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LEGISLATION, COGNITION, AND ARTIFICIAL INTELLIGENCE: A FORWARD-LOOKING DISCUSSION

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Abstract: *In recent years, discussions about Artificial Intelligence (AI) technology have exploded, as a result of the changes brought by the launch of Chat GPT in the fall of 2022. From that moment, authors with varying degrees of interest have tried to highlight certain themes, either advocating for the widespread adoption of this technology or strongly warning about the consequences of its careless use.*

However, starting in 2025, the discussions are becoming increasingly applied, because there are evaluation sets available to the general public, and among these, those related to cognition stand out – or, at least, that's my opinion for now. The results of studies from the last 24 months show that lawmakers need to pay attention to several issues, and the text I am proposing tries to point out some relevant directions for action for them, because once this technology has appeared, it can no longer be eliminated from everyday life.

Keywords: *Legislation; Artificial Intelligence; cognition; mental health; children growth; labour force.*

Introduction

New technologies always have a significant effect on direct users, but it is also interesting to measure the perception they offer to people who are not directly involved in this usage/production process, because not infrequently, the latter, being more numerous, can determine the image and even the fate of the product/technology itself. History is full of such cases

– from trains, which were considered capable of scaring people and animals so much that they would bring them close to extinction, to today's microchips, capable of even changing human DNA (Carmichael and Goodman, 2020). Therefore, when new technologies emerge, it is useful to consider public opinion, without forgetting, however, that technological progress is sometimes made against naive or deliberately destructive ideas, or against various political or opinion leaders.

Most of the technologies we use, however, have a clear characteristic: they were invented a long time ago, or at least their foundations were laid centuries ago, and their concretization and refinement generally took place after the 1950s - 1960s. Specific to those years of creation – sketching of goods, products, technologies – there were two other characteristics, namely the fact that they were not initially available to the general public (for use), but especially that their appearance was not known from the beginning, so years passed between the invention of a product/technology and its widespread implementation. The situation with AI is completely different; in the last decade, it has been closely monitored by a large number of specialists, not only from the IT sector, and its large-scale appearance – as much as it is now, even if it doesn't match the ideas from sci-fi literature – has been followed from day one by hundreds of millions of people.

1. The emergence of what we now call Artificial Intelligence was something expected, desired, and predicted by both leading scientific researchers and the general public. This fact is not surprising, because it was anticipated in reality by what valuable engineers achieved in data transmission technology in the first part of the 20th century: radio waves and radar signals prefigure both mobile internet and, more importantly, the need to accumulate and transmit large quantities of data, implicitly also a transformation of the economy: from large factories with thousands of workers to companies capable of processing those many data in a short time.

The mechanism was thus fixed before the Second World War, only the practical modalities and the speed at which the development actions of

the created technologies were to unfold were to be discussed. Hence, a certain detachment that the researcher must have: the broad lines of humanity's development do not appear suddenly, they are created over time, based on more or less successful attempts that can themselves last decades or perhaps even centuries (see in this latter case the period of creation/testing of flying machines).

As is often the case, it was believed that this new technology would also be profitable for some from the outset, and then become accessible to more users, so that the benefits would be great and all humanity would make a qualitative and quantitative leap in terms of well-being (Cohen, 2024). Obviously, there were also warnings, some perhaps more catastrophic (Federspiel et al., 2023), but it was considered that the equation of technological progress would remain the same, and in the end all industrial products (in the legal sense, namely those that are created repetitively, as a result of human action) would improve their quality, and the number of those who would truly lose a lot from AI would be reduced.

2. Real discussions regarding the possibilities of information technologies will only begin after 2016, a year that will remain in history for the two major electoral events in the USA and Great Britain (Brexit), respectively. The press noted that the – somewhat surprising – results were determined to some extent by internet campaigns conducted by powerful agents, who used large amounts of data to profile each voter, and from there, calibrated messages at an individual level (Webb et al., 2023). From that year on, society became increasingly aware of the power of big data analysis, and in some countries with real democratic standards, legislation is being sought to be adapted in electoral matters, so as to prevent overly strong methods of influencing citizens' will.

Data aggregation, analysis, and the formulation of conclusions have been appreciated in industry over the past decade relative to various methods of product development/improvement in factories, but less so by people in the social relations sphere (for example, human resources or human rights advocacy). Dissatisfaction arose from the inability to ensure a neutral interpretation, and from the fact that data collection models were

biased from the outset – one researcher published a book called "Weapons of Math Destruction" (O'Neil, 2016), in which she analyzes these issues.

A shift from industrial models to another type of economy was therefore evident, and what was unknown was only the moment when the "point of no return to old work typologies" would be reached. Again, this major change was not unexpected, because once methods for faster analysis of large quantities of data were created – and which were continuously growing after the global generalization of the internet – they were going to be implemented, because they eased the work in large companies, these being, in public perception, the actors of humanity's economic and technological progress in the 21st century.

3. The emergence of what is commonly called Artificial Intelligence today occurred at the end of 2022, at a completely inopportune moment, as it amplified various political orientations. Towards the end of that year, it was clear that the Covid-19 pandemic was nearing its end, and the appearance of Chat GPT would come as a shock to the economy, but also as a confirmation of conspiracy theories.

However, after the first few weeks of jokes about the capabilities of this product, global competition opened up, and the progress of AI models was rapidly observed, with data processing capabilities and the provision of results for precise requests formulated in everyday economic activity being achieved within a few months. In addition, the huge success of adopting the new technology – over a billion users in less than three years (AI Economy Institute, 2026) – brings into discussion a change not only at the level of society and economy, but especially of law.

Obviously, we do not have the space here to address the entire issue of law and AI, but a few principles and directions of action must be considered, starting from a fundamental effect of the new technology on cognition, because it is ultimately what differentiates the human species from all other living beings. Defining the term „cognitive", psychology refers to the mental processes involved in learning, memory, and understanding. These processes include attention, reasoning, and problem-

solving, which are crucial to how we acquire and use knowledge every day (Cherry, 2026).

4. Why do we need to consider the relationship between cognition and legislation? There are several types of arguments, but among them all, it must be emphasized above all that the changes AI brings to cognition will transform not only economies and society, but also the way people relate to state power and the idea of legislation. The process is inevitable, because governments and parliaments will have to legislate not only for people who have reached adulthood without being influenced in any way by AI, but especially for the future, particularly for young people who have not reached civil majority, and who are most affected by the new technology.

Why is there such great concern regarding cognition? Firstly, because there is more research that has been conducted two or three years after the public appearance of these AI tools, and the results are negative. In one of the studies – widely cited, with the team being from MIT – it is demonstrated that the use of AI has led to a decrease in users' cognitive capacity, and there are other scientific articles in this regard (Kosmyna et al., 2025). Among these, the most recent one emphasizes that using AI for just 10 minutes affects human intellect (Liu et al. 2026), and such a conclusion can only worry lawmakers and parents – but, in fact, any person with reasonable discernment.

To better understand the true perspective of the AI – cognition relationship, it is important to consider where this new technology intervenes the most. Specifically, it could be defined as "the golden dream of all lazy people" (Fan et al., 2024), where someone performs/works on most of the tasks in the office/factory, and in the end, the produced item meets the necessary standards for it to be sold in stores.

Taken as an abstract equation, no one would have anything to comment on, but human life is not an equation, no matter how much some political leaders or philosophers (Lenin, Marx, etc.) might have wished it were. Our life means working, and this activity is almost mandatory for every human, no matter how rich we may be. Work, however, is what has

developed the intellectual capacities of the entire species, without this process happening all at once, so changes have occurred over millennia.

More important, however, is something else: our society has developed based on work, and every discerning adult – in fact, adolescent – thinks in terms of finding a job, because only then will they have income to buy the goods necessary for life. However, the emergence of AI creates several problems related to jobs, which are under major pressure, many of which can be replaced by the new technology, automating positions in job descriptions both in offices and in execution/assembly halls. So, the first major threat that scares both ordinary people and governments is that of emptying many jobs in the economy, which cannot be replaced, and which will cause budgetary complications in terms of supporting those left without a salary. Hence, a certain paradox: the more advanced an economy is, the greater the danger of having a large group of unemployed people as a result of new automations, and among these, young graduates from 2023 – 2025 are the most vulnerable, as several news reports show (Fore, 2026).

5. The history of humanity shows a simple pattern regarding work and its effects on cognition – and when we mention history, we are not referring to the present! Specifically, for thousands of years, people had no guarantee that they would have sufficient harvests to survive, and this forced most of the workforce to be dedicated to agriculture, so intelligence was primarily directed towards selecting plant and animal varieties that could yield better production, along with land improvement and water supply works.

As agricultural performance became more stable, a part of the workforce began to shift towards industry, so the 19th century began to consistently modify the proportion of the workforce in different sectors in developed countries, which forced governments to change education systems, with primary and even secondary education becoming compulsory, and the number of new universities also increasing (Baten, 2016). This transformation, specific to developed countries, would be reproduced in countries with less advanced economies in the 20th century, and the cognitive logic would be clear: the entire population is educated in

schools and high schools, and as much as possible in universities, absorbing ever larger quantities of data, and based on the acquired knowledge, graduates diversify their intellectual and physical capacities in different professions, often creating them.

In all cases, however, these new professions that emerged from the 19th century until now involved a certain education of the workforce based on books and practical experiences – often these began during schooling – and a high level of knowledge in a field attracted more clients and implicitly better incomes, as well as a more peaceful retirement. Automations were harder to implement, but they had the effect of reducing the number of low-skilled workers, who had no option but to learn more and seek new job prospects. Obviously, this entire process was not a simple one, achieved "in the blink of an eye". Also, what happened in one country could not be identically copied in others, and the fact that less developed economies largely took on less intellectually demanding professions, but which required greater raw labor (employed people), was still an advantage. Thus, less developed countries were able to feed a large part of the population, leading to consistent demographic growth, while countries with advanced economies were able to invest in cutting-edge technologies, perfected their industries, and improved the quality of universities (technical, first and foremost). Again, the brain drain from less developed to powerful countries was a logical consequence (Docquier, 2014), but this phenomenon is external and could not be blocked, because the invention of the airplane made it easier not only to transport ideas and books from one country to another, but especially to transport skilled labor capable of paying a ticket to change their country or continent.

The cognitive equation was simple: intellectual development began in the first years of school, and high schools and universities set the maximum lines of development in a country, relative to its own economic capacity, as well as specific development plans (when governments wanted to improve a particular sector of the economy). Relative to the complex level of the global economy, there were opportunities for almost all countries that had a stable government oriented towards economic development, and universities and high schools set the maximum professional and intellectual aptitudes for the population, which meant that

the most complex industrial systems required daily, constant, and many hours of learning, because the entire technological process had to be supervised, and solutions had to be provided without the need for intellectual support from the IT sector.

6. What are the profound changes that AI brings and that will attract the attention of lawmakers? First of all, the fact that it eliminates a significant part of the highly skilled workforce – a unique aspect in history, the inverse of what has ever been recorded, because well-trained workers were "bought"/"hunted" by rulers and employers. Here, financial law will be directly affected, because if well-paid jobs disappear, large sums from taxes will also decrease, which will in time affect all sectors of social activities that need budgetary funding. But if more can be done with fewer workers and AI tools, it means that the size of factories will also decrease, which further affects budgets, and the reduction of the employed workforce can quite easily lead to large-scale social protests.

The most important issue, however, is the cognitive problem, relative to AI. The use of this technology is not that expensive – it wouldn't have exceeded a billion access accounts if it weren't relatively cheap – and the transformations have already begun to affect children and adults.

As research shows, the decrease in cognitive abilities is certain, which means there will be significant effects, especially for the future. Thus, if for adults a part of education is already completed, and AI only subtracts something from a certain, stabilized quantity, in the case of children things are more serious, because their education is not at all completed. In fact, human education, even if it never ends, has a threshold, usually close to the moment when standardized studies in educational institutions cease. In any situation, for most people, the largest percentage of learning occurs before the age of 25, when the mind is most vulnerable to various influences.

However, the strongest influence on a child's or adolescent's mind will be represented by AI, because this young age is not predisposed to work, but to playful activities – and that is psychological normalcy. AI capabilities are seen to be very good in terms of performing simple tasks,

which is similar to some school assignments. But the progress of AI has led to outstanding results in several subjects, being now considered close to the intellectual level of a doctoral student. However, this is wonderful for a child who does not have the maturity to understand how cognitive processes are formed, but sees that they have more time to play.

So, by reducing the time dedicated to study, what will the future adult be like? The question is mandatory, because there are already studies that say that today's young generation has – for the first time in human history – a lower IQ than that of their parents. Let's consider that today's life model is most often like this: parents spend many hours at work, and children stay home alone, but at home they have a computer that has access to AI. In this situation, the temptation will be great to use it for homework, and parents can only control the situation through video cameras installed in the house, which will cause dissatisfaction among children, and in adolescence this mental state can turn into something negative.

7. The complexity of the economy does not decrease with the adoption of AI, but the cognitive future seems unclear or with entirely negative prospects, which means there will be fewer and fewer young people prepared to enter the labor market at the necessary level. From this, a decrease in the economy's capabilities will result, which will regress, because a large part of the workers and/or users of industrial goods will be unable to use them adequately, or at performance parameters.

Therefore, it follows that legislators will be obliged to act with two issues in mind: on the one hand, the elimination or quasi-total reduction of AI use for children, adolescents, and young people up to a normatively fixed threshold – 25 years, I think, is sufficient – and this is because at an age of 20+ years there are sufficient capacities for learning new things (foreign languages, technologies, etc.). There are no options here, there is not and will not be an AI that is perfect for children, because the vision of the adult who will design it will never be identical to that of a child. So, from this perspective, legislators must act as a negative filter, or more precisely as a promoter of classical education, because cognitive decline, once established, is difficult to reverse.

Here, the discussion regarding private space will emerge, because such a prohibition must be applied without discrimination based on person, and in a manner that finds ways to block attempts to circumvent a restrictive legal framework (for example, using parents' AI accounts). Therefore, methods must be found that are effective in terms of children and young people using AI, because the long-term cognitive effects are negative and almost irreversible, and a government has an obligation to offer the best prospects for intellectual and professional development to the citizens it represents, as all constitutions of the world show. So, for these restrictive conditions to work, constitutional amendments would even be needed, because we will face challenges regarding the inviolability of private space (home and methods of school/university/professional preparation), which certainly will not be easy to accept. But we must be aware that no state will accept seeing its young people – those who will be the future of the nation – becoming less intelligent as a result of this technology.

The second issue that legislators will need to consider is that of qualifications for the labor market, because there will be quality differences between children who will reach maturity based predominantly on studies supported by AI tools (so, they will most likely be less intelligent) and those who avoided (or could hardly afford) this technology, and who very likely have a sharper mind and better cognitive abilities. Can we consider it necessary to equalize diplomas – implicitly access to certain professions or higher levels – between these two categories of graduates/future employees?

There are arguments in both directions, but I believe those who should recognize this differentiation must prevail. It will not be the same for a doctor to practice with poorer memory, which will not help during intense moments of an intervention, because their cognitive performance was weakened by excessive use of AI. Why do we say excessive? Because first of all AI relies on a huge library, but there is still no guarantee that the data it provides to users is real, knowing that there have been cases when AI providers have invented legal arguments and case law in favor of one

party, which complicated the judges' task and also lowered the professional prestige of the lawyers who used them.

There will certainly be many problems that AI will bring to the legislators' table, but it must be kept in mind that for the first time in history, a new technology cognitively affects users, not offering them a way to become smarter by exploiting its capabilities. Therefore, a competent legislator will first be obliged to act in terms of maintaining society's cognitive strength, and only then to consider the economy as a whole. This is because a worker with regressing intelligence will not understand complex instructions, and thus will reduce their work capabilities to something that can be done by hundreds of thousands of other people, which means that their potential salary will depend on the size of the competition with those equally intellectually disadvantaged (attention, a worldwide competition).

Conclusions

Humanity "plunged into the world of AI" during difficult times, of pandemic and war, which was not necessarily good for its image. However, we cannot deny that there are advantages that the new technology brings, and a discerning person will have to identify and use them for their own good and that of their loved ones. Nevertheless, the "laziness potential of AI" is real, and its effects are already visible in education, where many young people have already preferred to "study" specialized bibliography through texts created by this new technology, so their cognitive abilities are already declining – as we see, in the short term since these tools were made available to the general public.

Lawmakers thus face major topics for study and legislation, which must, however, be based on a real cognitive capacity of their own citizens. But when this decreases, as an effect of AI, firm intervention is needed, including in a restrictive sense, and from here to the formulation of other principles for study diplomas and access to different professions is not far – most likely, by the end of this decade we will analyze different solutions from countries with top economic potential, which will then be reproduced on a continental or global scale.

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