give them a chance for their own agency and the opportunity of “Teilhabe” (participation in social and economic life). Social innovations can thus serve as means to reduce the potential for harmful social confrontations, even if they will not be totally eradicated. As BEPA put it: *“Social innovations are social in both their ends and their means. [They are] new ideas (products, services and models) that simultaneously meet social needs (more effectively than alternatives) and create new social relationships or collaborations. In other words they are innovations that are not only good for society but also enhance society’s capacity to act”*. (BEPA 2010) Thus, each research project geared toward (technological) innovation should be assessed for its potential to generate social innovations for the benefit of marginalized groups – and be prioritized for public funding if this benefit out pays the negative effects (from the perspective of society, not the individual) .

Can the process of R&I policy give more incentives for stakeholder/public participation?

- Democratizing decisions on investment (e.g., in industrial R&I, public R&I)

Not only in publicly funded research projects but especially in public research organisations as well as in private and public companies, new approaches can be charted to democratise the decision-making processes on how investments in R&I are taken and for what purpose. These can be – or maybe even have to be – individual approaches that grant more decision-making power to the employees, for example, without infringing the secrecy of strategic directions. Co-decision making on R&I investments could also be one of the criteria mentioned above for the allocation of public R&I funds.

- Tripartite decision-making processes: government, industry, social partners

At member state level, the co-decision-making process on setting research priorities can be organized in a tripartite manner: between government representatives, industry, and social partners. Based on the old corporatist model, it is crucial, however, to include more than the traditional union representatives. Instead, other groups of society need to be incorporated as well in a fair and representative manner, e.g., the younger generation.

- Institutional reform in the context of public participation and debate (corporate and political governance)

Co-decision-making processes are not yet common in the EU even though a lot of attempts are being developed and tested in smaller contexts. One way to better deal with social confrontation and use them as a resource for a more stable and resilient democracy is to learn and practice co-decision-making process from early on and in as many occasions as possible. Even though it might appear complex and cumbersome at start, it will save a lot of costs if social groups don't have to waste resources when confronting each other to have things their way. Thus, corporate companies and research organisations as well as R&I institutions including policymaking need to define strategies how a higher level of co-decision-making can be achieved, e.g. by consent-orientation.

- Experiments for new forms of governance

Beyond R&I policy making, new approaches for institutional reform in the field of policy and administration are necessary. Here the EC and some MS have already launched first attempts and projects to develop new models. However, future forms of governance, at local, regional, national, EU and international level are still a blank spot. More dialogue needs to be initiated to inspire creative solutions and mutual learning activities, across Europe and beyond. This should also entail visions of a more inclusive governance structure that grants right to people with diverse criteria, not only nationality.

What alternative approaches of R&I towards socio-ecological transformation need to be designed?

The climate crisis will be a major cause of adversity and desperation in our society in the future. It will bring about more inequity, more inequality and more social confrontation. Accordingly, containing and mitigating the effects of the climate crisis needs to be the focus of socially responsible R&I policy.

- Role of R&I in ecological transformation/degrowth

The climate effects of R&I investments need to be assessed before these assessments are made. A fundamental assumption needs to be cleared: is more growth contributing to the climate crisis or what are alternatives that move towards degrowth?

- Dealing with the (uneven) consequences of climate change

New concepts need to be developed to share and distribute the severe consequences of climate change evenly. To some degree there are already considerations to put up funds for disaster-prone regions especially in the global south that are suffering more from the climate crisis effects than the causers (who to a large degree reside in the global north). However, it would be more appropriate and comfort citizens' worries if a more systematic approach was co-developed. Especially when decisions for investments in new technologies are taken, an a-priori assessment of the short-, mid-, and long-term effect on the climate should be mandatory. Such an assessment should not only be quantitative and theoretical, but it should also take the voice of those people into account that will be affected by the consequences of such a technology along its lifecycle. One option is to install an advisory board of representative members of society to be involved in the up-front assessment, the decision on the funding, and possible mitigation strategies for the consequences.

Future European R&I focus areas of relevance to the four scenarios

The four scenarios discuss various development paths that from a normative position do not always depict a preferable future. Scenario 1 is the most positive one of the four – in our view – and it is helpful to filter the preferable developments that can be influenced by R&I policy making. But also for the other three, less preferable scenarios it is necessary to identify negative developments that could be contained by or prevented by R&I policy making. Among these issues are the following:

- Alternative forms of housing and living

For many, housing is a human right. However, the reality in Europe is much different, not the least due to a severe market failure. All governments and societies in the EU struggle with the task to provide sufficient quantity and quality of affordable housing. Even though a few good practice models exist, they don't seem to find their way into the mainstream. More research and innovation need to be done to develop alternative ways not only of housing construction (material, design, recycling, reuse etc.) but also of financing housing, and alternative ways of living (and working); further to adapt buildings to the changing requirement of people. Additionally, new hardware needs to be developed and more efficient production processes, meeting ecological requirements at the same time facing limited resources such as sand and concrete.

- New technologies and social approaches to detect troll armies and fake news

While there are already some technologies in place to detect troll armies and fake news that can harm democratic and economic processes, it is necessary to make these simpler and applicable for the average users. AI and IT experts are very knowledgeable in identifying fake news and they programme complex tools for this purpose. What is needed, however, are automatic tools that alert lay people when fake news and troll army operations appear on their IT gadgets, and education to use and interpret them. At best, detecting tools are always a step ahead or at least at the same level of development with malware producers. Though the recent Digital Services Act (DSA) aims to tackle social media problems as wide-ranging as content

regulation and the protection of users, such as misogyny, disinformation and consumer fraud, some concerns remain. One deficit is that for users it is not always transparent that their data are transferred to outside the EU and how they are processed. Actions to prevent online hate speech is not sufficiently regulated. And aside from the DSA, is the issue of educated usage of social media and the user's capability to identify fake and harmful content on the spot. Further regulations have to be developed and installed how to contain the unprecedented growth of big tech firms and their increase of power on almost all spheres of people's life.

- Socially responsible AI

Average AI tool, e.g. algorithms, reflect mainstream users and discriminate against minorities. White, male, young, urban, originating from the global north are the attributes used in the context of AI programming. They perpetuate cultural biases from the real world to the virtual world and back. To break through this wall of biases new approaches have to be developed that take the patterns of other ethnicities, cultures, genders, ages etc. into account and create a more diverse and democratic virtual world.

4 BIBLIOGRAPHY

- Amlinger, C., Nachtwey, O. (2023): Gekränkte Freiheit. Aspekte des libertären Autoritarismus. Suhrkamp: FfM
- Arabadjieva, K. (2022). The missing link between social inequalities and the European Green Deal narrative. <https://www.etui.org/news/missing-link-between-social-inequalities-and-european-green-deal-narrative>
- Arrighi, J.-S. F. , Battestini, J.-T., Coatleven, L., Hublet, F. (2022). The Scale of Trust: Local, Regional, National and European Politics in Perspective. Groupe d'études géopolitiques. <https://geopolitique.eu/en/2022/07/13/the-scale-of-trust-local-regional-national-and-european-politics-in-perspective/>
- Barrett, P., Appendino, M., Nguyen, K., de Leon Miranda, J. (2022). Measuring social unrest using media reports, *Journal of Development Economics*, Volume 158, 2022, 102924, <https://doi.org/10.1016/j.jdeveco.2022.102924>.
- Benson, T. (2023, January 20). The Small but Mighty Danger of Echo Chamber Extremism. *Wired*. <https://www.wired.com/story/media-echo-chamber-extremism/>
- BEPA (2010). [Empowering People, Driving Change, Social Innovation in the European Union](#)
- Bradford, C. (2005). Global Governance Reform for the 21st Century. OECD, 14. <https://search.oecd.org/dev/34983436.pdf>
- Brand, U. (2005). *Gegen-Hegemonie. Perspektiven Globalisierungskritischer Strategien*. Hamburg. VSA
- Brand, U. (2006). *Gegen-Hegemonie als strategische Perspektive. Ambivalenzen und Strategien der aktuellen globalen sozialen Bewegungen*. In O. Marchart, R. Weinzierl (Eds.) *Stand der Bewegung? Protest, Globalisierung, Demokratie – eine Bestandsaufnahme*. (pp 35-44). Münster: Westfälisches Dampfboot,
- Broecke, S. (2021). Artificial Intelligence and Employment: NEW EVIDENCE FROM OCCUPATIONS MOST EXPOSED TO AI. OECD. <https://www.oecd.org/future-of-work/reports-and-data/AI-Employment-brief-2021.pdf>
- Carnegie Endowment for International Peace (2023). Global Protest Tracker. <https://carnegieendowment.org/publications/interactive/protest-tracker#>
- Carothers, T., Wong, D. (2020). Misunderstanding Global Protests. Carnegie Endowment for International Peace. <https://carnegieendowment.org/2020/04/01/misunderstanding-global-protests-pub-81412>
- Chopin, T., & Macek, L. (2018). In the face of the European Union's political crisis: The vital cultural struggle over values. *Fondation Eobert Schuman / European Issue*, 479, 1–10. <https://www.robert-schuman.eu/en/doc/questions-d-europe/qe-479-en.pdf>
- Colmer, J (5 October 2021): How does climate change shape inequality, poverty and economic opportunity? In: *Economics Observatory*. <https://www.economicsobservatory.com/how-does-climate-change-shape-inequality-poverty-and-economic-opportunity>
- Dahrendorf, R. (1959). *Class and Conflict in an Industrial Society* (1st ed.). Routledge. <https://doi.org/10.4324/9781003260257>

- della Porta, D. (Ed.). (2009). *Democracy in Social Movements*. Palgrave Macmillan UK. <https://doi.org/10.1057/9780230240865>
- Demirovic, A. (2010). Die Protestbewegung und die Demokratie. In C. Hildebrandt, N. Tügel (Eds.), *Der Herbst der „Wutbürger“: Soziale Kämpfe in Zeiten der Krise*. (pp 7-12). Berlin: Rosa-Luxemburg-Stiftung.
- Dennison, J., Geddes, A. (2021). Thinking Globally about Attitudes to Immigration: Concerns about Social Conflict, Economic Competition and Cultural Threat. *The Political Quarterly* 92(3), 541-551.
- Der Spiegel. (2018, November 29). USA: Lebenserwartung sinkt - durch Drogen und Suizide. *Der Spiegel*. <https://www.spiegel.de/gesundheit/diagnose/usa-lebenserwartung-sinkt-durch-drogen-und-suizide-a-1240993.html>
- Dirth, E. (2019). Responding to Fridays for Future and the Youth Movement for Climate Justice. Research Institute for Sustainability Potsdam. <https://www.rifs-potsdam.de/en/blog/2019/09/responding-fridays-future-and-youth-movement-climate-justice>
- Dörre, K. (2022): Nach dem Corona-Schock - Übergang zu einer Gemeinwohlökonomie? In: Werneke, Frank/ Zanker, Klaus (Hrsg.): *Renaissance des Gemeinwohls? Erkenntnisse und Schlussfolgerungen aus der Pandemie*. Hamburg: VSA. pp 17–33.
- Druckman, J. N. (2022). Threats to Science: Politicization, Misinformation, and Inequalities. *The ANNALS of the American Academy of Political and Social Science*, 700(1), 8–24. <https://doi.org/10.1177/00027162221095431>
- Ebener, J. (2023). *Massenradikalisierung*. Frankfurt/Main: Suhrkamp.
- Eisinger, P.K. (1973). The conditions of protest behaviour in American cities. *American Political Science Review*. 67(1), 11-28.
- Enyedi, Z. (2020). Right-wing authoritarian innovations in Central and Eastern Europe. *East European Politics*, Vol. 36, No. 3, 363-377; doi.org/10.1080/21599165.2020.1787162.
- Eurobarometer 98 (Winter 2022-2023). <https://europa.eu/eurobarometer/surveys/detail/2872>
- European Commission. Directorate General for Regional and Urban Policy. (2022). *Cohesion in Europe towards 2050: Eighth report on economic, social and territorial cohesion*. Publications Office. <https://data.europa.eu/doi/10.2776/624081>
- European Union External Action Service. (2023). 1st EEAS Report on Foreign Information Manipulation and Interference Threats: Towards a framework for networked defence. <https://www.eeas.europa.eu/sites/default/files/documents/2023/EEAS-DataTeam-ThreatReport-2023..pdf>
- Fabel, M., Flückiger, M., Ludwig, M., Rainer, H., Waldinger, M., Wichert, S. (2022). *The Power of Youth: Political Impacts of the “Fridays for Future” Movement*. CESifo Working Papers. Munich. https://www.cesifo.org/DocDL/cesifo1_wp9742.pdf
- Finanz Wende e.V. (n.d.). Finanz Wende e.V. Retrieved May 19, 2023, from <https://www.finanzwende.de/>
- Frazer, N. (2022). *Cannibal Capitalism*. London: Verso.
- Fukuyama, F., Richman, B., & Goel, A. (2020, November 24). How to Save Democracy From Technology. *Foreign Affairs*, January/February 2021. <https://www.foreignaffairs.com/articles/usa/2020-11-24/fukuyama-how-save-democracy-technology>

- GEO PLUS MAGAZINE. (2022, January 5). Die stille Epidemie: Amerikas Drogenkrise wütet wie nie zuvor. geo.de. <https://www.geo.de/wissen/gesundheit/-amerikas-drogenkrise-wuetet-wie-nie-zuvor-31476666.html>
- Gidron, N., Adams, J., Horne, W. (2019). Toward a comparative research agenda on affective polarization in mass publics. APSA-CP Newsletter, 29 (1) (2019), pp. 30-36
- Glasius, M. (2018). "What authoritarianism is ... and is not: a practice perspective", International Affairs, 94 (3), pp. 515–533, <https://doi.org/10.1093/ia/iyy060>
- Götz-Votteler, K., Hespers, S. (2019). Sprache und die Erfassung von Wirklichkeit. In Götz-Votteler, K., Hespers, S. (2019) (Eds.), *Wie Fake News und Verschwörungstheorien funktionieren und warum sie Aktualität haben: In der Reihe X-Texte zu Kultur und Gesellschaft*. transcript Verlag. <https://doi.org/10.1515/9783839447178-008>
- Guess, A. M., & Lyons, B. A. (2020). Misinformation, disinformation, and online propaganda. Social media and democracy: The state of the field, prospects for reform, 10. https://www.opo-lisci.com/wp-content/uploads/pdf-front/Social_Media_and_Democracy.pdf#page=30
- Habermas, J. (2011). Zur Verfassung Europas. Frankfurt/Main: Suhrkamp~
- Habibov, N., Fan, L., & Auchynnikava, A. (2019). The Effects of Corruption on Satisfaction with Local and National Governments. Does Corruption 'Grease the Wheels'? Europe-Asia Studies, 71(5), 736–752. <https://doi.org/10.1080/09668136.2018.1562044>
- Inayatullah S. (1999). Ageing Futures. The ABN Report. 7(8), pp. 6-10.
- Inayatullah, S. (2015). What Works: Case Studies in the Practice of Foresight. Tamkang University.
- [Inayatullah, S. \(2016\) Youth Bulge, Journal of Futures Studies. 21\(2\), pp. 21-34](#)
- [Inayatullah, S. \(2022\).](#) Scenarios for Teaching and Training: From Being "Kodaked" to Futures Literacy and Futures-Proofing. CSPA Journal. 8, pp. 31-48.
- Jera, E. (2014). Freedom of Religion and Social Conflict. Academic Journal of Interdisciplinary Studies, 3(3), 553-555. Retrieved from <https://www.richtmann.org/journal/index.php/ajis/article/view/3835>
- Kaiser, S. (2020) Hass gegen Frauen: Rechtsextrem und Sexist. Die Zeit online. https://www.zeit.de/politik/deutschland/2020-02/hass-frauen-rechtsterrorismus-motive-taeter-hanau-feminismus?utm_referrer=http%3A%2F%2Fwww.freistilberlin.de%2F
- Kaiser, S. (2020). *Politische Männlichkeit. Wie Incels, Fundamentalisten und Autoritäre für das Patriarchat mobilmachen*. Frankfurt/Main: edition suhrkamp 2765
- Keil, J.-G. (2022). Verschwörungserzählungen aus Sicht der Kriminalpsychologie und ihre besondere Rolle im Milieu von „Reichsbürgern“, „Impfgegnern“ und „QAnon-Anhängern“. In Lüttig, F. Lehmann, J. Verschwörungstheorien , pp. 13 – 50. Nomos: Baden-Baden.
- Kirby, J. (2018). "What to know about the Russian troll factory listed in Müller's indictment", Vox, 16 February 2018. Available at <https://www.vox.com/2018/2/16/17020974/mueller-indictment-internet-research-agency>
- Kitschelt, H. (1999). Politische Gelegenheitsstrukturen in Theorien sozialer Bewegungen heute. In A. Klein, H.J. Legrand, T.L. (Eds.), *Neue soziale Bewegungen. Impulse, Bilanzen und Perspektiven*. (pp. 144-63.). Wiesbaden: Springer VS.

- Kleinfeld, R. (2022= The Rise in Political Violence in the United States and Damage to Our Democracy. Carnegie Endowment for International Peace. Testimony before the Select Committee to Investigate the January 6th Attack on the United States Capitol. March 31, 2022. <https://carnegieendowment.org/files/2022-Rachel%20Kleinfeld%20Jan%206%20Committee%20Testimony.pdf>
- Kolb, M. (2016, January 25). Drogentote in USA: Weiß, männlich und immer jünger. Süddeutsche.de. <https://www.sueddeutsche.de/politik/thema-im-us-wahlkampf-drogentote-in-den-usa-weiss-maennlich-und-immer-juenger-1.2829860>
- Laclau, E., Mouffe, C. (2006). *Hegemonie und radikale Demokratie: Zur Dekonstruktion des Marxismus*. Wien: Pasagen Verlag.
- Malleson, T. (2023) *Against Inequality: The Practical and Ethical Case for Abolishing the Superrich*. Oxford University Press
- Marston, C., Renedo, A., & Miles, S. (2020). Community participation is crucial in a pandemic. *The Lancet*, 395(10238), 1676–1678. [https://doi.org/10.1016/S0140-6736\(20\)31054-0](https://doi.org/10.1016/S0140-6736(20)31054-0)
- Marx, K., Engels, F. (1848): *Das kommunistische Manifest*. In *Karl Marx, Friedrich Engels Werke*. Dietz Verlag Berlin 1977, pp. 461- 493.
- McCarthy, J.D., Zald, M.N. (1977). Resource mobilization and social movements: A partial theory. *American Journal for Sociology*. 82 (6), 1212-1241.
- Molitor, G. (2003). Molitor Forecasting Model. *Journal of Futures Studies*. 8(1), pp. 61-72.
- Moustakis, F. (2004). Soft security threats in the new Europe: the case of the Balkan region. *European security*, 13(1-2), 139-156.
- Müller, J.-W. (2020). *Was ist Populismus?* Frankfurt/Main: Suhrkamp
- Oberschall, A. (1978). Theories of Social Conflict. *Annual Review of Sociology*. 4, 291-315.
- Olsen, M.E. (1989). Strategies for Changing Society. *Journal of Applied Sociology*. 6, 1-12.
- Piketty, T. (2022). *A Brief History of Equality*. Harvard University Press.
- Prainsack, B., Buyx, A. (2022). *Das Solidaritätsprinzip. Ein Plädoyer für eine Renaissance in Medizin und Bioethik*. Frankfurt/Main. Campus
- Pybus, K., Power, M., Pickett, K. E., Wilkinson, R. (2022). Income inequality, status consumption and status anxiety: An exploratory review of implications for sustainability and directions for future research. *Social Sciences & Humanities* 6 (1), 100353, <https://doi.org/10.1016/j.ssaho.2022.100353>
- Reiljan, A. (2020). ‘Fear and loathing across party lines’ (also) in Europe: affective polarisation in European party systems. *Eur. J. Polit. Res.*, 59 (2) (2020), pp. 376-396
- Reinhard C. Heinisch, Christina Holtz-Bacha, Oscar Mazzoleni (eds.) (2017), *Political Populism. A Handbook*, Editors: Frankfurt-am-Mein, Ed. Nomos, <https://www.nomos-library.de/10.5771/9783845271491/political-populism?page=1>
- Rucht, D. (1994). *Modernisierung und neue soziale Bewegungen. Deutschland, Frankreich und USA im Vergleich*. Frankfurt/Main/New York: Campus Verlag.

- Schiermeier, Q., Atkinson, K., Mega, E.R., Padma T.V., Stoye, E., Tollefson, J., Witze, A. (2019). Scientists worldwide join strikes for climate change. *Nature*. 573(7775), 472-473. doi: 10.1038/d41586-019-02791-2. PMID: 31551548.
- Snow, D.A., Rochford, B.E. Jr., Worden, S.K, Benford, R.D. (1986). Frame alignment processes, micro-mobilization and movement participation. *American Sociological Review*. 51, 464-481.
- Standard Eurobarometer(2022-2023), 98 - Winter. <https://europa.eu/eurobarometer/surveys/detail/2872>
- Tarrow, S. et.al., (1998). *Power in movement. Social movements and contentious politics*. Cambridge University Press.
- The National Intelligence Council. (2021). Global Trends 2040, <https://www.dni.gov/index.php/gt2040-home/gt2040-media-and-downloads>, ISBN 978-1-929667-33-8
- Törnberg, P. (2022). How digital media drive affective polarization through partisan sorting. *PNAS* 2022 Vol. 119, No. 42, e2207159119. Pp1-11. <https://doi.org/10.1073/pnas.220715911>
- Traverso, M. (2021). Measuring magnetism: How social media creates echo chambers. *Nature Italy*. <https://doi.org/10.1038/d43978-021-00019-4> (<https://www.nature.com/articles/d43978-021-00019-4>)
- Twenge, J. M. (2010). *The Narcissism Epidemic: Living in the Age of Entitlement*. New York: Atria paperback.
- V-Dem Institute (2023). *Democracy Report 2023. Defiance in the Face of Autocratization*. University of Gothenburg. https://www.v-dem.net/documents/29/V-dem_democracyreport2023_low-res.pdf
- Vey, J. (2017). Wie "Gesellschaft von unten" denken? Konstituierungsprozesse zivilgesellschaftlicher AkteurInnen in postmodernen Zeiten. In Stephan Lessenich (Eds.) *Geschlossene Gesellschaften – 38: Kongress der Deutschen Gesellschaft für Soziologie in Bamberg 2016*.
- Vike, K. et al., (2023). Migration in the Context of Climate Foreign Policy. DGAP Policy Brief. 5 April 2023. <https://dgap.org/en/research/publications/migration-context-climate-foreign-policy>
- Walby, S. (2013). Violence and society: Introduction to an emerging field of sociology. *Current Sociology*, 61(2), 95–111. <https://doi.org/10.1177/0011392112456478>
- Wang, M. (2021, April 8). China's Techno-Authoritarianism Has Gone Global. *Foreign Affairs*. <https://www.foreignaffairs.com/articles/china/2021-04-08/chinas-techno-authoritarianism-has-gone-global>
- Wagner, M. (2020). Affective Polarization in Multiparty Systems. *Electoral Studies*. 2021, 69. Jg., S. 102199.
- Wilk, R. (2009). Consuming ourselves to death. In S. Crate (ed.), *Anthropology and climate change: from encounters to actions* (pp. 265–76). Durham, NC: Duke University Press.
- Wilkinson, R., Pickett, K. (2009) *The Spirit Level: Why Equality is Better for Everyone*. Penguin
- Wilkinson, R., Pickett, K. (2019) *The Inner Level: How More Equal Societies Reduce Stress, Restore Sanity and Improve Everyone's Well-being*. Penguin

World Economic Forum. (2021). Global Risks Report. https://www3.weforum.org/docs/WEF_The_Global_Risks_Report_2021.pdf

ANNEX I

METHODOLOGICAL NOTE

The Expert Process

Within this FoD project, a small expert team was formed. The members were known for both their foresight expertise and thematic expertise. Some experts were part of the FoD consortium, some were external scholars.

The first step for the expert group was to identify from rapid exploration paper and other sources further factors to demarcate the topic. Through this horizon scanning some 30 factors with relevance to the future development of social confrontations were identified. A catchy title, a short paragraph and selected references were prepared on each factor. The STEEPV categorisation was used for clustering the factors and to make sure that each category is served.

Subsequently, the factor collection was fed into a background paper for a first workshop, presenting the factors and the scenario structure for four scenarios. This workshop and a second one were used to connect and adjust the factors to each scenario through discussion with the participants. External participants were also taking part. Accordingly, the expert team developed four scenario narrative drafts which were presented in the HEFN steering meeting for further refinement and first implications for R&I policy. Subsequently, the scenarios were explored further and as an input for the first dissemination event of the project. This event should also serve to collect more inputs for R&I policy implications that should then be finalized in the last version of the Policy Brief.

COLLECTION OF FACTORS

The horizon scanning aims to collect relevant data about trends in the landscape. By scoping of the search field based on preliminary subject-related desk research, one can define keywords and the most relevant sources for horizon scanning. Horizon scanning can combine qualitative and quantitative methods to collect and synthesize data of existing knowledge (e.g., from other Foresight on Demand projects) about relevant mega-trends and long-term trends and their drivers, as well as weak signals and wild cards. The following list of factors is tentative and represents general trends that are expected to have significant influence on the further development of social confrontations.

Table for collecting factors of change

Social

Title (self-explanatory neutral topic, no future projections)	Description including possible future projections	References (hyperlinks/ literature)
Inequality	<p>Economic difference and the narrative that well-to-do people have to defend their wealth and live at the expense of the poorer classes has waged conflict throughout human history. KSCH: Although it is increasingly becoming a consensus that economic growth is no longer the solution to social inequalities but is increasingly coming to be an amplifier of social inequalities, the ruling capitalist class will try to kidnap politics even more shamelessly than before, which will lead to doubts about the capacity for democracy. Small local but violent uprisings will follow. Populist regimes will exploit anti-establishment sentiment. New "communist" parties will re-enter national parliaments.</p>	<p>Arabadjieva, K. (2022). The missing link between social inequalities and the European Green Deal narrative. https://www.etui.org/news/missing-link-between-social-inequalities-and-european-green-deal-narrative</p> <p>Piketty, T. (2022). A Brief History of Equality . Harvard University Press</p> <p>Malleson, T. (2023) Against Inequality: The Practical and Ethical Case for Abolishing the Superrich. Oxford University Press</p> <p>Finanz Wende e.V. (n.d.). Finanz Wende e.V. Retrieved May 19, 2023, from https://www.finanzwende.de/</p>
Migration	<p>People migrating to different regions, countries causes conflicts for resources, cultural and ethnic identity.</p> <p>KSCH: Due to enormous, albeit initially rather small-scale, climate disasters, large migration flows will be set in motion, mainly affecting migration to the southern edge of the Mediterranean and Turkey. This will require a Green Deal with the Mediterranean countries in the form of massive investments in agricultural infrastructure through efficient desalination plants, irrigation systems and reforestation.</p> <p>Moreover, the further desertification of large areas of land in southern Spain, Turkey and Sicily will lead to massive internal migration.</p>	<p>Dennison, J., Geddes, A. (2021). Thinking Globally about Attitudes to Immigration: Concerns about Social Conflict, Economic Competition and Cultural Threat. The Political Quarterly 92(3), 541-551.</p> <p>Vike, K. et al., (2023). Migration in the Context of Climate Foreign Policy. DGAP Policy Brief. 5 April 2023. https://dgap.org/en/research/publications/migration-context-climate-foreign-policy</p>
Isolation/ individualisation	<p>Long before COVID19 have we witnessed an increasing singularisation of the European society. Crisis situations make psychological consequences obvious and people more prone to digital addiction and precarious group identities</p> <p>KSCH: But there will also be contrary perceptions due to increased digitalisation. These include holograms and second reality virtual worlds that simulate a normal social life in the digital realm with many "players" interacting with each other. Through neuronal networking, sensory impressions in the virtual world will be increasingly perceived as "true". Many people will voluntarily migrate to these virtual worlds because they can live a more social and less isolated life there, which also distracts from the dreary real life conditions.</p>	<p>Kolb, M. (2016, January 25). Drogen-tote in USA: Weiß, männlich und immer jünger. Süddeutsche.de. https://www.sueddeutsche.de/politik/thema-im-us-wahlkampf-drogen-tote-in-den-usa-weiss-maennlich-und-immer-juenger-1.2829860</p> <p>GEO PLUS MAGAZINE. (2022, January 5). Die stille Epidemie: Amerikas Drogenkrise wütet wie nie zuvor. geo.de. https://www.geo.de/wissen/gesundheit/-amerikas-drogenkrise-wuetet-wie-nie-zuvor-31476666.html</p>

	In addition, drug use among young people, especially young men, will become so widespread that there will be massive generational cuts (including 25+NEETs). The first dramatic signs are already visible in the USA.	Der Spiegel. (2018, November 29). USA: Lebenserwartung sinkt - durch Drogen und Suizide. Der Spiegel. https://www.spiegel.de/gesundheit/diagnose/usa-lebenserwartung-sinkt-durch-drogen-und-suizide-a-1240993.html
Pandemics	Economic and other differences between social groups are made obvious and are amplified through pandemics. As the COVID19 crisis has shown, new coalitions are formed between some very radical and some less radical groups. The COVID-19 pandemic and its economic fallout have exacerbated existing social and economic inequalities, leading to increased social tensions and protests. They were echoed in several new as well as established radical political parties.	World Economic Forum (2021) Global Risks Report. https://www.weforum.org/reports/the-global-risks-report-2021/
demographic shifts	Slowing global population growth and rising median age will help some developing economies. But rapidly aging and contracting populations will weigh on many developed economies. It will be difficult to keep the progress in education, health and poverty reduction.	The National Intelligence Council (2021) Global Trends 2040, https://www.dni.gov/index.php/gt2040-home/gt2040-media-and-downloads , ISBN 978-1-929667-33-8
weak community life	The lack of a network in civil communities is a deficit when it comes to compensate for crisis situation. Especially when governmental authorities are overburdened with certain developments it is important for civil society to rely on strong community structures and build on social innovations to help people that are marginalized or to prevent cleavages in society.	Marston, C., Renedo, A., & Miles, S. (2020). Community participation is crucial in a pandemic. The Lancet, 395(10238), 1676–1678. https://doi.org/10.1016/S0140-6736(20)31054-0
higher rates of violence	Notwithstanding empirical crime rates, security is always a subjective perception. Dominant narratives of violence and crime cause feelings of uneasiness and insecurity in civil society and hamper public life, often also economic development. If counter measures by public authorities are not successful, the rate of weaponisation within civil society is likely to rise and/or some social groups are organizing themselves to take the law into their own hands, leading to a vicious spiral of crime and violence.	Walby, S. (2013). Violence and society: Introduction to an emerging field of sociology. Current Sociology, 61(2), 95–111. https://doi.org/10.1177/0011392112456478

Technological & science-related

Title (self-explanatory neutral topic, no future projections)	Description including possible future projections	References (hyperlinks/ literature)
(Digital) technologies /Impact of social media in public debate	Social media echo chambers often increase societal polarisation when algorithms and user preferences lead to echo chambers of like-minded people. Alternatively, social media platforms could offer means to learn from alternative and opposing viewpoints. KSCH: AI will deepen and expand existing echo chambers - including through fake news that makes prevailing conspiracy myths seem more credible. This leads to profound uncertainty and further fragmentation of society. Among other things, it will also lead to a splitting off of people who would like to live as far as possible without digitization.	Benson, T. (2023, January 20). The Small but Mighty Danger of Echo Chamber Extremism. Wired. https://www.wired.com/story/media-echo-chamber-extremism/ Traverso, M. (2021). Measuring magnetism: How social media creates echo chambers. Nature Italy. https://doi.org/10.1038/d43978-021-00019-4 (https://www.nature.com/articles/d43978-021-00019-4)

		<p>Fukuyama, F., Richman, B., & Goel, A. (2020, November 24). How to Save Democracy From Technology. Foreign Affairs, January/February 2021. https://www.foreignaffairs.com/articles/usa/2020-11-24/fukuyama-how-save-democracy-technology</p> <p>Jan-Werner Müller (2020) Was ist Populismus? Frankfurt/Main: Suhrkamp</p>
Science	<p>The role of science and its “objectivity” have been contested in the past years in the context of climate change and the COVID19 pandemic.</p> <p>KSCH: Science in some key areas will be characterized by institutional mergers and institutional funding. Because these institutional grants will consume enormous amounts of money, project grants will become less important. This will lead to massive institutional inefficiencies but also to the development of new key technologies in the field of energetics, synthetic materials, geoengineering, digital optimization of subsystems (agriculture, transport). SSH are further instrumentalized. Their enlightening role further downgraded. Moreover, in key technologies that are of high commercial interest (especially AI), the share of private "dark" science will continue to increase, further outpacing publicly funded science in these areas.</p>	<p>Druckman, J. N. (2022). Threats to Science: Politicization, Misinformation, and Inequalities. The ANNALS of the American Academy of Political and Social Science, 700(1), 8–24. https://doi.org/10.1177/00027162221095431</p>
Digital technologies to control populations	<p>In government hands these technologies can be used to control opposition groups and anybody whom the government distrusts. But also private groups, internal and from foreign countries as well as from the industry sector can spy on people in order to control their moves and thoughts and to manipulate them and stir people against each other.</p>	<p>Wang, M. (2021, April 8). China’s Techno-Authoritarianism Has Gone Global. Foreign Affairs. https://www.foreignaffairs.com/articles/china/2021-04-08/chinas-techno-authoritarianism-has-gone-global</p>
New technologies like AI, automation	<p>Causing unemployment, new job opportunities, demand for new qualifications</p>	<p>Broecke, S. (2021). Artificial Intelligence and Employment: NEW EVIDENCE FROM OCCUPATIONS MOST EXPOSED TO AI. OECD. https://www.oecd.org/future-of-work/reports-and-data/AI-Employment-brief-2021.pdf</p>

Economic

Title (self-explanatory neutral topic, no future projections)	Description including possible future projections	References (hyperlinks/ literature)
Financial crises	Financial crises usually increase inequality and worsen the current social and economic disparities. Often, civil society has the impression that governmental intervention is more motivated by supporting the stumbling financial institutions and not the people who suffer from the impacts. In the end the tax payer has to pay for the financial stability measures. This is hard to communicate to the public in a time where a very small percentage of wealthy people are even getting richer where as the rest is not improving or at least not significantly.	World Economic Forum (2021) <i>Global Risks Report</i>
resource scarcity	KSCH: Enormous advances in technology will mean that key rare earths and materials can be replaced by synthetic products, but this will require enormous energy consumption, risky infrastructures, and the use of alternative resources (which are also only finitely	The National Intelligence Council. (2021). Global Trends 2040, https://www.dni.gov/index.php/gt2040-home/gt2040-media-and-downloads , ISBN 978-1-929667-33-8

Environmental

Title (self-explanatory neutral topic, no future projections)	Description including possible future projections	References (hyperlinks/ literature)
Climate change	The burden will be unevenly distributed, heightening competition, contributing to instability, straining military readiness, and encourage political movements. The effects put a lot of burden to socially deprived groups more than on others. This leads to conflict not only between groups of different equity, also between generations, ethnicities, etc.	Wilk, R. (2009). Consuming ourselves to death. In S. Crate (ed.), <i>Anthropology and climate change: from encounters to actions</i> (pp. 265–76). Durham, NC: Duke University Press. Pybus, K., Power, M., Pickett, K. E., Wilkinson, R. (2022). Income inequality, status consumption and status anxiety: An exploratory review of implications for sustainability and directions for future research. <i>Social Sciences & Humanities</i> 6 (1), 100353, https://doi.org/10.1016/j.ssaho.2022.100353 Schiermeier, Q., Atkinson, K., Mega, E.R., Padma T.V., Stoye, E., Tollefson, J., Witze, A. (2019). Scientists worldwide join strikes for climate change. <i>Nature</i> . 573(7775), 472-473. doi: 10.1038/d41586-019-02791-2. PMID: 31551548.
The carbon challenge	Finding solutions for the climate crises and energy source that make carbon usage superfluous is one of the big challenges for policy making and the economy. At the same time the necessary policy measures have to take care to make the transformation acceptable for civil society, especially for marginalized groups. Rising cost of energy hit poor people the hardest. They might thus exert resistance to go with the transformative approaches.	Jonathan Colmer: How does climate change shape inequality, poverty and economic opportunity? In: Economics Observatory, 5 Oct 2021. https://www.economicsobservatory.com/how-does-climate-change-shape-inequality-poverty-and-economic-opportunity

Political

Title (self-explanatory neutral topic, no future projections)	Description including possible future projections	References (hyperlinks/ literature)
Military conflicts	A direct threat to human security and a major challenge to the very existing of the European Union, a confederation of states based on pacifism and welfare.	Moustakis, F. (2004). Soft security threats in the new Europe: the case of the Balkan region. <i>European security</i> , 13(1-2), 139-156.
Feminism	The progress of the feminist movement and increasing independent life-style of women (as well as the LGBTQ community) makes some (hetero) male feel endangered in their historically rooted power positions and may cause aggressive sentiments against individual women or women in general (or LGBTQ members), physically, psychologically, online	Kaiser, S. (2020) Hass gegen Frauen: Rechtsextrem und Sexist. <i>Die Zeit online</i> . https://www.zeit.de/politik/deutschland/2020-02/hass-frauen-rechtsterrorismus-motive-taeter-hanau-feminismus?utm_referrer=http%3A%2F%2Fwww.freistilberlin.de%2F
Governance structures / democratization	The spreading of authoritarianism and of authoritarian practices among semi-consolidated democracies.	Glasius, M. (2018). "What authoritarianism is ... and is not: a practice perspective", <i>International Affairs</i> , 94 (3), pp. 515–533, https://doi.org/10.1093/ia/iyy060 Enyedi, Z. (2020). Right-wing authoritarian innovations in Central and Eastern Europe. <i>East European Politics</i> , Vol. 36, No. 3, 363-377; doi.org/10.1080/21599165.2020.1787162
European cohesion	Some groups in EU MS use incidents like Covid 19 or EU wide regulations to contest their membership, often motivated by populist considerations KSCH: In 2040, there will be several lengthy lawsuits against EU member states that could only be resolved by kicking them out of the EU. However, most states are not prepared to do this. On the contrary, the accused states, which are characterized primarily by nationalistic and populist policies or are on the brink of economic collapse, will fight for a massive reorganization of EU law in order to push through their concerns. This will lead to a weakening of the EU and its erosion. As a result, the EU will split into several diadochal communities of states.	European Commission. Directorate General for Regional and Urban Policy. (2022). <i>Cohesion in Europe towards 2050: Eighth report on economic, social and territorial cohesion</i> . Publications Office. https://data.europa.eu/doi/10.2776/624081
Foreign Information Manipulation and Interference	FIMI is a key global threat post to democracies by foreign states or other actors to take a negative impact on values, procedures and political processes, often through manipulative IT/social media devices and in combination with other hybrid activities. Often, proxies are used in the country under attack.	European Union External Action Service. (2023). 1st EEAS Report on Foreign Information Manipulation and Interference Threats: Towards a framework for networked defence. https://www.eeas.europa.eu/sites/default/files/documents/2023/EEAS-DataTeam-ThreatReport-2023..pdf

Disequilibrium and mismatch of governance structures	Future challenges might overwhelm existing governance and administrative structure to react in due time in order to manage (multi-) crisis situations. Thus people/groups establish their own substitute structures which could undermine governmental authority, also when it comes to weapons sovereignty. This could bring armed conflicts or even civil-war-like developments to the fore. A more peaceful scenario would be a patchwork society where different group live next to each other but with little interaction	Bradford, C. (2005). Global Governance Reform for the 21st Century. OECD, 14. https://search.oecd.org/dev/34983436.pdf
Growing competition between China and US	The US and China will have great influence on global dynamics, supporting competing visions if the international system and governance that reflect their core interest and ideologies. This rivalry will affect most domains, existing alliances, international organizations but also the race for resources, for expanding technological knowledge, for more power over information, military, economy as well as for more soft cultural power.	The National Intelligence Council (2021) Global Trends 2040, https://www.dni.gov/index.php/gt2040-home/gt2040-media-and-downloads , ISBN 978-1-929667-33-8
More corruption	Increasing corruption especially with in government and administrative structures are causing distrust within civil society and are undermining the rule of law.	Habibov, N., Fan, L., & Auchynnikava, A. (2019). The Effects of Corruption on Satisfaction with Local and National Governments. Does Corruption 'Grease the Wheels'? <i>Europe-Asia Studies</i> , 71(5), 736–752. https://doi.org/10.1080/09668136.2018.1562044
Disinformation	The effects of mass disinformation practiced by non-European powers and illiberal actors in Europe eroding democratic resilience	Guess, A. M., & Lyons, B. A. (2020). Misinformation, disinformation, and online propaganda. <i>Social media and democracy: The state of the field, prospects for reform</i> , 10. https://www.opolisci.com/wp-content/uploads/pdf-front/Social_Media_and_Democracy.pdf#page=30
Populism and Euro-scepticism	The development of populist and other radical platforms fighting against the EU supra-national competences and more generally against Europeanization	Reinhard C. Heinisch, Christina Holtz-Bacha, Oscar Mazzoleni (eds.), <i>Political Populism. A Handbook</i> , Editors: Frankfurt-am-Mein, Ed. Nomos, 2017 https://www.nomos-elibrary.de/10.5771/9783845271491/political-populism?page=1

Value-related

Title (self-explanatory neutral topic, no future projections)	Description including possible future projections	References (hyperlinks/ literature)
Religion	Freedom of religion is guaranteed in European constitutions but not all religious communities comply to civil rights. There might be potential for a conflict that some religious groups are manipulating their member (especially young ones) and thus undermining rule of law and civil right. Some religious leaders start exerting their power on several spheres of society	Jera, E. (2014). Freedom of Religion and Social Conflict. <i>Academic Journal of Interdisciplinary Studies</i> , 3(3), 553-555. Retrieved from https://www.richtmann.org/journal/index.php/ajis/article/view/3835

	<p>(education, culture) and they even influence the political class, democratic elections, and law making. On the other hand, some governments like to survey religious groups because they are afraid of radicalisation and thus infringe privacy rights.</p>	
<p>A struggle for a supremacy of values.</p>	<p>Will the future see more fractioning of society into polarized groups that confront each other or will a common consensus unite civil society (at least in Europe) in sharing the same values and promote European cohesion?</p> <p>KSCH: The delay of important sustainability policies, including those related to climate catastrophe, biodiversity loss and increased animal welfare awareness, by populist and conservative parties that serve farmers and the food sector as their core clientele, among others, is giving rise to new social movements that will make such sustainability issues a matter of survival. This will lead to the emergence of new political parties or strengthen the existing green parties. However, some of these new movements will also radicalise and become involved in militant or clandestine operations against governments - in the USA also with firearms, and will encounter an equally radicalised counter-movement of property preservationist and reactionary groups that will not shy away from firearms either. This clash of values will also exacerbate intergenerational fault lines. Counter-movements to this will be supported by right-wing and populist as well as moderate parties. Distinct countercultures will establish themselves on both sides, which will fight for influence and the distribution of resources.</p>	<p>Chopin, T., & Macek, L. (2018). In the face of the European Union's political crisis: The vital cultural struggle over values. Fondation Eobert Schuman / European Issue, 479, 1–10. https://www.robert-schuman.eu/en/doc/questions-d-europe/qe-479-en.pdf</p>



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