WORKING PAPER

SOCIAL RIGHTS AND DATA TECHNOLOGIES: LOOKING FOR CONNECTIONS

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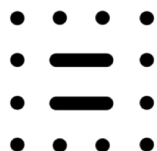
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INTRODUCTION: PROTECTING HUMAN RIGHTS IN THE AGE OF DATAFICATION

Human rights have been part of the discussion about digital technologies for many years. Scholars, activists, courts and politicians use rights language to explain how various digital technologies may interfere with people's lives and impact societies. However, for a long time, this discussion has focused predominantly on privacy and data protection, which often provide a framework in which to raise questions about the transparency and accountability of such systems. Recent debate about artificial intelligence (AI) and justice has introduced another strong focus related to discrimination and the principle of equal treatment, in terms of the use of particular data technologies in making decisions.

However, the catalogue of human rights is much broader than privacy or non-discrimination. It can also include a variety of social rights, such as the right to social security, housing, healthcare, education or work. In this working paper, we are interested in understanding the added value of social rights in this debate and raising questions to gain some new insights into our understanding of justice and technology.

We focus mostly on European examples, especially the European Union as one of the key players in regulating and policymaking in digital technologies. However, we also provide examples of cases, legislation and policies from other countries and international organisations.

The main objective of this working paper is to map existing and possible connections between social rights and the rise of various data technologies. We raise four questions:

- What is the wider socio-technical context of the intersection between social rights and optimisation technologies?
- How do existing practices of international social rights treaties, national courts and policymaking institutions outline the relationship between social rights and optimisation technologies?
- What are the existing connection lines between data protection and social rights?
- How may social rights be used as a framework to understand and challenge socio-technical issues?

WHAT ARE SOCIAL AND ECONOMIC RIGHTS?

Historical perspective and the emergence of international social rights

In this working paper, we offer a broad understanding of social rights, combining discussions that have emerged in political theory, international human rights and law. These include various rights, such as housing, social security, healthcare, food or work. Importantly, in this paper we use the term 'social rights' to describe a group of rights that is sometimes described as 'economic, social and cultural rights' or 'economic and social rights'. The different meanings behind the names of these groups are sometimes blurred and vague, therefore it is beneficial to use the shortest term that encompasses all of these – 'social rights'.

In political theory, social rights are seen as a part of the broader agenda and transformations related to the emergence of the welfare state in the 19th century. Famously, T. H. Marshall depicted the evolution of citizenship as being divided into three categories: civil, political and social [1]. This categorisation may now be seen as outdated and historically inaccurate. However, it captures the dynamic in which citizens have different freedoms and entitlements from the state, society and community. Marshall's social dimension of citizenship is built upon claims of distributional justice and more egalitarian social relations. It refers to access to public services such as education, healthcare, welfare and pensions, as well as various labour-related issues like fair wages, paid holidays, the right to form trade unions or go on strike.

In a legal sense, social rights have been outlined by numerous different international and national legal acts [2]. At the international level, especially since the Second World War, social rights have been proclaimed by declarations or treaties including the Universal Declaration on Human Rights, the International Covenant on Economic, Social and Cultural Rights, and the European Charter of Social Rights, along with many International Labour Organization Conventions. Some countries' constitutions contain references to social rights, social citizenship or the state's obligation to conduct social policies.[3] Finally, ordinary public and labour legislation includes enforceable rights and entitlements that guarantee access to social services and offer protection for workers. According to King, the successful protection of social rights requires multi-institutional cooperation from different branches of the government: parliaments, administration, courts, special commissions and ombudspersons. All of these play important and different roles in allocating, understanding and interpreting the rights, duties and frameworks of social security schemes.

Sometimes social rights are regarded as 'controversial' rights, their scope and practical use is called into question, and people challenge their legal nature, scope and regulatory potential. However, the sources of such objections are frequently political and ideological [4]. Narrow liberal conceptions of rights highlight a misleading division between 'negative' (related to individual

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[1] T. Marshall, 'Citzenship and Social Class', in *Citzenship and Social Class: And Other Essays* (London; New York: Cambridge University Press, 1950).

[2] Jeff King, *Judging Social Rights*, Cambridge Studies in Constitutional Law (Cambridge: Cambridge University Press, 2012).

[3] Eleanor D. Kinney and Brian Alexander Clark, 'Provisions for Health and Health Care in the Constitutions of the Countries of the World', *Cornell International Law Journal*, no. 37 (2004): 285–355.

[4] Daphne Barak-Erez and Aeyal M Gross, *Exploring Social Rights: Between Theory and Practice* (Oxford: Hart, 2007).

freedoms) and 'positive' rights (which require active state intervention) [5]. In fact, the realisation of social rights depends on particular resources, and budgetary and tax policies play an essential role in this. Recently social rights frameworks have been criticised for providing only minimal protection and access to essential services, against a more robust and developed egalitarian agenda that would focus on, e.g. wealth inequality or industrial policies [6].

There have always been controversies surrounding social rights within the European Union's fundamental rights work.[7] In the early years of European integration, one of the key questions was the place of broader social and employment policies. While some commitments like equal pay between women and men have been present in the European legal system since 1957, social rights stand on relatively weak ground.[8] On the other hand, a commitment to social rights has been recognised as a crucial element of so-called 'European values' – 'fundamental social rights' are mentioned in the Treaty of Amsterdam and social rights are incorporated into the European Charter of Fundamental Rights.[9] However, they are seen as principles rather than individuals' binding entitlements, and their legal status is somewhat limited. Nevertheless, the Charter of Fundamental Rights plays a crucial role in assessing legislative proposals and existing European law. Social rights also relate – although often inexplicitly –to a large variety of EU policy areas, such as initiatives related to anti-discrimination legislation, health and security in the workplace, social security coordination or migration.

Recently, the European Commission renewed interest in social rights at the political level by announcing its European Pillar of Social Rights.[10] This is a non-binding instrument proclaiming many different rights and principles related to three crucial areas: equal opportunities and access to the labour market, fair working conditions, social protection and inclusion.[11] Each of these areas is linked to the catalogue of principles that have been seen in other similar international declarations. At the same time, the pillar is connected to specific mechanisms of monitoring and assessment and a recently-outlined policy action plan. For example, the European Commission has developed a monitoring mechanism called a Social Scoreboard, which identifies 12 issues and 54 indicators connected to the principles outlined in the pillar. Each European country is evaluated in line with this data during the European semester. The semester itself is a process conducted by the European institutions to assess each country's economic and fiscal responsibility.

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[5] Alicia Ely Yamin, '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, no. 1 (1 January 2008): 45, https://doi.org/10.2307/20460087.

[6] Samuel Moyn, *Not Enough: Human Rights in an Unequal World* (Cambridge: The Belknap Press of Harvard University Press, 2018).

[7] Jeff Kenner, 'Economic and Social Rights in the EU Legal Order: The Mirage of Indivisibility', in *Economic and Social Rights under the EU Charter of Fundamental Rights: A Legal Perspective*, ed. Tamara K Hervey and Jeff Kenner (Oxford; Portland, Or.: Hart, 2003).

[8] Mahamat K. Dodo, 'Historical Evolution of the Social Dimension of the European Integration : Issues and Future Prospects of the European Social Model', *L'Europe En Formation* 372, no. 2 (2014): 51, https://doi.org/10.3917/eufor.372.0051.

[9] Cecile Fabre, 'Social Rights in European Constitutions', in *Social Rights in Europe*, ed. Gráinne de Búrca, Bruno de Witte, and Larissa Ogertschnig (Oxford: Oxford University Press, 2005).

[10] Sacha Garben, 'The European Pillar of Social Rights: An Assessment of Its Meaning and Significance', *Cambridge Yearbook of European Legal Studies* 21 (December 2019): 101–27, https://doi.org/10.1017/cel.2019.3.

[11] https://ec.europa.eu/info/strategy/priorities-2019-2024/economy-works-people/jobs-growth-and-investment/european-pillar-social-rights_en

How social rights are operationalized?

Political ideas, bills of rights and international human rights treaties often provide a proclamation of specific rights. These proclamations usually have a comprehensive and general character. To be more practical and usable, they need to be translated and operationalised into particular safeguards, limitations and expectations via policies, laws or budgets. Based on two examples – the right to social security and the right to work -we will next explain how social rights are a complex structure with differing sets of obligations and expectations regarding social policies

- **The right to social security**

Various international treaties and declarations proclaim the human right to social security. They can have a pretty broad character and include a wide range of topics, including social insurance, unemployment, ill-health and retirement (tab 1 in the annex). These general declarations are then translated into a more complex mix of obligations, entitlements and safeguards of a material and procedural character, including issues related to good governance, the administration of social programmes and the financial sustainability of social security schemes. There are also specific requirements on transparency, accountability and necessary remedies in case of violations. For example, the UN Committee on Economic, Social and Cultural Rights (CESCR) distinguishes three levels of obligations that arise from the right to social security: respect, protect and fulfil. They also name four essential aspects of the right to social security:

- **Availability**: A social security system needs to be in place under domestic law to ensure that benefits are effectively administered and supervised.
- **Adequacy**: Benefits, whether in cash or in kind, must be sufficient in quantity and duration so that everyone may realise his or her rights to family protection and assistance, a reasonable standard of living and access to healthcare.
- **Affordability**: Costs and charges associated with contributions to social security must be economical for all, and must not compromise the realisation of other Covenant rights.
- **Accessibility**: A social security system should cover all persons, especially those belonging to the most disadvantaged and marginalised groups, without discrimination. Benefits should also be physically accessible.[12]
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Moreover, realising the right to social security (and other social rights) requires the extensive use of resources such as money, staff and other facilities. That is why international standards do not oblige states to fulfil economic and social rights immediately if they have impeding economic constraints. However, they must take progressive actions towards the full realisation of these rights and ensure that they use the maximum amount of their available resources (e.g. a gradual increase in welfare expenditures).[13] Any regression in the enjoyment of these rights (like cutting spending on social services) may lead to a violation of international standards.[14] Other obligations are immediate, such as providing some minimum, essential level of particular rights. For example, in terms of the right to social security, this covers at least essential healthcare, basic shelter and

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https://tbinternet.ohchr.org/_layouts/15/treatybodyexternal/Download.aspx?symbolno=E%2fC.12%2fGC%2f19&Lang=en

[13] Robert E. Robertson, 'Measuring State Compliance with the Obligation to Devote the "Maximum Available Resources" to Realizing Economic, Social, and Cultural Rights', *Human Rights Quarterly* 16, no. 4 (November 1994): 693, https://doi.org/10.2307/762565.

[14] I. Saiz, 'Rights in Recession? Challenges for Economic and Social Rights Enforcement in Times of Crisis', *Journal of Human Rights Practice* 1, no. 2 (1 June 2009): 277–93, https://doi.org/10.1093/jhuman/hup012.

housing, water, sanitation and food. Another core obligation is ensuring that the right to social security is exercised without discrimination. This means that welfare administration or schemes should be available to all and that states should prioritise and pay special attention to marginalised and vulnerable groups, like women, individuals who are unemployed, working in the informal economy, have disabilities, are old, children, prisoners or refugees.

Discussions about the right to social security also involve certain aspects of welfare programmes' governance and accountability. For example, it is essential to develop and implement a national social security strategy and relevant legislation that set out institutional responsibility, entitlements and goals for welfare policies. The CESCR also provides guidelines on how organisations should provide benefits and ensure procedural fairness. For example, eligibility criteria for welfare benefits should be transparent and clear to the individuals applying for them. Another important element is the participation of the affected community in creating social policies and in administering schemes. In case of violations, national laws should also create mechanisms for redress - through courts or administrative entities such as ombudsmen. States should also establish instruments for monitoring progress in realising the goals set and achieving targets. Relevant indicators and benchmarks are necessary for this.

A second body, the European Committee of Social Rights (ECSR) also has a long and extensive tradition of interpreting the right to social security.[15] It points to a few critical issues, including the universality of the right, which means that there must be a universal social security system accessible for every person who needs help. In addition, some benefits may address the need of a particularly vulnerable group. It states that access to social security should be laid down in binding laws and not be subject to discretionary decision making by the administration. This means that specific rules concerning the conditions, criteria and other factors defining the rules for granting assistance should be clearly defined in the law. The ECSR has highlighted the need for a legal definition of a threshold below which individuals are entitled to receive assistance (a means test). Other issues are related to suspending or reducing benefits, which should be possible only if this does not violate people's means of subsistence, and there always must be a right to appeal against an unfavourable decision. Finally, the ECSR has also declared that social assistance should not be much lower than the local poverty line.

Simultaneously, the interpretation of the right to social security by the Court of Justice of the European Union is narrower and much more complex.[16] First, it views the right to social security as a principle instead of a fully enforceable individual's right. Therefore it only has a programmatic character for public authorities and serves as an 'interpretative reference' or parameter for ruling on the legality. Interestingly, the court asserts that the eurozone's financial stability may serve as a justification for limiting the right to social security. In another ruling, the Court decided whether 'core benefits' should include at least minimum income support, assistance in case of illness, pregnancy, parental assistance and long-term care. According to this ruling, the goal of the right to social security is to ensure a minimum and decent existence for those experiencing poverty or social exclusion due to a lack of sufficient resources.

[15] María Dalli, 'The Content and Potential of the Right to Social Assistance in Light of Article 13 of the European Social Charter', *European Journal of Social Security* 22, no. 1 (March 2020): 3–23, https://doi.org/10.1177/1388262720908695.
[16] Ane Aranguiz, 'Bringing the EU up to Speed in the Protection of Living Standards through Fundamental Social Rights: Drawing Positive Lessons from the Experience of the Council of Europe', *Maastricht Journal of European and Comparative Law*, 12 August 2021, 1023263X2110217, https://doi.org/10.1177/1023263X211021765.

Box: Social rights and austerity measures

During and after the financial crisis of 2007-2008 many European countries implemented a variety of austerity measures – including drastic cuts in pensions, social protection schemes and healthcare. These decisions have been heavily criticised by various monitoring bodies and experts from the UN and Council of Europe, as they violated social rights standards.[17] For example, the European Committee of Social Rights (ECSR) found that some states violated the European Social Charter by implementing austerity measures ordered by the European credit institutions. In many cases it was seen that these cuts lead to regression in the enjoyment of social rights, especially for certain vulnerable groups, in contradiction to the progressive nature of obligations coming from social rights. The UN Committee on Economic, Social and Cultural Rights (CESCR) also explained that, in times of crisis, austerity measures should fulfil certain criteria[18], being: a) temporary to only cover the period of the economic crisis; b) legitimate (for example when austerity measures result from a decrease in state resources due to external factors), with the ultimate aim of protecting the totality of human rights; c) necessary, they must be justifiable after the most careful consideration of all other less restrictive alternatives; d) reasonable, in that the means chosen are the most suitable and capable of achieving the legitimate aim; e) proportionate, in the sense that adopting any other policy or a failure to act would be more detrimental to the enjoyment of economic, social and cultural rights; f) not discriminatory, being able to mitigate inequalities that emerge in times of crisis and ensure that the rights of disadvantaged and marginalised individuals and groups are not disproportionately affected; g) protective of the minimum core content of economic, social and cultural rights; based on transparency and the genuine participation of affected groups in examining the proposed measures and alternatives; h) subject to meaningful review and accountability procedures.

- **The right to work and rights at work**

The right to work is also strongly recognised in international human rights treaties and many countries' declarations and national constitutions (tab 2 in the annex). At the core, it recognises that labour is not only a source of necessary income but also an essential and integral element of human dignity. It is commonly accepted that the human right to work has three different but interconnected components.[19] The first one is personal liberty to choose an occupation and to be free from any form of coercive work, including slavery. The second element is entitlement to have a job, which may also be seen as a controversial obligation of a state to provide jobs and conduct a full employment policy. This may also include delivering necessary vocational training, guidance and education, and taking measures to develop an environment for employment

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[17] Claire Kilpatrick and Bruno De Witte, eds., 'Social Rights in Times of Crisis in the Eurozone: The Role of Fundamental Rights' Challenges', EUI Working Paper, 2014.

[18] https://www2.ohchr.org/english/bodies/cescr/docs/Lettercescrtosp16.05.12.pdf

[19] Manisul Ssenyonjo, *Economic, Social and Cultural Rights in International Law* (Portland: Hart Publishing, 2009).

opportunities. The third aspect of the right to work relates to the quality of work and fair working conditions. This includes particular safeguards on fair wages, occupational health and safety, prohibition of child labour and non-discrimination at work. Reasonable work hours, leisure and holidays are also essential components. Workers should have the right to associate, form or join a trade union and bargain collectively. Strikes and protests are also an important element of the right to work framework. Such an understanding of the right to work is in line with the interpretation done by the UN CESCR in its General Comment of 2005, which recognises the following dimensions of the right to work[20]:

- **Availability:** States must provide specialised services to support individuals in identifying and finding work.
- **Accessibility:** States must make the labour market open to everyone without discrimination and ensure that reasonable accommodation is made so that workplaces are physically accessible, particularly for people with physical disabilities. Everyone has the right to seek, obtain and impart information on employment opportunities.
- **Acceptability and quality:** This dimension involves workers' rights to just and favourable conditions of work, in particular to safe working conditions, the right to form trade unions and the right to freely to choose and accept work.

The European Committee of Social Rights offers a comprehensive interpretation of the content of the right to work. For example, over the years the ECSR has described the conditions under which prisons may organise inmates' work, remuneration levels during public holidays and the regulation of working time. The European Social Charter offers quite a detailed set of standards that reflect the European model of protecting workers' rights, providing a full-employment policy. Interestingly, in its interpretation of the right to work, the ECSR includes protection from interference in workers' private and personal lives due to data technologies.[21] This emerges from the right to undertake work freely, including protection from electronic surveillance that could especially affect private and personal life.

Over many decades the International Labour Organization (ILO) has been one of the crucial organisations responsible for setting international standards for workers' protection.[22] The ILO has adopted several Conventions related to the right to work: ILO 100 concerning Equal Remuneration, ILO 122 concerning Employment Policy, ILO 111 concerning Discrimination, and ILO 142 concerning Human Resources Development. Closely related to the right to work are trade union rights and the prohibition of forced labour. Several ILO Conventions protect these rights, especially ILO 87 and ILO 98 concerning Freedom of Association, ILO 29 and ILO 105 concerning Prohibition of Forced Labour, ILO 138 concerning Minimum Age, and ILO 182 aiming at eliminating the worst forms of child labour.

The right to work may be seen as a general idea that combines a variety of issues related to labour and employment. However, it is important to stress that workers' rights at the national level are protected through various labour laws and regulations. These protection systems vary from one country to another and usually have a long tradition. An important element of that system of protection is labour inspections, along with occupational safety inspectorates and special labour courts and commissions that proceed on employment-related disputes.

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[20] https://tbinternet.ohchr.org/_layouts/15/treatybodyexternal/Download.aspx?symbolno=E%2fC.12%2fGC%2f18&Lang=en

[21] http://hudoc.esc.coe.int/eng?i=XX-1_035_02/Ob/EN

[22] https://www.ilo.org/global/standards/introduction-to-international-labour-standards/conventions-and-recommendations/lang--en/index.htm

Box: Social rights indicators

At the international level human rights bodies use indicators to inform and assess how compliant states are with social rights treaties.[23] These indicators are both quantitative and qualitative, and are concerned with the process as well as the result. Important evaluation elements are repeatability, measurability and comparison of situations in different countries. Indicators should be periodically revised to take into account changing circumstances that affect the implementation of human rights. Using such data can also be used to determine whether a state is progressing or regressing in specific policy domains (e.g. allocating financial resources to education). The Human Rights Council has proposed the following example indicators of the right to work (examples): a) ratification of the ILO conventions; b) presence of the right to work in national constitutions; c) number of registered trade unions per 100,000 persons; d) maximum working hours; e) minimum age for employment; f) proportion of target population receiving effective support to re enter the labour market; g) average time spent on unpaid domestic or family care; h) proportion of workers who move from precarious to stable contracts

TECHNO-SOCIAL CONTEXT: BETWEEN THE DIGITAL WELFARE STATE AND AUTOMATED WORKPLACE

Following our interests in two areas – social security and employment – we will now briefly describe how they are being impacted by the development of new data technologies (including AI, machine learning and so on). In this working paper, we look at this development from the social rights perspective and examine certain kinds of impact (like access to social benefits, remuneration, working conditions and access to trade unions). Based on these examples, we will discuss what interests are at stake when technology influences people's enjoyment of social rights.

Automated welfare administration

Computers, databases, expert and automated systems have been part of social security administration for a long time now. For example, Scandinavian countries have been using gathering data by computers and use automated calculation systems (e.g. to calculate benefits or pensions) since 1960.[24] Similarly, in Germany, ideas about nationwide information systems were

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23 Judith V. Welling, 'International Indicators and Economic, Social, and Cultural Rights', *Human Rights Quarterly* 30, no. 4 (2008): 933–58.

24 Per Lundin, 'Computers and Welfare: The Swedish Debate on the Politics of Computerization in the 1970s and the 1980s' (4th History of Nordic Computing (HiNC4), Copenhagen, 2014), 10; Malcolm Langford,

seen as a crucial element of growing welfare administration.[25] Therefore, automating and computerising its decision making has been an essential aspect of modern welfare states that are expanding their operations, improving, speeding up and standardising procedures.

More recently, under the unifying frame of e-government, countries have invested in digitising the databases and communication methods used by the public sector, including social security. This is no surprise, considering that this sector is responsible for administering significant financial resources. In one early study around e-government in the welfare sector, scholars outlined the 17 most common goals for using such systems. These include increasing productivity, promoting accurate and consistent decision making, cutting costs, increasing the responsiveness of service delivery, and improving information flow.[26] Today, as seen for example in the study conducted by the organisation Algorithm Watch, diverse algorithmic and automated systems are being developed in many other European countries on a massive scale.[27] However, their level of technological sophistication varies.

The widespread use of technologies, especially in recent years, has been seen as a challenge for citizens in receiving access to social entitlements. For example, in 2019 the UN Special Rapporteur on extreme poverty and human rights issued a report concerning the 'digital welfare state' and explained how modern informational technologies can affect the public redistribution of services and welfare administration operations.[28]

One of the driving forces for introducing such new technologies has been various neoliberal reforms that promote cutting expenses and introducing different austerity measures. As explained by Eubanks and Gilliom, automated systems were implemented in the US as part of a reduction of employment in social services, in the belief that technology could replace human operators.[29] Automated technologies are also connected with neoliberal reforms through the growing trend of conditionality. Older welfare systems were based on universal social protection schemes that provided similar assistance to everybody. Today, welfare administration focuses more on individual responsibility and assessing personal behaviours, adjusting assistance (and sanctions) to these situations.[30] For example, an active job search or rehab attendance is a prerequisite for receiving benefits in some countries. Information systems play a growing role in monitoring and checking how such conditions are being fulfilled. Vast collection, use and sharing of data among different social dimensions also allows information from one sector to be used by another. This means, for example, that conditionality in social security can also rely on the information (and

'Taming the Digital Leviathan: Automated Decision-Making and International Human Rights', *AJIL Unbound* 114 (2020): 141–46, https://doi.org/10.1017/aju.2020.31; Heather Broomfield and Lisa Reutter, 'Towards a Data-Driven Public Administration: An Empirical Analysis of Nascent Phase Implementation', *Scandinavian Journal of Public Administration* 25, no. 2 (n.d.): 25.

[25] Larry Frohman, 'Network Euphoria, Super-Information Systems and the West German Plan for a National Database System', *German History* 38, no. 2 (2020): 311–37, https://doi.org/10.1093/gerhis/ghaa011.

[26] Michael Adler and Paul Henman, 'Computerizing the Welfare State: An International Comparison of Computerization in Social Security', *Information, Communication & Society* 8, no. 3 (September 2005): 315–42, https://doi.org/10.1080/13691180500259137.

[27] https://automatingsociety.algorithmwatch.org/

[28] https://www.ohchr.org/EN/Issues/Poverty/Pages/DigitalTechnology.aspx

[29] Virginia Eubanks, *Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor* (New York: St Martin's Press, 2018); John Gilliom, *Overseers of the Poor: Surveillance, Resistance and the Limits of Privacy* (Chicago: University of Chicago Press, 2001).

[30] Paul Henman, 'Conditional Citizenship? Electronic Networks and the New Conditionality in Public Policy', *Policy & Internet* 3, no. 3 (24 January 2011): 71–88, https://doi.org/10.2202/1944-2866.1103.

conditions) gathered in criminal or health records.[31] Research also shows that, in the UK, this access to information has allowed partly privatised social welfare to manipulate and change eligibility criteria with high frequency (mainly to reduce the number of migrants receiving benefits).[32]

New automated systems are also being employed to detect fraud and sanction fraudulent behaviour. Sanctions in welfare systems mean that benefits are reduced or suspended. An example of a system used to detect frauds was the Dutch SyRi, which enabled public institutions to compare data from different governmental databases (like employment, personal debt and benefits records, education and housing histories) and analyse them through creating profiles of those deemed to be at higher risk of committing fraud (like having a side job or undeclared income).[33] Detection of such situations has always been an important element of neoliberal narratives around welfare systems that prioritise fiscal responsibility, reduction of spending and reliance on harmful stereotypes about people receiving benefits. It is notable that SyRi primarily targeted people and communities living in poorer and migrant neighbourhoods. This brings another important aspect of concerns into the discussion about automated systems in welfare systems: discrimination and a focus on marginalised groups.

On the one hand, a well-known discussion about biases embedded in algorithmic systems shows that certain systems may lead to differentiation based on gender, skin tone or other characteristics.[34] On the other hand, implementing particular systems (like fraud detection) on specific segments of the population (e.g. migrants) may be seen as punitive and as sanctioning such groups through technological means.[35] Another example of a system used to detect potential fraud is the new Irish Public Services Card that allows welfare recipients to be identified and verified using facial recognition and other biometric methods.[36]

This growing volume of data in public registers and in-depth knowledge about citizens and their needs has opened up a way for public services to be more tailored and adjusted to individual needs.[37] This trend of more individualised and data-tailored services is already present in the welfare sector. For example, public employment services in Poland have developed a profiling mechanism that divides all unemployed individuals into one of three different categories, based on their demographic data, unemployment history and other life-related situations.[38] In theory, such categorisation should lead to effective and individualised unemployment services to help people back into the labour market. However, while the previous system outlined eligibility and access to unemployment services in binding law, the new personalisation-led method uses algorithmic decision making that is only accessible for the data system constructors and the government. Therefore, this automated profiling method has drastically reduced transparency in the allocation and distribution of welfare services.

[31] Paul Henman, *Governing Electronically* (London: Palgrave Macmillan UK, 2010), https://doi.org/10.1057/9780230248496.

[32] https://data-scores.org/

[33] https://algorithmwatch.org/en/syri-netherlands-algorithm/

[34] Solon Barocas and Andrew D. Selbst, 'Big Data's Disparate Impact', *California Law Review* 671 (2016), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2477899.

[35] Torin Monahan, 'Regulating Belonging: Surveillance, Inequality, and the Cultural Production of Abjection', *Journal of Cultural Economy* 10, no. 2 (4 March 2017): 191–206, https://doi.org/10.1080/17530350.2016.1273843.

[36] https://www.irishtimes.com/news/ireland/irish-news/data-protection-watchdog-launches-new-inquiry-into-public-services-card-1.4654892

[37] https://search.oecd.org/social/soc/Workshop-NewSocialData-16Oct2019-BackgroundNote.pdf

[38] https://panoptykon.org/sites/default/files/leadimage-biblioteka/panoptykon_profiling_report_final.pdf

Regardless of their technological sophistication, these digital innovations are causing some disruption and even harm. Much of this is connected to errors, poor design and other shortcomings in developing or implementing the systems. One such example is the Michigan Integrated Data Automated System, which wrongly accused individuals in at least 20,000 cases of fraudulently seeking unemployment payments.[39] As a result, the people accused lost access to unemployment payments and reportedly faced fines as high as $100,000. Similarly, in Australia, thousands of citizens faced the problem of so-called 'robo-debts' due to an error in an automated system that resulted in obstacles to receiving unemployment benefits.[40] In his country report from a visit to the United Kingdom, the UN Special Rapporteur on extreme poverty and human rights expressed that the nation's new digitalised welfare policies had 'built a digital barrier that obstructs access to benefits, and particularly disadvantages women, older people, people who do not speak English and persons with disabilities'.[41]

The future of work and automated workplace surveillance

Technological developments naturally affect the world of labour and employment relations. These transformations have different characteristics and are debated from diverse perspectives. One of the recurring themes has been discussion about the so-called 'future of work', which is built around anxiety over automation and fears that robots will take jobs away from humans. Such fears have a long tradition and can be traced back to the Luddite actions in response to the 19th century's industrial revolution. A central concern of this discussion is the net loss of jobs and job opportunities, where AI and other advanced robotic systems lead to the automation of specific activities and reduce the demand for human labour.[42] However, some commentators say that these fears are exaggerated, as new technologies also create new jobs and demand new skills.[43] From the right to work point of view, however, reducing the number of jobs creates real problems for a decent living and increases the risk of long-term unemployment. In this respect, there are various ideas related to new mechanisms of social support, restructuring the labour market, or focusing on different priorities in education. Among the flagship solutions, controversial ideas under discussion include a Universal Basic Income (discussed below), the pursuit of a full employment policy or new guaranteed social services.

While the discussion on automation often focuses on job losses, digital technologies are also changing job quality and workplace relationships. Again, this discussion is not entirely new, as new mechanisms of employee management, supervision, control and work organisation have been present since the popularisation of industrial mass production.[44] Today CCTV cameras, sensors, databases and other digital tools are widely used to surveil workers, and this often changes power dynamics in the workplace. As some researchers suggest, constant control may

[39] https://www.theguardian.com/us-news/2016/dec/18/michigan-unemployment-agency-fraud-accusations

[40] https://www.theguardian.com/australia-news/2020/may/29/robodebt-government-to-repay-470000-unlawful-centrelink-debts-worth-721m

[41] https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=23881&LangID=E

[42] Melanie Arntz, Terry Gregory, and Ulrich Zierahn, 'The Risk of Automation for Jobs in OECD Countries', 2016, https://www.oecd-ilibrary.org/content/paper/5jlz9h56dvq7-en.

[43] David H. Autor, 'Why Are There Still so Many Jobs? The History and Future of Workplace Automation', *Journal of Economic Perspectives* 29, no. 3 (2015): 3–30, https://doi.org/10.1257/jep.29.3.3.

[44] Kirstie Ball, 'Workplace Surveillance: An Overview', *Labor History* 51, no. 1 (February 2010): 87–106, https://doi.org/10.1080/00236561003654776.

affect work effectiveness and cause stress and other harm.[45] Some observers also argue that particularly harsh digital surveillance methods have been implemented most in low-paid jobs, affecting resource-poor and marginalised groups.[46] For example, in the United Kingdom, the retail company Tesco made workers wear electronic armbands to track their movements and productivity and monitor their breaks.[47]

A new wave of automation and algorithmisation of decision-making processes is also affecting how decisions about hiring, wages, time and work performance are made. We have described some of these new technologies and their functionalities in our previous working papers.[48] These new digital tools are leading to the creation of 'quantified workers', amplifying existing surveillance patterns and increasing managerial power.[49] With the popularisation of such new algorithmic management, there are growing concerns related to transparency and control over the decision-making process, for instance. Various examples exist about workers having no adequate knowledge about scheduling, salaries and even firing. One of the best-known and highly-criticised practices of that sort was introduced in the online retailer Amazon's warehouses, where workers are monitored and supervised by automated systems. Based on data gathered about their movement, productivity, breaks, and other behaviours, systems automatically generate warnings about particular workers' quality or productivity, are responsible for automated staffing schedules or even decisions about terminating employment.[50] This limits or denies workers' right to reply, as seen in the United Kingdom, where the Post Office used a flawed computer system that wrongly accused hundreds of workers of theft and financial misconduct, which led to their dismissal or criminal prosecution.[51]

Other problems are related to discrimination and the already-mentioned issue of biases. For example, LinkedIn discovered that their algorithm used to match candidates with job opportunities showed more men than women for open positions.[52] Other well-described examples included an experimental recruiting system developed by Amazon that rated candidates for software developer jobs and other technical posts, which was found to be not gender-neutral.[53] As we will show below, these problems have been addressed mostly by introducing or discussing laws related to increasing both algorithmic transparency and workers' rights to be informed about the

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[45] Ball.

[46] Michele Gilman, 'The Surveillance Gap: The Harms of Extreme Privacy and Data Marginalization', *SOCIAL CHANGE* 42 (n.d.): 56.

[47] https://www.independent.co.uk/news/business/news/tesco-accused-of-using-electronic-armbands-to-monitor-its-staff-8493952.html

[48] Javier Sánchez-Monedero and Lina Dencik, 'The Datafication of the Workplace' (Cardiff: Cardiff University, 2019), https://datajusticeproject.net/wp-content/uploads/sites/30/2019/05/Report-The-datafication-of-the-workplace.pdf.

[49] Phoebe V Moore, 'Tracking Affective Labour for Agility in the Quantified Workplace', *Body & Society* 24, no. 3 (September 2018): 39–67, https://doi.org/10.1177/1357034X18775203.

[50] https://techxplore.com/news/2021-08-algorithm-california-bill-amazon-notorious.html ; https://www.vice.com/en/article/z3xeba/amazons-new-algorithm-will-set-workers-schedules-according-to-muscle-use , https://www.theverge.com/2019/4/25/18516004/amazon-warehouse-fulfillment-centers-productivity-firing-terminations

[51] https://www.bbc.co.uk/news/business-56718036

[52] https://www.technologyreview.com/2021/06/23/1026825/linkedin-ai-bias-ziprecruiter-monster-artificial-intelligence/

[53] https://www.bbc.co.uk/news/technology-45809919

automated systems' operations. Some scholars and trade unions are also discussing 'rights to negotiate the algorithm' as a new reality for workers and their representatives.[54]

Algorithmic management has been a crucial element of the experiences of so-called 'platform workers' (e.g. Uber drivers), that is, people who derive their work from online intermediary sites. However, platforms also create additional challenges affecting how workers may enforce their right to form a union and other labour rights.[55] One of the crucial problems to emerge over the years is the status of people who work via digital platforms, raising the question of whether they are independent contractors or employees in the traditional sense, whom existing labour regulations should also protect. Courts have recently considered this issue in various constituencies (e.g. Spain and the United Kingdom).

SOCIAL RIGHTS AND TECHNOLOGY: POLICY DISCUSSIONS, COURT CASES AND NEW LAWS

Social rights have not been the dominant framework used in the discussion and policymaking of new technologies. However, as we will illustrate below, there are already some examples that directly or indirectly link concerns related to social rights with the discussion, as well as laws and jurisprudence concerning emerging technologies and their social implications.

The policy level: using a social rights framework in debating technologies

At the international level, a few examples of debates can make explicit connections between social rights and new technologies. For example, a recent report from the UN Human Rights Council (HRC) raises questions about 'the role of new technologies for the realisation of economic, social and cultural rights'[56], including digital ones such as AI. One of the crucial aspects of this report is the dichotomy it identifies between risk and benefits. The HRC explains that digital technologies may expand quality and access to essential services and goods. However, at the same time, these technologies have the potential to exacerbate existing inequalities. The HRC emphasises the need for harnessed and equitably distributed technologies. It notes that new data technologies provide an essential infrastructure that can be used to plan and effectively allocate resources in such sensitive areas as healthcare, education, water management or housing. The report also describes different risks that automation and digital technologies may create for work relations (reduction of job numbers), education (worse educational quality) or health (possible dehumanisation due to widespread use of robots in the care sector). Two important issues are directly linked to the equality problem: the so-called 'digital divide' and equal access to technology, and biases embedded in the design and operation of various digital systems. The HRC also recommends investing in 'the right to social protection to build resilience for changes and instability, including those caused by technological change, and

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54 Valerio De Stefano, '"Negotiating the Algorithm": Automation, Artificial Intelligence and Labour Protection', Employment Workig Paper Series (International Labour Office, Employment Policy Department, 2018), https://ilo.userservices.exlibrisgroup.com/discovery/delivery/41ILO_INST:41ILO_V2/1254389610002676.
55 Ruth Berins Collier, V.B. Dubal, and Christopher L. Carter, 'Disrupting Regulation, Regulating Disruption: The Politics of Uber in the United States', *Perspectives on Politics* 16, no. 4 (2018): 919–37, https://doi.org/10.1017/S1537592718001093.
56 https://digitallibrary.un.org/record/3870748?ln=en

protect labour rights in all forms of employment'. Among other crucial themes, the report considers the transparency and explainability of AI systems in the public sector and the regulation of such technologies. A General Comment from the UN Committee on Economic, Social and Cultural Rights (CESCR) focuses on developing 'the relationship more broadly between science and economic, social and cultural rights'.[57] The key issues highlighted in the document include the unequal distribution of benefits, access to, and risks from scientific progress and new technologies. The Commentary is quite clear in positioning the distribution question concerning laws, regulation, and infrastructures and resources in relation to technology.

Concerning digital technology, particularly AI, the CESCR recommends 'adopt[ing] policies and measures that expand the benefits of these new technologies while at the same time reducing their risks'. It states that human rights and especially anti-discrimination measures should be a crucial element of decision making about the development and use of such technologies. Among specific social and economic rights issues, CESCR points to issues around job automation, the ownership and control over data that many big tech companies exploit.

As mentioned above, the European Pillar of Social Rights has recently been embedded into the EU political agenda around digital technologies promoted by the European Commission. At the political level, reference to social rights is used to recall European values embedded in the European Union's treaties and provide a 'social' response to digitalisation and other challenges. More detailed reports and implementation plans for the pillar issues related to technologies directly connect to the enjoyment of social rights.[58] First of all, it deems AI and automation to be disruptive forces that will generate various changes in the job market and social security institutions. To address these challenges, the European Commission is planning to support digital education and reskill some groups, thereby directly implementing the right to work agenda. Algorithmic management of the workplace is seen as potentially bringing problems such as: 'new patterns of discrimination or exclusion or new risks to workers' physical and mental health'. The EC is planning to revise and adopt an occupational safety and health strategy framework and bring in a regulation on AI systems that would also cover workplace relations to deal with these issues. With regard to the increase in precarity brought about by digital transformations, there is a need for rules to prevent abuses, maintain high standards for health and safety and ensure better social protection coverage. The EU is also promoting digitalisation and the creation of new data mechanisms in public services, especially in healthcare provision. The Commission calls digital communication one of the essential services which everybody should have the right to access (along with water, sanitation, energy and transport). It also outlines a commitment to improving platform workers' conditions by hosting a Platform Work Summit to discuss their employment status, working conditions and access to social protection, collective representation and bargaining, and cross-border aspects of platform work.

Laws and policies
Countries and organisations like the European Union have been adopting and developing laws and policies that directly address problems of technologies encountered in the employment or social security context. In this section, we detail some of these efforts.

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[57] https://digitallibrary.un.org/record/3899847?ln=en
[58] https://op.europa.eu/webpub/empl/european-pillar-of-social-rights/en/

- GDPR and data protection

The EU's General Data Protection Regulation (GDPR) regulates the processing of information data, including in the areas of employment and public administration.[59] It grants such rights as receiving information about the processing of one's personal data, the right to access, rectify, erase, restrict or object to data processing. In the context of profiling and automated decision making, GDPR gives data subjects rights such as an explanation for decisions reached, the right to obtain human intervention, express their point of view, and contest an automated decision. Specific provisions related to the processing of personal data in employment can be regulated explicitly by national labour laws or collective agreements, particularly in recruitment, management, planning and work organisation, equality and diversity in the workplace, health and safety. In 2017 Working Party 29 (a former body that represented all European Data Protection Authorities) issued an opinion that aims to help with applying data protection rules in employment relations.[60] The opinion points to factors such as the 'imbalance of power' between employees and employers, which may affect someone's right to give free consent to their personal data being processed. There is also rich literature on the role and interpretation of GDPR in the workplace.[61]

GDPR also applies to the operation of public administration, including welfare services. Scholars point to particular problems in which data protection may apply in this area. For example, one recent article explores the problem of conditionality and automated eligibility checks that can affect people's right to data protection and how GDPR may protect the interests of welfare recipients.[62]

- New labour laws

In recent years there have also been several proposals for new laws and policies that focus predominantly on technology used in the employment field. For example, under a new Spanish law adopted in May 2021, workers' councils (a collective representative of workers at a given company) gained the right to be informed about the parameters, rules and instructions via which algorithmic systems impact working conditions, determine access or retention of employment.[63] Similarly, in California, a new bill will force so-called 'mega-retailers' (like Amazon) to disclose the algorithms being used to assess how workers fulfil productivity quotas, and to ban companies from firing people who refuse to fulfil such targets if they breach occupational health and safety standards.[64]

As noted earlier, another crucial issue is the employment status of platform workers. The same new Spanish labour law introduced direct provisions that established the employment status of people working in delivery via digital platforms. Furthermore, in December 2021 the European

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[59] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02016R0679-20160504&qid=1532348683434

[60] https://ec.europa.eu/newsroom/article29/items/610169

[61] Clara Fritsch, 'Data Processing in Employment Relations; Impacts of the European General Data Protection Regulation Focusing on the Data Protection Officer at the Worksite', in *Reforming European Data Protection Law*, ed. Serge Gutwirth, Ronald Leenes, and Paul de Hert (Dordrecht: Springer Netherlands, 2015), 147–67, https://doi.org/10.1007/978-94-017-9385-8_6; Adrián Todolí-Signes, 'Algorithms, Artificial Intelligence and Automated Decisions Concerning Workers and the Risks of Discrimination: The Necessary Collective Governance of Data Protection', *Transfer: European Review of Labour and Research* 25, no. 4 (November 2019): 465–81, https://doi.org/10.1177/1024258919876416.

[62] Valery Gantchev, 'Data Protection in the Age of Welfare Conditionality: Respect for Basic Rights or a Race to the Bottom?', *European Journal of Social Security* 21, no. 1 (March 2019): 3–22, https://doi.org/10.1177/1388262719838109.

[63] https://socialeurope.eu/spains-platform-workers-win-algorithm-transparency

[64] https://interestingengineering.com/amazon-has-to-disclose-how-its-algorithms-judge-workers-per-a-new-california-law

Commission published a draft directive on improving the conditions of platform workers.[65] This draft legislation will apply to all platform workers, granting them employee status. It also increases transparency in the algorithms used by digital labour platforms, ensures human monitoring of their working conditions and gives them the right to contest automated decisions. Platforms will be also required to declare work, make key information about their activities and the people who work through them available to national authorities. This proposal is portrayed as one of the vital initiatives of the European Pillar of Social Rights Action Plan.

Another significant trend in legislation is the so-called 'right to disconnect', that is, allowing workers not to engage in work-related electronic communication (such as emails, phone calls, texts, video chats, etc.) during non-working hours.[66] Such laws exist in France (where they originated from), Italy or Slovakia. In 2021 the European Parliament adopted a Resolution on the right to disconnect, which calls for adopting the directive on minimum standards and conditions to ensure that workers can exercise their right to disconnect.[67]

Interestingly, in some countries like Denmark, trade unions have already started negotiating and implementing collective agreements (which are binding and in some constituencies are treated as one of the sources of labour law) that cover the situation of platform workers.[68] For example, the agreement reached in Denmark includes such aspects as the status of platform workers, rules for setting hourly wages, notice periods, and rights about digital data, workers' profiles and profile ratings.

-   ### Regulating AI

In 2012 the European Commission proposed a new piece of legislation that will regulate some of the applications of Artificial Intelligence (AI).[69] The new regulation will distinguish between three different levels of systems, based on risk - prohibited, high-risk and low-risk applications. Developers and users of high-risk systems will have to comply with new obligations concerning data governance, transparency, human oversight, documentation and record-keeping, accuracy, security and robustness. Some applications of AI systems will be prohibited. These include systems that are likely to cause physical or psychological harm through subliminal techniques or exploiting specific vulnerabilities of groups due to their age, psychical or mental disability; as well as social scoring systems and real-time remote biometric identification systems in public spaces. It also creates a market surveillance mechanism for AI services with new investigatory powers. However, the draft act does not provide far-reaching provisions related to algorithmic transparency and fairness. Importantly, the draft regulations contain few direct references to social rights issues. For example, among high-risk AI systems, those used for recruitment, screening job applications, making decisions about promotion, firing, task allocation or performance evaluation are mentioned. Other examples of high-risk systems determine access to public services, including checking eligibility, granting, reducing, revoking or reclaiming benefits. Regardless of these provisions, some observers have argued that the new legislation in its existing shape will not provide adequate protection for workers and their rights.[70]

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[65] https://ec.europa.eu/commission/presscorner/detail/en/ip_21_6605

[66] Paul M. Secunda, 'The Employee Right to Disconnect', *Notre Dame Journal of International & Comparative Law 9*, no. 1 (2019): 1–39.

[67] https://www.europarl.europa.eu/doceo/document/TA-9-2021-0021_EN.html

[68] Anna Iløse and Forskningscenter for Arbejdsmarkeds- og Organisationsstudier, 'The Hilfr Agreement: Negotiating the Platform Economy in Denmark' (Employment Relations Research Centre, Department of Sociology University of Copenhagen, 2020).

[69] https://digital-strategy.ec.europa.eu/en/policies/european-approach-artificial-intelligence

[70] http://regulatingforglobalization.com/2021/04/16/the-eu-proposed-regulation-on-ai-a-threat-to-labour-protection/

- New social policies

There are also ongoing discussions about new social policies, especially connected to the automation and restructuration of the labour market. These new ideas focus less on directly regulating technology or data processing and more on social transfers or creating new welfare institutions. One of the most widely discussed ideas is Universal Basic Income (UBI), which would entail all citizens, regardless of whether they have a job or not, receiving a periodic grant from the government that allows them to cover their basic needs.[71] The concept has already been tested on a small scale in several cities and regions in Canada, France, Finland and India. While UBI is proffered as a response to many diverse social problems, it is also seen as a way to provide a stable income for those who will lose their job because of massive automation. However, the idea of UBI has also been criticised, for example, for introducing a focus on individualisation, reduction of the welfare state and a move from traditional welfare policies.[72] Less radical policy options focus on education and reskilling initiatives that involve the training in digital skills that is necessary to develop the AI sector. For example, this approach has already materialised in the EU's expansion of its new programmes like the Digital Fund, which allocates significant investments in upskilling workers in digital competencies.[73] Other policy options under discussion include full-employment policies and the state and public sector actively creating jobs, reducing working hours (ideas range from between to 38 hours per week), or expanding existing active labour market programmes.

Court cases

Over the years, a few notable court cases have appeared in European countries that directly connect issues related to social rights with data technologies. Importantly, as demonstrated below, many of these cases have built upon data protection and the right to privacy, showing how specific interests related to social rights may be protected through more effective legal frameworks.

- Welfare administration

At least two recent significant rulings in Europe have dealt with the issue of automated systems used by welfare administration. In 2019 the Polish constitutional court ruled that laws introducing controversial profiling of the unemployed mechanism in the Polish Public Employment System were unconstitutional and violated its citizens' right to data protection. The ruling focused mostly on the precision of the laws and the formal division between the bill adopted by parliament and the regulation issued by government.[74] In 2020 the District Court of the Hague (in the Netherlands) suspended the SyRi system being used to detect welfare fraud.[75] The court stated that using this system violated Article 8 of the European Convention on Human Rights, which protects the right of respect for private and family life. In the opinion of the court, SyRi's operation infringed the balance between the right to privacy and public interests in detecting welfare fraud. Furthermore, it deemed the system to be insufficiently transparent and verifiable.

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[71] Ugo Gentilini et al., 'Exploring Universal Basic Income' (World Bank, 2020).

[72] https://www.versobooks.com/blogs/4929-the-division-of-labour-in-the-techno-populist-age

[73] More about those different polices:
https://www.europarl.europa.eu/RegData/etudes/STUD/2021/656311/EPRS_STU(2021)656311_EN.pdf

[74] https://trybunal.gov.pl/postepowanie-i-orzeczenia/komunikaty-prasowe/komunikaty-po/art/10168-zarzadzanie-pomoca-kierowana-do-osob-bezrobotnych

[75] https://www.rechtspraak.nl/Organisatie-en-contact/Organisatie/Rechtbanken/Rechtbank-Den-Haag/Nieuws/Paginas/SyRI-legislation-in-breach-of-European-Convention-on-Human-Rights.aspx

Outside Europe, one of the most important cases regarding data systems and social protection concerns the Indian system Aadhaar - a biometric identification system that is obligatory in numerous welfare schemes.[76] The system was challenged on the grounds that it does not provide an adequate privacy safeguard and that social entitlements should not be conditional on possessing an Aadhaar Card. In a 1,400 page precedential ruling, the court upheld the system's constitutionality, but with some reservations related to aspects including the data retention period or the use of a person's Aadhar number by private entities. However, the ruling gives a detailed assessment of the informational infrastructure of the welfare state and tries to provide a balance between 'dignity in the form of autonomy (informational privacy) and dignity in the form of assuring better living standards of the same individual'. In this assessment, the court focused on such elements as the possibility of better reaching marginalised groups with benefits, better targeting of subsidies and services, the scale of the intrusion of privacy and the biometric system's error rate.

- **Workplace: surveillance, algorithms at work and the status of platform workers**

There is already quite rich jurisprudence on surveillance, privacy and processing of workers' personal data. For example, the European Court of Human Rights (ECHR) has an extensive ruling line in employees' privacy.[77] In one recent case, Lopez Ribalda and Others v Spain, the ECHR found that a supermarket's covert video surveillance did not violate its workers' privacy rights. The main reason for this decision was that covert surveillance was seen as necessary for addressing the problem of stealing in the shop, it was incidental, and there was no less intrusive way to catch thieves. On the other hand, in another ruling, Bărbulescu v. Romania, the ECHR found that the employee's right to a private life had been breached by the employer's monitoring of their personal correspondence. The court called for a fair balance between their opposing interests, in particular on the one hand the employee's right to respect for his private life and correspondence and, on the other hand, the employer's right to take measures to ensure the smooth running of the company.

Two rulings in the Netherlands focused on the algorithms used by Uber (and other similar companies) to manage relations with its drivers. In the first ruling, drivers from the United Kingdom and Portugal asked for access to their personal data and the right to transparency of algorithmic management.[78] The Amsterdam District Court ruled in favour of disclosing some of the personal data used in automated decision making and profiling of drivers. In the second judgment, the same court ordered Uber to reinstall five drivers dismissed by the algorithmic system. It was one of the first cases that used Article 22 of the GDPR, which provides rights of protection against unfair automated decision making.[79] In Italy, a court in Bologna decreed that the reputational-ranking algorithm used by Deliveroo (a food delivery digital platform) discriminated against workers and violated labour laws. The main argument in this judgment was that the drivers' ranking systems did not distinguish between legitimate reasons for not performing work (like illness, holiday or strike) and other reasons for failing to be available.[80]

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[76] https://www.scobserver.in/cases/puttaswamy-v-union-of-india-constitutionality-of-aadhaar-act-case-background/

[77] https://www.echr.coe.int/Documents/FS_Workplace_surveillance_ENG.pdf

[78] https://www.workerinfoexchange.org/post/gig-workers-score-historic-digital-rights-victory-against-uber-ola-2

[79] https://www.workerinfoexchange.org/post/dutch-uk-courts-order-uber-to-reinstate-robo-fired-drivers

[80] https://techcrunch.com/2021/01/04/italian-court-rules-against-discriminatory-deliveroo-rider-ranking-algorithm/

In the United Kingdom, the Supreme Court ruled that Uber drivers should be recognised as workers and not individual contractors.[81] Therefore, they are entitled to holiday pay, the minimum wage, sick leave and a pension. The litigation was based on precedents such as the Employment Rights Act 1996, National Minimum Wage Act 1998 and Working Time Regulations 1998. A similar judgment was issued by the Spanish Supreme Court, who determined that people working for digital delivery platforms are self-employed but still fall under labour law protection.[82]

Interventions by Data Protection Authorities

As already mentioned, privacy and data protection have become crucial frameworks that have been used to address the human rights implications of automated systems used in welfare administration or by employers. Recent cases and examples of Data Protection Authorities' (DPA) interventions show that data protection laws and institutions are vital in addressing the potential and actual harms caused by automated systems.

For example, Austria's DPA explained that the algorithm used by its job centres to profile unemployed individuals clashes with data protection rules because it lacks any adequate legal basis and does not provide practical human intervention.[83] The Danish Data Protection Authority refused permission to the Gladsaxe model and fined the responsible municipality, for a system of processing information about children in vulnerable circumstances on similar grounds.[84] In Ireland, the DPA ruled that a Public Service Card (PSC) should not be obligatory, and that retention of data gathered (including biometric data) upon the introduction of the card was unlawful.[85] The Cyprus DPA banned processing by an automated tool used to score employees' sick leave, known as the 'Bradford Factor', and subsequently fined the controller of that system.[86] In Hamburg, the local DPA fined the company H&M 35.5 million euros for serious violation of its employees' right to privacy, due to gathering and processing sensitive information about their private lives (including information about their holidays, health, family problems and religious beliefs).[87] Iceland's DPA fined an ice-cream company for processing employees' personal data via a video surveillance camera installed in a staff area.[88] One of the most interesting cases emerged in Italy, where the local DPA decided about a food delivery company's infringement of data protection, especially in the context of algorithms used to rate riders' performance.[89] The DPA ruled that the system had no safeguards to ensure accuracy and fairness of the algorithmic results, and that there were insufficient procedures for their workers to obtain human intervention, express their point of view and contest decisions made by the algorithm.

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[81] https://www.supremecourt.uk/cases/docs/uksc-2019-0029-judgment.pdf

[82] https://techcrunch.com/2020/09/23/spains-top-court-rejects-glovos-classification-of-couriers-as-self-employed/

[83] Doris Allhutter et al., 'Algorithmic Profiling of Job Seekers in Austria: How Austerity Politics Are Made Effective', *Frontiers in Big Data* 3 (21 February 2020): 5, https://doi.org/10.3389/fdata.2020.00005.

[84] https://www.datatilsynet.dk/presse-og-nyheder/nyhedsarkiv/2020/mar/to-kommuner-indstillet-til-boede/

[85] https://www.dataprotection.ie/sites/default/files/uploads/2021-12/PSC%20REPORT.pdf

[86] https://edpb.europa.eu/news/national-news/2020/cypriot-supervisory-authority-banned-processing-automated-tool-used-scoring_en

[87] https://edpb.europa.eu/news/national-news/2020/hamburg-commissioner-fines-hm-353-million-euro-data-protection-violations_en

[88] https://edpb.europa.eu/news/national-news/2021/icelandic-dpa-has-fined-company-running-ice-cream-parlours-processing_en

[89] https://edpb.europa.eu/news/national-news/2021/riders-italian-sa-says-no-algorithms-causing-discrimination-platform-glovo_en

PROTECTING SOCIAL RIGHTS IN THE DIGITAL WELFARE STATE

Adjusting social rights standards to the technological age

The development of new technologies affects various aspects of the welfare state. Social rights – one of the pillars of this social system – also gains new content and areas of application. Due to the new dynamics of workplace relations, employee supervision, working methods and the functioning of welfare administration, social rights require some reinterpretation and the introduction of new safeguards in the form of policies, laws and regulations. We can witness this process coming into reality at different levels:

- **Conceptual**: Social rights, like all human rights, are 'living instruments', so they need to be conceptually adjusted to changing social circumstances. Therefore, international or constitutional standards regarding social rights can be creatively reinterpreted and adjusted to the reality that digital technologies bring to society. The protection of fair working conditions and an adequate level of social protection and dignity has a universal value that should find its place in technology-centred discussions. These social rights standards may also bring new focuses on equality and fair redistribution. Some of the more specialised discussions around issues like conditionality, health and security at the workplace or the right to form trade unions can provide valuable perspectives on the social consequences of applying new technologies. While we are at the first stages of this reinterpretation, we can see that this conceptual work is already happening in courts, international human rights bodies and within academia. Some of the next steps could include a General Commentary from the CESCR on digital welfare state and social rights or an interpretative statement from the ECSR.
- **Legislation**: In various constituencies, there are new laws and regulations focused directly on the operations of new digital technologies. These include European laws on AI systems, workplace algorithms and the regulation of platform work. Sometimes these new laws may have a limited focus on one area, such as transparency. However, they seem crucial in responding to some immediate impacts of technological changes.
- **Enforcement**: There are many existing laws and standards that need to be effectively enforced rather than changed, for instance labour laws which include legislation on minimum wages or working hours in the context of platform work. We have already seen courts enforcing labour standards in the context of platform work. However, this requires robust enforcement mechanisms, institutions and organisational capacity of trade unions and other actors which are willing to initiate sometimes precedent cases.

Data protection as an intermediary

Our review of different cases and policy discussions has shown how data protection plays an important role and acts as a starting point in addressing many of the problems that technologies create for the enjoyment of social rights. For example, in welfare technologies cases in the Netherlands and Poland, privacy and data protection were strongly connected to other problems, like the operational accountability of welfare administration. While data protection may sometimes offer a limited and rather procedural perspective, we see it as a crucial framework in the effective policy response to the aforementioned problems. In some ways, GDPR and other data protection legislation may behave as subsidiary legislation that enables the protection of particular interests (such as procedural fairness, transparency or non-discrimination) that are crucial in a social rights context, especially in those situations when social rights (like the right to social protection) do not have strong enforcement rules. Exploring these new dimensions and the more 'egalitarian' side of

data protection is required – however, new types of interpretation and the active role of data protection authorities will be necessary to achieve this.

Relying on existing institutions

In many European countries, plenty of institutions are responsible for protecting human rights, data protection or labour rights. As outlined above, they all play a growing role in the social impact of data technologies. For example, data protection authorities can play an active role in addressing abuses of workers' rights in the context of algorithmic surveillance. Other agencies, for instance labour inspections or human rights commissioners, can also play an active role. However, these agencies must have adequate resources and capacity to understand and address such socio-technical challenges. It is vital to also go beyond the data protection framework and use labour laws and other legal frameworks at the same time.

Equality beyond biases and harms

While recent discussion about AI and equality focuses on biases, we have identified a much more complex relationship between discrimination, equality and new data technologies. First, there is the fundamental question about in what context certain technologies are being used and how they affect specific sectors of society. Second, data technologies are also creating new ways in which capital is accumulated and what constitutes work, giving certain companies significant power and advantage vis-à-vis the rest of the population. Finally, there are questions about how certain technologies may help address inequalities like limited access to high-quality public services and employment. These questions require new types of evidence and consideration, including a focus on needs, material equality and distributional policies of the state. Here, indicators and benchmarks used to assess social rights may help collect such evidence.

Social policies beyond algorithmic tweaks

Many of the existing policies related to technologies are focused on narrowly-defined features and characteristics, such as addressing questions of transparency or data quality. However, we can also see growing discussion on how to address problems caused by automation with new social policies. For example, many of the negative impacts of welfare administration systems are predominantly consequences of the neoliberal turn and austerity policies adopted over recent decades. A simple focus on harmful technologies and their regulations would not solve more significant political problems. Therefore, we see a need to focus on structures of existing social policies to either address social transformations caused by technologies (e.g. in the context of work) or simply mitigate harms that can also be co-produced by technologies implemented in particular political contexts.