Entering the Artificial Intelligence Age

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Abstract: *This paper provides an overview on the key questions posed to policy makers and regulators to define a sounding regulatory framework that will not unintentionally limit the evolution of this technology. The origin of this technology and its evolution to become a marketing keyword. A tight relation between AI and ethics. How to reduce or even eliminate the range of concerns raised by AI in the field of jurisprudence. Different levels of development of AI and creativity in the age of AI with reference to existent of proposed regulations.*

Keywords: Artificial Intelligence, Jurisprudence, Trustability, Liability, Ethics, Human rights.

Preamble

Long ago, competition was based on the race to space, the Moon, technological innovation, supercomputers, and, more recently, Star Wars; today, the competition among the major players seems to be focused on quantum systems and artificial intelligence. One of the significant events that have characterized the evolution and pervasiveness of information technology and the "new normal" is Artificial Intelligence, nowadays expressed, among the other tools, by powerful Large Language Models. This long-lived technology, born in the 1950s, was considered too cryptic and too far from practical use by citizens. Apart from direct concerns pertaining AI per se major concerns can arise if AI will be placed on top of the whole digital “society” enabled to act autonomously, each digital “service” have a potential direct or indirect impact on society and human rights.
However, the exponential spread of AI platforms like ChatGPT and the immediate familiarity acquired by citizens have favoured the implementation of AI in a wide range of products, such as washing machines, self-driving cars and drones, plus documents, and visual content created by Gen AI (GAI). This widespread implementation of AI and GAI has raised serious concerns about ethical issues involving, non-only human rights, but fairness, transparency, trustworthiness, privacy, accountability, and social impact, as well as the need to address the legal position of AI in the event of harm and the related liability. In addition, these issues have highlighted some of the potential concerns regarding liability and responsibility in the case of systems directly operated by AI and GAI.

Deep Seek, Open AI, Google, META & friends are investing in LLMs like Chat GPT, Mistral, LLAMA, and more. Hardware and microchip developers, once named Symbolics machines, now are represented by neural processing units (NPU) like NVIDIA or AMD. On September 2025 NVIDIA and INTEL announced, “a collaboration to jointly develop multiple generations of custom data centre and PC products that accelerate applications and workloads across hyperscale, enterprise and consumer

markets." Few days later OpenAI and NVIDIA announced a strategic partnership to deploy 10 Gigawatts of NVIDIA Systems. Investments and joint ventures depict a potential impressive development of this sector and related impacts on society.
On October 30, 2025, at the Second International Conference on Cooperation and Development for Young Entrepreneurs, Chen Wenling, former chief economist of the China International Economic Exchange Centre, presented the ongoing plans China to become the world's first power-producing country to excel in artificial intelligence systems. The need for energy and cooling is posing the interests of key player on innovative solutions based on server farms on orbit powered by solar energy and cooled by the outer space low temperature or polar installations.
To better approach this subject it is time to devote some lines to describe the origin and evolution of AI.

Can machines think? And the reborn Artificial Intelligence

We must point out that Artificial Intelligence it is not a newcomer, the origin of this technology dates to the middle of the previous century and even before. Alan M. Turing[1], considered the father of Artificial Intelligence, further developed the research carried out on this subject at Bletchley Park during the WWII. Following the studies on Turing[2] machine in 1950 a first release of the Touring Test was published on Mind, the incipit of the article is[3], "*I propose to consider the question, 'Can machines think?' This should begin with definitions of the meaning of the terms 'machine' and 'think'…".*

For the first time arose the idea to break the rule of rigid procedures and algorithms unleashing the hidden power to identify "invisible" patterns and create associations of items. The initial people's understanding about AI was "the ability of computers to dynamically instruct themselves creating code". Advances of A.I. captured the interest of journalists being this technology considered the seed of the George Orwell's "Big Brother" or the ignition of the progressive slavery of men ruled by machines. This vision generated the concern "*General artificial intelligence design and generative AI will improve itself to overcame human intelligence?*[4]" Are we going to face what several times was depicted in the science fiction movies?
We don't know whether the concerns often associated with AI, considered a potential cyber-Leviathan dominating humanity thanks to its "far superior intelligence", are due to the term that was long associated with the first studies and applications in this field. The term "artificial intelligence" likely sparked the awareness that there were two "intelligences," one human and one artificial, potentially competing to "rule" the world, as some Sci Fi movies use to depict like "*2001: A space Odyssey*" due to HAL[5], War Games, Eagle Eye or even Lucy[6]. Sci-Fi movies many times anticipate some realities

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[1] Alan Mathison Turing (1912-1950), British mathematician Alan Turing, c. 1930s. Turing did the earliest work on AI, and he introduced many of the central concepts of AI in a report entitled "Intelligent Machinery" (1948)

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[3] Alan M. Turing, Computing machinery and intelligence, Mind, 59 October, pp. 433-460, 1950. https://academic.oup.com/mind/article/LIX/236/433/986238

[4] Science fiction movies already proposed similar scenarios e.g. Wargames (1983 American techno-thriller film directed by John Badham) or Eagle Eye (2008 American action-thriller film directed by D. J. Caruso)

[5] A Space Odyssey is a 1968 epic science fiction film produced and directed by Stanley Kubrick based on an Arthur C. Clark novel – HAL acronym is formed by the chars preceding IBM - The spaceship officer Dr. Dave Bowman used to interact with HAL by voice calling "Hello, HAL. Do you read me, HAL?"—HAL: "Affirmative, Dave. I read you.", Dr. Dave Bowman: "Open the pod bay doors, HAL", HAL: "I'm sorry, Dave. I'm afraid I can't do that" . . . We all know what happened later.

[6] Science fiction movies already proposed similar scenarios e.g. Wargames (1983 American techno-thriller film directed by John Badham) or Eagle Eye (2008 American action-thriller film directed by D. J. Caruso), Lucy (2014 French Sci Fi movie written and directed by Luc Besson)

that later become true. Both experts in the field and governmental bodies are asking to issue specific regulations and laws, in October 2025 over 850 people signed a statement calling for a pause in the development of superintelligence[7], among them tech leaders like Virgin Group founder Richard Branson and Apple cofounder Steve Wozniak. The key questions concerning similar problems are:

- How to achieve precautionary/protective regulatory goals on AI design. Use & autonomy without stifling a jurisdiction's competitive advantage?
- At which level should AI be treated as a morally[8] considerate agent and how could this be regulated?
- Recognizing that assigning 'legal personality' does not necessarily mean 'morally considerate'. Should moral considerations be integrated into regulatory approaches?
- Can artificial intelligence be accountable and liable?

To better understand the range of concerns and the desire to regulate a short list of shared and conflicting underlying concerns, we need to consider:

- Security (homeland/national & defence secrets, military, space, weapons, infrastructure, financial systems, personal information, political processes/elections, commercial secretes, biosecurity).
- Discrimination and BIAS in health, selection processes, procurement, justice, policy, regulation, and anything where AI is involved.
- AI moral responsibility: in case a trusted AI system will be used to pose ethical dilemmas and feel released from a personal ethical analysis and related responsibilities.
- Information oversight, misinformation, disinformation, disapproved information filtering, nudging, opinion formation and manipulation.
- Privacy, human rights & civil liberties protections.
- Commercial advantage e.g. promoting national industry – via different methods.
- Protection of system and information integrity programs from being hijacked.
- Consumer protection including liability for harmful products or non-regulation compliant e-services[9].

Mixed frameworks for national security, commercial advantage, justice, and biosecurity. In terms of national security and commercial advantage justice systems are already at work assigning accountability and liability in cases of AI and GAI managed systems. This is due to the proliferation of AI managed systems and devices that have gained a key role in systemic liability allocation models, and this ensures accountability without stifling innovation. However, there are other areas evolving such as "cyberbiosecurity", an emerging field that combines cybersecurity, biosecurity, and cyber-physical security to protect biological and healthcare systems and data from digital attacks and malicious manipulation. Safeguarding sectors such as healthcare, agriculture, renewable energy, and the environment are part of the cyberbiosecurity agenda. Defending the "bioeconomy" from intrusions that exploit the growing

[7] https://superintelligence-statement.org/

[8] Ethics as Moral Philosophy refers to the characteristic spirit of a culture, era, or community as manifested in its beliefs and aspirations, so it is strictly related to cultural identity.

[9] https://commission.europa.eu/news-and-media/news/digital-services-act-keeping-us-safe-online-2025-09-22_en

connection between biotechnology and the digital world, protecting information, processes, and materials in this interconnected space is a critical agenda item. Shared preventative solution generally do not include precautionary measures as they focus too late with 'after the fact liability' to be effective. It should involve the evaluation of potential risks and threats and related management within regulatory frameworks and, if needed, mitigation actions.

Among some more integrative frameworks that we might consider:

- Traditional commercial liability for programme creators (downside v/s preventative effectiveness), how to behave in case of neural networks "black boxes" or Actionable - Generative AI?
- Environmental law preventative frameworks (downsides v/s competitive or innovative advantage). Regulations and jurisdiction are usually followers in this space and need to be careful not to shape or limit a priori innovation, as stated in the US AI executive order about AI leadership "excessive State regulation thwarts this imperative"[10] or UNESCO's "Ethics of Artificial Intelligence"[11].
- Graduated "AI" focused liability as with other independent actors, this is one of the basic approaches in the EU AI Act[12].

A marketing passepartout

AI as an essential buzzword for ensuring market success. The "*commercial*" power of "*AI-based*" tools and equipment is evident. Thanks to the blurred border line between programmed logic behaviour and artificial intelligence a relevant part of products and services are nowadays "AI based". Consequently, it is important to establish guidelines that frame this sector.
How can AI be defined? A rough definition is: "*AI is a system that uses technologies capable of making predictions, generating content, providing recommendations, or making decisions with varying degrees of autonomy.*" [13] Another key characteristic of AI systems is their "*inference*" capability.
China is investing relevant resources to lead the AI domain. One of the definitions of AI due to Chinese researchers is "Artificial intelligence (AI) aims to mimic human cognitive functions and execute intellectual activities like that performed by humans dealing with an uncertain environment.[14]". The Chinese approach to this technology is in line with Chinese culture and foresees, in recent rules, that AI must always be under human control (since the advent of Generative AI as a precautionary approach). Positive duties for applications to promotes social cohesion, additional regulations prohibitions on algorithms that create division.
To conclude this short overview let's consider the standpoint of Saudi Arabia that was one of the first country to establish the National Center for AI (NCAI). What is AI? "*AI is systems that use technologies capable of making predictions, generating content, providing recommendations, or making decisions with different levels of autonomy*."

[10] https://www.whitehouse.gov/presidential-actions/2025/12/eliminating-state-law-obstruction-of-national-artificial-intelligence-policy/
[11] https://www.unesco.org/en/artificial-intelligence/recommendation-ethics?hub=32618
[12] https://eur-lex.europa.eu/eli/reg/2024/1689/oj/eng - On September 23, 2025 Politico (www.politico.com) issued an article stating that "just one year after the European Union adopted a landmark plan to cut risks of artificial intelligence, it's already preparing to put the brakes on."
[13] As an example – definition due to the National Center for AI in Saudi Arabia
[14] Chen Shuang - School of Chinese Medicine, University of Hong Kong, Hong Kong 999077, China

Daily life companion

Artificial Intelligence will increasingly pervade applications and devices. On 18 May 2023 Open Ai released a ChatGPT APP on IOS, on June 2024, Sam Altman announced the integration of an Open AI Chat GPT based AI assistant on iPhone, in 2025 META launched AI on WhatsApp providing major part of the typical AI services, above we already considered some of the following steps and developments. AI extensions are offered as a kind of bonus or add-on to any product from fridges and washing machines to internet service provision. Automotive industries are starting to extend the use of AI out of autonomous guide.
This trend will expand soon involving both everyday “tools” and high-end applications and services. Several services are already managed by artificial intelligence as well as decisions and even critical decisions are assigned to Artificial Intelligence, many times based on Narrow AI[15]. Large Language Models[16] are quickly developing offering a wide range of “services” to even not skilled citizens. These “end-users” will accept the outcome of AI mainly as an “oracle” with a limited or absent ability to analyse or criticise it. Apart from potential conflicts with ethics, errors and drawbacks a potential mid-term effect should be to lose the ability to perform traditional tasks having delegated these tasks to AI.

Will ethical principles be incorporated in AI?

The term "*ethics*" is often associated with the term "*morality*," as in ethics as moral philosophy, the philosophical study of the concepts of moral right and wrong and moral good and evil. The term "*morality*" is often associated with religions, cultures, professions, or virtually any other group characterized by its own moral perspective (e.g., doctors, biologists, judges, engineers). This outlines the close relationship between ethics and groups or communities.
To properly consider ethics in the field of AI, in line with the above definition derived from Ethos[17], we must consider, in addition to some shared fundamental principles derived primarily from key human rights, several characteristics related to cultural models. This brings us to the "*localization*" of "*intelligences*". Thus, the question "*Can we build an AI and align it with our values and ethics?*" involves two main aspects: the ability to integrate ethics into the AI system and, at the same time, integrate "*our*" values; localize, or, if you prefer, respect, the ethical values of the community. This directly involves applied ethics and, arguably, the choice of an ethical model, such as normative ethics.

Due to the proliferation of AI managed systems and devices, ethics has gained a key role in systemic liability allocation models that ensure accountability. without stifling innovation. The role of followers assigned to regulations is usually due to the will to do not influence or shape the evolution of science and technology.
One of the side effects of innovation from online breaking news to stock exchange is the quest for real-time, reactions must be immediate, the initial trend in the transition from humans to AI systems, usually associated with “black boxes,” considered human supervision not to be mandatory and even unnecessary, as it created a significant time

[15] Narrow AI and General AI are one of the typical differences in AI domain – the first has a in depth but limited knowledge.

[16] LLM are advanced artificial intelligence (AI) programs trained on massive datasets to understand, generate, and process human language and other content.

[17] The term "ethics" finds its root/etymology in the ancient Greek "ἦθος" (ethos), and refers to the characteristic spirit of a culture, era, or community, manifested in its beliefs and aspirations

lag compared to decisions and actions that AI could execute on the fly. This results in critical decisions being entrusted to automated decision-making software, with no room for human intervention and unpredictable conflicts with ethics. As we all know, this approach has already led to some inconveniences and even disasters. Tokyo stock exchange collapse, Boeing 373 Max crash, some automatic driving systems accidents, etc. The unbridgeable gap between AI real-time decisions and human evaluated decisions poses both ethical, legal and practical issues.

Following the actual trend to embed AI at decision level in a broad range of fields the legal system will soon face the problem to assign responsibility when AI systems will be involved in or cause harm.
Taking as an example to well-known car collision case, apart from potential ethics and cultural differences (east and west), the analysis will take into account the design and performance of the hardware side (sensors, actuators, schema, redundance, etc.) and the logic side trying to understand the logic schema followed by the system usually without human supervision and last but not least a mix of negative circumstances due to a negative combination of exceptions on both sides. All these aspects not mentioning other vehicles involved in the case, environmental conditions, physical condition of the road, etc.
If we consider some cases in a field, like aeronautics, that is more advanced, it is evident that several additional parameters will make the assignation more difficult: regular updates, compliance with requested mandatory updates or notification forms, etc.
How will jurisprudence define a proper methodology to evaluate AI decision-making case? If a usual algorithmic decision-making system can be analysed and evaluated or amended, the dynamic outcome of the AI system will make the case more complicated.

This also applies to tort-based approaches that address the unintended behaviour of a decision-making system that, due to an unpredictable set of inputs, has deviated from the correct course of action. Tort-based approaches involve using the tort law framework to assign responsibility for harm and provide remedies to victims, often focusing on corrective justice. In such a case described above we potentially face the case of a collection of negative circumstances that all together unpredictably caused a disaster. Again, we are basically back to the chain of the fact checking list and probably to try to identify the origin of the problem and assign the responsibility.

The use of algorithmic procedures in already digitised working environments usually splits the accountability and liability problems into two sections. Some operational fields use to submit to authorities for checking and archive the source code of the application and in any case assign responsibility to the responsible person within the organisation. In this situation, whether the source code is provided or not, the liability falls on the person guaranteeing the results. In the event of damage, ordinary case law applies, without any specific guidance regarding the software, except for potential legal recourse against the software developer and the loss of confidence in the product. This is what usually happens, for instance, in case of structural analysis or mechanical designing tools. This is true for algorithmic software: if we add a little AI or fully rely on AI systems, the approach could potentially differ. If the AI module provides output to a human supervisor, we likely revert to the previous "algorithm-based" approach, where the responsibility rests with the human. If the AI module connects

directly to the operational side, responsibility is likely attributed to the human in charge of the operation, but in both cases, there is no feedback to the technology. In both cases, there is no responsibility on the AI, so ideally, the same or similar damage can happen again. Of course, if the damage is made public and the related information shared, trust in the AI system will suffer, but is this enough?

As happens in cases of uncertain attribution of liability, should we envisage mandatory insurance for any potentially harmful AI system as a partial remedy for victims? In such a situation, how can insurance companies assess the risks and allocate the corresponding policy costs?

How can risk managers consider the role and behaviour of AI and GAI?
Recently, thanks to the appeal of AI-based applications, a range of management and decision-making tasks are being entrusted to AI systems, not always supervised by humans. This new approach makes risk assessment much more difficult, as this specific aspect is usually not included in the scenario analysed by the intelligent application, which is often responsible for optimizing one or more resources. Some artificial intelligence applications are tasked with optimizing project management plans, without providing explanations of the logic behind them or the specific aspect deemed to need optimization. Risk managers receive process output from a sort of black-box and must analyse it to identify potential risks associated with that specific configuration. This often leads to a “snapshot” of the process rather than analysing the actual full “movie”. Research labs are investing time and resources to “open” the black-boxes and provide explainability concerning the outcomes.

There is a clear need to develop systemic liability allocation models that ensure accountability. without stifling innovation. As it already happened in similar situations one of the first steps is to identify if there is any potential relation to traditional situations to reconnect the specific case to traditional jurisprudence. One of the relevant differences is the lack of a pre-casted algorithmic procedure that can be analysed and amended. At a first it looks much more like a concourse in liability between human and AI. Furthermore, is there any possibility that in the future such cases will be directly managed by “AI judges”, there are already several AI systems supporting attorney in law starting from the provision of the analytics of the huge set of documents, court rulings and laws pertaining similar cases. Are there some plans to solve low impact cases by AI as a concrete opportunity to solve the overcharge of duties in some courts?
Key players like Google and Microsoft are upping their game. Anthropic[18], Mistral[19], DeepSeek[20] and OpenAI are continuing their winning streaks disseminating their AI platforms in every-day smart companions, Palantir[21] already developed and tested AI solutions to fight crime and foresee potential criminal actions stating that human rights and ethics are fully respected. Which will be at the "end of the day” the juridical status of AI and potentially assigned responsibilities? what about Gen AI and the black box that generate the outcomes?

[18] https://www.anthropic.com

[19] https://mistral.ai

[20] https://www.deepseek.com/en

[21] Palantir a US company founded in 2003 in Denver, with the support of different agencies https://www.palantir.com

Intelligence: human or artificial?

The recent polarization between the supremacy of human intelligence and the surpassing of human intelligence by AI leads us to consider some of the evolutionary stages of AI: from Narrow AI (NAI) to Expert Systems, Machine Learning, Deep Learning, Artificial Intelligence (AI), General AI, and Generative AI. All these steps, more or less in this order and in these terms, have extended the capabilities of these systems from rigid, almost algorithmic behaviours to a kind of "*freedom*" demonstrated by NAI, General AI, and, most evidently, Generative AI. Scientists and researchers envision reaching two further frontiers: the "*Human Brain*" model of functionality, aimed at recreating an ever-growing network of synapses, and the ultimate level, "*Self-Awareness*". This last level of evolution is probably the one that frees the machine from all dependence on humans and its "*architect*"[22]. One of the best-known examples of self-awareness is probably represented by the scene in Stanley Kubrick's "*2001: A Space Odyssey*" in which Captain Dave Bowman begins to disconnect the HAL 9000 computer by removing its circuit boards. HAL 9000 demonstrates self-awareness, realizing that it is about to die. "*My mind is going... I can feel it*", "*I'm afraid. I'm afraid, Dave. Dave, my mind is going. I can feel it. I can feel it. I can feel it. I'm a... fraid*". This theoretically foreseeable step, like the previous one, the Human Brain, is not yet included among the achievable goals of the near future. These steps have represented the turning point, in several science fiction films, enabling the machines' rebellion against humans. The debate is still open and polarized, with some industry leaders clearly calling for AI regulation, especially to avoid a critical gap between predictable human behaviour and AI hallucinations. If AI can be generative, it will be able to express creativity?

One of the typical taxonomies in describing the levels of AI autonomy includes:

- **Level one** – basic automation, driven by fixed rules and scripts. At this stage, an AI or system follows predetermined instructions to execute simple, repetitive tasks, with minimal intelligence. Pros: Quick execution of repetitive tasks without errors, consistency, and reduced labour requirements for repetitive and tedious work. Cons: Rigidity of rule-based systems (lack of adaptability) and inability to handle exceptions or complexity.
- **Level two** – partial autonomy which incorporates some machine learning or adaptive capabilities where AI can make limited decisions on its own within a narrow scope but still requires human guidance or validation for most outputs. Pros: Better decision support, AI handles the analysis, greater accuracy than human labour, better results over time thanks to adaptive learning. Humans remain in control, so quality and ethical oversight are robust. Cons: If humans overly rely on AI, errors and hallucinations can happen. Human review is required because AI may provide incorrect recommendations outside of its training. To integrate machine learning systems into workflow it is a complex task.
- **Level three** - conditional autonomy, a more advanced AI that can make conditional decisions and act independently within well-defined circumstances. Pro: AI autonomously handles routine cases, improved efficiency, increased throughput. Humans fucus the attention only on exceptions. Contra: in case of exceptions errors can occur if the AI doesn't correctly alert humans. Systems require well-defined limits and real-time monitoring. Human supervisors must ensure that AI's

[22] This term was chosen in the film "Matrix Revolution" to identify the manager of the virtual world.

decisions in its autonomous zone are correct and auditable. on the social side the duty transfer from humans to AI can cause some frictions.

- **Level four** - high autonomy where AI can make independent decisions in complex scenarios with only minimal human oversight. Often foreseen in supply chain and logistics realms. Pros: Level 4 autonomy are game-changing, a high-autonomy operation can run continuously and react in real time to data. Cons: human oversight is minimal, so any mistake the AI makes can propagate widely before a human notice. AI must be trained to handle a wide range of scenarios to win the challenge of the “unknown unknowns.”. Ex-post amendments to the system in case of hallucinations are hard to amend (the “black box” problem). This raises the risks concerning governance, ethics and accountability. Data governance is also paramount since the AI is largely on its own, feeding it high-quality, up-to-date data and preventing bias or drift is essential to keep decisions reliable. Another consideration is security – highly autonomous systems could be targets for cyberattacks, as malicious actors might try to manipulate an AI that controls critical operations warns of risks like “Agentic AI-driven cyberattacks” if guardrails are not in place). Companies may reshape the job roles to better cope with these new technologies.
- **Level five** - full autonomy where AI systems operate completely independently of human intervention. Pros: A Level 5 AI can handle any task, decision, or scenario within its defined domain just as a human expert would. Adequately training AI can learn and adapt but this is limited to a specific domain of knowledge not extended to Artificial General Intelligence (AGI). No need to interact with humans in daily operations, humans set high level directions AI agent does the rest. Full autonomy if implemented in AI driven factory as an example, can offer improved flexibility as ramping production up or down immediately. Cons: Level 5 comes with serious risks and responsibilities and raises profound issues of trust, ethics, and governance. Users must have absolute confidence in AI’s reliability because having no human oversight there is no “safety net”.

Creativity: Can machine be creative?

Artificial intelligence can boost our creativity in a broad sense, can perform different added value activities in different fields as an example: performing arts, interpretation of huge datasets pertaining artefacts to extract invisible patterns and generate new artefacts, a wide set of autonomous systems from hotels’ guest assistants to worms cleaning pipes there are no specific limits to creativity and imagination quoting Albert Einstein "Logic will take you from A to B. Imagination will take you anywhere."
Again, even in the field of creativity we need to ensure “different creativities” accordingly with cultural identities. These differences are often evident in international contests where cultural background, sensibility and taste are clearly expressed even if the tools used by authors are the same. Dealing with AI and content creation one of the potential scenarios is to face the exponential proliferation of documents due to this “ghost author”, this will lead to new AI documents based on existent AI documents and so on diverging probably from human creativity. As already pointed out nowadays the dataset training the systems is mainly “western” so the outcome generated by these systems will pertain to that cultural environment. How can we identify a human “product” from a machine product? Is AI to be considered as a co-author? These requests many times create potential conflicts on the side of IPR, do we need to

include the BOT as an author, as it is? "Local content" will be soon generated by "local" BOTs?
In the meantime, publishers and event organisers are asking the contributors to sign a declaration about the use or not use of AI based content (text, images, movies, etc), is this simply an integration of paternity right (human + cyber), or is it a release of responsibility related to IPRs or other? Some researchers suggest governments issuing a regulation to impose the insertion of an invisible watermarking in each AI generated output. Policymakers around the globe are therefore pondering how to design and implement watermarking techniques to ensure a trustworthy AI environment. China has already taken steps to ban AI-generated images without watermarks; United States already enforced this option at least on specific events to be protected by AI generated bias (as in case of Political elections) developing effective labelling and content provenance mechanisms so that citizens are able to identify human or AI generated content. A similar request to develop and deploy reliable content authentication and provenance mechanisms, such as watermarking, was requested by G7. The EU Artificial Intelligence Act (OJ 12 July 2024) requires providers and users of AI systems to enable the detection and tracking of AI-generated content[23].

To conclude

The willingness to create a regulatory framework devoted to Artificial Intelligence is already a reality - several conferences or spokespersons from various sectors are concerned about the potential impact of AI on their activities and businesses. Some of them are concerned over the impact on jobs and careers, others are concerned about human rights and ethics, the possible control over human lives. Furthermore, the use of AI in social engineering, or nudging and opinion manipulation boosted by AI. The use of AI as a filter in "Chat Control Regulation[24]" will be completely approved by the EU or a similar use of AI in the eServices Act[25], adapting services to AI logic standards. Regulatory bodies are faced with questions about emerging technologies that are not yet fully developed and consider their own impact in influencing the development of AI such thus potentially biasing the evolution of this technology. This has already occurred in digital global domains such as intellectual property rights (IPRs) where privacy or cybersecurity regulations are attempting to deal with global "borderless" technologies. The hope is to release or promulgate a global regulatory framework limiting as much as possible unregulated "oasis". Currently, each country or institution is promoting or enacting its own solution. Sometimes approaches differ, other times they use similar principles. As it happened in several fields now the access threshold to digital tools is lowered, much more people can perform similarly and, in short term the gap between the one that know-how and "the one that don't know what is shared" will be relevant so the risk to do not debunk fakes will increase. Once again there is a strong need to keep humans in the centre of the loop and respect human rights and ethics. As already outlined, nowadays, in the light of actual trends moral philosophy / ethics must be always the key reference point in developing, customising and using technologies.

[23] https://www.europarl.europa.eu/RegData/etudes/BRIE/2023/757583/EPRS_BRI(2023)757583_EN.pdf

[24] https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52022PC0209

[25] https://digital-strategy.ec.europa.eu/en/policies/digital-services-act