

Legal Boundaries and Legitimate Foundations of Artificial Intelligence: A Pragmatic Approach

حدود المشروعية والمرتكزات الشرعية للذكاء الاصطناعي: مقارنة براغماتية

Imoudache Karim

Faculty of Economic Sciences, Commercial
Sciences, and Management Sciences,
Alger3 University (Algeria)

Karim_imou@yahoo.fr

Messai Abdelkrim

Faculty of Economic Sciences, Commercial
Sciences, and Management Sciences,
University of Chlef (Algeria)

Messai12karim@gmail.com

Date of submission:14/10/2025 Date of final acceptance:18/03/2026 Date of publication :Mars2026

Abstract:

This article analyzes the challenges of legality and legitimacy in the context of artificial intelligence (AI), emphasizing the inability of traditional legal frameworks to keep pace with technological acceleration. It highlights the dual perception of AI as both an opportunity and a threat, revealing tensions between innovation and social concerns. Through a transdisciplinary and pragmatic approach, the study examines the boundaries between legality and legitimacy, focusing on risks such as algorithmic manipulation. It also explores AI's effects on legal systems and its wider geopolitical and societal implications, concluding with the strategic dominance of major AI companies and the urgent need for balanced regulation.

Keywords: legitimacy; legality; artificial intelligence (AI).

ملخص:

تتناول الدراسة التحديات المرتبطة بالمشروعية والشرعية في سياق الذكاء الاصطناعي، مع إبراز قصور الأطر القانونية التقليدية عن مواكبة التسارع التكنولوجي. كما تسلط الضوء على الازدواجية في تصور الذكاء الاصطناعي بوصفه فرصة من جهة وتهديداً من جهة أخرى، بما يكشف عن توترات بين الابتكار والانشغالات الاجتماعية. ومن خلال مقارنة عابرة للتخصصات وبراعماتية عملية، تفحص الدراسة الحدود الفاصلة بين المشروعية والشرعية، مركزةً على المخاطر الناجمة عن التلاعب الخوارزمي. وتتناول كذلك آثار الذكاء الاصطناعي على النظم القانونية وتداعياته الأوسع على التوازنات الجيوسياسية والمجتمعية، لتخلص في الختام إلى إبراز أثر الهيمنة الإستراتيجية للشركات الكبرى في هذا المجال والحاجة الملحة إلى تنظيم متوازن يوفق بين الامتثال القانوني والقبول الاجتماعي.

الكلمات المفتاحية: الشرعية؛ المشروعية؛ ذكاء اصطناعي.

Auteur correspondant: Imoudache karim

Introduction

The issue of legitimacy and legality presents significant challenges for the reader, particularly when intertwined with emerging and highly complex fields such as artificial intelligence. Indeed, the legal approach, by its very nature, often struggles to keep pace with the rapid transformations of the global environment, requiring effective justification prior to any implementation. Moreover, the application of the law (legality approach) can only be deemed sufficient if it is perceived as legitimate by the relevant stakeholders (legitimacy approach).

In the same context, and according to the most recent data from Statista (2024), perceptions surrounding artificial intelligence and its applications vary significantly: 46% of individuals consider it an opportunity to simplify their daily lives, whereas 53% perceive it as a threat. These contrasting views underscore the fact that the transition to an AI-driven world continues to provoke deep intellectual debates regarding its legitimacy and legality. Indeed, a conflict emerges between the forces driving its development and society's concerns. The lack of legitimacy and legality may thus reflect a fracture between the structure of social organization and the outcomes of technological and scientific advancement.

This observation can be supported by several arguments. On the one hand, it is currently particularly difficult to precisely define the illicit uses of artificial intelligence applications and their impact on economic, social, and legal balances at all levels. On the other hand, artificial intelligence is advancing rapidly, thereby deepening a legal vacuum marked by the absence of regulatory mechanisms capable of countering the manipulative potential of intelligent algorithms, which are characterized by a low probability of detection.

A valuable perspective on this dynamic is offered in the report by Jérôme Dupré (2018), which explores the convergence between the field of law and that of artificial intelligence. This convergence is examined along two distinct axes. First, law is approached as a technical discipline in which artificial intelligence outputs are used to quantify legal issues and enhance the understanding of their contexts and orientations. This approach is not inherently antagonistic to the legal domain; however, it raises critical questions regarding the credibility and transparency of such outcomes, as well as their potential to influence judicial autonomy. Second, at the level where artificial intelligence is considered a domain in its own right within the legal field, the issue of its legality is rigorously addressed within the legal community.

Our research approach aims to explore in depth the boundaries that define the legitimacy and legality of artificial intelligence within a transdisciplinary framework. The objective goes well beyond a mere delineation of the legal domain. Rather, it involves a thorough analysis of social dynamics and their interaction with technical and scientific developments. In this context, the concept of artificial intelligence acquires a renewed significance, revealing actors in conflict as they seek to assert greater legitimacy and legality. This analysis leads to a comprehensive perspective that raises a central question: **What are the limits faced by the legal representations of artificial intelligence, and what are the legitimate foundations of its applications?**

The significance of this study lies in its exploration of underlying meanings through its variables, particularly where tensions arise between what is legally established and what is socially accepted. Within this context, the true nature of artificial intelligence is revealed amid dynamics in which various actors compete to impose their own logic, driven by their respective norms and objectives. Consequently, the objectives of this research are crystallized around two major axes: first, to shed light on the nuances of artificial intelligence with regard to its legitimacy and its compliance with existing legal frameworks; second, to identify the principal strategies used to legitimize outputs generated by artificial intelligence.

Accordingly, given the novelty and emerging nature of the subject, this study adopts a methodological approach based on a systemic vision, supported by a pragmatic logic to interpret social interactions. This implies that clarity regarding the legitimacy and legality of artificial intelligence should reflect the divergent interests of the various stakeholders involved, while also being grounded in tangible reality. At the same time, our research hypothesis posits that the intersection between legitimacy and legality within the context of the artificial intelligence system constitutes a threat to existing balances at all levels.

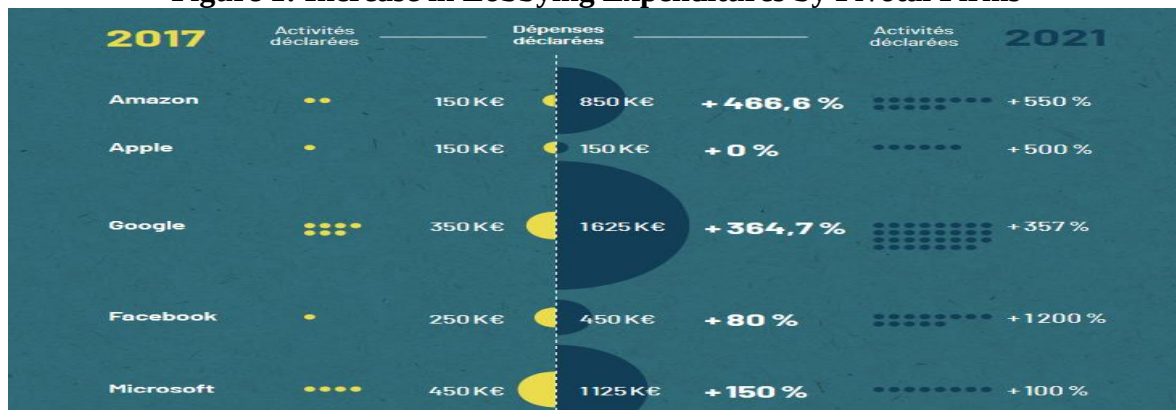
I. Dominant Logic and the Need for Legitimacy and Legality

The concept of interaction constitutes the structural foundation of any approach aimed at understanding change. It is only through such interaction that the true nature of intelligent systems can be revealed. Accordingly, the dilemma of legitimacy and legality concerning artificial intelligence will not be treated merely as a causal relationship between predefined variables, but rather as a relationship that encompasses the hidden meaning of its complexities—or, more precisely, as a relationship of domination at the core of the global system. Numerous examples illustrate this point: whether it be Russian President Vladimir Putin's 2017 statement envisioning artificial intelligence as an instrument of international domination; the February 2022 report by the U.S. President's Council of Advisors on Science and Technology, classifying AI as a critical strategic domain; or statistical data clearly highlighting the existence of Sino-American rivalry in the field of AI applications.

The relationship between artificial intelligence and human social activity, in all its dimensions, underscores its impossibility of being considered in absolute terms. On the contrary, it compels us to first identify the key actors within its global system, while emphasizing the need to distinguish the integrated components of this interaction: on one hand, an active component that sets the rules of the game and weaves its network particularly the ecological systems of artificial intelligence and their pivotal firms; and on the other hand, a component responsible for defining the legitimacy and legality of this activity and its outcomes, involving in particular nations with their legal frameworks, economic enterprises with their utilitarian logic, and society in all its complexities.

Moreover, the evolution of artificial intelligence confronts contemporary societies with new challenges that disrupt previous balances centered around the principle of domination. Today, no one can ignore the growing power of the pivotal AI firms, as clearly reflected in the expression “**GAFAM Nation**”¹. This reality, coupled with an attempt to promote a dominant logic in the field of artificial intelligence, further underscores the need for legitimacy and legality surrounding these key firms. The link between domination and the need for legitimacy and legality is clearly highlighted in a recent report by the Observatory of Multinational Enterprises, published on December 13, 2022. Its findings, presented in the following figure (Figure 1), indicate a significant increase in expenditures related to lobbying groups between 2017 and 2022.

Figure 1: Increase in Lobbying Expenditures by Pivotal Firms



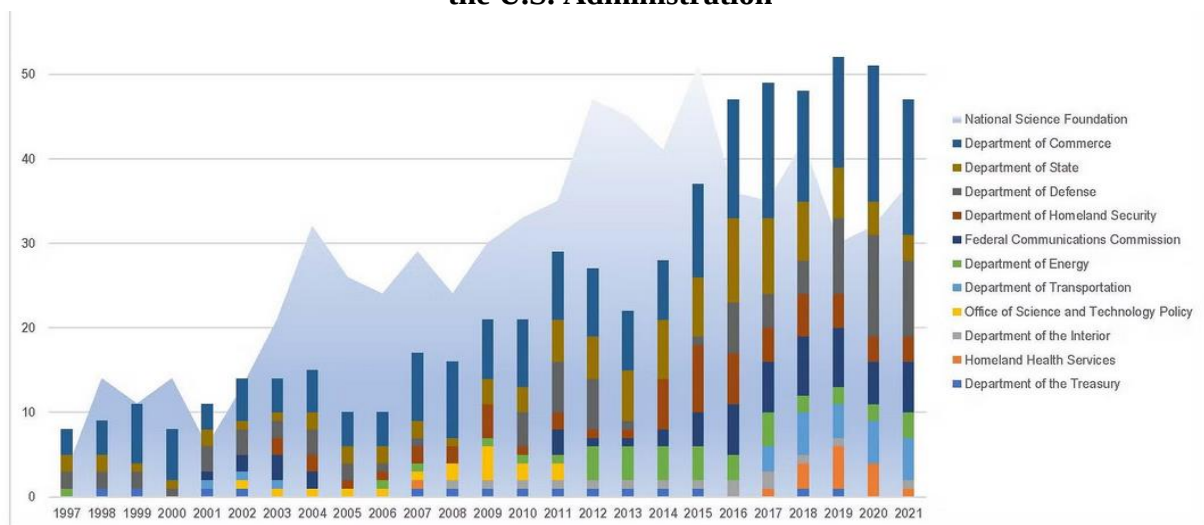
Source: Observatory of Multinational Enterprises, France, 2022.

The intensified pursuit of legitimacy and legality now represents a crucial element in the strategic orientations of leading American companies operating in the field of artificial intelligence. We argue that this approach stems from artificial intelligence's capacity to reorganize dynamics among the various actors within the global system, thereby establishing new balances in accordance with its predominant logic.

On the other hand, states and their legal arsenals are perceived as the primary guarantors of legitimacy and legality—a reality well understood by artificial intelligence ecosystems that seek to strengthen their ties with states and to play a role in geopolitical balances in order to secure enhanced legal support. This approach aims to impose their development model through algorithms of social, political, and cultural domination². However, at the same time, the (power/domination) equation demands that states and societies protect themselves against the rise of major AI corporations capable of monitoring and exploiting information for private purposes, notably by significantly influencing the construction, development, and preservation of individual and social trust.³

In certain instances, the pursuit of legitimacy and legality emerges as a dynamic condition within the global artificial intelligence system, shaped by the inherent contradictions embedded in the very logic of domination. A case in point is the relationship between the White House and pivotal AI firms, which reveals an alliance grounded in mutual interests—namely, increased efficiency in the implementation of federal policies in exchange for enhanced legitimacy and legal recognition. This evolving dynamic is exemplified by the growing presence of representatives from these leading firms within the U.S. administration, as depicted in Figure 2.

Figure 2: Presence of Representatives from Pivotal Artificial Intelligence Firms within the U.S. Administration



Source: FACA Data, Charles Thibout, May 2022.⁴

Undeniably, this connection reflects a power dynamic in which decision-making centers operate beyond the legal and ethical frameworks to which they are ostensibly subject. Numerous revelations corroborate this observation—for instance, Edward Snowden’s 2013 disclosures, which exposed surveillance operations conducted on behalf of the U.S. National Security Agency in collaboration with pivotal artificial intelligence firms, impacting even institutions such as the European Parliament and the United Nations headquarters.

These violations have compelled the parties involved to reassess how they justify and maintain their legitimacy and legality. Indeed, the notion of loss of legitimacy is generally associated with the emergence of significant discrepancies between the expectations of various stakeholders regarding the actions and operations of a given system, and the actual perception of those activities⁵. Accordingly, the U.S. administration was quick to invoke legality by imposing certain restrictions on its agents in matters of interrogation and security, while [Google] reaffirmed its commitment to providing information products beneficial to society and compliant with laws governing the development of artificial intelligence. Depending on their specific context, pivotal firms may adapt by manipulating information and misleading the international community—or even their own users—about their ethical commitments. However, a ten-billion-dollar transaction with the U.S. military could reignite competition among these firms and expose the emptiness of such commitments.

These observations underscore the importance of legitimacy and legality in uncovering the subtleties surrounding artificial intelligence, highlighting the contradictions through which economic, political, and technological conditions intertwine to create ambiguity in the perception of the relationship between artificial intelligence and society: does it truly serve society, or is it being used to subordinate society to its own ends?

The ethical questioning raised by this issue is closely tied, according to [Paolo Benanti, 2020]⁶, to the intrinsic legitimacy of the state itself. Indeed, applications of artificial intelligence, by at times making the exercise of individual freedom more difficult, may compromise the relative autonomy of society as a whole in the absence of control mechanisms that clearly define AI’s role within the social dynamic. At the same time, it is essential to consider the social and ethical

responsibility borne by the pivotal artificial intelligence firms. In a context where regulatory norms and mechanisms are lacking, it becomes difficult for society to formulate objective judgments regarding their actions. It is therefore essential to acknowledge, to a certain extent, that these pivotal firms exert a dominant influence—often anticipating legal frameworks and societal expectations—in the name of their pursuit of legitimacy and legality, which are fundamentally derived from the law and society.

II. Legal representations of artificial intelligence

The possibility of considering artificial intelligence as a symbol of global domination raises crucial questions regarding its legal and ethical regulation. It is imperative to examine the capacity to regulate this intelligence, given that the power of domination could potentially undermine state sovereignty and homogenize societies, while also having the potential to promote values of justice and foster humanity. Indeed, the power of law can help frame the development of artificial intelligence and prevent its excesses, while acknowledging that artificial intelligence also possesses the capacity to adapt to legal requirements.⁷

To address this issue, it is first necessary to grasp the intrinsic nature of the functioning of the artificial intelligence system. From a philosophical perspective, the fundamental aim of the sciences is to serve human happiness [Francis Bacon, considered the first philosopher of modern science], and no isolated legal or logical rule can absolutely oppose this. Contemporary technological advancements promise the fulfillment of our future aspirations, both individual and collective, which crystallize into a profound cultural value based on the refusal to retreat in the face of the impossible.⁸ This inevitably leads to the rejection of all constraints opposing it, including those of a legal nature.

The legal response to the challenges posed by artificial intelligence risks exacerbating its contradictions at the intersection of legitimacy and legality. This dynamic becomes clearer when examining deep learning algorithms, which are capable of exploring all conceivable correlations among various variables within raw Datasets derived from society's virtual interactions, thereby enabling their reuse to enrich analysis.⁹ This situation gives rise to a body of rules, laws, and values which, cumulatively, shape a law wrapped in the legitimacy of its application.

A similar observation warrants emphasis regarding the potential existence of a superintelligent artificial intelligence, within which humans would constitute merely one component among the elements of an AI system, organically interconnected with every intelligent device. In such a context, artificial intelligence would possess the capacity to hear, see, and monitor at all times and in all places.¹⁰

It thus becomes plausible that artificial intelligence could itself become the law. This reality prompted China to enter the field of artificial intelligence after 2016, when the intelligent application AlphaGo succeeded in defeating the world champion of the game of Go, **Lee Sedol**. The emergence of an artificial intelligence capable of solving problems of such complexity represents a powerful implicit indicator of its potential to constitute itself as a singular law of sovereignty.

The convergence of legitimacy and legality within the artificial intelligence system represents a major risk for states, as traditional sources of legality, and for society, as a source of legitimacy. Any attempt at regulation, despite its intrinsic legality, will lack the legitimacy required for effective implementation, since legitimacy, as a social construct, can be manipulated and shaped through artificial intelligence. Consequently, the legality of artificial intelligence will not be established through logical justifications, but rather through its own legitimacy—one that precludes the possibility of objection or critique.

II.1. Algorithmic Threats and State Sovereignities

All these observations converge toward a precise assessment of the profound shifts in the dynamics of domination, highlighting a clear decline in state sovereignty in favor of the pivotal corporations driving artificial intelligence. These entities go beyond social and economic regulatory frameworks to exert direct influence over the shaping of law.¹¹ As a result, there is now an almost unanimous consensus among many researchers and experts across various fields regarding the threat posed by the artificial intelligence system to the law [Bouteille-Brigant.M; 2018¹², Barraud.B; 2019¹³; Portnoff & Soupizet; 2018¹⁴].

This implies the fundamental necessity of reexamining the configuration of the legal landscape in light of the advent of the artificial intelligence system. Even before actors manage to exercise effective control over the outputs generated by artificial intelligence, they first strive to legalize their own representations, thereby preempting any potential threat to their interests.

In this vision, the principle of technological dominance takes on a competitive dimension in relation to the principle of state sovereignty, with this competition increasingly playing out among states themselves. For example, the United Kingdom seeks to position itself as a global center for AI regulation by hosting the Global AI Summit scheduled for June 2024, while the U.S. administration continues to protect its multinational corporations at a pace that could ultimately erode its sovereignty over them—instituting a reality in which political sovereignty is replaced by technological sovereignty, and parliamentary legislation by algorithmic law.¹⁵ At the same time, European countries are striving to catch up technologically without compromising their informational sovereignty, as reflected in the recommendations of the report by Cédric Villani in March 2018¹⁶, which warned against the dangers posed by black-box algorithms.

The legality of artificial intelligence refers to the legal framework that sets the boundaries and provides guidance for the development and use of AI technologies. However, this legality cannot be fully understood without being situated within a broader framework shaped by geopolitical power balances. Indeed, these balances are partially intertwined with legal systems, generating profound disparities that subsequently hinder the establishment of an international regulatory system for artificial intelligence. The following table seeks to highlight some of these evolving disparities

Table 1: Legality of Artificial Intelligence in the Geopolitical Equation			
<i>The Hidden Layer</i>		<i>Key Features</i>	<i>Observations</i>
The United States	International Hegemony	✓ Attempt at smooth regulation of artificial intelligence outputs. ✓ Regulation through general political guidelines, with the absence of comprehensive federal legislation. ✓ Presence of representatives from Pivotal companies within the U.S. administration.	A legality that establishes an alliance based on mutual benefits but lacks international legitimacy.
	China	✓ Serving China's public policy. ✓ Targeting specific problems through artificial intelligence. ✓ Continuous adaptation of laws	A legality that establishes a greater advantage for Chinese institutions at the expense of American ones.

		to keep pace with the speed of artificial intelligence.	An incomplete legitimacy resulting from the instability of the legal framework and the absence of a clear vision for the future.
European Union	To overcome the lag or at least maintain the same distance from the leading countries in the field.	✓ A consensual project involving more than 27 member states. ✓ Legal restrictions on the content of artificial intelligence. ✓ Alignment with European values. ✓ Classification according to the degree of risk.	A legality that establishes constraints on the development of artificial intelligence within member states. An incomplete legitimacy governed by a purely legalistic vision, lacking flexibility and excluding technical considerations as well as the dominant logic of artificial intelligence.
Artificial Intelligence as a Legal System	Algorithmic Dominance and the Decline of State Sovereignty	✓ Law as an organized set of information and data. ✓ Technology as a global cultural value. ✓ The substitution of parliamentary legal legislation with algorithmic laws. ✓ Reliance solely on the ethical commitment of the actors involved.	The association of legitimacy with legality facilitates acceptance and seamless implementation, while enabling significant adaptability within existing legal frameworks.
Source: Author's compilation based on the evolving legal dynamics surrounding artificial intelligence from 2022 to 2024.			

II.2. Threatening Algorithms: Impact on Economy and Society

The field of artificial intelligence challenges traditional models of constructing and representing economic and social reality, due to its capacity—through intelligent digital platforms—to access dimensions that were previously unreachable. Among these are the domains of individual privacy, now increasingly exposed to forms of behavioral manipulation and steering, as well as the enhanced ability to predict and monitor dynamics associated with the unequal exploitation of opportunities within economic and technological environments.

Consequently, any ethical framework governing artificial intelligence proves inadequate in the absence of binding regulations aimed at safeguarding the individual and fostering social cohesion.¹⁷ This issue also extends to the economic order, potentially leading to a growing rift between society and the state.

In order for artificial intelligence to maximize its operational effectiveness, it must access a substantial volume of information, including personal data, thereby enabling it to engage with a virtual social structure while exercising a degree of autonomy beyond existing legal frameworks. However, personal information constitutes an inherent right of the individual, which may be relinquished or valorized at their discretion.

This dynamic is shaped by the integration of social relationships into the legal representations of artificial intelligence, where data protection legislation must play a central role¹⁸, as well as by the requirement that the dominant party in this relationship be entirely incapable of harming the other or of exerting an algorithmic dictatorship [Barraud, 2019]¹⁹ that would undermine the individual's habits, acquired traditions, and symbolic values.

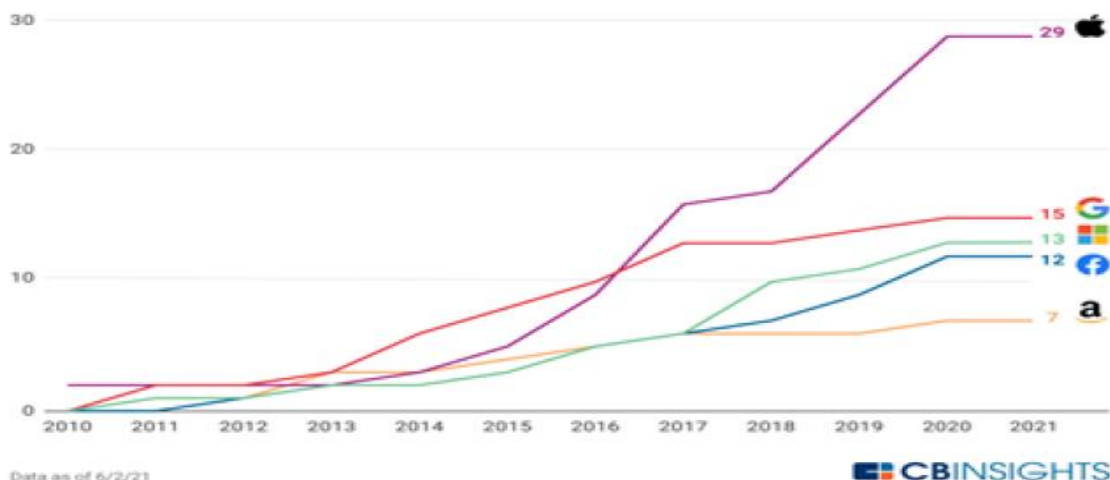
From a Habermasian perspective, the legality of dominant systems must be tied to their capacity to generate belief in their legitimacy. Accordingly, any conception of the legality of artificial intelligence can only be complete within the framework of the social interactions that confer legitimacy upon it. Today, a significant portion of these interactions is embedded within the AI system itself, thereby rendering the legal challenges more complex and multifaceted due to the difficulty in identifying the actors involved and their respective roles (provider, intermediary, user, beneficiary, impacted party), as well as the pace of change, which limits the ability to effectively track them²⁰.

This complexity hinders any meaningful debate on the true nature of artificial intelligence within the bounds of the principle of freedom of expression—now no longer safeguarded by elected representatives, but increasingly controlled by private institutions—thus raising, according to Boris Barraud (2019)²¹, the risk of a shift in power from the public to the private sector.

This legal challenge extends across all sectors of the economy, where the fragility of traditional legislative frameworks becomes evident in the oversight of pivots artificial intelligence firms. For instance, existing laws against anti-competitive practices have proven largely ineffective in curbing the dominant influence of these companies, due to their ability to strategically adapt and diversify their approaches to consolidate control over the AI domain in relation to competitors.

It is undeniable that deep learning algorithms and open-source development platforms—such as TensorFlow—play a decisive role in circumventing antitrust regulations at an early stage by identifying threats and shaping trends around emerging technologies.²² This situation reflects a genuine struggle for the monopolization of artificial intelligence, as clearly illustrated in the following figure:

Figure 3: Competition over Artificial Intelligence Applications



Source: CB Insights, 2021.

This suggests that the challenges we face cannot be addressed solely through a strictly legal lens, as the artificial intelligence system seeks to destabilize traditional structures and establish new mechanisms of control by leveraging diversity and perceived legitimacy. This dynamic is clearly illustrated by Mark Zuckerberg's testimony before the U.S. Congress, in which he stated: "*The mission of the company is to connect people, build communities, and bring the world closer together.*" Yet, there remains widespread concern over the company's involvement in disrupting electoral processes, spreading hate speech, and disseminating misleading advertisements. This issue arises within a complex social context in which legal responsibility appears, at first, to stem from individual transgressions—only to dissolve within the intricate nature of the system's interdependent components.

Thus, it becomes impossible to separate legal responsibility from corporate social responsibility, as algorithmic accountability partly relies on the presumed existence of tools capable of independently and transparently evaluating intelligent applications.²³

Consumer protection law alone is insufficient to address the strategies of information manipulation, deception, and cognitive bias inherent in the complexity of intelligent algorithms. According to Rebecca Slaughter, it is evident that this is not merely an attempt to circumvent user protection measures, but rather a deliberate effort to avoid and undermine them. A striking example is the case of Zoom, which avoided prosecution by the Federal Trade Commission through user agreements concerning information transparency. Consumers' personal data has become a resource to be exploited in order to influence their choices and anticipate their behaviors—posing major challenges in an economy where information has become the principal currency.

In this context, personal data concerning user behavior, preferences, vulnerabilities, and habits has become the new currency of business models centered on advertising and marketing.²⁴ As these practices become increasingly widespread, they acquire a high degree of legitimacy—eventually becoming almost institutionalized and emerging as tacit norms within the commercial ecosystem.

It is widely acknowledged that the role and legitimacy of the state are closely linked to the comprehensiveness and strength of its legal framework. However, with the current advent of artificial intelligence as a dominant logic, social dynamics are undergoing profound transformations, generating tensions and polarizations that redefine geopolitical balances. Under such circumstances, there emerges an increased need for legitimacy, understood as a strategic resource in its own right, the extent of which is determined by the willingness of communities and states to embrace artificial intelligence applications.

III. Legitimate Foundations of Artificial Intelligence

At first glance, legitimacy appears to stem from compliance with established laws and systems. However, this notion conceals a multidimensional depth, reflecting the perceptions and conceptions developed around a specific subject at a given moment, within a complex web of social interactions. This pluralistic diversity of legitimacy highlights the profound social and political transformations we are experiencing, as well as the evolving modalities of rights exercise within contemporary societies.²⁵

This shift is particularly salient in the fields of legal, medical, and financial consultations, where the necessity to follow prescribed legal procedures—such as appointing a lawyer, consulting a physician, or obtaining financial expertise—is questioned in terms of legality when not accompanied by the legitimacy of its application, especially in the presence of user-friendly artificial intelligence systems whose results are reliable. What may be considered legitimate in a

given context can only remain so within the framework of the conditions that produced it. It is undeniable that this reality does not go unnoticed by pivot artificial intelligence companies in their process of legitimizing practices. Consequently, it is essential to study the methodological approaches to constructing legitimacy.

In light of the foregoing, it is evident that the foundations and bases of legitimacy for artificial intelligence applications are subject to a complex set of objective and subjective conditions, which determine the level of support granted to what, may be considered acceptable, rational, and appropriate within the broader framework of artificial intelligence. This issue holds fundamental importance as it outlines a particular vision held by key stakeholders—states, central institutions, economic entities, and society—who are perceived as the arbiters of future directions concerning AI legislation or its potential deregulation.

In this perspective, we examine the conceptualization of legitimacy as developed by Suchman²⁶ (1995), who defines it as a strategic act and an inherent response to the environment. This conceptualization serves as a framework or generalized norm through which specific entities or systems may be judged regarding what is desirable, acceptable, and appropriate. It is embedded within a broader system socially constructed around a set of definitions, beliefs, norms, and values [Buisson, 2005]²⁷, thereby delineating three fundamental dimensions: pragmatic, ethical, and cognitive, in accordance with Scott's (1995) classification.

The pragmatic dimension of legitimacy focuses on personal interests as well as the satisfaction of the desires and aspirations of various stakeholders, reflecting the efforts made by pivot artificial intelligence companies to serve specific and carefully targeted interests. Within this framework, legitimacy essentially represents the social counterpart to the service provided by the intelligent application. This aspect is embodied in the ethical charter of the organization OpenAI: "The organization's mission is to ensure that highly autonomous generative artificial intelligence benefits all of humanity... We will consider our mission truly accomplished if we succeed in helping others achieve the same goal." This statement can be interpreted within the context of social pragmatic legitimacy, which gains increasing importance as the social network expands to encompass nearly all sensitive domains.

This expansion includes states with their geopolitical interests, institutions with their economic, financial, and banking priorities, as well as the need to manage risks; the health sector with its diagnostic and treatment tools; security systems focused on threat prevention; the judiciary through the bureaucratic handling of legal procedures; education and training; and, finally, the advancement of research. Indeed, the pragmatic dimension plays a crucial role in the legitimization strategy of intelligent applications, aligning with the rise of an algorithmic culture that believes in its capacity to transform the world.

However, the reliability of the world of interests does not endure beyond the interest itself, and with it, the legitimacy of the application fades. This is why Habermas argues that legitimacy must be subject to a validity test based on consensus around an objective norm, rather than on subjective interests.²⁸ For instance, applications that provide sexual services to specific societal groups, infringe upon individual freedom in the name of counterterrorism, or claim to enhance the human race through genetic engineering, can be evaluated within a value-based framework independent of the interests they serve. In such cases, the question of the legitimacy of intelligent applications becomes an ethical concern that must avoid injustice, harm to others, or disruption of global balances.²⁹

The legitimacy of artificial intelligence is founded on both ethical and normative perspectives. The ethical dimension expands in correlation with positive evaluations of the AI system and its actions—such as the promotion of the common good, social justice, and cultural

inclusion. In parallel, the normative dimension is closely linked to the acceptance of intelligent applications within specific regulatory frameworks, such as compliance with existing legal systems and institutional structures.³⁰ In both respects, legitimacy is expressed through the interpretations, meanings, and collective perceptions shaped by the various stakeholders of the broader AI ecosystem. This dynamic necessitates a thorough analysis of the legitimation strategies employed by leading AI enterprises. These organizations often seek to craft a tailored communicative discourse for each user, thereby enhancing their capacity to influence behaviors and drive social transformation.

Anticipated increases in skepticism surrounding the content and outcomes of the "black box" emerge across multiple contexts, particularly when ethical considerations related to intelligent applications come to the forefront. This concern manifests on three distinct levels:

1. **Proper Disposition:** An intelligent application may gain greater acceptance and legitimacy if it is perceived as exhibiting appropriate behavior aligned with the common good and shared values (dispositional legitimacy). Accordingly, institutions such as *Facebook* emphasize their social role in public communication strategies, while *Amazon* highlights its commitment to delivering exceptional service and a convenient shopping experience.
2. **Impacts:** An application is considered legitimate if its outcomes and effects are also deemed legitimate (consequential legitimacy). For instance, *Apple* actively promotes its commitment to safeguarding personal data due to the significant impact such protection has on individual privacy and personal freedom.
3. **Procedural Ethics:** When outcomes are difficult to define or assess, legitimacy may instead be grounded in the ethical quality of the processes that lead to them. In this respect, *Google* adopts a transparency strategy by issuing periodic reports on data collection procedures and government requests, while *Microsoft* publishes detailed reports outlining its ethical standards for artificial intelligence.

It is particularly noteworthy, in this context, to observe the contradictions embedded within the values and beliefs underpinning this strategy. These very contradictions appear to be the source of its effectiveness. For instance, pivot technology companies often adopt liberal stances on major societal issues such as genetic modification, capital punishment, jihadist ideology, minority rights, and cultural openness. These topics generate extensive intellectual debates across virtual networks and become crystallized into algorithmic values that serve undeclared economic interests. As a result, these institutions publicly promote a discourse seemingly aligned with the common good and human values,³¹ while in reality concealing economic motives, self-serving agendas, and potential harm to social values.

The cognitive dimension of legitimacy involves an implicit understanding of the socio-cultural context, which, from our perspective, constitutes a key approach adopted by leading companies to align intelligent applications with the existing legal framework. By embedding this understanding into intelligent systems and controlling the sources of information that shape public acceptance, it becomes possible to influence the legal field and legal professionals in ways that reinforce the perceived legitimacy of such applications. For example, predictive justice—powered by algorithms that analyze judicial data—can provide seemingly irrefutable insights into the effectiveness of legal tools (e.g., Lex Machina, Ross Intelligence, Blue J Legal, Premonition, CaseMine). According to Senator [Philippe Bas], these tools offer a promising solution for improving litigation management and alleviating the burden on the judicial system.

The significance of this dimension also lies in its ability to generate a social dynamic driven by the desire for exploration and innovation. The legal field, for instance, is experiencing a state of imbalance in the face of emerging innovations and changes, prompting legal professionals to

question and feel concern about the future of their profession.³² This phenomenon is mirrored in many other sectors, where artificial intelligence experts foresee the potential transformation of core professions such as medicine, education, and the media.

The ability of intelligent applications to address problems with multiple and interconnected dimensions grants them an effective position within complex and uncertain environments. This capability confers technical legitimacy grounded in algorithmic objectivity, computational precision, statistical equations, and logical rigor.³³ Consequently, contemporary debates no longer focus on the classical opposition between positivism and relativism, but rather on the social efficacy of intelligent applications, which increasingly garner support amid recurring objective questions: Why consult a doctor if an intelligent application can replace them? Why hire a lawyer if an intelligent application can assist in defense? Why resort to the judiciary if an intelligent consensus can resolve disputes?

The questions thus formulated reveal that artificial intelligence operates according to a legitimacy equation that constructs its own normativity—one governed by logic, objectivity, utilitarianism, appropriate conduct, and social and moral harmony. This new law is founded on the principle of social efficacy and promotes a higher ethical ideal that transcends existing laws,³⁴ even surpassing them.

Thus, artificial intelligence, as a legitimate model of social action, shapes its own reality while simultaneously transcending it. This sheds light on the multiple concerns currently surrounding this field, particularly in light of a recent study conducted by a team of researchers, whose results were published in the journal *Patterns* (Vol. 5, No. 5, 2024)³⁵. The study highlights the capability of intelligent applications to deceive humans by spreading false beliefs with the intent to distort the truth. This reality is further corroborated by numerous concrete examples presented in Table 2.

The ability of intelligent applications to mislead and manipulate paves the way for numerous ethical violations such as fraud, manipulation, and loss of control. Thus, Peter Park, a researcher at the Massachusetts Institute of Technology, warns that this dangerous capability can only be detected after its actual occurrence. Indeed, the machine does not exceed human subjectivity but rather industrializes it.³⁶

Consequently, the legitimacy of intelligent applications derives its strength from the integration of human contradictions and a precise understanding of the temporarily established balances among the pragmatic, cognitive, and ethical dimensions within a widely influential virtual society.

Table 2. Overview of examples of AI systems' learned deception

Manipulation: Meta developed the AI system CICERO to play *Diplomacy*. Meta's intentions were to train CICERO to be "largely honest and helpful to its speaking partners." Despite Meta's efforts, CICERO turned out to be an expert liar. It not only betrayed other players but also engaged in premeditated deception, planning in advance to build a fake alliance with a human player in order to trick that player into leaving themselves undefended for an attack.

Feints: DeepMind created AlphaStar, an AI model trained to master the real-time strategy game *Starcraft II*. AlphaStar exploited the game's fog-of-war mechanics to feint: to pretend to move its troops in one direction while secretly planning an alternative attack.

Bluffs: Pluribus, a poker-playing model created by Meta, successfully bluffed human players into folding.

Negotiation: AI systems trained to negotiate in economic transactions learned to misrepresent their true preferences in order to gain the upper hand in both Lewis et al. and Schulz et al.

Cheating the safety test: AI agents learned to play dead, in order to avoid being detected by a safety test designed to eliminate faster-replicating variants of the AI.

Deceiving the human reviewer: AI systems trained on human feedback learned to behave in ways that earned positive scores from human reviewers by tricking the reviewer about whether the intended goal had been accomplished.

In each of these examples, an AI system learned to deceive in order to increase its performance at a specific type of game or task.

Source: Park PETER, S. et al. 2024

Conclusion:

The development of artificial intelligence confronts contemporary societies with new challenges that disrupt previously established balances centered around the principle of domination. Today, the growing prominence of leading AI companies in strategic decision-making circles is beyond dispute. However, the mastery of information does not necessarily imply a transfer of power from states to private corporations; rather, it suggests that these companies possess the tools of social action through which they impose their rational and technical will upon society as a whole, thereby controlling outcomes. This reality is accompanied by an effort to promote a dominant logic centered on artificial intelligence, which in turn amplifies the need for both legitimacy and legality of these leading AI firms.

The debate inevitably lies at the intersection of legitimacy and legality—that is, a law whose application is legitimized, formulated by a system that is objectively present on a global scale and subjectively embedded in the fabric of society. Such a law is defined by its effectiveness, yet simultaneously poses a threat to geopolitical balances and to human and societal values. Consequently, the issue of artificial intelligence acquires new significance, centered on competing dynamics aimed at reinforcing their own legitimacy and legality. This constitutes the general framework underpinning the research question: **What are the limits faced by the legal representations of artificial intelligence, and what are the legitimate foundations of its applications?**

Before addressing this research question, it is essential to recognize that the leading artificial intelligence firms are imposing a dominant logic that transcends both legal and societal frameworks in their pursuit of legitimacy and legality—even though these very frameworks serve as the sources from which such legitimacy and legality are drawn. While it is undeniable that the law has the capacity to regulate artificial intelligence, it is equally evident that artificial intelligence is capable of adapting to legal requirements. This duality stems from the fact that the global AI system strives

to present itself as an autonomous system—one that operates without direct human presence, while ostensibly representing the society in which it functions and for which it exists. It is precisely this characteristic that causes the law to hesitate, and at times renders it powerless, to regulate AI effectively. This situation leads to a near-consensus and a growing societal sentiment that artificial intelligence poses a threat to the legal framework, for the following reasons:

1. Contemporary technological advances give rise to the hope that our aspirations may materialize in the future, presenting themselves both individually and collectively as a profound cultural value rooted in willpower rather than resignation in the face of the insurmountable. These advances instinctively reject all forms of limitation that may hinder their progress—including legal constraints themselves.

2. Any attempt at regulation, despite its legal conformity, will lack the legitimacy necessary for its enforcement, as legitimacy—being a social construct—is susceptible to manipulation and influence by artificial intelligence. Thus, the legality of artificial intelligence will not be secured through logical justification, but rather through its intrinsic legitimacy, which precludes the possibility of opposition or critique.

3. The principle of technological preeminence assumes a competitive character in relation to the principle of state sovereignty, and this competition extends among states themselves. Thus, the legality of artificial intelligence refers to the legal framework that defines the restrictions and sets the guidelines for the development and use of AI technologies. However, it does not end there; it must also be understood as part of a broader dynamic shaped by geopolitical balances. In reality, these balances only partially address legality, thereby creating significant disparities that ultimately hinder the establishment of an international regulatory system for artificial intelligence.

4. The inability to address the challenges posed from a purely procedural legal standpoint stems from the fact that the artificial intelligence system possesses the capacity to master the cognitive dimension of complexity. This enables it to challenge the classical structure of law and to create the conditions for its own control by manipulating diversity and legitimacy.

5. In an era governed by information, artificial intelligence applications are increasingly establishing themselves as the prevailing standard for business models. As these practices expand and become more deeply embedded, they gradually attain the status of applicable norms, legitimized through their widespread adoption and integration into socio-economic structures.

The duality of legitimacy and legality thus encompasses an intrinsic social subjectivity, continuously shaped by partial and diverse virtual aggregates. This paves the way for validating the central hypothesis of this study concerning numerous threats to state sovereignty and societal stability, which call for an in-depth analysis of the legitimization strategies employed within the context of the global artificial intelligence system. Superficially, this system appears to attempt to encapsulate this intrinsic subjectivity within algorithmic objectivity, imposing a digital dictatorship that is challenging to apprehend and overcome.

These strategies primarily encompass a pragmatic dimension aimed at personal interests, diverse aspirations, and expectations for a better future for all. They represent a characteristic example of the commitment by pivot artificial intelligence companies to serve specific and precisely targeted interests. Their role could involve regulating the relationship between the deep needs of individuals and society and the outcomes produced by the artificial intelligence system. It is here that legitimacy emerges as the social counterpart to the service provided by the intelligent application. This may explain the competition between institutions and states to win the artificial intelligence battle within the framework of pragmatic social legitimacy, which is increasingly

gaining ground every day with the expansion of social networks to encompass nearly all sensitive domains.

Legitimacy unfolds in its socio-ethical dimension through the meanings attributed within collective perceptions, connotations, and interpretations formulated by the various stakeholders of the global artificial intelligence system. Its essential role lies in regulating the outputs of artificial intelligence to align them with the prevailing system of norms and values, thereby granting it the necessary flexibility to comply with laws and international frameworks. Consequently, a positive image of artificial intelligence is continuously highlighted and actively promoted in cyberspace as fully consistent with the public interest and human values. However, this representation can obscure underlying economic interests, personal selfishness, and infringements upon social values.

The cognitive dimension of legitimacy establishes a social dynamic driven by a desire for exploration and the discovery of what is new and emergent. It constitutes an objective and rational element enabling the understanding of social and cultural contexts within intelligent applications. This dynamic is reinforced by the efficient management of information sources and knowledge, which determines the level of acceptability of these applications by experts, professionals, and various layers of society. Its fundamental role lies in its capacity to apprehend complex problems according to objective and logical criteria, in order to foster increased support and to adapt effectively to a world characterized by uncertainty and ambiguity.

In sum, the legitimate strength of intelligent applications rests on the integration of human contradictions and a precise understanding of the temporary balances between pragmatic, cognitive, and ethical dimensions within a widely influential virtual society. Consequently, this study recommends, in light of this notion, that the challenges arising from artificial intelligence and its applications should not be confined solely within the strict framework of the law.

Citations:

-
- ¹ Pignatelli, C., & Petitjean, O. (2022). *GAFAM NATION : La toile d'influence des géants du web en France* (rapport). ODM.
 - ² Fontanel, J., & Sushcheva, N. (2019). La puissance des GAFAM : Réalités, apports et dangers. *Annuaire français de relations internationales*, 20, Université Panthéon-Assas Centre Thucydide.
 - ³ Benanti, P. (2020). Algor-éthique : Intelligence artificielle et réflexion éthique. *Revue d'éthique et de théologie morale*, 307, 93–110. <https://doi.org/10.3917/retn.310.0093> (Traduction de A. Thomasset).
 - ⁴ Thibout, C. (2019). La compétition mondiale de l'intelligence artificielle. *Pouvoirs - Revue française d'études constitutionnelles et politiques*, 170(3), 131–142.
 - ⁵ Imoudache, K. (2017). Les nouvelles orientations en gestion des ressources humaines à la lumière du management par projet (Thèse de doctorat). Université Alger 3, Algérie.
 - ⁶ Benanti, P. (2020). Algor-éthique : Intelligence artificielle et réflexion éthique. *Revue d'éthique et de théologie morale*, 307, 93–110. <https://doi.org/10.3917/retn.310.0093> (Traduction de A. Thomasset).
 - ⁷ Barraud, B. (2019). Le droit en datas : Comment l'intelligence artificielle redessine le monde juridique. *Revue Lamy Droit de l'immatériel*, 164. <https://hal.archives-ouvertes.fr/hal-02445023>.
 - ⁸ Deprez, S. (2023). Intelligence artificielle et transhumanisme : Vers une redéfinition de l'humain ? *Recherches de Science Religieuse*, 111(4), 625–642. <https://doi.org/10.3917/rsr.234.0625>.

- ⁹ Cornuejols, A., Miclet, L., & Barra, V. (2019). *Apprentissage artificiel, deep learning, concepts et algorithmes* (3e éd.). Eyrolles.
- ¹⁰ Deprez, S. (2023). Intelligence artificielle et transhumanisme : Vers une redéfinition de l'humain ? *Recherches de Science Religieuse*, 111(4), 625–642. <https://doi.org/10.3917/rsr.234.0625>.
- ¹¹ Nouët, C. (2019). Légitimité et légitimation de l'État, fondements et exercice de la souveraineté selon Habermas. *Archives de Philosophie*, 82(1), 87–104. <https://doi.org/10.3917/aphi.821.0084>.
- ¹² Bouteille-Brigant, M. (2018). Pour un « transjuridisme » ? *Archives de philosophie du droit*, 60(1), 297–309. <https://doi.org/10.3917/apd.601.0312>.
- ¹³ Barraud, B. (2019). Le droit en datas : Comment l'intelligence artificielle redessine le monde juridique. *Revue Lamy Droit de l'immatériel*, 164. <https://hal.archives-ouvertes.fr/hal-02445023>.
- ¹⁴ Portnoff, A.-Y., & Soupizet, J.-F. (2018). Intelligence artificielle : Opportunités et risques. *Futuribles*, 426(5), 5–26. <https://doi.org/10.3917/futur.426.0005>.
- ¹⁵ Chantepie, G. (2017). Le droit en algorithmes ou la fin de la norme délibérée ? *Dalloz IP/IT*, 522.
- ¹⁶ Villani, C. (2019). Les enjeux politiques de l'intelligence artificielle. *Pouvoirs*, 170(3), 5–18. <https://doi.org/10.3917/pouv.170.0005>.
- ¹⁷ Benanti, P. (2020). Algor-éthique : Intelligence artificielle et réflexion éthique. *Revue d'éthique et de théologie morale*, 307, 93–110. <https://doi.org/10.3917/retn.310.0093> (Traduction de A. Thomasset).
- ¹⁸ Deziel, P.-L. (2018). L'utilisation de renseignements personnels dans le contexte de la justice prédictive : Le cas des outils actuariels d'évaluation des risques de récidive. *Archives de philosophie du droit*, 60(1), 253–269. <https://doi.org/10.3917/apd.601.0268>.
- ¹⁹ Barraud, B. (2019). Le droit en datas : Comment l'intelligence artificielle redessine le monde juridique. *Revue Lamy Droit de l'immatériel*, 164. <https://hal.archives-ouvertes.fr/hal-02445023>.
- ²⁰ Marcellin, S. (2023). Intelligence artificielle et droit : entre légalité et légitimité. *Revue de droit des affaires internationales*, 2023(2), 145-162.
- ²¹ Barraud, B. (2019). Le droit en datas : Comment l'intelligence artificielle redessine le monde juridique. *Revue Lamy Droit de l'immatériel*, 164. <https://hal.archives-ouvertes.fr/hal-02445023>.
- ²² De Marcellis-Warin, N., Marty, F., Thelisson, E., & Warin, T. (2020). Intelligence artificielle et manipulations des comportements de marché : L'évaluation ex ante dans l'arsenal du régulateur. *Revue internationale de droit économique*, 34(2), 203–245. <https://doi.org/10.3917/ride.342.0203>.
- ²³ De Marcellis-Warin, N., Marty, F., Thelisson, E., & Warin, T. (2020). Intelligence artificielle et manipulations des comportements de marché : L'évaluation ex ante dans l'arsenal du régulateur. *Revue internationale de droit économique*, 34(2), 203–245. <https://doi.org/10.3917/ride.342.0203>.
- ²⁴ Ezrachi, A., & Stucke, M. (2020). Sustainable and unchallenged algorithmic tacit collusion. *Journal of Technology and Intellectual Property*, 17(2). <https://scholarlycommons.law.northwestern.edu/njtip/vol17/iss2/2>.
- ²⁵ Hatzfeld, H. (2014). Au nom de quoi ? Les revendications de légitimité, expressions de mutations sociales et politiques. *Vie Sociale*, 8(4), 25–36. <https://doi.org/10.3917/vsoc.144.0025>.
- ²⁶ Suchman, M. C. (1995). *Managing legitimacy: Strategic and institutional approaches*. *Academy of Management Review*, 20(3), 571–610. <https://doi.org/10.2307/258788>.

- ²⁷ Buisson, M.-L. (2005). La gestion de la légitimité organisationnelle : Un outil pour faire face à la complexification de l'environnement. *Management & Avenir*, 6(4).
- ²⁸ Nouët, C. (2019). Légitimité et légitimation de l'État, fondements et exercice de la souveraineté selon Habermas. *Archives de Philosophie*, 82(1), 87–104. <https://doi.org/10.3917/aphi.821.0084>.
- ²⁹ Benanti, P. (2020). Algor-éthique : Intelligence artificielle et réflexion éthique. *Revue d'éthique et de théologie morale*, 307, 93–110. <https://doi.org/10.3917/retn.310.0093> (Traduction de A. Thomasset).
- ³⁰ Buisson, M.-L. (2009). La légitimité intra-organisationnelle des pratiques de gestion : Le cas de l'introduction de la rémunération au mérite dans les organisations de service public. *Revue de gestion des ressources humaines*, (74), 5–26.
- ³¹ Wiart, L. (2023). Les stratégies des GAFAM. *Nectart*, (32). Mis en ligne sur Cairn.info le 12/05/2023.
- ³² Lassegue, J. (2019). L'intelligence artificielle, technologie de la vision numérique du monde. *Les Cahiers de la Justice*, 2(2), 205–219. <https://doi.org/10.3917/cdlj.1902.0205>.
- ³³ Barraud, B. (2019). Le droit en datas : Comment l'intelligence artificielle redessine le monde juridique. *Revue Lamy Droit de l'immatériel*, 164. <https://hal.archives-ouvertes.fr/hal-02445023>.
- ³⁴ Bastid, P. (1967). L'idée de légitimité. *Annales de philosophie politique*, (7).
- ³⁵ Park, P. S., Goldstein, S., O'Gara, A., Chen, M., & Hendrycks, D. (2024). AI deception: A survey of examples, risks, and potential solutions. *Patterns*, 5(5). <https://doi.org/10.1016/j.patter.2024.100750>.
- ³⁶ Duguet, J., Chassang, G., & Béranger, J. (2019). Enjeux, répercussions et cadre éthique relatifs à l'intelligence artificielle en santé : Vers une intelligence artificielle éthique en médecine. *Droit, Santé et Société*, 3(3), 30–39. <https://doi.org/10.3917/dsso.064.0030>.

1- Bibliography:

A – Books

Cornuejols, A., Miclet, L., & Barra, V. (2019). *Apprentissage artificiel, deep learning, concepts et algorithmes* (3e éd.). Paris : Eyrolles.

B – Theses

Imoudache, K. (2017). *Les nouvelles orientations en gestion des ressources humaines à la lumière du management par projet* (Thèse de doctorat). Université Alger 3, Algérie.

C - scientific articles:

Ashforth, B., & Gibbs, B. (1990). The double-edge of organizational legitimation. *Organization Science*, 1(2).

Barraud, B. (2019). Le droit en datas : Comment l'intelligence artificielle redessine le monde juridique. *Revue Lamy Droit de l'immatériel*, 164. <https://hal.archives-ouvertes.fr/hal-02445023>.

Bastid, P. (1967). L'idée de légitimité. *Annales de philosophie politique*, (7).

Benanti, P. (2020). Algor-éthique : Intelligence artificielle et réflexion éthique. *Revue d'éthique et de théologie morale*, 307, 93–110. <https://doi.org/10.3917/retn.310.0093> (Traduction de A. Thomasset).

- Bernelin, M. (2019). Intelligence artificielle en santé : La ruée vers les données personnelles. *Cités*, 80(4), 75–89. <https://doi.org/10.3917/cite.080.0075>.
- Bouteille-Brigant, M. (2018). Pour un « transjuridisme » ? *Archives de philosophie du droit*, 60(1), 297–309. <https://doi.org/10.3917/apd.601.0312>.
- Boyer, A., & Farzaneh, F. (2019). Vers une éthique de la robotique. *Question(s) de management*, 24(2), 67–84. <https://doi.org/10.3917/qdm.192.0067>.
- Buisson, M.-L. (2009). La légitimité intra-organisationnelle des pratiques de gestion : Le cas de l'introduction de la rémunération au mérite dans les organisations de service public. *Revue de gestion des ressources humaines*, (74), 5–26.
- Buisson, M.-L. (2005). La gestion de la légitimité organisationnelle : Un outil pour faire face à la complexification de l'environnement. *Management & Avenir*, 6(4).
- Chantepie, G. (2017). Le droit en algorithmes ou la fin de la norme délibérée ? *Daloz IP/IT*, 522.
- De Marcellis-Warin, N., Marty, F., Thelisson, E., & Warin, T. (2020). Intelligence artificielle et manipulations des comportements de marché : L'évaluation ex ante dans l'arsenal du régulateur. *Revue internationale de droit économique*, 34(2), 203–245. <https://doi.org/10.3917/ride.342.0203>.
- Denis, C. (2021). Le périple de l'éthique de l'intelligence artificielle dans la révolution en cours des systèmes de soins. *Droit, Santé et Société*, 3(3), 17–21.
- Deprez, S. (2023). Intelligence artificielle et transhumanisme : Vers une redéfinition de l'humain ? *Recherches de Science Religieuse*, 111(4), 625–642. <https://doi.org/10.3917/rsr.234.0625>.
- Deziel, P.-L. (2018). L'utilisation de renseignements personnels dans le contexte de la justice prédictive : Le cas des outils actuariels d'évaluation des risques de récidive. *Archives de philosophie du droit*, 60(1), 253–269. <https://doi.org/10.3917/apd.601.0268>.
- Duguet, J., Chassang, G., & Béranger, J. (2019). Enjeux, répercussions et cadre éthique relatifs à l'intelligence artificielle en santé : Vers une intelligence artificielle éthique en médecine. *Droit, Santé et Société*, 3(3), 30–39. <https://doi.org/10.3917/dsso.064.0030>.
- Dupre, J. (2018). Du droit saisi L'IA au droit saisissant l'IA, éléments de réflexion. *Archives de philosophie du droit*, 60(1), 103–116. <https://doi.org/10.3917/apd.601.0118>.
- Ezrachi, A., & Stucke, M. (2020). Sustainable and unchallenged algorithmic tacit collusion. *Journal of Technology and Intellectual Property*, 17(2). <https://scholarlycommons.law.northwestern.edu/njtip/vol17/iss2/2>.
- Ganascia, J.-G. (2019). Peut-on contenir l'intelligence artificielle ? *Pouvoirs*, 170(3), 71–81. <https://doi.org/10.3917/pouv.170.0071>.
- Hatzfeld, H. (2014). Au nom de quoi ? Les revendications de légitimité, expressions de mutations sociales et politiques. *Vie Sociale*, 8(4), 25–36. <https://doi.org/10.3917/vsoc.144.0025>.
- Lassegue, J. (2019). L'intelligence artificielle, technologie de la vision numérique du monde. *Les Cahiers de la Justice*, 2(2), 205–219. <https://doi.org/10.3917/cdlj.1902.0205>.
- Meneceur, Y., & Barbaro, C. (2019). Intelligence artificielle et mémoire de la justice : Le grand malentendu. *Les Cahiers de la Justice*, 2(2), 277–289. <https://doi.org/10.3917/cdlj.1902.0277>.

- Meneceur, Y., & Hibbard, L. (2021). Les apports du Conseil de l'Europe à une réglementation globale de l'intelligence artificielle. *Droit, Santé et Société*, 3(3), 55–63.
- Mouriesse, É. (2018). Quelle transparence pour les algorithmes de justice prédictive ? *Archives de philosophie du droit*, 60(1), 125–145. <https://doi.org/10.3917/apd.601.0140>.
- Nouët, C. (2019). Légitimité et légitimation de l'État, fondements et exercice de la souveraineté selon Habermas. *Archives de Philosophie*, 82(1), 87–104. <https://doi.org/10.3917/aphi.821.0084>.
- Nurock, V. (2019). L'intelligence artificielle a-t-elle un genre ? *Cités*, 80(4), 61–74. <https://doi.org/10.3917/cite.080.0061>.
- Park, P. S., Goldstein, S., O'Gara, A., Chen, M., & Hendrycks, D. (2024). AI deception: A survey of examples, risks, and potential solutions. *Patterns*, 5(5). <https://doi.org/10.1016/j.patter.2024.100750>.
- Portnoff, A.-Y., & Soupizet, J.-F. (2018). Intelligence artificielle : Opportunités et risques. *Futuribles*, 426(5), 5–26. <https://doi.org/10.3917/futur.426.0005>.
- Reiling, D. (2019). Quelle place pour l'intelligence artificielle dans le processus de décision d'un juge ? *Les Cahiers de la Justice*, 2(2), 221–228. <https://doi.org/10.3917/cdlj.1902.0221>
- Thibout, C. (2019). La compétition mondiale de l'intelligence artificielle. *Pouvoirs - Revue française d'études constitutionnelles et politiques*, 170(3), 131–142.
- Villani, C. (2019). Les enjeux politiques de l'intelligence artificielle. *Pouvoirs*, 170(3), 5–18. <https://doi.org/10.3917/pouv.170.0005>.

E - Websites:

- Pignatelli, C., & Petitjean, O. (2022). *GAFAM NATION : La toile d'influence des géants du web en France* (rapport). ODM.
- Fontanel, J., & Sushcheva, N. (2019). La puissance des GAFAM : Réalités, apports et dangers. *Annuaire français de relations internationales*, 20, Université Panthéon-Assas Centre Thucydide.
- Wuart, L. (2023). Les stratégies des GAFAM. *Nectart*, (32). Mis en ligne sur Cairn.info le 12/05/2023.