**Artificial Intelligence and Law: The Problem of Autonomy**

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**Abstract**

Artificial intelligence has evolved from various perspectives, continually improving and piercing numerous aspects of human life. Traditional legal studies are undergoing profound transformations in an era in which the boundaries between law, technology, and society are blurring with unparalleled intensity. These changes have been accompanied by ongoing philosophical debates on redefining the ethical and philosophical foundations of law and legal responsibility. Central to these discussions is the question of whether artificial intelligence systems can bear the responsibility. To address this, examining the normative, legal, and ethical dimensions of autonomous systems is essential. For Artificial Intelligence to be held accountable for its choices, decisions, and actions, it needs a degree of autonomy comparable to that of humans. Without this autonomy, discussions on responsibility remain theoretical and lack practical grounding. However, a significant gap exists between human autonomy and the autonomy attributed to artificial intelligence. This article explores the fundamental differences between human and artificial autonomy and argues in why these distinctions matter. In addition, it examines the discrepancy between human intelligence and artificial intelligence, demonstrating the limitations of AI in approximating human intelligence and autonomy, at least with current technological capabilities.

**Keywords**: Artificial Intelligence, Ethics, Autonomous, Responsibility

1. **Introduction**

Law is unique in its role in using and regulating AI; it establishes its limitations. Studies of both technology and law focus on AI's integration. Since law regulates social life, it's a suitable ground for AI programs using natural language processing. Rules of law regulate human rights and freedoms. This discipline is based on moral values. Understanding and applying the law requires more than rules understanding. Instead, it is about understanding human interests, developing a sense of justice, and reflecting individual empathy on the flow of social development. It is imperative to acknowledge that legal negotiation and decision-making are not entirely result-oriented processes; they also demand a degree of empathy. Conversely, they emphasize the importance of comprehending a person's circumstances by utilizing all available senses and not merely by relying on theoretical language skills.

Thinking, knowing, understanding, doubting, and questioning are included in this process, as is creativity, another feature of legal intelligence. AI has made significant progress in this area; it's always possible to use ChatGPT to brainstorm in the field of law: Even with a margin of error, different ideas strengthen creativity. AI can help humans develop creative thinking, but it can't produce it on its own. Its main function is to apply existing knowledge and logic, which allows for faster and more precise legal rule application. Nevertheless, there has been no normative legal development in this area. While AI applications have been developed for the creation of legal documents, they currently lack the capacity to influence legal opinions or persuade individuals.

Law enforcement by artificial intelligence is hindered by its lack of democratic legitimacy. Institutions that are not involved in law creation and development undermine constitutional order. Algorithms are also problematic because they are not transparent and can be manipulated.

AI has drawbacks, as noted above. However, it can also have benefits, depending on its application. It's no longer acceptable to exclude AI. For instance, it can provide data convenience in the decision-Making process, assisting lawyers, prosecutors, and judges. This article also addresses the limitations of employing AI as a legal decision maker, particularly because AI is incapable of assuming ethical responsibility due to its lack of human-like autonomy.

We must clarify concepts used for artificial intelligence systems. Human autonomy refers to law formation, individual choices and preferences, and self-definition. When we apply the term "autonomous" to AI, we mean that AI can establish its own laws, make choices, and define itself, similar to humans. There's a key difference between how we define AI autonomy and human autonomy. When revealed, this difference changes discussions like responsibility and AI. Another important concept is the difference between AI and human intelligence.

This article explores the question of whether the concepts of intelligence and autonomy that enable humans to be legally and ethically addressed can also be used for AI. In addressing this question, the article seeks to contribute to the ongoing discourse on the legal and ethical governance of AI. However, to lay the groundwork for the concept of autonomy, the distinction between the concept of intelligence, as it applies to AI, and human intelligence will be clarified.

1. **Artificial Intelligence – Conceptual Analysis**

The term "intelligence" (Latin: *intellegentia*) is derived from the Latin verb *intellegere* (Latin *inter* = between and *legere* = to choose, read, gather) and already in antiquity meant the intellectual process of 'choosing between', of understanding, and recognition through critical selection.[[1]](#footnote-1) Cicero used the term *intellegentia* synonymously with ratio, "the higher faculty of the soul" and the ability to recognize (*intellectus*).[[2]](#footnote-2) Medieval and Scholastic philosophers have shown great interest in intelligence. They used it to describe human perception of God and celestial beings. Thomas Aquinas defines four meanings of "intelligence" within this tradition: a) rational substance, b) activity of the intellect, knowledge of the intellect, c) apprehension of the intellect, that is direct knowledge of the intellect, and d) understanding, intellectual perception (synonymous with *'intellectus'*).[[3]](#footnote-3)Based on this definition, *intelligentia divina* reveals itself as a defining feature of God, which can be indicated as a term for God in French (intelligence suprême) and English (supreme intelligence). The idea of ​​intelligence, defined under Christian influence, continued until the Copernican Revolution. Later, in addition to the ability to reason and comprehend, the meaning of intelligence was expanded to include components of the divine and the systematic structure of a collective. The concept of intelligence has been discussed from different perspectives, for example, from a philosophical perspective in discussions of idealism.[[4]](#footnote-4)After briefly considering the historical background, when we look at what is currently understood by intelligence, the first thing that comes to mind is that intelligence can now be measured.

* 1. **Definition of Intelligence Today**

Today, a general understanding has emerged that addresses the issue from a psychological perspective, such as intelligence and, the ability to establish abstract relationships, comprehend and solve problems and overcome new situations.[[5]](#footnote-5) Since the early 20th century, psychology has understood intelligence as something measurable with tests. Intelligence tests can also be used to qualify for development. Intelligence consists of various factors, including linguistic, associative, arithmetic, memory, spatial, and deductive thinking.[[6]](#footnote-6) Intelligence is affected by genes, environment, and culture. Even identical twins' intelligence can differ due to cultural and social differences.[[7]](#footnote-7) Intensive research on AI followed the era of measuring human intelligence in psychology. Many believe AI can measure and recreate intelligence. This is understandable from a historical perspective.

* 1. **Artificial Intelligence**

The term artificial intelligence was used in a call by McCarthy and his colleagues in 1955. A less problematic alternative term suggested in the literature that did not require the term ‘intelligence’ could have been used, but this is the term that has survived to this day. The term “artificial intelligence” can be divided into two components: ‘artificial’- ‘intelligence’.

The word *'artificial'* originates from the Latin term *'artificialis,'* which originally meant "skillful" or "crafted".[[8]](#footnote-8) This term is derived from the Latin root *'ars,'*meaning "skill" or "art."

As mentioned above; the word “intelligence” comes from the Latin term “*intelligentia*”[[9]](#footnote-9) "Intelligence" can also mean "understanding," "ideas," "concepts," "insights," or "knowledge." In English today, the term is always defined in relation to "creativity" or "critical thinking," that is, intellect. This understanding suggests AI intelligence is merely a means of (artificial) knowledge acquisition. From psychological, philosophical, or sociological perspectives, intelligence is a value-free name for a different class of (technical) entities.

Many answer the question of artificial intelligence but remember this idea of humans compared to machines. In this context, artificial intelligence is using technology to automate tasks requiring human intelligence.[[10]](#footnote-10) A few examples will help to illustrate the depiction of AI. Researchers have successfully applied AI technology to automate complex activities such as playing chess, translating languages, and driving vehicles.[[11]](#footnote-11) What's different about these AI tasks compared to automated ones? They both involve humans using complex cognitive processes. For example, when playing chess, humans employ a range of cognitive abilities, such as planning and making decisions.

Humans also use higher-level brain centers to translate and drive. Finally, engineers describe automating human-required activities as artificial applications when using brain centers involved in vision, space, movement, judgment, etc.

Many people think AI is a type of thinking machine. This is a misconception. Today's AI systems do not understand meaning. AI systems often produce intelligent, useful results without human-like intelligence by detecting data patterns and using knowledge and rules coded into computer processes. In their third book edition, Russel and Norvig divide AI approaches into four areas: (1) acting humanly, (2) thinking humanly, (3) thinking rationally, and (4) acting rationally.[[12]](#footnote-12) Taking human action and thought as models, these methods are based on an empirical approach, that is, the observation and evaluation of human behavior patterns are the basis for technical replication. “Rational” approaches are those that emerge from mathematics and engineering.[[13]](#footnote-13)

(1) “Behaving Humanly: The Turing Test Approach” Which is the oldest approach followed in AI research. Russel and Norvig also call it the “Turing Test Approach” because the basic idea behind the human-like approach is to build machines that can pass the “Turing Test” (Turing, 1950).[[14]](#footnote-14) Alan Turing, who gave his name to this test, understood “thinking machines” as electronic or digital computers whose intelligence can be proven on the basis of the following capabilities: (a) “natural language processing” (communication in a language), (b) “knowledge representation” (ability to store information), (c) “automatic reasoning” (use of stored information to generate answers and draw new conclusions), (d) “machine learning” (adaptation to new conditions, extrapolation of new behavioral patterns) (Turing, 1950). According to Turing, the fundamental common ground between humans and electronic machines is the ability to understand mathematical functions and store and process data. The main aim of research in this direction is to understand and decipher the principles underlying intelligence.

AI exists if a machine can imitate a human thought process. Turing's test reduced a semi-thinking machine's operation to simulating human behavior. In other words, a machine behaves in each situation as if it produces thought process results expected by a human. However, the structure of a machine program's inputs/outputs cannot be compared to the thought process of a human. So, AI covers only a small part of human intelligence. Therefore, the physical simulation of a human is not necessary to prove artificial intelligence.[[15]](#footnote-15) However, according to Russel and Norvig, when looking at the development of AI research in the last 60 years and its current goals, the Turing test (e) “computer vision” and (f) “robotic” abilities will also need to be completed to the extent necessary to prove AI in the sense of “behaving like a human” approach. However, machines developed according to these six abilities are used today, especially in the service, industry, and military sectors.

(2) “Thinking Humanly: The Cognitive Modeling Approach” Thinking Humanly encompasses methods whose development is closely related to cognitive science. As a subfield of cognitive science, AI research aims to help unravel human thinking. The human thinking approach can be generalized as follows: “Once we have a sufficiently precise theory of the mind, it becomes possible to express the theory as a computer program. If the input-output behavior of the program matches the corresponding human behavior, this is evidence that some of the mechanisms of the program can also work in humans.” [[16]](#footnote-16)

To achieve this, the workings of human thought must first be understood, through introspection or experimentation. Cognitive science is an interdisciplinary field using experimental tests, such as psychology and neurophysiology. These tests are represented as computer models, which provide a theoretical view of human thought. Russel and Norvig point out that this claim can be understood in two different ways: (a) The interdisciplinary approach from cognitive science tries to link humans and technology using artificial and natural intelligence structures. (b) Modeling human thought can also be an algorithm that calculates a solution to a mathematical problem.

(3) “Thinking rationally: The ‘Laws of thought’ approach”

The second possible interpretation of “human-thinking” programs mentioned in the previous section is partly better explained by the rational thinking approach. This approach to AI research has emerged from classical logic. In this case, AI refers to problem-solving programs that work with predicate logic. The major disadvantage of this method is that it is only useful with 100% of the information.

(4) “Behaving rationally: Rational agent approach”

The rational agent approach combines earlier approaches and combines AI research goals. It applies AI to rational agents, which create a Turing machine. Rational agent requirements go beyond those for computer programs.

“[…] [They] act autonomously, perceive their environment, exist over long periods of time, adapt to change, and create and pursue goals”.[[17]](#footnote-17) The next section asks whether artificial intelligence has autonomy. That is, it can adapt independently. This issue is discussed later.

Rational actors act for the best possible output, regardless of correct or incorrect inferences. "Rational thinking" offers a basis, not the sole solution. This approach aims to perform tasks as they arise. Turing machine framework conditions are complex and diverse. The "rational acting approach" innovatively evaluates actions based on achievements. Autonomy is crucial to this approach. The rational agent defines his independence from the designer who provides the input:

The autonomy of the rational agent always occurs within a “task environment”[[18]](#footnote-18), that is, the given environment for the purpose to which the rational agent is assigned. This approach involves making decisions and taking actions despite uncertain information based on "learned" knowledge. According to Russell and Norvig, the idea is that animals and humans can learn.

The environment is always one in which humans place machines for specific purposes. Technical autonomy means humans grant machines greater autonomy to solve problems based on external framework conditions. According to Russell and Norvig, autonomy is a rational agent's use of knowledge and learning for task success, and it's an artifact that actively changes its environment.

Comparisons with "humans" such as "acting like a human" or "thinking like a human" highlight an important limitation in AI: the inability to self-know, or understand its own consciousness. This is crucial for AI to achieve full consciousness, as discussed in the next section using example from Chalmers' "Zombie" analogy.

1. **Can Artificial Intelligence Know What It is Doing?**

The technical literature shows that there's no "artificial will," "artificial consciousness," or "artificial emotion" in the sense of humans or AI. The questions are mostly propositional logic, predicate logic, stochastic reasoning, and heuristic search.[[19]](#footnote-19)

In 1996, David Chalmers argued in his book "The Conscious Mind" that information processing systems couldn't possibly have conscious experience. He introduced the concept of a "philosophical zombie," defined as an entity with similar behaviors but no conscious experience. Chalmers accepts that AI can be a zombie, but argues that due to the subjective nature of consciousness, there's a limit to what it can truly understand.[[20]](#footnote-20)

In other words, AI systems are human-like in that they have physiological structures. However, this doesn't mean they have consciousness. So, Chalmers argues for the need of consciousness for directional states and says it's subjective and challenging. He also acknowledges that AI and robots can be goal-directed but not necessarily have human-like consciousness or experience.[[21]](#footnote-21)

In his article "Singularity: A Philosophical Analysis" (2010), Chalmers expresses skepticism about AI systems producing fully orientational experiences, arguing that human-like subjective experiences have a deeper meaning than symbolic operations. Chalmers' ideas on machine orientationality make it structurally possible for machines to have orientations; however, these orientations will not have the same subjective qualities as those of humans. He claims that machines that can generate orientations are similar to human orientations in terms of capability but different in content. For example, he notes that symbolic machines have existential orientations, but these machines' orientations differ from humans' subjective qualities. In sum, machines can be fitted with silicon chips to create a mechanism that can mimic human beings. This mechanism can't produce subjective experiences like consciousness, orientation, and experience, because humans experience orientation through conscious experiences that are unique to each individual. Chalmers says human experience is holistic, meaning it can be experienced in its totality. Humans have unlimited access to the external world, whereas machines have limited output through symbolic processors.[[22]](#footnote-22)

In short, the following points have been previously established: AI has been shown to emulate human intelligence in numerous ways; however, it is deficient in the domains of meaning and subjective experience. Consequently, its cognitive and evaluative capacities are limited. While artificial intelligence exhibits orientational and purposeful tendencies akin to human intelligence, its capacity remains constrained in producing limited targeted outputs. Furthermore, it is imperative to exercise skepticism regarding the determination of the orientation of artificial intelligence. The orientation of the individual who writes the algorithm or the individual who seeks to align the algorithm with a specific concept is also implicated in this regard.

Despite the fact that artificial intelligence has been demonstrated to exhibit human-like reasoning and problem-solving capabilities, it is imperative to recognize that this technology was originally developed to enhance human tasks and augment human productivity. The development of AI has been guided by this objective, resulting in the absence of certain features that are unique to humans. This limitation is exemplified by the concepts of autonomy and intelligence, which are inherently human-specific.

1. **Autonomy**

Recently, the term autonomy has been increasingly used to describe new technologies, such as “autonomous mobile robots” or “autonomous systems”. According to the term, the “autonomy” of these technologies refers to a certain type of technological advancement resulting from the ability to regulate themselves. However, from a philosophical perspective, this raises the question of how self-legislation is defined, especially since the concept of autonomy in philosophy refers to the political or moral self-regulation of people groups of people, or their actions.[[23]](#footnote-23)

As humans and technology become more interconnected, a key question emerges: How do increased human-machine connectivity and autonomy influence each other? Autonomous technologies influence human autonomy, yet it's important to consider autonomy from different angles. This is necessary to understand machine and define autonomy more broadly.

To explain the difference between human and artificial intelligence's concepts of autonomy, it is first necessary to explain autonomy, a concept many philosophers have focused on since ancient times. The article focuses on Kant's most widely used and still core concept and its current use. The term “autonomy” (Greek *autonomia*, Latin *autonomia*) comes from ancient Greek and consists of the parts autós (self) and nomós (law). This term can be translated into self-determination, self-government, and self-regulation.[[24]](#footnote-24)

* 1. **The Concept of Autonomy According to Kant's Thought**

Autonomy has gained importance in moral philosophy since Immanuel Kant's 1785 work, "The Foundation of the Metaphysics of Morals." Kant also addresses the meaning of autonomy in the 1781, 1787, and 1788 works, "The Critique of Pure Reason" and "The Critique of Practical Reason."

Autonomy is a structural principle of Kant's philosophy, developed in the Critique of Pure Reason. It is the quality of the individual's theoretical reason. It is particularly important in the third antinomy, where Kant begins a discussion on causality. According to the laws of nature, causality is not the only cause from which a phenomenon of the world as a whole can be derived. To explain this, it is still necessary to assume causality through freedom.[[25]](#footnote-25)

A detailed discussion of the third antinomy is not possible here; rather, this paper aims to prepare for the following explanations of the connection between autonomy and freedom in his work Foundations of the Metaphysics of Morals, where "other causality through freedom" is equated with the effect of freedom and the will's own legislation, and thus with autonomy.[[26]](#footnote-26) In Kant's practical philosophy, autonomy is key. In The Foundations of the Metaphysics of Morals, Kant declares the autonomy of the will, which is expressed as a rational human being. Its "principle is a categorical imperative," the supreme principle of morality. This quote demonstrates autonomy's importance in self-legislation. According to Kant, humans, as rational beings, can self-legislate. (Kant, 2017, 441). An autonomous man establishes the laws of his actions through his will. Furthermore, Kant points out that man “[...] can never think the causality of his own will outside the idea of ​​freedom [...]”.[[27]](#footnote-27) Each component cannot be considered in isolation; there is a “kind of circle’ (Kant, 2017, 452) because ‘[...] freedom and the law of one’s own will are both autonomies, hence interchangeable concepts [...]”.[[28]](#footnote-28)

Kant's point is the difference between freedom and its components. "Freedom of an object" is the basis for "free causality.":[[29]](#footnote-29) the autonomous will of man causes his completely free action (this action can be moral and therefore punishable if it fails). Conversely, in the second case, the relation between the cause of a given action and the action itself is a "mechanism of nature":[[30]](#footnote-30) "the total necessity of events in time in accordance with the law of natural causality"[[31]](#footnote-31) causes his partially free action (this action cannot be moral and therefore cannot be punishable if it fails). This leads to a key distinction. Autonomy implies full freedom and morality, which, as Kant noted, involves "imputation" and being "guilty and deserving of punishment.".[[32]](#footnote-32) On the other hand, we see that heteronomy implies a kind of (partial) freedom that does not imply morality, which does not mean imputing guilt for something to someone and does not mean being “guilty and deserving of punishment”.[[33]](#footnote-33) All these explanations make us free and moral, while also potentially making us “guilty and deserving of punishment”. This also makes accountability, a crucial precondition for responsibility, possible.[[34]](#footnote-34)

While heteronomy is “the natural necessity of acting causes [...]”, autonomy is “the property of the will to be a law unto itself”.[[35]](#footnote-35) Accordingly, if “natural necessity is a property of the causality of all non-rational beings”, then the will being seen as the causality of rational beings is a matter of negative freedom, and in this case, freedom is “a property of this causality”.[[36]](#footnote-36) Positive freedom, on the other hand, transcends the cause-effect relationship in the world of senses by referring to the self-legalization of the good will, although it is a synthetic proposition that refers to a third thing “[...] of which freedom points to us and of which we have an a priori idea [...]”.[[37]](#footnote-37) From this, Kant concludes that “[...] every rational being who has a will necessarily has the idea of ​​freedom [...]” [[38]](#footnote-38) and therefore every human being has positive freedom. Since only rational people can think, Kant finds it absurd for people to explain their power of judgment with an impulse instead of their reason. Humans are subject to both the "world of sense" and the "world of reason," but true freedom exists only when we are independent of the sensory world. This, in combination with our autonomy of will, enables rational action. In Critique of Practical Reason, Kant emphasizes that actions can be either self-determined or externally determined: Rational beings generally exist under empirically conditioned laws and are thus heteronymous for reason. Conversely, the same beings exist according to laws that are independent of all empirical conditions and thus belong to the autonomy of pure reason.[[39]](#footnote-39)

Accordingly, heteronomy is human action based on the senses. Autonomy is human action based on the mind. Besides the autonomy of reason and the autonomy of reason already mentioned, we should briefly discuss Kant's heteronomy in the Critique of Judgment. Kant understands an autonomy that reflects autonomy by autonomy. This autonomy is the "reflective power of judgment directed toward the subjective use of reason.".[[40]](#footnote-40) After defining the function of autonomy in Transcendental and Moral Philosophy, Kant historically addresses the concept of autonomy, which is related to political and institutional autonomy, in his later monographs, The Metaphysics of Morals (1797) and The Disputation of the Faculties (1798). In the Metaphysics of Morals, Kant explains the nature of a free state as follows: Therefore, there are three different powers (potestas legislatorial, executorial, iudiciaria) -legislative, executive, judicial - in which the state (civitas) has autonomy, that is, it shapes and maintains itself according to the laws of freedom.[[41]](#footnote-41) Autonomous institutions are based on the idea of autonomous reason. According to Kant, the people who govern autonomous states and institutions are always rational. They are autonomous citizens who form the basis of an autonomous country.[[42]](#footnote-42)

As mentioned above, there are different discussions about the concept of autonomy, but Kant's definition has been decisive as the core meaning. As for the current concept of autonomy in philosophy: If we summarize the definitions[[43]](#footnote-43) developed in philosophy, we notice the following: They all carry the basic features of Kant's understanding of the autonomy of the self-regulating, moral individual, but the framework of his autonomous action is always surrounded by a teleological goal.

However, the autonomy of the individual can conflict with heteronomy, as can different social contexts. Two positions of philosophy continue to influence the current discourse: motivating autonomous actions and teleological or deontological considerations. It depends on how humans and machines are classified. This is relevant for autonomous machines and the criteria for autonomy.

The next section defines "autonomous machine" and the conditions under which it is considered such. Autonomy is a field of technological development. It is defined by its own characteristics. Autonomous machines do not inherently demonstrate autonomy. Instead, the term "autonomy" should be understood as an expansion of the technical possibilities of mechanization. The following is a differentiation between "human autonomy" and "technical autonomy" to better distinguish autonomy as a philosophical term from its technical meaning.

* 1. **Machine 'Autonomy' feature**

In 1986, an international conference was held in Amsterdam. The conference titled "Intelligent Autonomous Systems" [[44]](#footnote-44) discussed the theoretical and practical aspects of the design and operation of autonomous systems. At that conference, the following technological developments were summarized under the heading of autonomy:

[…] autonomy is achieved by dividing the task into three basic parts: sensor system, control module and world model.[[45]](#footnote-45)

Autonomous machines are defined by their technological level. The term "autonomy" is used in technical contexts to describe systems and agents. George Bekey defines autonomy as follows:

Autonomy refers to systems' ability to operate in a real-world environment without external control. Living systems are prototypes of autonomous systems: they can survive in a dynamic environment, maintain internal structures and processes, find and obtain nutrients, and exhibit various behaviors, adapting to change within limits.[[46]](#footnote-46)

The definition suggests that bio systems serve as a model, which makes sense since the machine operates independently in the "real world." Its autonomous function is time-limited and depends on external factors like its environment, technology, and human-defined controls.In the textbook *Artificial Intelligence* (2012) written by Lämmel and Cleve, "autonomous" is defined as follows: The characteristics of agents are as follows: An agent acts independently while performing the task assigned to it. Independent decisions are made regarding the individual actions to be carried out.

Therefore, the decisive criterion for the autonomy of the so-called agent is independence. Therefore, it remains unclear why this property, which is related to the execution of actions, is labeled “autonomous” and not simply “independent”. According to the Robotics Handbook, “autonomous” also means simply “free from external control”.[[47]](#footnote-47)

The agent acts autonomously only in the scope of its assigned task, without overstepping its own boundaries.[[48]](#footnote-48) Such “Agent” should also be understood as software and hardware agents. The functioning of so-called autonomous agents is like that of autonomous systems.

* 1. **Degrees of Autonomy**

As technology becomes increasingly complex, the underlying “goal autonomy” of humans decreases and the autonomy of the machine gradually increases. According to Gutmann (2010) and others, technical systems can be divided into four levels that demonstrate this gradual development:

(1) “Instrumentalization” (e.g. a hammer)

(2) “Mechanization” (e.g. vehicles with “driver information or warning systems”)

(3) “Automation” (e.g. elevators or automatic gear changing)

(4) “Autonomy”.

The first two stages of automation allow for "goal autonomy," meaning users can set their own objectives. This decreases as the level of mechanization increases, since goals are achieved using tools. At the level of automation, machines can regulate themselves using laws. In the level of autonomy, the system develops self-regulation strategies. Tim Smithers offers this explanation:

[…] automated systems are self-regulating, but they do not make the laws that their regulatory activities seek to satisfy. These are given to them or built into them.

[…] Autonomous systems, on the other hand, are systems that develop for themselves the laws and strategies by which they regulate their behavior: they are both self-governing and self-regulating.[[49]](#footnote-49)

Smithers correctly highlights the distinction between automation and autonomization. It's important to note that a system achieving this level of self-regulation is initially developed by humans for specific purposes. In the human-technology relationship, the definition of autonomous systems emerges at this stage:[[50]](#footnote-50)

Finally, more narrowly defined autonomous systems are those in which not only fixed functions are performed without user intervention, but the system itself determines both the functions to be performed and how they are performed in each context.[[51]](#footnote-51)

In such a system, for example, the user's role would be limited to goal setting, and the user himself could be seen as “[...] an element of the system environment [...]”.[[52]](#footnote-52) The same applies to autonomous agents. On the technological side, the more an autonomous system intervenes in a person's living space, the greater the autonomy: Sebastian Thrun's (2004) categorization of robots by autonomy level illustrates this. Thrun divides autonomy into three areas, each with different degrees depending on environmental context. (1) Industrial use, for example, industrial robots; (2) Professional service robots, for example, “robotic dogs” (“professional service robots”); (3) Special service robots (“personal service robots”). Thrun defines the measurability factors of a robot as follows: the autonomy of a robot is as follows: Autonomy is usually measured by how much the environment can be changed and how often robots fail.

He justifies the increase in autonomy from robot type (1) to robot type (3) by the increasing ability of robots - depending on their technical performance capabilities - to make changes in their environment, that is, in the human environment. Accordingly, a particularly high degree of autonomy is required in situations where robots work in close proximity to humans, if not together with them. The demand for greater autonomy is justified by the increased need for safety measures and the fact that human actions are less predictable for robots than vice versa.[[53]](#footnote-53)

This view shows that humans are key in human-machine interactions and that robot autonomy is a mechanism for adapting to the human environment. Despite their autonomy, such robots have goals set by humans and still need some independence to achieve these goals. This form is called "open autonomous systems." "Autonomization" is mainly applied to "closed autonomous systems," which are contrasted with other systems. The closed systems can't receive goal-oriented human input. In these systems, "the system controls and creates itself." This shows that autonomy in new technologies is different from human autonomy. They are similar in that both involve self-legitimization to solve a technical task.

Russel's and Norvig's classification of AI research methods shows that technical development has depended largely on the underlying view of humanity, and that this has led to widely differing ideas about the potential of AI. The debates about strong and weak AI show that views about artificial and natural intelligence are divided. Different approaches to AI also lead to different ideas about how certain features should be implemented.[[54]](#footnote-54) As humans and technology increasingly intersect, two issues stand out: growing links between people and technology and the question of human vs. technical autonomy, depending on the human control degree in open autonomous systems. As discussed in the section on autonomy, we must determine the criteria for autonomy to be considered a human characteristic. There are growing linguistic challenges related to terminology inadequacies in understanding technical systems. Ryle's category mistake theory raises questions regarding terminology inaccuracy and technology performance misunderstanding, underestimation, or exaggeration. Since these machines are human-built and labeled "autonomous," it's crucial to examine how much autonomy to grant or its purpose.[[55]](#footnote-55)

1. **Conclusion**

The article supports the idea that autonomy is a human characteristic. If autonomy comes from moral philosophy, it should be accepted as only valid for humans.

However, the problem of considering AI an "electronic person" with autonomous systems is addressed. This is because legal negotiation and decision-making are not result-oriented processes. We need an autonomous person with will and a knowing subject aware of the power of judgment in decisions. AI, with its problematic autonomous concept, cannot be a decision-maker.

Prosecutors or judges must carefully sift the data produced by AI's auxiliary activities. One issue is the potential bias in computer models, which may learn discriminatory patterns. For instance, a predictive recidivism model may be built on biased past arrest records. Let’s also assume that police activity in a particular area is biased; for example, perhaps police tend to arrest certain ethnic minority groups disproportionately more than non-minority groups for the same crime. If this is the case, then biased police activity will be hidden in the recorded police arrest data. In contrast, any machine learning system that learns patterns from this data can encode these biases. It's essential to ensure that computer models treat people fairly. The European Union's 2015 report on civil law rules on robotics also emphasizes this. Accordingly, the "General Principles" section, Article W, emphasizes the need to shape the technological revolution in a way that serves humanity, to share the benefits of advanced robotics and AI widely, and to avoid potential pitfalls as much as possible. (P. 6/64). Again, in the ‘Responsibility’ section of this report, it is stated that a machine or AI will not be autonomous like a human and will not be able to take responsibility, and it is recommended that legal regulations be made accordingly (P. 6-7/64).

Looking again at the concept of responsibility, defining responsibility as merely an obligation is short-sighted, because taking responsibility for the consequences of actions can go beyond fulfilling ethical or legal obligations. While duties limit the scope of relatively well-defined normative requirements for action, responsibilities can be based on unclear expectations for action that expand the scope of what is ethically and legally obligatory. In contrast to specific ethical and legal duties of guilt (officia debiti), responsibilities can be traced back to vague duties of moral merit (officia meriti) undertaken out of generosity and helpfulness.[[56]](#footnote-56) Responsibility requires moral, cognitive, and communicative skills that must be developed. The principle of responsibility aims to bring together contributions to action in an "integrative practice." Therefore, responsibility requires networked thinking. Since the Industrial Revolution, people have been transferring their muscle power to machines. Now, they are transferring their mental power to machines. As mentioned, AI has developed rapidly and will continue to do so. AI-supported systems can provide important services that benefit prosecutors, judges, and lawyers. Economically weak countries, such as Turkey, can gain great advantages thanks to the savings that AI provides.

This may happen soon: AI could become independent and autonomous. But it wouldn't be like our autonomy. If it were, it'd be the same, but it'd be a new kind of being. First, humans must learn to use their advantage. Otherwise, reverse evolution, i.e., the machine becoming more intelligent while humans dull their own intelligence, will inevitably result in stupidity. It's important to consider biases and outputs when using artificial intelligence. Instead of being overly critical or overly optimistic, it's better to create new ideas and explore new concepts.

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