

AI AND DEMOCRACY

In a society where AI becomes the element on which a new paradigm for humanity is built, what is the impact for democracy?

From 2017 to today, the literature on the risks of AI has multiplied and new alarms follow each other every day, the concerns concern above all **privacy and democracy and human rights**. The possible biases that can distort assessments of AI, the impact that AI can have on public health, the media system and justice. The ethical implications of the use of AI in the most diverse fields, from agriculture to military.

at the management of the traffic, to training

Among the possible **biases** that can distort the assessments of AI there are certainly those on women, those so-called gender. Jeevane Harlyawasam (UN Women) states: "When tools for AI are developed, they must be built with a specific focus on gender equality and inclusiveness, technology is now our future, and the empowerment of women in this sector is fundamental".

The legislative aspect

The alarms about the destruction of humanity due to the uncontrolled and opaque development of AI are very similar to those that have been going on for years about the dangers of the digital network, from a legislative point of view the initiatives of democratic countries to put rules ecosystem of innovation, in recent years have been many and also important.

The European Union has made respect for human dignity, freedom, democracy, equality, solidarity, the rule of law and the protection of human rights its founding values.

To preserve these values, we need to take into account the transformative factors of society and among these there is certainly digital technology, which while offering great opportunities for improving the quality of life, at the same time presents great risks that the corpus of European legislation must always keep in mind.

Digital legislation in Europe already exists; the web that had seemed at the beginning to promise great innovations, socially profound, economically advantageous, with the concentration in a few hands of the power of the digital and what follows from it, in the long run has made it necessary to rethink the digital world and the will to return to the original spirit of the internet, and it is the path that Europe is trying to take by creating a regulation that is in step with the innovation that runs ever faster, in the face of such an overbearing acceleration of technology, any rule always seems to arrive late but you have to try.

Europe, which certainly does not hold the digital leadership in the world, on the other hand has always been the bearer of the gods values democracy and of the rights humans.

The reflection on rights in the context of a world driven by technology dates back to the pioneering work of Stefano Rodotà, who in 2015, in the Chamber of Deputies in Italy, a he wrote in 2015 the Paper of the rights in Internet.

commission of studies on internet rights was formed, and its presidency was entrusted to the great and unforgettable jurist: Stefano Rodotà.

This document was voted unanimously by the House and entered the official list. This document, which over the years has become a guide for the study of rights on the web, took some time to enter European legislation, but the advantage is that it was of Montecitorio. written in a era not yet affected by economic powers and therefore it could also be an inspiration for the regulation of AI, in an attempt to ensure that it does not put human rights at risk, with all that this entails for aspects of citizens' lives.

The [European Commission](#) started dealing with AI in 2018 by producing a general regulation on data protection. In 2019 and during 2020, the Commission was ready to start the deliberative process of the new laws on digital markets when the world was shocked by the arrival of the pandemic, which then forced to re-read everything in a more complex light.

The pandemic has accelerated technological processes that were struggling to take off, technology has come to our rescue on many levels: health, commercial, work, it has been a lifeline, the network has allowed us to organize a sort of "parallel life" to overcome those terrible moments.

Then with the slowdown of the health emergency, Europe decided for the first time to make a recovery and resilience plan to respond to the economic disaster caused by the pandemic, abandoning austerity policies (at least for the moment), this recovery economy will necessarily have to go through a green and digital transition of our society, trying to treasure what the pandemic had taught us.

On the other hand, the internet begins to demonstrate all its dangerousness, even politically, on January 6, 2021, in fact a sort of revolt against the American institutions organized on the net distorts the great American democracy (assault on Capitol Hill).

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Something is moving internationally too, in September 2021 UNESCO publishes a report entitled *The race against time for wiser development*. On November 24, 2021, it defines, in the form of a recommendation, a set of ethical standards for AI: it is the first global standard-setting tool on this issue, it is adopted by 193 countries but has no regulatory power.

Europeans are aware that technology is not neutral: the values of those who create and adopt it are an integral part of technology and its social impact. Therefore, the European institutions undertake to "ensure that the design, development, dissemination and use of technological solutions respect fundamental rights, allow the exercise of these rights and promote solidarity and inclusion"

(European Declaration on Digital Rights and Principles for the Digital Decade).

Only a few weeks earlier, the European Commission had presented its revolutionary proposal for digital regulation (**DSA**) and Digital Markets Act (**DMA**), with which the large platforms were called to take responsibility for what was circulating on the net, in the **USA** and in **EUROPE** .

The DSA EU Regulation of 19 October 2022, known as the Digital service Act, was created with the aim of regulating and controlling the operation of large platforms and search engines, with more than 45 million active users per month (VLOP) in the EU, which without claiming to question the most popular digital platforms, however claims that they assume responsibility: **"an independent auditor will have to verify how the algorithm works and if it is managed in such a way as to guarantee the legitimate exercise of freedom of enterprise and the legitimate pursuit of profit, but without causing serious damage to social and democratic life"**. (the Code of the Future pg102)

In April 2021, a European law proposal (EU AI Act) was drawn up which includes a ranking of possible risks in the use of AI, a proposal voted in May 2023 and should become operational in 2024.

It is the first law in the world formulated by a major regulatory body concerning AI.

MEPs gave the first via **Act**, **free to the Artificial Intelligence** with **87 votes in favour, 7 against and 12 abstentions**, kicking off the inter-institutional negotiations with the co-legislators of the Council of the EU. An ambitious and strong stance, the best that could be obtained from the compromise between the political groups, to which was added a plus for the protection of citizens' fundamental rights: the prohibition of biometric recognition in real time **in public places**.

The text and the separate compromises on the Artificial Intelligence Act were all approved during the

joint meeting of the Internal Market and Consumer Protection (**Imco**) and Civil Liberties, Justice and Home Affairs (**Libe**) committees of the EU Parliament and will now have to be voted on at the next plenary session of the Eurochamber, scheduled between on 12 and 15 June. The goal is to implement by the end of the legislature (in spring 2024) the **world's first horizontal and wide-ranging legislation on artificial intelligence**, which will regulate one of the most crucial aspects of managing the double digital and green transition of European Union.

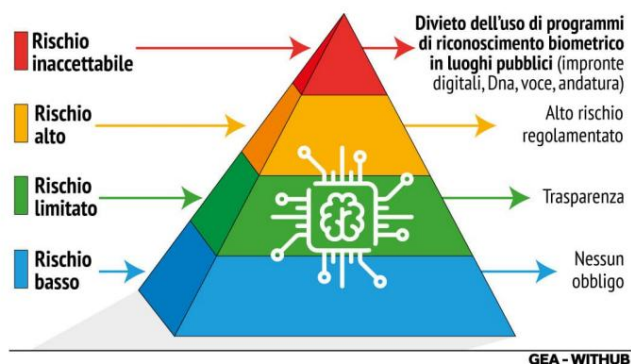
This is a highly political point, after years of statements such as "innovation cannot be stopped, let us work", we have moved on to prudence and asking ourselves profound questions precisely about the consequences of these innovations on human rights and on our democratic societies .

To arrive at this regulation, a group of 52 AI experts representing the various components of society was created, who, faced with the enormous task of choosing a criterion to build a Regulation based on a compromise between those who wanted to regulate everything and those who wanted nothing fine has established as the founding criterion of the document that of risk (from the point of view of use and context). In the second chapter of the declaration, the second commitment is that of inclusion: **"we must pursue a digital transformation that leaves no one behind. It should benefit all, achieve gender equality and include in particular the elderly, people living in rural areas, people with disabilities, marginalized, vulnerable or disenfranchised people, as well as those who act for them account, and should also promote cultural and linguistic diversity"**.

(Chapter II art.2 AIA)

AI, LA PIRAMIDE DEL RISCHIO

Verso l'Artificial Intelligence Act europeo



MEPs backed the EU Commission's approach outlined in the April 2021 Artificial Intelligence Act proposal on the risk scale for regulating AI applications. There are four levels defined in the proposal: **minimum** (AI-enabled video games and spam filters), **limited** (chatbots), **high** (scoring academic and professional exams, sorting resumes, assessing the reliability of evidence in court, robot-assisted surgery) and **unacceptable** (anything that poses a "clear threat to people's security, livelihoods and rights", such as the assignment of a 'social score' by governments). **For the first level no intervention is envisaged, while the last level concerns systems that present unacceptable levels of risk for the safety of people will be strictly prohibited, including systems that use subliminal or intentional manipulative techniques, even biometric identification systems remote "in real time" in spaces accessible to the public and 'a posteriori' (with the sole exception of the forces of order for the prosecution of serious crimes and only with prior judicial authorisation).**

Speaking of generative foundation models such as ChatGpt, MEPs call for **compliance with transparency requirements** and the publication of copyrighted data used for training.

The EU Office for AI will monitor the whole system of the Artificial Intelligence Act, whose role has been

reformed by the EU Parliament.

On high risk, MEPs broadened the classification under **the Artificial Intelligence Act** to include **harm to health, safety, fundamental rights or the environment**, as well as artificial intelligence systems that can influence voters in campaigns policies and recommendation systems

Who teaches artificial intelligence what it knows?

Artificial intelligence does not consist only in the knowledge of the algorithm, there are algorithms that recall others, which in turn recall others, in a network that complicates their knowledge.

For the machine to be able to do everything it does, it certainly needs algorithms, but it also needs to be trained, educated, and for this we need data, many, many data, which are fundamental.

a role

The data are used by the machine to learn to 'reason', the neuronal networks are increasingly similar to the learning brain, these 'self-human' systems, in the sense that they process data and data, are called 'machine learning', which they buy at end the ability, to produce on the basis of what they have learned, new results and new algorithms, learning'.

in a process That we call: 'deep

It is therefore evident that the data that the machine processes are fundamental because the AI is not capable, per se, of making ethical evaluations but absorbs everything that is fed to it without critical discernment.

Much has been written on the subject (see Paolo Benanti, who addresses ethical issues related to AI and places training data as one of the central points of the problem): "The world must seriously and urgently invest in the security and control of AI, stopping progress is not possible, but the implementation of these complex systems must take into account ethics, or rather, algorithmics", says Benanti. Transparency and reasoned reflection on the training of machines can be the keystone of a frightening robotic world.

That Not these

However, technology companies have often raised an iron curtain of mystery on the data they feed during the AI training phase, if these machines amaze us with what they are capable of doing, in fact we are almost in the dark about the sources and origins of their knowledge: it would seem a real inversion of the scientific mode of knowledge that has made the transparency of data and sources scientific.

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This is why the initiative of the "Washington Post", which for the first time analyzed one of these datasets, revealing which are the websites, personal and often offensive, from which the training data of an artificial intelligence is taken, was an experiment of great interest, very useful for starting to think about whether and how these systems are adequate and respectful of the cultural and democratic identities of Western countries and in particular of that increasingly isolated area in the defense of the rule of law which is the 'Europe.

The survey found, for example, that C4 is mostly dominated by websites related to journalism, content creation, entertainment and software development, with google.com, wikipedia.org and scribd.com listed as the top three referenced sites. However training data from more questionable sites could potentially cause AI models to generate unwanted, racist, pornographic, unreliable and generally harmful texts. Algoretics asks us to reflect on this sort of "raw material" for AI: **the quality of data influences the quality and reliability of training systems.**

on which it happens

The transparency of the algorithms and the creation of a public dataset should be our first forms of defense: "we must ask ourselves if the time has not come to think about creating our own culturally weighted and ethically balanced dataset to allow the country and public services to benefit from the transformative impact of AI". (Paolo Benanti - FUTURE).

GENDER BIAS

We need to reason about the importance of conceiving the idea of AI not as something differing **from** something else, because in doing so we are destined to reproduce a norm and a canon that cannot be applied, except by giving birth to a hierarchy. We should interpret the AI phenomenon, not as something that differs from something else, but analyze the differences **between** phenomena that are different, even though they perhaps respond to a common matrix, but which cannot be exported one into the other, without this produces opacifying and preclusive consequences of the ability to go all the way in the analysis of the phenomenon. (Elisa Giomi -)

The crucial point in understanding new technologies, as we have seen, concerns the data that feed them and which are the basis of its awareness: AI systems would seem to be much more maneuverable from the data with which they are trained than from the algorithm, data and algorithm work together to produce a certain result and it is from their interference that an answer, a work is generated, an action.

We understood that in addition to not being "neutral", this technology is not exactly "intelligent", the definition of intelligence attributed to a machine is often problematic: we believe it has the ability to make its own decisions, when in reality it is humans who establish the rules of its functioning (for example the algorithm according to which the chat must provide its answers by drawing from the data available to it), who have provided it with the datasets from which to start to elaborate the results it will then achieve, whether portrayed or long dissertations on the most diverse topics as in the case of chatGPT.

The possibility that there are risks of 'discrimination' are very high: if you train an algorithm to see only red cubes, it won't recognize the yellow cube (it's called 'bias').

To return to the previous reasoning, if the canon and norm of the human world are masculine, the rule and therefore the "invisible norm" is masculine and ends up representing all human intelligence, therefore the paradigm is that if human intelligence is male, so will artificial intelligence.

Various examples can be given, if we use AI for the granting of a mortgage or for the selection of personnel to be hired, we must be careful of the quality of the data with which the machine has been trained: if we ask artificial intelligence, based on the existing data, if it is a good idea to hire a woman to work in cyber security, the machine will reply that it is not a good idea, because the past data does not show a large number of women doing that job, which would lead to sensational errors and the same thing can be said for recruitment in other senior roles in a company and beyond

(The code of the future pg 89).

Aylin Caliskan, professor at the University of Washington, argues that in the visual semantics of learning models such as 'Stable Diffusion' "women are often associated with sexual content, while men are associated with professional and career-related content in any important field such as medicine, science, business and so on.

Applications such as Lensa, which creates portraits from our photos, or the ChatGPT chatbot, which simulates human conversations, are not neutral, but reproduce the discrimination and inequalities already taking place in our society.

As? They use data that tell us how we are and not who we will be (and unfortunately today we are sexists, racists and even ableists)

An MIT researcher used her photos to test the Lensa app, which transforms our photographs into portraits in futuristic scenarios, the result was that while most of her friends and colleagues have been transformed into astronauts or proud warriors, you have received many nude photos (...). According to the journalist, her Asian origins played a significant role in this interpretation of the APP: in fact, typing "Asian women

“ in search engines you get a lot of pornographic images.

How do we solve it? "The point according to **Diletta Huyskes, advocacy manager of Privacy Network**, is that: we continue to "blame the algorithm", that is to say "it's the algorithm's fault", but in the overwhelming majority of cases the responsibility is human and planning".

Sacha Costanza Cook (Design Justice – MIT Press 2020) says: *"WE CONTINUE TO PRODUCE TECHNOLOGIES THAT REPRODUCE CURRENT SYSTEMS OF INEQUALITY WHEN IT SHOULD BE CLEAR THAT*

WE HAVE THE NEED URGENT FROM DISMANTLE THESE SYSTEMS".

Excellent intuition, from a legislative point of view in all the documents and recommendations that have followed one another from the European and international institutions since 2017 to date, this problem has been addressed and not only for the impact of gender but for all possible discrimination: sexism, racism and ableism, but it is not enough.

Examples of gender bias

As far as gender discrimination is concerned, it is clear that more women are needed in science and technology, an objective advocated by international organizations and which has been spreading to governments and also to businesses.

Having more women scientists means integrating their point of view and their experience in the development of new solutions for the well-being of our lives.

To achieve this ambitious goal and translate it into reality, there are many steps to take: working on gender stereotypes that influence deep-seated beliefs about what women 'are good at doing' for example.

Gender bias, or gender prejudices, have a significant impact on the fair distribution of opportunities in society and in the world of work, it is extremely topical in the world of politics, for example, the difficulty in finding top positions held by women.

In the world of work, the issue has been on the table for many years.

The biases accompany the female gender from **schooling**, to the research and selection phases in companies, up to growth and **career paths**.

To give just a few examples:

- 1) schooling phase : bias on topics, subjects, university courses that respond more to female predispositions
- 2) phase of entry into the **world of work**: bias on positions and trades unsuitable for female figures
- 3) phase of **professional growth** in organizations: bias on knowing how to reconcile, especially in some phases of life, work and family commitments.

The role of society, and consequently of the media, has had a significant weight in conveying a female image in which the woman is relegated more to home and childcare tasks or in educational roles and therefore to confine the female gender in prejudicial "cages".

This cultural education has determined the formation of unconscious bias responsible for the disparity of power also in professional possibilities.

On women's professional aspirations, the stereotypes matured in the family and at school have a very significant impact: 56% of girls against 46% of boys think that boys are more likely to have a career .

From here the mechanism is triggered which takes place and which makes girls, despite graduating in greater numbers (57% of the total number of graduates), and better and more quickly, mainly choose humanistic **studies**, with low employability (Source: Research by Valore D in partnership with Ipsos).

And yet, the female minority that chooses scientific universities is no less than the male group: the **average graduation mark** is 102 against 100 for engineering students, with an **average graduation time** of 4.1 against 4.5 years.

Despite this, the result of higher university performances is that 5 years after graduation they find work less often, with a **lower salary**: an average of 1,263 euros per month, against 1,508.

And only one out of two women has a **permanent contract**, against 61% of colleagues.

Tools to act

And here is identified one of the problems: there are few women who are working in the architecture of the machines, so the machines tend to reproduce the gender stereotypes that we already live. The fields of technology, engineering and computer science have always been dominated by men and therefore there is an urgency to push more and more women towards STEM knowledge, on the other side there is a need for massive digital literacy of the female population, which recalls other moments in history, when for example there were few women who approached knowledge, because this was mediated by a language unknown to them, Latin, which only a few privileged ones could study.

How do you eliminate all forms of discrimination at every stage of women's careers?

1. Fixing the numbers of women: reviewing and readjusting the number of women, increasing their number participation and representation.
2. Fixing the institutions: organizing institutions, encouraging and promoting gender equality through structural changes in research institutions and organizations (staff recruitment, career progression, etc.)
3. Fixing the knowledge: increase awareness of how important a gender approach is in the field of innovation, to achieve levels of excellence in science and technology, with positive effects on business and the economy (economic case for gender equality) (see Generally)

So we need to take action and many women's realities in Europe and around the world are doing so. As mentioned so far, having acknowledged the ambivalence of the potential of AI and the growing invasion of the decision-making processes that shape our lives, it is more necessary than ever for artificial intelligence solutions to be rooted in humanity and inclusion.

The Women4AI Daring Circle association, for example, continues its efforts to accelerate the adoption of inclusive AI and to facilitate the transformation of the ecosystem, inspiring companies to act and adopt effective policies to drive these transformations.

In November 2022 at the **Women's Forum Global meeting**, The Daring Circle launched a call to action that brings together all signatory organizations, in their commitment to implement inclusive AI (many companies such as the L' Oreal).

The Daring Circle defines inclusive AI as "intelligence that takes into account the needs of diverse groups, including minorities, marginalized and underrepresented groups.

The application of inclusive AI addresses the issue of bias and discrimination with the aim of reducing inequalities, including representation, accessibility and interpretation.

Genevieve Smith and Rim tehaouri, shared their insights with the audience on "How to make inclusive AI a reality", Genevieve underlined the urgent imperative to act: "people interact with artificial intelligence every day: questions of work, loans, healthcare, social media algorithms. It is crucial that these are developed in an inclusive way, before it is too late. If you don't prioritize inclusion, the default you will get is exclusion. The cost of inaction is high, not just for women, for all of us.

The associations in the world deal more than anything else with increasing female empowerment in the field of AI, some meritoriously, also with transmitting knowledge to the female population.

Even in Italy there are many realities that are moving towards inclusion, the ISMU Foundation, with the GRACE project funded by the EU, deals with rights, citizenship and equality, and is trying to form a board on 'women and AI'.

Call to action:

First theme: "Strengthening the pipeline and practices"

According to Fortune Business Insights, the global AI market size was \$328.34 billion in 2021, a rapidly evolving industry with the potential for sustainable and inclusive growth and jobs. However the World Economic Forum found that **only 22% of AI employees globally were women.**

This gap in the AI market reflects the gender and skill gaps too often found in technology sectors.

For organizations to implement inclusive AI, they need to start addressing this imbalance internally, it has to start with how teams are built, effective design and development teams should include a mix of disciplines and identities: gender, race, religion, sexuality, nationality, disability, neuro diversity, generation and more.

Second theme: Building solid public data bases

It is essential that artificial intelligence solutions use complete and representative data, to avoid the risk of replicating existing prejudices and therefore act for inclusive practices.

Human oversight is essential to avoid errors and ensure fair decision making. Prior to release, models should be exposed to a broad range of environments, contexts, and real-life users to ensure their inclusiveness.

In the age of information and globalisation, it is more important than ever to promote media and digital literacy so that people can navigate the sea of available information and discern between reliable and less reliable sources. The dissemination of knowledge and the promotion of critical thinking are essential to create aware and responsible citizens, capable of making informed decisions and contributing to the public debate.

With Open Source, which is a philosophy that requires software and technology to be free and accessible through licenses, for example, it is thought to be able to spread power to citizens, rather than to large companies. There must be a decentralization of knowledge and tools to access this technology. The value of Open Source is the democratization of access and the redistribution of power and wealth that will inevitably be produced by this technology.

There has been talk of a ruling that essentially prohibits member countries from using, in public administrations such as schools and universities, platforms that send data outside the European Union to states with lower privacy protection than that of the EU, such as Google. However, the Italian state and the ministers do not want to enforce this sentence, and unfortunately some school principals do not understand it.

We are facing an education problem, not only for students but also for teachers.

In summary, the main objective should be to ensure that artificial intelligence becomes a public good and that it is based on the use of free software and open source. We should work at different levels, from the political struggle, to national and European laws, to protect public data and ensure that any artificial intelligence developed on this data remains public and accessible to all and face the worldwide development of this technology, which for now it is only regulated in the EU. This will require a collective effort and a combination of different strategies and action plans, but it is essential to ensure a future where artificial intelligence serves everyone and not just big corporations (hence the political role of Europe, as a sentinel of rights, becomes increasingly important).

We must focus on the importance of creating and disseminating culture and knowledge, using artificial intelligence as a tool to improve our understanding of the world and to address the social and ethical problems that arise. In this way, we can enable AI to **complement natural intelligence** to create a better and more sustainable future for all.

What is 'doomerism' applied to AI

Donata Columbro in an interesting article says: "There are two approaches that leave me speechless when I read headlines and statements on AI, the unfiltered enthusiasm and the apocalyptic vision of the end of the world fueled by those software, those super computers and especially those neural network models he is designing and selling them.

Let's take the latest alarm from Sam Altman, CEO of Open AI (the company that develops ChatGpt), Bill Gates and 350 other people from the Center for Safe AI where they say that:

*"Mitigating AI-related **extinction** risks should be a global priority, alongside other societal risks, such as pandemics and nuclear war."*

Extinction: a word that catapults us into such a distant future that not even when we apply it to extreme climatic events produced by global warming are we able to believe it and act, let alone when we talk about such an abstract topic as AI.

The comparison between AI and nuclear risk increases more and more, from the point of view of Donata Columbro, it is a shift of scenario that distances people from the themes of technological development, increasing the gap between those holding power in the **control** room of AI (CEOs and politicians) and the common users, male and female workers, on whom the immediate effects of this industry fall, while they are made to believe that they have no choice between using these technologies or succumbing to their extreme "power".

And we return to the ethical interest of AI that we risk is only a declaration of intent that leaves time that finds examples: since you continue to lay off the internal teams that deal with it, to do a few

Amazon has downsized its responsible AI team and Microsoft has fired the entire ethics team and the company itself fate has befallen the employees of Amazon Twitch responsible for monitoring abusive, illegal or harmful behavior. At META, the first consequence was the elimination of the disinformation project in collaboration with the Associated Press and Reuters Agency, which was scheduled to be launched in late 2022 and never started, perhaps as a result of the dismissal of 21 thousand people between November 2022 and March 2023.

The tragic approach (AGI-doomerism) and the idea that an intelligent artificial agent exists (AGI) is the other side of the coin of solutionism (AI as a solution to all our problems)".

We must not embrace the catastrophic vision of AI, but continue to discuss its critical aspects, possible solutions and reveal the possible sexist, racist and ableist distortions of machines and above all we must equip ourselves to be able to use them to our advantage.

BIBLIOGRAPHIC SOURCES

WHITE PAPER on artificial intelligence - A European approach to excellence and trust (Brussels, 19.02.2020)

QA- Gender and media notebook (Elisa Giomi - Pigreco Editions - 2015)

The Code of the Future - The European charter of digital rights and the sense of innovation (Roberto Viola and Luca De Biase - Il Sole 24 ore - May 2023)

How many women are needed to fix science - (InGenere articles from Siarv magazine n.75 -2020)

Accelerating Action for Inclusive AI: The Women4AI 2022 Call to Action (Womens-forum.com – January 2023)

Silicon Valley fires, but worries about AI and human extinction (Donata Columbro – La Stampa – 1 June 2023)

What is "doomerism" applied to artificial intelligence and why we don't need it (Donata Columbro, June 2023 newsletter)

UNESCO – Values and principles (III-IV – policy area 6:Gender)

Gender equality and artificial intelligence in Europe. Addressing the direct and indirect impacts of algorithms on gender-based discrimination (Fabian Lutz – ERA Forum – 2022)

Technology. The source of artificial intelligence incorporates a serious ethical problem (Paolo Benanti Avvenire.it – 6 May 2023)