



Volume 10 Issue 3



RESEARCH
ARTICLE



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What rights matter? Examining the place of social rights in the EU's artificial intelligence policy debate

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DOI: <https://doi.org/10.14763/2021.3.1579>

Published: 30 September 2021

Received: 23 November 2020 **Accepted:** 31 March 2021

Funding: This research has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation program (grant agreement No 759903-DATAJUSTICE).

Competing Interests: The author has declared that no competing interests exist that have influenced the text.

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Citation: Niklas, J. & Dencik, L. (2021). What rights matter? Examining the place of social rights in the EU's artificial intelligence policy debate. *Internet Policy Review*, 10(3). <https://doi.org/10.14763/2021.3.1579>

Keywords: Social rights, Artificial intelligence, European Union, European values, Datafication

Abstract: References to 'European values' are often rooted in some perception of a commitment to particular rights that uphold certain principles about democracy and the relationship between state, market and citizens. Whilst rarely translated into consistent policy frameworks or activities, the formulation of new policy areas, such as artificial intelligence (AI), provide a window into what priorities, interests and concerns currently shape the European project. In this paper, we explore these questions in relation to the recent AI policy debate in the European Union with a particular focus on the place of social rights as a historically pertinent but neglected aspect of policy debates on technology. By examining submissions to the recent public consultation on the White Paper on AI Strategy, we argue that social rights occupy a marginal position in EU's policy debates on emerging technologies in favour of human rights issues such as individual privacy and non-discrimination that are often translated into design solutions or procedural safeguards and a commitment to market creation. This is important as systems such as AI are playing an increasingly important role for questions of redistribution and economic inequality that relate to social rights. As such, the AI policy debate both exposes and advances new normative conflicts over the meaning of rights as a central component of any attachment to 'European values'.

This paper is part of **Governing “European values” inside data flows**, a special issue of *Internet Policy Review* guest-edited by Kristina Irion, Mira Burri, Ans Kolk, Stefania Milan.

Introduction

The entrenchment and establishment of particular rights has from the outset been part of the advancement of the European project and how the European Union (EU) has defined itself. References to ‘European values’ are often rooted in an understanding of this commitment to rights seen to uphold certain principles about democracy and the relationship between market, state and citizens. Although the notion that Europe is premised on a set of exceptional values is contentious, Foret and Calligaro argue that European values can be understood as those ‘*values enshrined in the treaties and asserted by European institutions in their discourses*’ (2018, p. 2). These treaties and institutional discourses do not always translate into consistent policy agendas and geopolitical activity, but they provide a window into what is considered valuable and for whom. This is particularly relevant in new policy areas, such as emerging technologies, where concrete conceptualisations of different fundamental rights are still being formulated. In these circumstances, we are provided with an opportunity to explore policy debates as indications of the priorities and concerns that make up the European integration project as it is shaped by different strategic interests and self-understandings.

In this paper we approach the question of what rights matter in EU policy debates by looking at the discourses of different stakeholders in the policy debate surrounding AI. We do so with a particular focus on the place of *social rights* as a growing, but historically neglected aspect of the governance discourse surrounding emerging technologies. Rights-based approaches in the governance of technologies, especially optimisation technologies¹, have tended to prioritise human rights understood in terms of individual privacy, non-discrimination and procedural safeguards pertaining to consent and transparency as significant entry-points for regulation (Gangadharan, 2019). Whilst these are important areas for engaging with technology, ample research demonstrates how impacts on social and economic rights, such as the right to work, social security, healthcare, or education, constitute a crucial component of the societal tensions surrounding developments

1. We are following Kulynych et al. (2020) in describing a set of different data and algorithmic driven technologies, as ‘optimisation technologies’ that are ‘developed to capture and manipulate behavior and environments for the extraction of value’ (p. 1) and operates within the optimisation logic that prioritise technological performance and cost minimisation.

in AI (Alston, 2019). Yet despite these rights being important for the European project, they have received marginal attention in AI policy and governance debates.

As a way to uncover how social rights are understood in EU's policy debate on AI we use the public consultation on the *White Paper for AI Strategy* as a case study for examining concerns and priorities amongst different stakeholder groups. The engagement with the White Paper for AI Strategy is an important discussion in this regard, as it forms part of a discourse on AI that from the outset positioned policy concerns in relation to the protection of fundamental rights and so-called 'European values'. We start by outlining the historical and theoretical context out of which social rights emerge, situating them in relation to the broader pursuit of the 'European social model' following World War II and the subsequent creation and integration of the EU. We then go on to discuss some of the ways social rights intersect with optimisation technologies, and the role of rights-based approaches in concerns about data justice, particularly in areas such as employment and social welfare. Against this backdrop we outline the emergence of AI policy in the EU as an introduction to our study of the submissions to the public consultation on the White Paper on AI Strategy from key stakeholder groups, including civil society, public authorities and business associations. In analysing the dominant themes of these submissions, we argue that social rights are relatively muted within the AI policy debate despite the profound significance AI policy has for the articulation of resource distribution and economic inequality. Whilst concerns about social rights manifest themselves in discourses pertaining to public services and employment, they do so predominantly in a procedural context that emphasise fair data collection or right to redress rather than in material or distributive terms. Moreover, as an indication of what actually informs 'European values', social rights are marginalised in favour of geopolitical concerns about the single market, regional competition and technological innovation.

Social rights and the European project

Although they are sometimes perceived as elusive, social rights have a firm role in the broader discussion on the evolution of citizenship, most famously perhaps in T. H. Marshall's three dimensions that include civil, political and social citizenship (Marshall, 1950). At the same time, social rights are steeped in ambiguity of both a political and legal nature that relates, in part, to the division of rights into different categories that we see play out particularly at the international level (Ssenyonjo, 2009). Post World War II international human rights regimes, for example, adopted separate treaties for civil and political rights (such as freedom of religion,

the right to assembly or to privacy) and economic, social and cultural rights (including the right to work, health or social security).² While both categories of rights are part of international human rights, civil rights have dominated the discourse and practice of human rights, often becoming their synonym and leaving social rights in the position of ‘poor stepsister’ (Alston, 2005).

One of the key differences between these categories of rights revolves around state-citizen relations. In the case of civil rights, the emphasis is on issues of individual freedom, especially from state interference, whereas the implementation of social rights often requires state intervention, incurring budgetary expenses and limiting private property or economic freedom (Eide, 2001). Furthermore, social rights have been considered dysfunctional in terms of any legal structure of those rights, making their judicial assessment harder to carry out (Langford, 2009). They also intersect with other categories of rights in some circumstances. For example, in the constitutional practice of some countries, the right to life is used to confirm the protection of access to medical care or medicines. On the other hand, conflicts can arise between rights, especially when the individual freedom vs. state intervention binary comes into play (Toebes, 1999).

While the scope of social rights might be contested, for the purposes of this article we follow Marshall’s early understanding of social citizenship to include *‘(t)he right to share to the full in the social heritage and to live the life of a civilized being according to the standards prevailing in the society’* and the *‘universal right to real income which is not proportionate to the market value of the claimant’* (Marshall, 1950, p. 11 and 47). In other words social rights are strongly connected to public services, fair working conditions, equality, and a guarantee of social protection delivered through universal systems and wealth redistribution measures such as minimum income or progressive taxation (Katrougalos, 2007; Moyn, 2018). Legal jurisprudence in the field on international social rights denotes that such rights are structurally complex and consist of various obligations of the state such as the guarantee of non-discrimination, procedural standards, but most of all ensuring the availability of public services and welfare (e.g. UN CESR 2008).

In Europe, the emergence of the modern welfare state has been associated with a strong commitment to social rights since the 19th century (Esping-Andersen, 1990). Furthermore, the dual crises of the global recession and second world war ushered in a widespread consensus around the need for state institutions to play a

2. In this article we use shorter terms for each group of rights: for civil and political rights—civil rights, and for economic, social and cultural rights—social rights.

permanent role in mitigating the harms of the market economy through social reforms that ensured social protection, access to employment and decent care (Judt, 2007). Today, the recognition of social rights, along with civil and political rights, is part of what Fabre (2005) has called a 'European culture of social justice'. This model is visible in national constitutions and international treaties including the European Social Charter from 1961.

At the same time, the place of social rights in the European integration project (including European Communities [EC] and later European Union [EU]) has been ambiguous, sometimes based on contradictions and marked by fluctuations that raise questions about their place within common 'European values'. From the outset of the EC, the 'social question' has been the subject of disputes between the ordoliberal model of European integration and the vision of 'Social Europe' (Dodo, 2015). A commitment to social rights has been a prominent feature in what has characterised the European model, but the advancement of a European integration project was always primarily oriented towards the formation of a common market (Maduro, 1999; Kenner, 2003; Garben, 2020). Already in 1957, the Treaty of Rome included commitments such as the guarantee of equal pay between women and men, community coordination of paid holiday schemes, and the establishment of a European Social Fund. Yet, until the 1980s, there were limited practical initiatives concerning social policy from the European Commission that only really changed after 1989 with the proposal for a European Charter of Social Rights. This initiated various policy debates and was partially incorporated into the Treaty of Amsterdam, that referred to '*fundamental social rights*' (art. 136 EC, see also Maduro, 1999). In this context, social rights were presented as a component of eligibility rules that would allow for migration within the EU and the standardisation of national social security systems, constitutive of a 'market making' rather than a 'market breaking' imperative (Katrougalos, 2007; Maduro, 1998). Far from traditional welfare model and comprehensive social redistribution mechanisms, EU's social legislation set up minimal common standards (Demertzis 2011). Social rights eventually became inscribed in the European Charter of Fundamental Rights under the category described by Menendez (2003) as 'rights to solidarity'. Most recently, the UK's exit from the EU (Brexit) marked the adoption of a so-called European Pillar of Social Rights—a non-binding instrument that proclaims different rights related to equal opportunities, access to the labour market, fair working conditions, social protection and inclusion (Plomien, 2018). We now turn to the relationship of such rights with emerging technologies.

Optimisation technologies and social rights

Whilst there is widespread recognition that the rapid development and deployment of data-centric technologies has significant transformative implications, the question as to what these are and how they should be addressed is still a point of contention. Initial concerns have been oriented towards the mass collection of data that have tended to focus on issues of surveillance and privacy, prominent in public debate particularly in the immediate aftermath of the Snowden leaks in 2013 (Hintz et al., 2018). These events made clear the limitations of existing legislation and fed into a long-standing discussion about the need for further protection of privacy and personal data and better oversight in the handling and processing of data by both corporate and state actors (Lyon, 2015). Some of these concerns have subsequently been translated into the 2018 General Data Protection Regulation (GDPR), intended to give a new impetus to the protection of fundamental rights in the context of dynamically developing digital technologies and services (de Hert & Papakonstantinou, 2016).

The focus on privacy has been particularly dominant in relation to optimisation technologies, but there has also been a growing emphasis on issues such as harmful profiling, automated sorting, and biases embedded in data and algorithms that lead to forms of discrimination (Gandy, 1992). Both privacy and non-discrimination have become significant organisational concepts for policy debates on optimisation technologies. Yet in assessing the transformative potentials of such technologies both privacy and non-discrimination policies also have limitations (Mann & Matzner, 2019; Schermer, 2011). In part, the way these priorities have been operationalised has been critiqued for lending itself to design solutions that seek remedies in efforts such as 'privacy-by-design' or bias mitigation that, although useful, rarely address the contextual nature of technologies or their operative logics (Powles, 2018, Hoffmann, 2019). Furthermore, a more 'holistic evaluation' of the impact of optimisation technologies has been said to be needed in order to consider international human rights law in earnest (McGregor et al., 2019). This requires a broader suite of considerations that go beyond citizens, political and consumer rights. Moreover, a focus on individual rights struggles to account for the structural transformations that are brought to bear with the advent of optimisation technologies. These different concerns have particular relevance for areas that have historically been central to the European social model, such as the role of labour and the protection of the welfare state. Whilst not obviously part of mainstream rights-based approaches concerned with data and computational infrastructures, these areas are receiving increasing attention in discussions on automation and AI (Den-

cik, 2021).

One of the most prominent themes in this regard is the growing orientation towards the so-called ‘future of work’ that has often focused on anxieties about the automation of work, potential mass job losses, wage reductions or global workplace restructuring (Arntz et al., 2016; Frey & Osborne, 2017). These discussions have provided impetus for new policy initiatives focused on redistribution and income guarantees, such as a universal basic income and public services or new wage policies (Standing, 2016; Portes et al., 2017; McGaughey, 2018). At the same time, debates about the impact of emerging technologies on actual job quality and the position of workers are also a growing focus, such as the impact of algorithmic management or increased workplace surveillance (Stefano, 2018; Wood, 2021). The focus on the precarity at the intersection of optimisation technologies and work has also informed debates on the future of the welfare state more broadly. This question encompasses not only ways to secure workers’ rights or income guarantees, but increasingly focuses on the ways in which data infrastructures are shaping public services, including eligibility checks, risks assessments, and profiling (Dencik & Kaun, 2020; AlgorithmWatch, 2019; Eubanks 2018). In his report to the General Assembly, the UN Special Rapporteur on extreme poverty and human rights, Philip Alston, describes these developments as the advent of the ‘digital welfare state’ that is already a reality or is emerging in many countries across the globe. In these states, ‘systems of social protection and assistance are increasingly driven by digital data and technologies that are used to automate, predict, identify, surveil, detect, target and punish’ (Alston, 2019, n.p.). Such systems have frequently been implemented in a context of spending cuts, reduction in services and new behavioural requirements, whilst at the same time being perceived as void of policy implications that exempt them from much scrutiny or public debate (Alston, 2019).

These different areas of concern point to the relevance of social rights in the context of datafication and the advent of optimisation technologies, even if they are rarely directly addressed. While privacy and data protection across work and welfare have been part of this debate, social rights, as a constructive frame, has seldom been a dominant focus. It remains unclear how these can effectively be translated into policy debates and shape legislative agendas in relation to data infrastructures and emerging technologies. As a way to explore this further, we now turn to the recent policy debate on AI in the EU.

The case of European artificial intelligence policy

Over the last few years, the EU has been actively engaging in a range of policy initiatives that have focused on the development of AI within Europe and includes investments and financial policies, regulation of AI systems, international cooperation and other activities. Importantly, European AI policy should be seen as part of a larger ecosystem of institutional and legal interventions regarding communications and digital technologies that has a long history and dates back to the early 1970s (Mărcuț, 2017). It is not the intention to detail these here, but it is worth noting that the interest in AI started to gain traction in 2017 and 2018 with the adoption of the first communications of the European Commission and resolutions of the European Parliament on AI (see Niklas & Dencik, 2020). This has continued with publications from the High-Level Expert Group on Artificial Intelligence in 2019 on ethics guidelines, a five-year plan on digital policy from the European Commission titled *Shaping Europe's Digital Future*, published in 2020, and other strategic documents such as the White Paper on AI and the recently published AI draft regulation (European Commission, 2020b and 2021a). All these different institutional, legal and budgetary efforts together constitute what Ryan Calo (2017) refers to as 'AI policy', a distinctive area of policymaking that addresses different challenges tied to AI and similar technologies, including justice and equity, safety and certification, privacy and power dynamics, taxation or displacement of labour.

Within Europe, we see that AI policy plays out along the lines of what Jasanoff (2009) describes as the dualistic nature of liberal state interventions in technology and innovation informed, on the one hand, by a principle of public funding in research that grants significant autonomy to scientists, whilst on the other hand, recognising a need for regulatory intervention before new products enter the market. This dynamic is evident, for example, in discussions concerning tensions between the need for binding legislation and business-preferred ethical principles and soft guidelines (Wagner, 2019).

Among the documents that make up the European AI policy is the White Paper published in February 2020 as part of the five-year strategy *Shaping Digital Future*. White papers initiate debates in a particular area and contain ideas for particular actions (sometimes outlining possible options) and are used for consultations with stakeholders and institutions before legislative proposals are formulated (Overy, 2009). The scope of the White Paper on AI is broad and covers legislative, financial, educational and scientific activities. It is an outline of a broad strategy containing goals and concrete action plans, together with an estimated time for their implementation. It is not the aim to provide a comprehensive review of the

White Paper here, but it is worth highlighting a few noteworthy aspects that inform our analysis.

AI is defined through its main components—algorithms and data. The two pillars of the European strategy are so-called ‘ecosystems’ of trust and excellence. The ecosystem of trust includes the strategies for funding and economic growth, research support and creating incentives for adopting AI systems by public and private sectors. The ecosystem of trust focuses on risks that AI systems create for fundamental rights, product safety and liability in what is considered a risk-based approach. Such an approach entails an assessment of ‘high’ and ‘low’-risk applications that should inform interventions and requirements, e.g. obligations to keep a record for data, quality requirements for training models and transparency rules for consumers. The White Paper also makes suggestions for voluntary labelling schemes, conformity assessments and new governance structures that involve cooperation between national authorities.

The articulation of rights in the White Paper primarily concerns privacy, personal data protection, consumer rights and non-discrimination. The emphasis on non-discrimination distinguishes the AI policy from many existing policy discourses on rights and technology that have prioritised privacy and personal data, leaving discrimination issues aside (Mann & Metzner, 2019). It is important to note that discrimination in the White Paper is primarily interpreted as a problem of bias, data quality and specific technological architecture. The paper also notes that AI systems can support ‘the democratic process and social rights’ but there are no further mentions of such rights except rare references to healthcare, public services or employment. For example, the White Paper refers to discrimination ‘*in access to employment*’, ‘*the rejection of an application for social security benefits*’ or the use of AI system to ‘*improve healthcare*’.

Whilst the White Paper serves as an illustration of regulatory approaches to AI and a proposed institutional framework for research and innovation in this area, it is also indicative of a wider set of discourses that are part of asserting the meaning of the European project and how the EU seeks to define itself. As Jasanoff (2007, p. 92) notes in relation to the EU’s biotechnology policy, policies on technology ‘became a site of interpretive politics, in which important elements of European identity were debated along with the goals and strategies of European research’. Similarly, the White Paper on AI Strategy makes frequent references to notions such as ‘European values’, ‘European data’ and ‘digital sovereignty’ that denote a close connection between narrower regulatory and funding initiatives with a broader articulation of the EU’s geopolitics and vision for the relationship between European in-

stitutions and citizens. This is the case not least in its positioning as an alternative to the ‘surveillance capitalism’ of the US and the ‘technological authoritarianism’ of China (European Commission, 2020a). In this sense, the White Paper reveals a certain set of priorities. Yet in order to understand the AI policy debate in broader terms it is important to engage with the different stakeholder interests and concerns that shape this debate. As a way to further explore how social rights feature in the AI policy debate, we therefore now go on to examine stakeholder perspectives with regards to the White Paper.

Methods

In order to examine the place of social rights in the EU’s AI policy debate, we conducted a qualitative content analysis of documents submitted to the public consultations on the White Paper on AI Strategy (European Commission, 2020d). The process of public consultations in the European Union invites various social actors, such as non-governmental organisations, trade unions, enterprises and academics to participate in the policy or regulatory process. These consultations are intended to make policy-making more democratic, sensitive to the voices of civil society and increase legitimacy for new political decisions (Rasmussen & Toshkov, 2013). However, they have also been accused of prioritising the involvement of particular groups of actors and require specific expertise that place limitations on their results (Persson, 2007). They are also bound by particular structures, such as on-line consultations that often use standardised questionnaires, shaping the extent of problem-definition and inclusivity (Quittkat, 2011). This is a significant aspect to consider in the analysis of any public consultation process and is illustrative in some of the conclusions we are able to draw.

Organised and structured by the European Commission, the public consultations on AI (that lasted from February 2020 till June 2020) attracted a very high number of contributions (1,215) from individual citizens, business organisations, trade unions, civil society or academia (European Commission, 2020d). All contributions were published on the official EU webpage and consist of two types of content: a) answers to the online questionnaire, b) policy papers, briefs and other materials attached to the submission. Contributors choose to submit either or both of them. The variety of actors that provided submissions offer an opportunity to examine the different values, priorities, interests and narratives that form part of the AI policy debate as articulated in the documents submitted. To make such a qualitative analysis we decided to create a sample of a cross-range of actors representing different areas of interests, focusing on organisations and groups rather than individ-

ual citizens as most representative of different stakeholder perspectives. With a comparative sample of each type of actor we ended up with submissions from 74 organisations in total taking into account diversity, nature of contribution, and relevance for social rights concerns (Tab. 1). The last factor was determined by an initial keyword search (Tab. 3). We also prioritised those organisations that, apart from the answers to the questionnaire, attached additional opinions, briefs and reports. Such an approach allowed us to analyse a richer data set containing more extensive evaluations of the policy proposals, values and recommendations of the particular organisations. For the analysis, we also included four ‘opinions’ created by European agencies, such as the European Data Protection Supervisor, that were not part of the public consultation process but are part of the White Paper debate.

TABLE 1: Submissions in White Paper consultations (by type)

TYPE OF ACTORS	NUMBER OF ANALYSED SUBMISSIONS (BY ACTORS)	NUMBER OF TOTAL SUBMISSIONS (BY ACTORS)
COMPANIES	15	222
RESEARCH ORGANISATIONS (ACADEMIA AND THINK THANKS)	15	152
NGOS	12	138
BUSINESS ASSOCIATIONS	12	130
TRADE UNIONS	10	22
PUBLIC AUTHORITIES	10	73
CITIZENS	-	406
OTHERS	-	72

TABLE 2: List of organisations cited in the article

ACRONYM/ORGANISATION	FULL NAME
AMI	The International Association of Mutual Benefit Societies

ACRONYM/ORGANISATION	FULL NAME
Amnesty Int.	Amnesty International
AN	Access Now
EDF	European Disability Forum
EDRi	European Digital Rights
EFPIA	European Federation of Pharmaceutical Industries and Associations
EPHA	European Public Health Alliance
EPSU	European Federation of Public Service Unions
EUROCITIES	
EWL	European Women's Lobby
FRA	Fundamental Right Agency of the European Union
Government of Ireland	-
industriAll	-
LO	Landsorganisationen i Sverige
NJCM	The Dutch section of the International Commission of Jurists
OGB	Österreichischer Gewerkschaftsbund
REIF	Représentations des Institutions Françaises de sécurité sociale
Institute for Human-Centered Artificial Intelligence, Stanford University	HCAI
UGICT	Union générale des ingénieurs, cadres et techniciens CGT
UNI	Union Network International-Europa

We conducted a thematic data analysis, following six steps recommended by Braun and Clarke (Braun & Clarke, 2006) and using qualitative data coding software (NVivo). First, we identified prominent concepts and initial findings. Second, based on

this first reading of the collected data and previous research on social rights and optimisation technologies we developed a list of codes that summarise and capture the crucial aspects of the given concepts. Those codes were assigned to particular sentences or larger segments of text. Then initial codes were defined and grouped in a way to help identify connections between them. They focused on different aspects of texts—description of particular phenomena, normative statements about the role of technology in society or recommendations for new laws or budget policies regarding AI. We ended up with a group of codes that were focused on particular problems and represent four areas of interest: a) social rights and policies (access to public services, work and employment, welfare administration), b) human rights and justice (discrimination, privacy, due process, transparency), c) narratives about AI systems (beneficial, critical) and d) approaches to European AI policy (critiques, recommendations, approval). After analysing the materials from each group of actors participating in the consultations, we prepared a summary on this group. Summaries covered the role of human rights in documents, political recommendations, issues related to social policies, and a general approach to AI. These summaries and the comparisons between them also allowed us to capture significant differences between specific actors participating in consultations, e.g. between NGOs and companies. Importantly, drawing on the interpretative policy analysis approach, we understand policy debates as a set of discourses constituting a conglomerate of various narratives, frames and understandings, where policy issues such as rights, regulations or institutions are seen as social constructs (Hajer, 1993). In this sense, we also approach rights as discursive and sociological rather than legal phenomena and are less interested in the legal interpretations and normative content of specific rights. We predominantly want to explore how rights and ‘rights talk’ build political discourses, set up priorities and indicate decisions about values.

Findings

As a way of outlining how social rights feature in the consultation on the EU’s White Paper on AI Strategy, we start by briefly outlining the structure of the online questionnaire in the consultation and the results from our search of keywords relating to fundamental rights and policies in the answers to that questionnaire (Tab. 3).

The questionnaire was divided into three sections, with a total of 16 close-ended questions, 10 open questions and additional space for comments (European Commission, 2020b). Each participant could also provide additional documents like

policy briefs, reports or more elaborated positions. Section one included questions related to the ‘ecosystem of excellence’ and covered issues such as support for development and uptake of AI, research excellence, and financing for start-ups. Section two referred to the AI regulation and section three raised questions about safety and liability. As part of these two, there were a limited number of questions pertaining to human rights, that also included potential answers such as ‘AI may breach fundamental rights’ or ‘The use of AI may lead to discriminatory outcomes’ and one question referred to workers’ rights. In this sense, the questionnaire provided limited scope for human rights concerns to be raised and made no overt reference to social rights.

The analysis of responses to the questionnaire (especially the open-ended ones) using keyword search shows that human rights was still an important part of the consultation. When writing about potential threats and problems, participants noted the violations of human rights in general terms, and in particular privacy and non-discrimination. Social and labour rights were very rarely included in the responses. Keyword searches specifically related to social policies demonstrate that mentions of healthcare or education were most prominent, and less so work, with a significant absence of mentions of social security or protection altogether. Whilst this may illustrate certain priorities, it may also be related to a focus on educational skills and innovation in healthcare related to AI.

TABLE 3: Keywords relating to rights and policies in answers to the online questionnaire as part of the public consultation on the White Paper on AI Strategy

KEYWORD	FREQUENCY
HUMAN RIGHTS AND SOCIAL RIGHTS	
Social rights/ social and economic rights/welfare rights	1
Labour rights/ workers rights	2
Collective bargaining	4
Human rights	217
Fundamental rights	249
Privacy	226
GDPR	186
Data protection	147

KEYWORD	FREQUENCY
Discrimination	196
SOCIAL POLICIES AND EMPLOYMENT	
Workers	49
Welfare	8
School	18
Trade union	38
Housing	8
Healthcare	129
Social security/protection	1
Welfare state	1
Education	108

This initial analysis indicates, in simplified terms, some priorities in the discussion on the White Paper. To further explore the question of the place of social rights in the EU's policy debate on AI, we next draw on our qualitative analysis of submissions and provide four central themes that emerged from our analysis. The first theme engages with the privileging of human rights in discussions on AI, whilst the second theme showcases how rights are operationalised in the context of the dual efforts of strategic investment and a risk-based approach. The final two themes focus particularly on how the intersection between social rights and technology is understood in relation to two policy areas: workplace relations and public services.

Human rights as a starting point

References to human rights and fundamental rights were very prominent in the submissions. All NGOs, trade unions and most research institutions and public authorities privileged a concern with human rights, with business organisations referring less to them. For some organisations human rights were an important starting point and normative basis for regulative intervention and technological development as stated by the Fundamental Right Agency of the European Union (FRA): *'fundamental rights frameworks and other legal commitments are the best starting point for any evaluation of the opportunities and challenges brought by new tech-*

nologies' (FRA, 2020, p. 1) . In this context, rights were often a manifestation of certain normative claims that are part of delineating an understanding of what 'European values' are.

Whilst references to rights in the submissions encompassed a wide range of relevant rights and freedoms for the impact of AI, there was a particular focus on data protection and non-discrimination (mentioned in more than 40 contributions) in line with previous policy debates on emerging technologies. At the same time most submissions referred to general fundamental rights, without explaining specific challenges and particular rights. Where specific challenges were expressed, these were mostly prominent in contributions from migrants groups, organisations representing people with disabilities, women, ethnic minorities, or the elderly. Many submissions noted that AI discrimination is different to other non-technical forms of discrimination, as for example outlined by EDRI: *'due to greater scales of operation, increased likelihood that humans will challenge its decisions (automation bias), and lower levels of transparency about how such decisions are made'* (EDRI, 2020, p. 5). While often focused on the issue of biases and data processing, some organisations also explained that technologies may lead to discrimination because they are applied to certain groups, sectors of society or *'problem districts'* (NICM, 2020, p. 9).

In terms of explicit references to social rights, we found these in 15 of the submissions analysed and engaged with the framework of rights to health, social security or work in the context of using AI systems. Such references came from organisations such as those representing healthcare insurance institutions who noted: *'AI should not have a negative impact on the social rights guaranteed by the Pillar of Social Rights'* (AMI, 2020, p. 8). Other organisations like trade unions, NGOs representing people with disabilities, or associations representing social security organisations referred to the need to respect labour rights or provide better safeguard for workers or social security recipients. Several of these submissions addressed those issues exclusively through the frame of non-discrimination. For example, an organisation that focused on healthcare implied that *'machine-generated decisions could potentially exacerbate existing health inequalities, discrimination and exclusion'* (EPHA in European Commission, 2020e, n.p.). Other submissions noted that algorithmic-driven discrimination could affect access to public transportation, employment or social security, predominantly concentrating on *'inherent bias embedded into software'* (EWL, 2020, p. 3) or inadequate consideration for certain groups *'An AI based solution for transport services will most likely dismiss the way which persons with disabilities travel'* (EDF, 2020, p. 4). Social rights were also referenced in con-

trasting terms that stressed how AI systems may be beneficial for advancing social rights, such as the submission from the Irish government that stated: *'AI-based diagnostic systems will improve living standards and quality of life'* (Government of Ireland, 2020, p. 16).

Operationalising human rights: from accountability to public investment

The engagement with rights language is not only indicative of normative priorities, but also suggests specific policy initiatives. For example, most submissions from NGOs in our sample argued for new requirements to increase transparency or accountability, such as *'mandatory human rights impact assessments'* (EDRi, 2020, p. 12), *'disclosure scheme for AI/ADM systems deployed in the public sector'* (AN, 2020, p. 7), and *'clear measures for enforcement'* (Amnesty Int., 2020, p. 3) and bans for particular technologies: *'the EU must establish red lines to ban applications of AI which are incompatible with fundamental rights'* (AN, 2020, p. 8). Some of those instruments create direct links with social rights, such as the proposal of a risk assessment that includes *'social discrimination, and impact on working conditions'* (UGICT, 2020, p. 10) as a response to the question of how to give human rights more concrete meaning in the development of AI. With regards to business organisations, rights were often operationalised in terms of particular organisational and technical procedures that focus especially on biases. Google, for example, explained how discrimination is addressed within their operations *'from fostering an inclusive workforce that embodies critical and diverse knowledge, to assessing training datasets for potential sources of bias, to training models to remove or correct problematic biases'* (Google, 2020, p. 21).

When it comes to investment efforts, human rights concerns were highlighted by NGOs (at least seven) as a necessary inclusion to ensure trust: *'Ecosystem of excellence must include trust'* (EDRi in European Commission, 2020e, n.p.). In particular, NGOs, trade unions or research institutes advocated for greater participation or evaluation methods that included fundamental rights, such as the suggestion from EWL that investing in and developing technology should include *'gender budgeting, impact assessments and well-funded monitoring frameworks'* (EWL, 2020, p. 4). Beyond these procedural safeguards, some organisations also engaged with the question of how decisions about resource allocation should be made: *'initiatives on research should ensure that the public interest is taken into account and that priorities are not simply set by the private sector but by broader social and environmental policy objectives'* (EPSU in European Commission, 2020e, n.p.). Relatedly, some saw public investment as an opportunity to challenge a *'surveillance-based business model'*

(Amnesty Int., 2020, p. 4) and data monopolies, and made suggestions for ‘*mandatory nonexclusive licensing of machine-collected data*’ (industriAll, 2019, p. 5) or ‘*legislative action to ensure access and use of business to government (B2G) data sharing*’ (EUROCITIES, n.d., p. 1). These discourses are indicative of a perceived role for the public sector in technological innovation as a way of ensuring fundamental rights.

Employment: automation of jobs to algorithmic management

References to social rights in the submissions centred on two main areas; employment and public services. With regards to the intersection of AI and employment, the most engagement came unsurprisingly from trade unions who focused particularly on transformations in the labour market: ‘*AI and robotics significantly impact the labour market and the way of working, not only because older jobs and tasks transform or disappear, and new ones emerge but also because of change in the nature of human work in relation to AI systems*’ (UGICT, 2020, p. 1). Two of the trade union submissions also highlighted the particular impact this would have on different groups of workers such as blue-collar workers and women. As a response, many of the submissions (including all trade unions and some business associations) called for educational programmes and re-skilling, such as the American Chamber of Commerce who wanted: ‘*significant investments in education, life-long learning and reskilling to ensure our workforce is ready for the jobs of tomorrow*’ (AmCham, 2020, p. 3). For trade unions those changes are essential for the ‘*transition to a fair workplace of the future*’ (UNI, 2020, p. 1) and called for the ‘*individual worker’s right to training, preferably guaranteed by collective agreements*’ (industriAll, 2019, p. 6). The focus on automation also engaged with resource distribution such as the call for the ‘*European transition fund to support those workers and regions negatively impacted by AI and more generally by the digitalisation of industry*’ (industriAll, 2019, p. 6) or the need for ‘*transferable benefits and commit[ment] to increasing support for those navigating the future of the labor... like universal basic income and adaptive social safety nets*’ (HCAI, 2020, p. 16).

In addition to restructuring the labour market, the submissions also focused on the impact of AI on management and working conditions where rights-based approaches were particularly prominent in questions of data governance, privacy, workers surveillance and algorithmic decision-making. All of the analysed submissions from trade unions highlighted that AI systems facilitate the possibility to ‘*supervise all workers, permanently, and to detect all occasions of noncompliance with prescriptions, in real time*’ (industriAll, 2019, p. 2). Automated systems for hiring, firing and performance-related decisions can ‘*deprive the worker from any possibility to discuss, present arguments to support their case and gain redress*’ (industryAll,

2019, p. 3). Responses ranged from a focus on data protection: *'[workers] must have the right to control the personal data that AI has generated about them'* (OGB, 2020, p. 3) to a greater role for unions in the implementation of AI systems: *'Negotiating the algorithm should become a real practice'* (UNI, 2020, p. 1). Suggestions here involve collective bargaining agreements that cover data governance issues but with the recognition that meaningful participation and social negotiations requires institutional support and capacity building for trade unions. Some unions also saw a need for more prominent engagement with ethical concerns in the development of technology, advocating for tech workers' *'right to know what they are building and to contest unethical or harmful uses of their work'* (UGICT, 2020, p. 9), whilst others suggested greater regulation of the use of AI in the workplace, calling for a *'system of regulation of the application of AI technologies for employment and management decisions'* (HCAI, 2020, p. 17).

Public services: providing access to benefits, healthcare and education

The other significant area for engagement with social rights was in relation to AI and public services. A diverse range of actors (business associations, NGOs, research institutions) referred in their submissions to the way automated systems are used by the public sector in areas like social security, healthcare or education. Only six submissions linked those issues with a language of rights although they did provide an indication of the normative expectations for AI in those areas, predominantly seeing AI as advancing social rights. For example, in describing the use of AI in public administration, some noted the benefits of AI for ensuring *'health workers spend their limited time in the most productive way'* (EPHA, 2019, p. 3), provide *'better, faster and more customised care to patients'* (EFPIA, 2020, p. 1), *'support and improve decision making'* (REIF, 2020, p. 3), *'help to inform policy direction and actions'* (Government of Ireland, 2020, p. 11) or even *'assist in deploying resources in a more accurate, strategic, and affordable way'* (AMI, 2020, p. 2). Some submissions also highlighted that AI and intensive data processing may bring particular benefits for *'the most underserved and marginalised groups'*, where *'linking of relevant administrative datasets of homeless people using different social welfare and health services could enable better observational studies, predictive analytics (e.g. service-use patterns)'* and *'... help illuminate the complex, intersectional reality of discrimination and exclusion'* (EPHA, 2019, p. 8).

At the same time, some submissions also noted the challenges of implementing AI systems in public administration. One NGO stated: *'(automatic) 'optimization' of medical resources and waiting times for medical procedures...[may be] of high-risk to*

the fundamental rights of patients (right to health, right to life)’ (NJCM, 2020, p. 16). With regards to a risk-based approach, several of the submissions therefore suggested that public services should fall into the high-risk category of AI applications: *‘Social security as a whole must be defined as a high-risk sector by virtue of its primordial nature in the life of all Europeans’* (REIF, 2020, p. 3). Other policy recommendations included legal bans for *‘use of AI to solely determine access to or delivery of essential public services (such as social security, policing, migration control)’* (AN, 2020, p. 9). Similarly, another submission cautioned against any general deployment of AI: *‘(t)he uptake of any technology, particularly in the public sector, should not be a standalone goal or value in itself’* and that *‘AI solutions must be evaluated against non-AI approaches’* (AN, 2020, p. 3). Interestingly, one submission raised the question of how AI impacts on more fundamental principles associated with public services: *‘What happens to the values that are built into our welfare systems when, for example, processes are automated?’* (LO, 2020, p. 2) whilst another put this into the context of how investment is carried out: *‘Public services need to be able to control the introduction of AI and make the necessary investment without being led or constrained by the private sector’* (EPSU in European Commission, 2020e, n.p.). As also noted above, these comments speak to the perceived close association between a strong public sector and the safeguarding of social rights.

The place of social rights in the EU’s AI policy debate

The White Paper on AI and submissions to the public consultation provide a useful indication of the different priorities and interests that are shaping the AI policy debate in Europe. When it comes to the question of social rights, it is noteworthy that their place is limited in the current AI policy. The White Paper does not lack a ‘rights language’, however the clear priority remains privacy, different transparency safeguards and specific understandings of non-discrimination. It is also in relation to non-discrimination that we see most engagement with social rights, such as unequal access to public services and care. Furthermore, submissions to the public consultations of the White Paper on AI Strategy do illustrate significant normative expectations of the role of the public sector in relation to AI innovation and a continued emphasis on employment regulation that are indicative of the sustained relevance of the European social model in defining ‘European values’. This has especially been a result of trade unions and some NGOs beginning to engage more in policy debates surrounding optimisation technologies.

This framing of priority is reflective of the wider EU AI policy debate. For example, 2018’s ‘Artificial Intelligence for Europe’ demonstrated little engagement with so-

cial rights or social policies but did outline an agenda that would address changes in labour markets caused by AI which include '*ensuring access for all citizens, including workers and the self-employed, to social protection, in line with the European Pillar of Social Rights*' (European Commission, 2018, p. 11). The High-Level Expert Group on Artificial Intelligence in its discussion on a commitment to fundamental rights does not engage much with social rights, but mentions workers in the context of the need for AI consultations and power imbalances (HLEG on AI, 2019). On the other hand, it is worth adding that digital technology has been highlighted in the recently adopted documents on European social policy. For example, 'Strong Social Europe for Just Transitions' noted that AI will generate structural changes in the job market and supports the advancement of digital skills, commitment to the development of digital technologies to avoid '*new patterns of discrimination or new risk to workers' physical and mental health*' as well as improving working conditions for platform workers (European Commission, 2020c, p. 9). Similarly, in the Action Plan for the Pillar of Social Rights, the post-pandemic recovery package encompasses an agenda on the digitisation of the workplace including '*issues related to surveillance, the use of data, and the application of algorithmic management tools*', setting a minimum standard on rights to disconnect, implementing a Digital Education Plan and making social security fit for technological changes (European Commission, 2021b, p. 19).

There are many different ways in which we might explain this limited conversation about social rights in the EU's AI policy debate. First of all, social rights hold an awkward position in European integration also in relation to the historical trajectory of the welfare state in the broader discussion on European identity and values (Katrougalos, 2007; Dodo, 2012). Whilst a social agenda within the EU has evolved over decades, the notable priority on market creation advances a political environment that makes some debates possible and some not. Social rights occupy a controversial place in policy debates that make them a less favourable frame for those actors that often prioritise individual freedoms or lack expertise in areas of social welfare or employment. Furthermore, the character of the policy process on technology prioritises the regulation of risks and the allocation of resources in innovation as main concerns (Jasanoff, 2009). Such a focus favours procedural and budgetary questions rather than, for example, the character of work or sustainability of public services. It also prioritises certain kinds of actors and language that can engage with these priorities. With regards to civil society, for example, this means that very often actors that have a particular techno-centric focus tend to respond to policy consultations and play an essential role in setting the agenda (Gangadharan & Niklas, 2019). This has played out in terms of a framing of issues that privi-

leges data protection and non-discrimination as main dominant human rights concerns as evidenced in our analysis. Both these issues have become widely recognised as spaces for policy intervention that engage with questions of data processing, algorithmic bias and transparency of computational models. This specific nature of the discussion on technology policy also undoubtedly influenced the nature of public consultations on the White Paper, which from the very beginning provided limited space for an engagement with social rights within the discussion.

Moreover, setting priorities in terms of rights discourses is a political matter, and is often associated with a broader economic and political context. This also means that how issues are understood creates certain parameters for the nature of responses. For example, the nature of the discussion on discrimination in AI debates that has tended to favour a focus on data and algorithmic bias has led to concerns about the presence of ‘happy talk’ on inclusion and diversity (Benjamin, 2019) and the drive towards an atomistic and techno-centric response to automated inequality (Hoffmann, 2019). These outcomes can be the result of many factors including particular corporate involvement, priorities of civil society or specific approaches to the topic in the media. Whilst rights-based approaches in general can be said to always have limitations (see also Hoffmann, 2020), the marginalisation of social rights within the EU’s AI policy debate should be seen as a political struggle over the meaning of ‘European values’ that goes beyond technological policy and touches upon the wider political priorities of the European project.

Nonetheless, social rights remain a relevant component of European integration and continue to be significant for addressing harmful market practices and for informing regulatory mechanisms (Kapczynski, 2019). Even if, as Moyn (2018) points out, there is also a need to engage with bigger structural questions about institutions, mechanisms of redistribution, taxation and control over infrastructures, public money and funds. Social rights can indeed broaden the horizon of political struggles, introducing new dynamics in the discussions about budgetary policies, architecture of institutions and reformulate the position of people who are receiving benefits, use healthcare or other public services (Yamin, 2008). Both Yamin and Kapczynski argue that in relation to a ‘narrow understanding of human rights’, social rights play a significant role in confronting matters of political economy, can ‘articulate claims to public prerogatives and infrastructures’ and reconstruct existing market mechanisms (Kapczynski, 2019). On this reading, social rights are integral to the creation of egalitarian social institutions and provide them with renewed relevance in light of neoliberal marketisation and widespread austerity agendas.

Conclusion

The policy debate on AI within Europe provides significant insights into how ‘European values’ are being constructed and what priorities are shaping approaches to technology innovation and regulation. Concerns about the turn to data infrastructures across areas of social life have tended to focus on particular human rights issues such as privacy and more recently non-discrimination, that are often translated into design solutions or procedural safeguards. At the same time, funding and intervention in the advancement of technology has been informed by an overarching commitment to the creation of a common market that can compete globally. These dynamics continue to play out in relation to current AI policy debates. Although the characteristics of the ‘European culture of justice’ have historically been associated with a social model that contrasts with other parts of the world (most notably the US) through its commitment to employment regulation and access to public services, an engagement with social rights in the context of emerging technologies has been notably absent and limited at best. Despite a growing recognition of the significance of social rights in addressing the impacts of AI advancements, they continue to occupy a marginal and awkward position in EU’s policy debates.

Yet certain openings for a discussion on social rights are emerging, particularly within questions of the future of work (including automation) or the use of optimisation technologies in the public sector, healthcare or education. Often this is bound up with an emphasis on non-discrimination. As we have seen, the increased involvement of trade unions and some NGOs that have not traditionally been prominent in policy discussions on technology has meant that there is emerging, albeit limited, engagement with social rights concerns in the most recent consultation on the White Paper on AI Strategy, particularly in relation to transformations in work and in public administration. Whilst these concerns speak to the continued relevance of the European social model, they rarely translate into a social rights frame that can effectively be operationalised in relation to AI, relying instead on design solutions or procedural safeguards. Instead, interests in redistribution and equality may need to engage with structural changes that involve the power relations of institutions, political economy and broader forms of governance not easily captured by rights-based approaches. Insisting on such an engagement as part of establishing any ‘European values’ in relation to technology that are said to be committed to (data) justice will continue to be a huge challenge.

References

AlgorithmWatch. (2019). *Automating society: Taking stock of automated decision making in the EU* [Report]. AlgorithmWatch; Bertelsmann Stiftung. https://algorithmwatch.org/wp-content/uploads/2019/01/Automating_Society_Report_2019.pdf

Alston, P. (2005). Assessing the strengths and weaknesses of the European Social Charter's Supervisory System. In G. Búrca, B. Witte, & L. Ogertschnig (Eds.), *Social rights in Europe*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199287994.003.0004>

Alston, P. (2017). The Populist challenge to human rights. *Journal of Human Rights Practice*, 9(1), 1–15. <https://doi.org/10.1093/jhuman/hux007>

Alston, P. (2019). *Report of the Special Rapporteur on extreme poverty and human rights (A/74/493)*. UN Special Rapporteur on extreme poverty and human rights. <https://undocs.org/A/74/493>

American Chamber of Commerce (AmCham). (2020). *AmCham EU's response to the White Paper on Artificial Intelligence*.

Amnesty International (Amnesty Int). (2020). *Amnesty International Submission to the European Commission's Consultation on Artificial Intelligence*.

Arntz, M., Gregory, T., & Zierahn, U. (2016). *The risk of automation for jobs in OECD Countries: A comparative analysis* (Working Paper No. 189; OECD Social, Employment and Migration Working Papers). Organisation for Economic Cooperation and Development. <https://doi.org/10.1787/5j1z9h56dvq7-en>

Benjamin, R. (2019). *Race after technology: Abolitionist tools for the new Jim code*. Cambridge Polity Press.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>

Calligaro, O., & Foret, F. (2018). *Analysing European values: An introduction* (O. Calligaro & F. Foret, Eds.). Challenges and opportunities for EU governance. Routledge.

Calo, R. (2017). Artificial Intelligence Policy: A Primer and Roadmap. *University of California, Davis Law Review*, 51(2), 399–435. https://lawreview.law.ucdavis.edu/issues/51/2/Symposium/51-2_Calo.pdf

Committee On Economic, Social And Cultural Rights. (2008). *General Comment no. 19. The right to social security (art. 9) (E/C.12/GC/19)*.

Demertzis, V., & Routledge. Dencik, L. (2011). *The European social model(s) and the self image of Europe* (F. Cerutti, S. Lucarelli, & P. Verdegem, Eds.). Westminster University Press.

Dencik, L. (2011). Toward data justice unionism? A labour perspective on AI governance. In P. Verdegem (Ed.), *AI for Everyone? Critical Perspectives* (pp. 267–284). Westminster University Press.

Dencik, L., & Kaun, A. (2020). Datafication and the welfare state. *Global Perspectives*, 1(1). <https://doi.org/10.1525/gp.2020.12912>

Dencik, L., Redden, J., Hintz, A., & Warne, H. (2019). The 'golden view': Data-driven governance in the scoring society. *Internet Policy Review*, 8(2). <https://doi.org/10.14763/2019.2.1413>

Dodo, M. K. (2014). Historical evolution of the social dimension of the European integration: Issues and future prospects of the European Social Model. *L'Europe En Formation*, 372(2), 51. <https://doi.org/10.3917/eufor.372.0051>

Eide, A. (2001). Economic, Social, and Cultural Rights as Human Rights. In A. Eide, C. Krause, & A. Rosas (Eds.), *Economic, social, and cultural rights: A textbook* (2nd revised). Nijhoff Publishers.

Esping-Andersen, G. (1990). *The three worlds of welfare capitalism*. Polity Press.

Eubanks, V. (2018). *Automating inequality: How high-tech tools profile, police, and punish the poor*. St Martin's Press.

Eurocities. (2020). *People-centred Artificial Intelligence (AI) in cities. Response to EU's white paper on AI*.

European Commission. (2018). *Communication from the Commission: Artificial Intelligence for Europe (COM/2018/237 final)*. European Commission. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52018DC0237&qid=1629380391776>

European Commission. (2020a). *Communication: A European strategy for data (Communication COM/2020/66 final)*. European Commission. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0066>

European Commission. (2020b). *Consultation outcome* [Spreadsheet and documents]. White Paper on Artificial Intelligence - a European Approach. https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12270-White-Paper-on-Artificial-Intelligence-a-European-Approach/public-consultation_en

European Commission. (2020c). *White Paper on Artificial Intelligence—A European Approach. Public consultation*. European Union. European Commission. https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12270-White-Paper-on-Artificial-Intelligence-a-European-Approach/public-consultation_en

European Commission. (2020d). *Communication from the commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A Strong Social Europe for Just Transitions (COM/2020/14 final)*. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0014>

European Commission. (2020e). *White Paper on Artificial Intelligence—A European approach to excellence and trust (White Paper COM(2020) 65 final)*. European Commission. <https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:52020DC0065>

European Commission. (2021). *Communication: The European Pillar of Social Rights Action Plan (COM/2021/102 final)*. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2021:102:FIN>

Proposal for a Regulation of the European Parliament and of the Council Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act) and Amending Certain Union Legislative Acts, no. COM(2021) 206 final; 2021/0106(COD) (2021). <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021PC0206>

European Digital Rights (EDRi). (2020). *Rights-based Artificial Intelligence Regulation* [Paper]. European Digital Rights. https://edri.org/wp-content/uploads/2020/06/AI_EDRiRecommendations.pdf

European Federation of Pharmaceutical Industries and Associations (EFPIA). (2020). *EFPIA responses to the European Approach for AI*.

European Public Health Alliance. (2020). *Moving Beyond the Hype. EPHA Reflection Paper on Big Data and Artificial Intelligence*.

European Services Workers Union. (2020). *UNI Europa ICTS specific responses to the Consultation on the White Paper on Artificial Intelligence*.

European Union Agency for Fundamental Rights (FRA). (2020). *Public Consultation on the European Commission's White Paper on Artificial Intelligence – a European Approach Contribution by the European Union Agency for Fundamental Rights*.

European Women's Lobby. (2020). *Recommendations on Artificial Intelligence and Gender Equality*.

Fabre, C. (2005). Social rights in European constitutions. In G. Búrca, B. Witte, & L. Ogertschnig (Eds.), *Social rights in Europe*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199287994.003.0002>

Frey, C. B., & Osborne, M. A. (2017). The future of employment: How susceptible are jobs to computerisation? *Technological Forecasting and Social Change*, 114, 254–280. <https://doi.org/10.1016/j.techfore.2016.08.019>

Gandy, O. H. (1995). It's discrimination, stupid! In J. Brook (Ed.), *Resisting the virtual life: The culture and politics of information* (pp. 35–47). City Lights Books.

Gangadharan, S. P. (2019). *What do just data governance strategies need in the 21st century?* [Keynote]. Data Power Conference, Bremen, Germany.

Gangadharan, S. P., & Niklas, J. (2019). Decentering technology in discourse on discrimination. *Information, Communication & Society*, 22(7), 882–899. <https://doi.org/10.1080/1369118X.2019.1593484>

Garben, S. (2020). Balancing social and economic fundamental rights in the EU legal order. *European Labour Law Journal*, 11(4), 364–390. <https://doi.org/10.1177/2031952520927128>

Google. (2020). *Consultation on the white paper on AI – a European approach. Google's submission*.

Hajer, M. A. (1993). Discourse coalitions and the institutionalization of practice: The case of acid rain in Great Britain. In F. Fischer & J. Forester (Eds.), *The Argumentative Turn in Policy Analysis and Planning* (pp. 43–76). Duke University Press.

Hert, P., & Papakonstantinou, V. (2016). The new General Data Protection Regulation: Still a sound system for the protection of individuals? *Computer Law & Security Review*, 32(2), 179–194. <https://doi.org/10.1016/j.clsr.2016.02.006>

High-Level Expert Group on Artificial Intelligence. (2019). *Ethics guidelines for trustworthy AI* [Report]. European Commission. <https://digital-strategy.ec.europa.eu/en/library/ethics-guidelines-trustworthy-ai>

Hintz, A., Dencik, L., & Wahl-Jorgensen, K. (2018). *Digital citizenship in a datafied society*. Polity.

Hoffmann, A. L. (2019). Where fairness fails: Data, algorithms, and the limits of antidiscrimination discourse. *Information, Communication & Society*, 22(7), 900–915. <https://doi.org/10.1080/1369118X.2019.1573912>

Hoffmann, A. L. (2020). Terms of inclusion: Data, discourse, violence. *New Media & Society*. <https://doi.org/10.1177/1461444820958725>

industriAll. (2019). *Artificial Intelligence: Humans must stay in command* [Policy brief].

Institute for Human-Centered Artificial Intelligence (HCAI). (2020). *Input on the European Commission White Paper "On Artificial Intelligence – A European approach to excellence and trust"*. Institute for Human-Centered Artificial Intelligence, Stanford University.

International Association of Mutual Benefit Societies (AIM). (2020). *Artificial Intelligence: Great Potentials and Some Challenges for Healthcare*.

Ireland, G. (2020). *Ireland's National Submission to the Public Consultation on the EU White Paper on Artificial Intelligence*.

Jasanoff, S. (2007). *Designs on nature: Science and democracy in Europe and the United States*. Princeton Univ. Press.

Jasanoff, S. (2009). Governing Innovation: The Social Contract and the Democratic Imagination. *Seminar*, 597, 18.

Judt, T. (2007). *Postwar: A history of Europe since 1945*. Pimlico.

Kapczynski, A. (2019). The Right to Medicines in an Age of Neoliberalism. *Humanity: An International Journal of Human Rights, Humanitarianism, and Development*, 10(1), 79–107. <https://doi.org/10.1353/hum.2019.0003>

Katrougalos, G. (2007). *The (Dim) Perspectives of the European Social Citizenship* (Working Paper No. 05/07; Jean Monnet Working Paper Series). NYU School of Law. <https://jeanmonnetprogram.org/paper/the-dim-perspectives-of-the-european-social-citizenship/>

Kenner, J., Hart, K., Kulynych, B., Overdorf, R., Troncoso, C., & Gürses, S. (2003). Economic and social rights in the EU legal order: The mirage of indivisibility. In T. K. Hervey & J. Kenner (Eds.), *Proceedings of the 2020 Conference on Fairness, Accountability, and Transparency* (pp. 177–188). <https://doi.org/10.1145/3351095.3372853>

Landsorganisationen Sverige. (2020). *LOs svar på Kommissionens öppna samråd: Om artificiell intelligens—En EU-strategi för spetskompetens och förtroende*.

Langford, M. (2009). The justiciability of social rights: From practice to theory. In M. Langford (Ed.), *Social Rights Jurisprudence Social Rights Jurisprudence Emerging Trends in International and Comparative Law* (pp. 3–45). Cambridge University Press. <https://doi.org/10.1017/CBO9780511815485.003>

Lyon, D. (2015). *Surveillance After Snowden*. Polity Press.

Maduro, M. P. (1999). Striking the Elusive Balance Between Economic Freedoms and Social Rights in the EU. In P. Alston (Ed.), *The EU and Human rights*. Oxford University Press.

Mann, M. (2020). Technological politics of automated welfare surveillance: Social (and data) justice through Critical Qualitative Inquiry. *Global Perspectives*, 1(1). <https://doi.org/10.1525/gp.2020.12991>

Mann, M., & Matzner, T. (2019). Challenging algorithmic profiling: The limits of data protection and anti-discrimination in responding to emergent discrimination. *Big Data & Society*, 6(2). <https://doi.org/10.1177/2053951719895805>

Mărcuț, M. (2017). *Crystalizing the EU digital policy: An exploration into the Digital Single Market*. Springer. <https://doi.org/10.1007/978-3-319-69227-2>

Marshall, T. (1950). Citizenship and social class. In *Citizenship and social class: And other essays*. Cambridge University Press.

- McGaughey, E. (2018). *Will robots automate your job away? Full employment, basic income, and economic democracy* (Working Paper No. 496). Centre for Business Research, University of Cambridge. <https://www.cbr.cam.ac.uk/wp-content/uploads/2020/08/wp496.pdf>
- McGregor, L., Murray, D., & Ng, V. (2019). International human rights law as a framework for algorithmic accountability. *International and Comparative Law Quarterly*, 68(02), 309–343. <https://doi.org/10.1017/S0020589319000046>
- Menendez, A. J. (2003). The Sinews of peace: Rights to solidarity in the Charter of Fundamental Rights of the European Union. *Ratio Juris*, 16(3), 374–398. <https://doi.org/10.1111/1467-9337.00241>
- Moyn, S. (2018). *Not enough: Human rights in an unequal world*. The Belknap Press of Harvard University Press.
- Nederlands Juristen Comité voor de Mensenrechten (NJCM). (2020). *Consultation EU White paper on Artificial Intelligence*. https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12270-White-Paper-on-Artificial-Intelligence-a-European-Approach/public-consultation_en
- Niklas, J., & Dencik, L. (2020). *European Artificial Intelligence policy: Mapping the institutional landscape* (Data Justice Working Paper. Cardiff University. https://datajusticeproject.net/wp-content/uploads/sites/30/2020/07/WP_AI-Policy-in-Europe.pdf
- Now, A. (2020). *Submission to the Consultation on the “White Paper on Artificial Intelligence—A European approach to excellence and trust”*.
- Österreichischer Gewerkschaftsbund, AK Europa (OGB). (2020). *Weissbuch Zur künstlichen Intelligenz – ein europäisches Konzept für Exzellenz und Vertrauen* [Position paper]. Österreichischer Gewerkschaftsbund.
- Overy, P. (2009). European union: Guide to tracing working documents. *Legal Information Management*, 9(2), 107–111. <https://doi.org/10.1017/S1472669609000279>
- Persson, T. (2007). Democratizing European chemicals policy: Do consultations favour civil society participation? *Journal of Civil Society*, 3(3), 223–238. <https://doi.org/10.1080/17448680701775648>
- Plomien, A. (2018). EU social and gender policy beyond Brexit: Towards the European Pillar of Social Rights. *Social Policy and Society*, 17(2), 281–296. <https://doi.org/10.1017/S1474746417000471>
- Portes, J., Reed, H., & Percy, A. (2017). *Social prosperity for the future: A proposal for Universal Basic Services* (IGP Working Paper Series. UCL Institute for Global Prosperity. https://mronline.org/wp-content/uploads/2019/08/universal_basic_services_-_the_institute_for_global_prosperity_.pdf
- Powles, J. (2018). *The Seductive diversion of ‘solving’ bias in Artificial Intelligence*. <https://onezero.medium.com/the-seductive-diversion-of-solving-bias-in-artificial-intelligence-890df5e5ef53>
- Quittkat, C. (2011). The European Commission’s online consultations: A success story? *JCMS: Journal of Common Market Studies*, 49(3), 653–674. <https://doi.org/10.1111/j.1468-5965.2010.02147.x>
- Rasmussen, A., & Toshkov, D. (2013). The effect of stakeholder involvement on legislative duration: Consultation of external actors and legislative duration in the European Union. *European Union Politics*, 14(3), 366–387. <https://doi.org/10.1177/1465116513489777>
- Représentations des Institutions Françaises de sécurité sociale (REIF). (2020). *Position REIF. Stratégie européenne pour les données et approche européenne sur l’intelligence artificielle*.

Schermer, B. (2011). The limits of privacy in automated profiling and data mining. *Computer Law and Security Review*, 27(45). <https://doi.org/10.1016/j.clsr.2010.11.009>

Seamster, L., & Charron-Chénier, R. (2017). Predatory inclusion and education debt: Rethinking the racial wealth gap. *Social Currents*, 4(3), 199–207. <https://doi.org/10.1177/2329496516686620>

Ssenyonjo, M. (2009). *Economic, social and cultural rights in international law*. Hart.

Standing, G. (2016). *The precariat: The new dangerous class* (Revised). Bloomsbury Academic.

Stefano, V. D. (2018). 'Negotiating the algorithm': Automation, artificial intelligence and labour protection (Working Paper No. 246; Employment Working Paper Series). International Labour Office, Employment Policy Department. https://ilo.userservices.exlibrisgroup.com/discovery/delivery/41ILO_INST:41ILO_V2/1254389610002676

Toebes, B. C. A. (1999). *The right to health as a human right in international law*. Intersentia.

Union générale des ingénieurs, cadres et techniciens CGT (UGICT). (2020). *Consultation on the White Paper on Artificial Intelligence—A European Approach*. https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12270-White-Paper-on-Artificial-Intelligence-a-European-Approach/public-consultation_en

Wagner, B. (2019). Ethics as an escape from regulation. From “ethics-washing” to ethics-shopping? In E. Bayamlioglu, I. Baraliuc, L. A. W. Janssens, & M. Hildebrandt (Eds.), *Being Profiled: Cogitas Ergo Sum. 10 Years of 'Profiling the European Citizen'* (pp. 84–88). Amsterdam University Press. <https://doi.org/10.2307/j.ctvhrd092.18>

Wood, A. J. (2021). *Algorithmic Management Consequences for Work Organisation and Working Conditions* (Technical Report No. 2021/07; JRC Working Papers Series on Labour, Education and Technology). European Commission Joint Research Centre. <https://ec.europa.eu/jrc/sites/default/files/jrc124874.pdf>

Yamin, A. E. (2008). Will we take suffering seriously? Reflections on what applying a human rights framework to health means and why we should care. *Health and Human Rights*, 10(1), 45–63. <https://doi.org/10.2307/20460087>

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