



European
Commission

#EthicsGroup_EU

Values for the Future:

The Role of Ethics
in European and
Global Governance

European Group
on Ethics in Science and
New Technologies



Research and
Innovation

European Group on Ethics in Science and New Technologies Values for the Future: The Role of Ethics in European and Global Governance

European Commission
Directorate-General for Research and Innovation
Unit 03

Contact Jim DRATWA
Email EC-ETHICS-GROUP@ec.europa.eu
RTD-PUBLICATIONS@ec.europa.eu

European Commission
B-1049 Brussels

Manuscript completed in May 2021.

The European Commission is not liable for any consequence stemming from the reuse of this publication.

The contents of this opinion are the sole responsibility of the European Group on Ethics in Science and New Technologies (EGE). The views expressed in this document reflect the collective view of the EGE and may not in any circumstances be regarded as stating an official position of the European Commission.

This is an EGE Statement, adopted by the members of the EGE: Emmanuel Agius, Anne Cambon-Thomsen, Ana Sofia Carvalho, Eugenijus Gefenas, Julian Kinderlerer, Andreas Kurtz, Herman Nys (Vice-Chair), Siobhán O'Sullivan (Vice-Chair), Laura Palazzani, Barbara Prainsack, Carlos Maria Romeo Casabona, Nils-Eric Sahlin, Jeroen van den Hoven, Christiane Woopen (Chair). Rapporteur: Jeroen van den Hoven.

More information on the European Union is available on the internet (<http://europa.eu>).

PDF	ISBN 978-92-76-37870-9	doi:10.2777/595827	KI-08-21-136-EN-N
-----	------------------------	--------------------	-------------------

Luxembourg: Publications Office of the European Union, 2021

© European Union, 2021



The reuse policy of European Commission documents is implemented based on Commission Decision 2011/833/EU of 12 December 2011 on the reuse of Commission documents (OJ L 330, 14.12.2011, p. 39). Except otherwise noted, the reuse of this document is authorised under a Creative Commons Attribution 4.0 International (CC-BY 4.0) licence (<https://creativecommons.org/licenses/by/4.0/>). This means that reuse is allowed provided appropriate credit is given and any changes are indicated.

For any use or reproduction of elements that are not owned by the European Union, permission may need to be sought directly from the respective rightholders. The European Union does not own the copyright in relation to the following elements:

Image credits:

Cover: ©mozart3737, #23704830, 2021. Source: stock.adobe.com

EUROPEAN COMMISSION

*European Group on Ethics
in Science and New Technologies*

Values for the Future: The Role of Ethics in European and Global Governance

Brussels, May 2021

1 ETHICS, FUNDAMENTAL RIGHTS, THE RULE OF LAW AND DEMOCRACY

The last decades have come with considerable challenges for the world and Europe. They are of a various nature, ranging from climate change to the COVID-19 pandemic. Particularly noteworthy are recent trends of democratic backsliding, authoritarian shifts and populist sways, exacerbated by problematic use of social media, which can be observed around the globe, even at the heart of some of the most ambitious projects of cooperation, solidarity and liberty, such as Europe.

Fundamental rights, democracy, the rule of law, ethics and values are the foundations and linchpin of the European project, as well as of the notion of an international order that is not premised on grave inequalities and exploitation. They provide legitimacy to the solutions that Europe and the world develop for the problems they face. **Yet, at this key juncture, respect for human rights, fundamental values and democratic principles is at risk, even at the heart of the European project itself.** As President von der Leyen has remarked and is summarised in her work programme, “Upholding a strong and vibrant democracy in Europe is a question of legitimacy and trust. Democracy is a core value of our Union, together with fundamental rights and the rule of law. However, European democracy faces multiple challenges, both from outside and from within.”¹

Ethics cannot be disentangled from fundamental rights, democracy and the rule of law. The values that a society holds dear reflect what is considered good and desirable within that society. Values designate and shape the purpose behind our actions. As a global community, we have been working towards harmonising sets of values. This has also resulted in the collective international development and adoption of human rights conventions after the tragedies of the last century. The laws of a society originate in its ethics, turning some of the manifold societal norms into institutionally enforceable rules on the basis of democratic agreements.

Values are baked into everything. This implies that one can neither act, govern, manage and administrate, nor innovate, design and intervene without them. No narrative evolves, no decisions are taken, no advice is given, no technologies are developed without values shaping them,

¹ Commission Work Programme 2020: A Union that strives for more, p. 8

whether consciously or unconsciously, explicitly or implicitly. Consciously integrating values into policy making, policy advice and innovation means to always be prepared and capable to articulate, critically discuss and specify one's value perspective. **Values and ethics are no limit or obstacle to innovation and change; they are the gist of innovation and change. They represent the compass indicating what responsible, inclusive and sustainable ways of future-making are.** In fact, all policy making and governance, local and global, is about efforts to find shared guiding values, deliberate and come to a common ground.

Values are not for one small group to decide in everyone else's stead. **There is no authoritative interpretation of values. Instead they are the outcome of dynamic debate and lived practice.** Structures and mechanisms should be in place to ensure that the negotiation of values and collective goals is mediated through inclusive processes of democratic deliberation, with the participation of all in the collective making of the future we would like to see unfold. **Wide deliberation regarding in what world we want to live together and we want to create for future generations is key.** Collective responsibility goes hand in hand with societal dialogue, also – and particularly – across social, economic, cultural and ideological divides.

In this vein and against the background of preventing a value crisis and democratic backsliding, the European Commission has taken up the challenge of declaring **a new push for democracy** as one of its priorities, adopting its new EU Action Plan on Human Rights and Democracy and the European Democracy Action Plan and launching a landmark Conference on the Future of Europe. With this in mind, and in the context of complex geopolitics of ethics and global governance, the European Group on Ethics (EGE) has formulated this Statement on the role of values and ethics in human societies at this critical juncture.

2 TOWARDS A DEMOCRATIC NOTION OF ETHICS

This Statement discusses the state and future of ethics for public policy in Europe and the world, for a century that will see major complex challenges and many new scientific and technological breakthroughs with significant consequences for the lives and wellbeing of individual citizens and groups, and in some cases, with existential risks for humankind, eco-systems and the planet. **Scientific progress and technological innovation impact every aspect of our lives and ethics and values are at the heart of**

shaping our world through innovations. Europe will have to deal responsibly with changes in the 21st century which will raise fundamental issues regarding sustainability, human and planetary wellbeing, human dignity and autonomy, solidarity, social and global justice and equality, safety, privacy and individual responsibility. In doing so it cannot afford to forgo the benefits that innovation – in its broadest, social meaning – may bring for European citizens.

We will have to carefully consider what kind of society we want for Europe and what kind of normative order we want for a world in which Europe plays its part. Reflection about innovations of all sorts, from social and governance reforms to new technologies, will have to be concerned with more than risk assessments, legal impact assessments, the straightforward application of moral principles and the drafting of ethical frameworks and codes of conduct. In the remainder of the 21st century, ethics will require comprehensive and pluralistic thinking on the basis of the best scientific and scholarly understanding and probing analyses of the emerging problems, together with extensive and inclusive debate on potential innovations and concomitant societal changes. The EGE sketches the contours of such an approach to ethics and its role in confronting societal issues of collective concern. Europe has a unique opportunity and responsibility to advocate for and adopt such an approach.

Such an ethics – ambitious, inclusive, wide-ranging – as a practice and activity always presumes the working of a society where the rule of law, human rights and democracy are a lived reality, protected and continuously reinvigorated. **It is situated in a socio-political context where citizens are at the centre of inclusive and participatory policy making, with innovative means for democratic participation and public engagement.** It builds on an understanding of societies that are made up by people who depend on each other, and not by atomistic individuals that are best served if left to their own devices. **Such an ethics is pro-active and addresses issues at an early stage of innovation when ethical considerations can still make a real difference.** Ethical reflection and analysis are therefore more than a set of afterthoughts or philosophical accompaniments and should not be regarded as obstacles to progress, they are the prerequisite for it. **Ethics is an integral and constitutive part of all policymaking, governance and management.** Ethics must be a radical interdisciplinary endeavour that draws upon knowledge in the humanities, social sciences and science and engineering. It also means that there is a close and ever wider collaboration between social parties, instruments and branches of the European Union and its member states.

Such an approach to ethical reflection is the contrary of a parochial, de-globalised or nationalist view on ethics. It implies a willingness to constructively, respectfully and peacefully justify one's views to any party – collective or individual – and engage in exchange. Ethical claims should not be seen as either absolute truths or, to the contrary, as merely valid relative to the social and cultural framework: Europe's value commitments are meaningful commitments and vantage points for constructive dialogue, on the basis of exchanges about what human beings owe to each other irrespective of their specific properties, such as race, gender, religion, ethnicity or socio-economic status, and what they owe to other species and the environment they collectively inhabit. The European Union's normative dimension should be construed importantly as a Space of Public Reason, as well as a Dominion of Democratic Deliberation about conceptions of the good and the right and about the basic institutions and the social contract that exemplify these conceptions.

In the same way that ideas about human dignity, freedom and equality, enshrined in the UN Declaration of Human Rights, have a global and universal applicability, such an approach to ethics would **further extend Europe's solidarity to all human beings in other parts of the world** as a matter of principle, especially to those who are in need or in precarious positions.

Europe has built a tradition in solidarity over the last decades: its strength emanating from a principled approach to its collective challenges. This does not mean that it has never disappointed itself or the world, that it has never failed to live up to the high expectations it projects. Europe is, however, energetically working on enhancing its democratic processes, improving ways to involve citizens, and seeks to demonstrate the importance of solidarity, collaboration and unity in diversity. And although this is a transformative and aspirational process, European values – as enshrined in Article 2 of the Treaty on European Union and in the Charter of Fundamental Rights of the European Union – have always been brought to bear upon the design of its institutions and socio-technical systems for the benefit of EU citizens and humanity. The importance of this is most strongly felt when human rights, social justice and equity, the rule of law, democracy and individual freedom are treated as subservient and subordinate to economic interest of a happy few, political aims of a ruling class and associated entrenched power structures.

Europe has a unique opportunity and responsibility to initiate and drive ethical debates in a world that faces global challenges. In

doing so it may set exemplary precedents, inspire to change and contribute to regulatory convergence.

Upholding the values we hold dear does not just mean mentioning them in passing at regular intervals, it means making good on the promises they hold. At this critical juncture, this means taking social justice and solidarity further, for future generations as well as all present generations. As buttressed above and as further detailed at the end of this Statement, this means taking democracy further, including deliberative and participatory democracy, drawing inspiration from the Charter of Fundamental Rights towards a Charter of Democracy.

This is by no means a trivial pursuit, but the EGE is of the opinion that ethics has been, currently is, and will in the future be an important pillar of the European project and potent ingredient in its geo-political positioning and its regulatory power: Europe has to make its ethics work in practice by showing how fundamental rights and ethical principles – on which the European project is founded – can lead to fruitful innovations to address the grand challenges, that are of wider interest, and thus contribute to prosperity and good standards of living and wellbeing for all.

Europe effectively shaped the discourse on the global governance of advanced digital technology in an early stage, thereby exemplifying the so-called 'Brussels Effect'. The EGE has played its role in this process by putting AI ethics on the agenda and issuing its *Statement on AI, Robotics and 'Autonomous Systems'*² as early as at the beginning of 2018. It paved the way for a series of initiatives of the European Commission, resulting in the recently proposed AI legislation, promoting human centred AI founded on basic rights. This approach found its way to OECD and G20 documents. Moreover, the General Data Protection Regulation serves as an example of how Europe has foregrounded individual rights and freedoms while embracing innovation. Similar developments have taken place with clean tech and renewables in the energy domain.

What follows are the key features for the future of an inclusive and practical ethics, and how this might be best achieved.

² https://ec.europa.eu/info/research-and-innovation/strategy/support-policy-making/scientific-support-eu-policies/ege_en#ege-opinions-and-statements

3 THE 21ST CENTURY CONDITION

In order to further develop what we see as a promising approach to ethics for the future of Europe, we first discuss the conditions with which any public ethics relevant to policy and the governance of innovation will have to grapple.

Complexities, wicked problems, deep uncertainty and unforeseen consequences. Our societies are hyper-connected at many levels. We have multiplied the links between people, institutions, systems and devices, beyond our own comprehension and control. The world in which new technologies are situated is institutionally complex and extremely dynamic. Thinking about appropriate regulation and governance concerning new technology is beset with deep uncertainty and unpredictability, conceptual confusion and novelty. We often find ourselves confronted with puzzling questions of how to fit novel things into old conceptual moulds or how to further develop familiar concepts when facing new insights and technologies. What is autonomy in the digital age? What is 'natural' in the context of genome editing?

The problems that we are confronted with in policy making are most often 'wicked problems'. Wicked problems are serious problems of great societal importance with strong ethical dimensions. A wicked problem is a problem that is very difficult or impossible to solve because of shifting problem statements, disagreement about what counts as relevant expertise, diverging ideas about its causes, and incomplete, contradictory and changing requirements for solving the problem. Because the problem definition itself is contested or shifting there is no single correct solution to a wicked problem. The UNSDG's, an intergovernmental and by this time broadly endorsed set of 17 aspirational goals, are interconnected and overlapping problems of this kind – globally, nationally, regionally and locally: fighting poverty, crime and corruption, bringing peace to (post-)conflict areas, providing affordable healthcare and food and water for all. Decisions about these issues need to be made under different interpretations of the relevance and weight of factual findings and unfathomable uncertainties about the future course of events. All too often the reactions to wicked problems are paralysis or overconfidence.

Public policy making regarding wicked problems typically involves complex adaptive systems – from ecosystems and climate to economies, markets, health care and educational systems. It also involves disagreement about criteria of success and adequacy of solutions, conceptions of values and ideals, as well as methodology. How to decide wisely about our policy

interventions in this context is a key issue in the 21st century. Policy analysis and policy making, and ethical reflection will have to be timely and agile, will need to accommodate interconnectedness and interdependencies, and will need to respect the multiple value perspectives of actors to be legitimate.

Value-ladenness. In dealing with wicked problems we constantly encounter moral values and value conflicts, implicitly or explicitly – often they are constitutive of the problem. There is nothing that is not value-laden and therefore one cannot but seek to address the moral complexities presented. The notion that one can remain neutral (or is simply providing a tool) or can avoid adopting an ethical position is itself an ethical position that one can be legitimately invited to justify.

Moral values inform our social and economic goals and models, managerial actions, political decisions, personal choices, and our justifications for them. We can always be held to account for them. We continuously appreciate values: we assess and evaluate individuals, institutions and societies (e.g. science and new technologies) in terms of values and cannot reduce them to anything else. However, values may be hidden, unarticulated, suppressed or taken for granted as background considerations, political ideologies or scientific paradigms. Values are also embedded in our technologies, our infrastructures, our institutions and procedures. Social media platforms, for example, can be designed to facilitate addiction in users and Internet dark patterns make it easy to create a user account, but make it virtually impossible to delete it. Products may be designed with inbuilt obsolescence. Knowing how our ideologies, world views, values, biases are imparted to the artefacts and designs, we need to be vigilant and become better at overseeing all value-infused processes, make them transparent and make those involved accountable. This is a truly Herculean task, which is further complicated by profound disagreements and ever-present value conflicts.

Awakening from the dream of neutrality. The recent challenges show that the idea of state neutrality regarding potential controversies on the good life and on scientific and technological innovation is untenable. It is so because a clear commitment to underlying values has to be made, while providing opportunities for living according to different concepts of a meaningful life – a democratic value decision in itself. Some groups may have reasons to want particular innovations and others may have reasons to ban them. Not deciding about them not only does not solve the problem, but also runs counter to the responsibilities of governance institutions. Why are we spending resources on this innovation rather than on this one? Why

are these considerations taken into account and not others? Why at this moment and not before or later? Who decides, how can we take these decisions democratically? The governing institutions need to come to grips with these and other moral dimensions of policy options and be prepared to answer these questions and provide justification for the conclusions reached.

Reasonable disagreement, value pluralism and democracy. In every social group there are frequent and deep disagreements between parties and stakeholders that are *reasonable* in the sense that they do not necessarily stem from flawed reasoning, but result from a plurality of perspectives, diverse world views, conflicting moral values, images of human beings and conceptions of a good life. There is also a great deal of disagreement about the nature of ethics itself, about adequate ethical theories, methods of decision making and accounts of the nature of moral properties, the universal validity of moral norms and principles, the relations between fact and value and the role of moral perception, emotions and reasoning in decision making. One proven way to deal with value pluralism, value conflicts and deep disagreement is democratic deliberation involving all affected on the basis of equality. Unfortunately, at this moment in time some of our democratic systems are under severe pressure.

If we want to foster a common space of reasons, civil discourse and respect for persons as equal and reasonable participants in public debates, we need to explicitly design for democracy, the rule of law and human rights, in the offline as well as in the online world. Fair and inclusive solutions will not emerge by a stroke of luck or rise from invisible digital hands. We need to improve the political mechanisms and social institutions to help us make judgement calls on ethical issues systemically, democratically, inclusively, transparently and sustainably, as well as a culture of communication that recognises and openly discusses them.

Power. We have to think and decide about public policy and the public interest in a world that has recently witnessed various shifts in power balances, the rise of nationalism, protectionism, populism, the undermining of democracy and the waning of a commitment to respect human rights. We must proactively avoid that our international convergence towards a consolidated set of shared values centred around human dignity, autonomy, responsibility, equality, justice and solidarity evaporates. We must defend and justify it in the face of political systems with different conceptions of the human person, social order, justice and governance that seem to be gaining ground.

Another power shift has emerged around large technology companies who exert significant influence as a result of the nature and the dynamics of how digital networks were (not) regulated, resulting in path dependencies and monopolies including unprecedented amounts of capital. The public and private sector have been merging in multiple ways, with the public sector often posing in a subordinate role. Has this been acceded to or indeed invited by governments who seem unwilling or unable to step into these areas and are happy to cede control and responsibility to the private sector? New digital technologies, if developed or used not in the service of shared values, can shape the thinking and behaviour of groups and individuals in a variety of ways that may be morally problematic. It can interfere with civility in online debates, facilitate dis-information and create echo chambers, filter bubbles, computational propaganda, sock puppets, bot armies, and big nudging strategies.

The problem with 'trust'. Trust is earned and built over time in a relationship, and cannot be imposed by one party onto the other. Distrust can be understandable and indeed healthy. Widespread distrust is a formidable stumbling block for the implementation of even the wisest policies, while at the same time distrust can be a powerful warning that more work together is needed. Levels of trust are a good indicator of how we perform in ethics and should not, and indeed cannot in sustainable ways, be artificially influenced by a 'marketing' of alleged trustworthiness. Trust is never in our balance sheets, but we know how expensive it is to establish it when it dissipates. It is not self-evident that politicians and public policy makers will always have the trust of citizens in their endeavours in the age of social media and polarisation. Trust also has become problematic in the horizontal dimension between social parties and citizens. The trust of citizens in science and technology policy and social acceptance by citizens will also depend on whether a policy option exemplifies ethical virtues such as inclusion, fairness, democracy, openness, responsibility, integrity and accountability.

International disagreement about values. EU partners, that have been referred to as 'system rivals', may position themselves vis-à-vis Europe as 'ethics competitors', and may seek to shape ethical frameworks for regulation, global governance and standards of new technologies (e.g. AI, genome editing, quantum computing and autonomous weapon systems) building on ethical premises that may be inconsistent with EU law and its core ethical ideals. It is therefore particularly important to engage in normative debates on an international and global level, strive for commonly agreed and shared standards and provide exemplary precedents. The premise for this is that Europe lives up to its own values,

for example by fighting poverty and reducing social and economic inequalities.

Towards shared values. In the context of ethical pluralism, there is an increasing need for shared ethical values and principles, in the face of the complexity of scientific and technological advancement, through balanced critical reflection and dialectic argumentation. The elaboration of shared ethical values and principles for regulating techno-science draws inspiration from the horizon of fundamental human rights as a conceptual framework, which form a crucial part of national constitutions and international documents. These documents have undergone, in recent decades, a process of specification and interpretation in light of emerging issues stemming from scientific and technological development: the primacy of the human being over the sole interest of science or society; the protection of freedom, in both the sense of autonomy and responsibility, especially with regard to those who are facing inability or particularly vulnerable conditions; justice or guaranteeing equal treatment for all, equity of access to healthcare, equality, non-discrimination and solidarity; and caution and prudence in the face of uncertain or risky technologies that are likely to cause serious and irreversible damage to human beings, humanity, the environment and future generations.

Global justice. Today, previously unconnected people around the world are connected in complex ways and the number of persons whose lives and fates need to be considered in decision and policy making at a given place and time has vastly expanded. In addition to duties to refrain from harming known individuals here and now, we may be called upon to consider the ill-understood causal chains in complex adaptive systems, in order to collectively assist others who may live in remote places and in a distant future. We are only starting to incorporate this expansion of scope into our moral thinking.

Anthropocentrism, the human prejudice and transhumanist values. We have moved into a phase of human development that is sometimes referred to as the era of 'the Anthropocene' or 'voluntary evolution' where human choices shape the course of evolution on Earth in important ways. Just as we started to find some relatively firm foundations for ethics in our common humanity, our evolutionary biology, psychology and common history, some suggest that we consider humanity as something that is not given and can be overcome and transcended by technological design and engineering. What we are, and what is good for us human beings, then depends on what we decide human beings could or should become. But what should we decide ourselves to become, assuming that this is now

increasingly up to us? And how should we choose wisely and justify our choices to each other? These questions are central to debates with those who advocate radical human enhancement and transhumanist perspectives. They relate to questions of naturalness and the role of humans in nature, in the broader environment they inhabit. What responsibilities do we have to each other, vis-à-vis other species, the planet, the universe and the future of life, and – from this perspective – what decisions on innovation do we want to take?

4 AN AMBITIOUS CONCEPTION OF ETHICS FOR A DEMANDING FUTURE

What follows is a conception of ethics for the future of Europe and a basis upon which to engage with other global actors.

Ethics by Design. Everything around us is designed, from governance systems to the means of communication, from production processes, voting procedures and smart cities to software, hardware and genomes. Some even defend and advocate for engineering the earth itself ('geo-engineering') to mitigate the effects of climate change. Everything designed, every artefact, piece of technology and human-made system contains the preferences, values and worldview of its designers and makers.

Sometimes value choices and preferences are incorporated intentionally and knowingly in design, sometimes inadvertently and unwittingly. Choices that inform our designs may be just confused or not particularly helpful, or they can be full of good intentions and geared towards solving societal problems. Sometimes, however, they are clearly morally objectionable, for example, when they are manipulative, discriminatory, dishonest or disrespectful. The so-called 'defeat devices' that car companies deployed to suggest low emissions during tests, the dark patterns used by social media companies, the carefully designed clickbait that makes online services and platforms addictive and the micro-targeting techniques for political campaigns are cases in point. One of our main concerns when it comes to ethics in the 21st century therefore is that the design of our socio-technical and institutional world should be democratic, responsible and transparent, with input from all directly or indirectly affected by it. We cannot leave the design of our future world to coincidences and to those who design for self-serving purposes outside democratic control. Moral reflection should therefore be situated when and where it can make a difference, i.e. when

and where (policies about) potential innovations – including social and institutional innovations – are conceived and designed, but not yet widely put in practice. Waiting for them to find their way into society, spread widely and evaluate them in retrospect is never a constructive option. Ethics may in that case bring too little, too late, or may only be consulted about the ‘how’, and not about the ‘whether’. Ethics needs to be pro-active and design oriented.

Ethics should also be present in *a form* that makes it more likely that it will be of practical consequence. In addition to thinking in terms of general principles and ideals, ethics will have to specify what values and principles mean in practice. What do our moral ideals imply in terms of specific design requirements for institutions and new technologies? Ethics will more and more often require a willingness and ability – in various roles of responsibility in policy, administration and commerce – to provide concrete specifications of moral concepts and ideas and subject them to public scrutiny and the most inclusive democratic deliberation. This design stance is not about one-shot interventions to ‘inject’, ‘design-in’ values into e.g. a technology, but about continuous democratic debates among citizens and stakeholders about which moral requirements ought to shape society. Without these concrete specifications, the use in policy and practice of concepts such as autonomy, sustainability or privacy may be gratuitous and remain inconsequential. Moreover, if we do not specify what our values mean for the shaping of the world of tomorrow, continuously, systematically, transparently and democratically, others may do it haphazardly, self-servingly and undemocratically.

We should work on the competence, capabilities, mechanisms and the supporting institutions that allow us to investigate systematically in moral terms what is designed, developed and produced and identify which values are supported or realised by designs that shape the lives of people. This is what we may call the ideal of ‘design for values’, ‘value-sensitive design’ or ‘ethics by design’ – concepts that are referenced more and more, but often in an *ad hoc* manner, for example in the context of policy and regulation of ‘privacy by design’ in data protection and ‘transparency and fairness by design’ in AI governance. This approach applies more widely and needs to be part and parcel of our education, production, monitoring and governance of innovation and new technologies.

Values and principles often do not point to solutions to ethical problems. Ambiguities and conflicts may arise and persist, particularly in the context of sensitive and controversial issues. The important role of ethics bodies is to outline and assess, theoretically and practically, the meaning of

principles and provide balancing considerations. A systems perspective here is of crucial importance. An ethical analysis is hardly ever about a single technology, an isolated institution, but always about the design of socio-technical systems, where an alignment of heterogeneous elements needs to be achieved to guarantee that the public value that could be engendered is realised. The moral acceptability of the self-driving car is not a matter of the AI embedded in the software, but equally about the sensors, the smart high way infrastructure, the liability regime, the insurance models, the psychology of users, the requirements for drivers licenses, certification, standardisation etc., and foremost of the views and wishes of citizens in the context of what investments and developments serve a sustainable, fair and safe future.

In addition to being ideal oriented, analytic and reflective³, ethical analysis will have to be aligned with new forms of policy making that are being considered to deal with conditions of uncertainty and complexity, non-linearity, exponential growth, and tipping points. It thus needs to be agile, interventionist, interdisciplinary and 'translational' (i.e. covering the whole spectrum of fundamental research to professional practice). Moreover it needs to be radically participatory and inclusive in order to be legitimate and in order to make good use of the collective intelligence present in society.

This design turn and the idea of the value-laden nature of scientific and technological innovation has also been foregrounded by EU research funding in the last decades. We can say that this European approach forms an excellent vantage point to deal with the ethical challenges of the 21st century. Its concept of *Open Responsible Research and Innovation*, when fully realised, consists in a transparent, interactive process by which societal actors and innovators become mutually responsive to each other regarding the ethical acceptability, sustainability and social desirability of the innovation process, its public services and its products. It shifts the focus from research and development of particular technologies and/or particular risks towards the whole innovation process and its governance which is neither technology-specific, nor exclusively and narrowly risk-focused. Responsible innovation intends to stimulate responsible behaviour and encourage individuals to take responsibility beyond the mere

³ It is important to note that traditional forms of theoretical reflection and analysis in normative and meta-ethics are still much needed. The argument for design orientation in ethics draws attention to a focus that has been underdeveloped thus far.

compliance with positive legal frameworks and traditional role responsibilities such as those of scientists, engineers and policy-makers.

The result is a 'public ethics' approach which seeks to identify the values we wish to protect, takes them as the starting point in addressing our societal challenges and shapes innovation around them, instead of the other way around. That speaks to the proactive rather than reactive approach to ethics and will ensure that there is not an overemphasis on merely technological solutions to deep-seated societal issues.

An ambitious ethics. Ethics for the future of Europe and beyond needs to be an ambitious, proactive, daring and public ethics, an ethics that asks the hard, painful or tedious questions. Such an ethics does not simply serve to make institutions and processes 'a bit more ethical' without addressing the larger political, social and economic factors that give rise to the institutions and processes in the first place. It addresses the foundations of the practices and institutions that are responsible for the phenomena that it considers to be problematic.

An ambitious public ethics does not rest content with responding to new developments – such as new fields of scientific research or new technologies – but it participates in shaping the agenda. It is a form of ethics that does not take refuge in technical fixes, reduced moral ambitions or purely instrumental reasoning. For example, in the case of climate change, it does not only go down the list of technologies and policy instruments suggested to address it and then 'evaluate' them – but it starts with the question: What is the problem that we need to solve? How can we best solve it in the best interest of as many individuals, societies and species as possible, and without imposing significant harm on anyone? Asking the question in such a way takes us onto very different ways than some of the incremental and technical solutions that are currently proposed.

Such an ambitious public ethics will also need to fend off the strategy of avoidance popular in some political traditions according to which it was senseless to engage in public debates about people's conceptions of the good life. As we discussed above, in a world with innovations we will have to address the problem of accommodating disagreement and value conflicts concerning social change, for example by designing new mechanisms for democratic deliberation. Special attention should be paid to developing new mechanisms and platforms for large-scale online deliberation.

An ambitious public ethics should be aimed first and foremost at our collective problems. There is a stock list of formidable problems that humankind needs to urgently address, whether we refer to these problems as the Grand Challenges, the Millennium Goals, or the UNSDGs. They include, but are not limited to, ending poverty and hunger, improving health and education, making cities more sustainable, combating climate change and protecting oceans and forests.

In this, ethicists and ethics advisers have a responsibility to act in the service of the public, rather than in the service of innovators or market parties in a narrow sense. This is linked to the dangers of a growing frustration with ethics when seen as 'defending politics', or when new ethics groups or company ethics boards are established to validate contested developments. To the contrary, ethicists have the obligation to ask uncomfortable questions, also for those without a voice.

Against trends of ethics inflation and ethics washing, the EU ought to be serious about placing values at the core of all policy making and nourish its ethics culture – including academic research in moral philosophy, spanning theoretical, interdisciplinary, applied research.

Democratic deliberation. Every policy decision is a value judgement and every narrative and action about change and innovation is imbued with values. Values shape our lives in all aspects. Who decides about them is therefore a key question. There is no authoritative interpretation of values from a few for the many. Instead, value decisions and their consequences must be the outcome of lively debate among all who are directly or indirectly affected by them. Sharing values, meaning to agree on them and act upon them, implies open and collective reflection on them. Collective reflection and deliberation require mutual respect and meaningful relations between citizens and, as the case may be, between those who govern and those who are governed.

It requires respectful debate situated in a society that is organised around its values and a space of public reason that does not avoid difficult topics that can divide us, but is dedicated to finding ways to resolve these issues peacefully. Against this background, a strong push for participatory governance is pivotal. All the while, extreme caution should be exercised as regards techniques that can bring about consensus and compliance by means of nudging and behavioural design, which could be used to push social acceptance of policies as well as of technologies, in the place of honest and transparent efforts to justify policies and interventions. It is imperative for the European Commission, and it is for public authority

institutions at all levels, to mainstream democratic participation and stimulate and design for deliberative democracy in the development of all policies.

This means putting in place the means to ensure that the opportunities for civic engagement and participation are maximised at all stages of the policy cycle and requires establishing practical solutions for wide societal deliberation and participation in decision making (including the prerequisites, such as open communication, access to information and quality education for all). This strong call has been a leitmotiv of EGE advice.

Drawing inspiration from the Charter of Fundamental Rights of the European Union and reaffirming the words of the preamble of the Treaty on European Union, it is now time to buttress the objective to maximise opportunities for public participation in policy making in the EU, and to engage in the development of a Charter of Democracy of the European Union.

—

Getting in touch with the EU

IN PERSON

All over the European Union there are hundreds of Europe Direct information centres.

You can find the address of the centre nearest you at:

https://europa.eu/european-union/contact_en

ON THE PHONE OR BY EMAIL

Europe Direct is a service that answers your questions about the European Union.

You can contact this service:

- by freephone: **00 800 6 7 8 9 10 11** (certain operators may charge for these calls),
- at the following standard number: **+32 22999696**, or
- by email via: https://europa.eu/european-union/contact_en

Finding information about the EU

ONLINE

Information about the European Union in all the official languages of the EU is available on the Europa website at: https://europa.eu/european-union/index_en

EU PUBLICATIONS

You can download or order free and priced EU publications from:

<https://op.europa.eu/en/publications>. Multiple copies of free publications may be obtained by contacting Europe Direct or your local information centre (see https://europa.eu/european-union/contact_en).

EU LAW AND RELATED DOCUMENTS

For access to legal information from the EU, including all EU law since 1952 in all the official language versions, go to EUR-Lex at: <http://eur-lex.europa.eu>

OPEN DATA FROM THE EU

The EU Open Data Portal (<http://data.europa.eu/euodp/en>) provides access to datasets from the EU. Data can be downloaded and reused for free, for both commercial and non-commercial purposes.

This Statement provides important perspectives on the role of values in Europe and the global community and proposes a proactive involvement of ethics in governance. It throws light on the connections between ethics and fundamental rights, democracy and the rule of law, concluding with a recommendation for the EU to maximise opportunities for public participation in policy making.

Research and Innovation policy

