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# Posthumanistic Considerations for the Human-Centric Approach to European Regulation of Artificial Intelligence

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**Abstract**

The article critiques the European Union's human-centric approach to regulating artificial intelligence, particularly in the context of the AI Act and the preparatory works of the High-Level Expert Group on Artificial Intelligence. It argues that while the human-centric approach intends to place human values at the core of AI regulation, it reproduces an anachronistic liberal humanist anthropocentrism, grounded in the human/machine dichotomy, that structurally forecloses the regulatory goals the Act itself proclaims. Deploying critical posthumanist methodology as a deconstructive project, the article reveals the conceptual limitations of this framework and proposes an ontocentric posthuman jurisprudence, drawing on Floridi's information ethics and Braidotti's critical posthumanities, as a more adequate regulatory foundation. Crucially, this shift does not require abandoning human values; rather, transcending the human/machine dichotomy is a precondition for protecting them more fully. Such a framework would extend regulatory protection to non-human actors and the environment, while remaining genuinely oriented towards the human, and being more fit for the stated goals of the regulation.

***Keywords***: AI regulation; posthumanism; Human-centric AI.

## 1. Introduction

While it generally might seem that law always plays catch-up with the requirements of the 'real' world, especially when it comes to new technologies.[1] The regulation of AI has been already underway for some time, even before the widespread adoption of consumer ready LLMs. Within the European Union (EU), in December 2019 the President of the European Commission Ursula von der Leyen vowed to tackle the regulation of these technologies within her first 100 days.[2] Her proclamation started a process that has, after much longer period of time than anticipated, resulted in the final version of the Artificial Intelligence Act[3] ('AI Act'). The Act was preceded by the 2018 creation of the High-Level Expert Group on Artificial Intelligence[4] ('AI HLEG') which produced several non-binding recommendations, including 'Ethics Guidelines for Trustworthy AI'[5] and 'Policy and Investment Recommendations for Trustworthy Artificial Intelligence'[6] that informed the AI Act.

[1] Bradford, Digital Empires, 12.
[2] European Commission, "100 Days of the von Der Leyen Commission."
[3] *Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act)* [2024] OJ L, 2024/1689.
[4] European Commission, "High-Level Expert Group on Artificial Intelligence."
[5] European Commission, "Ethics Guidelines for Trustworthy AI."
[6] European Commission, "Policy and Investment Recommendations for Trustworthy Artificial Intelligence."

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This regulatory process, that has by its lengthiness undermined the EU's ambition to 'export'[7] its regulation in a similar way to the GDPR,[8] as well as the resulting AI Act, have been criticised for many things, from misunderstanding their subject matter so badly that some of their original requirements were unattainable,[9] to including unreasonably broad definitions that went beyond the scope of AI-based technology.[10] This article aims to focus on a different aspect of the regulatory regime, albeit closely related to the individual shortcomings in its rules – its proclaimed human-centric approach to the European regulation of AI. Since the regulation is presented as being human-centric, it is this position that should also inform our evaluation of the problematic aspects and terms of the AI Act.

This article advances a three-part argument. First, it contends that the human-centric approach to AI regulation, as articulated across the AI Act and the preparatory works of the AI HLEG, is grounded in a liberal humanist anthropocentrism that constructs the human subject in structural opposition to the machine – an opposition that is, as one member of the AI HLEG has observed, not only outdated but essentially irrelevant for the present situation. [11] This foundational dichotomy is a constitutive feature of the regulatory framework that systematically forecloses the objectives the Act itself proclaims, including the extension of meaningful regulatory consideration to environmental and non-human actors.

I argue that critical posthumanist methodology, understood as a deconstructive jurisprudential and not as a speculative philosophical programme, provides the appropriate analytical apparatus for rendering this dichotomy visible and for exposing its structural consequences.[12] By drawing attention to the binaries upon which Western liberal law is founded, and by subjecting the figure of the rational, rights-holding humanist subject to sustained critical scrutiny,[13] posthumanist jurisprudence enables an assessment of the EU's regulatory approach that operates at the level of its foundational premises. Such an assessment is indispensable where the inadequacies of specific regulatory choices are symptomatic of deeper conceptual commitments, which technical amendment alone cannot remedy.

In this regard we propose an ontocentric posthuman jurisprudence, synthesising Luciano Floridi's information ethics[14] and the relational ontology of the infosphere with Rosi Braidotti's critical posthumanities[15], as a regulatory foundation capable of meeting the AI Act's proclaimed objectives better than its current anthropocentric premises permit.[16] This proposal does not require the abandonment of the human-oriented values that the regulation seeks to protect. It rather argues that transcending the dichotomy between human and machine is a precondition for protecting those values more effectively: that a regulatory framework which conceptualises AI as part of a networked assemblage of human and non-human actors, embedded within and co-constitutive of the broader informational environment, is better equipped to safeguard human dignity and safety, foster responsible innovation, and extend coherent regulatory consideration to the environment than one which insists upon a distinction that neither the technological realities nor the Act's own ambitions can sustain.

Precisely due to its proclaimed position in the creation of the regulation, this article holds the 'human-centric' as important for the interpretation of the resulting regulation. A preliminary methodological observation is warranted regarding the documentary sources. The article draws jointly upon the AI Act and the publications of the AI HLEG. However, the relationship between these bodies of work is neither straightforward nor uncontested. The final text of the AI Act was the product of political

[7] Bradford, Digital Empires, 369–371.
[8] Justo-Hanani, "The Politics of Artificial Intelligence Regulation and Governance," 141-146.
[9] Krištofík, "ODR and Online Courts."
[10] Ebers, "The European Commission's Proposal for an Artificial Intelligence Act," 590-591.
[11] Floridi, "The European Legislation on AI," 216.
[12] On critical posthumanism as a specifically jurisprudential project, see Käll, "Critical Posthumanism, Justice, and Law," 629–631; Herbrechter et al., "Critical Posthumanism," 3–6. The distinction between posthumanism as a deconstructive legal methodology and its more speculative variants (including transhumanist accounts of technological enhancement) is essential to the analytical approach adopted here. The article is not concerned with questions of AI consciousness, legal personhood, or the technological transcendence of human biological limitations, all of which the AI HLEG explicitly and, for present purposes, correctly set aside. See Floridi, "The European Legislation on AI," 216–17.
[13] Käll, "Critical Posthumanism, Justice, and Law," 629.
[14] Floridi, "Global Information Ethics."
[15] Braidotti, "A Theoretical Framework for the Critical Posthumanities."
[16] The compatibility of Floridi's ontocentric information ethics and Braidotti's critical posthumanities, which might not appear self-evident given their distinct disciplinary origins, rests in part on a shared engagement with Spinozian philosophy as a resource for non-anthropocentric ontology. See Braidotti, Posthuman Knowledge, 47–53; Hongladarom, "Floridi and Spinoza on Global Information Ethics," 175–79. The implications of this philosophical convergence for the regulatory framework proposed in Section 4 are developed further below.

negotiation and lobbying pressure, the cumulative effect of which was to modify the HLEG's recommendations.[17] This analysis treats them in conjunction for reasons that are themselves analytically significant. The concern of this article is not primarily with the proclaimed regulatory philosophy that the Act invokes and its technological implications are concerned only when regulatorily relevant. It is the HLEG's publications that constitute the primary locus in which that philosophy is articulated; the Act's own Recitals offer largely unreflective instantiations of the same commitment.[18] Reading the Act through the HLEG's philosophical framework therefore reflects the Act's own stated interpretive intention.[19] The documents examined here should be understood as presenting a spectrum ranging from the HLEG's relatively elaborated articulation of human-centricity to the Act's political operationalisation of it, across which the same foundational dichotomy is consistently reproduced.

At the same time, the interpretation of 'human-centredness' itself is contested. To better understand it, this article explores an approach that may seem contradictory, that of posthumanism. However, stepping out of the bounds of the anthropocentric perspective, allows us to explore its bounds and critically examine its usefulness. The article does this in four stages. Section 2 maps the documentary foundations of the EU's human-centric approach, demonstrating that these sources consistently reproduce a liberal humanist anthropocentrism in which the human subject is constructed in implicit opposition to the machine. Section 3 deploys critical posthumanist methodology as a deconstructive analytical framework, drawing principally on Braidotti's critical posthumanities[20] and Jannice Käll's posthuman jurisprudence,[21] to render this foundational dichotomy visible and to expose its structural consequences. Section 4 advances the constructive dimension, proposing an ontocentric posthuman jurisprudence that is grounded in Floridi's information ethics and the relational ontology of the infosphere[22] as a regulatory foundation that preserves the Act's human-oriented goals while transcending its anthropocentric limitations. Section 5 draws these threads together and identifies the implications of the proposed framework for the broader project of AI governance in an ecological and informational age. After all, we are faced with multiple predicaments, such as the climate change or technological advances, which we are unable to address within the universalistic notion of 'men' or the exceptionalism of the Anthropos.[23]

## 2. Human-Centric Europe

The proclaimed human-centric approach to the regulation of AI is mainly informed by two sources[24] that we will be further considering. The first one, whose binding nature makes its analysis more pressing, is the AI Act. The second one, which is on the contrary non-binding, yet provides us with the context of 'human-centric' AI, is the Recommendation on Trustworthy AI. It is this material that first introduced the human-centrism of AI regulation as a trust-building condition.[25] However, a structurally significant feature of the human-centric approach becomes readily apparent. From its very inception, the concept of human-centric is inherently oriented against a technological 'other' whose trustworthiness must be demonstrated and whose relationship to the human subject requires management. The human is constructed from the outset as prior to the technological. It is this foundational positioning that will be subjected to critical scrutiny.

Even though the Recommendation does not present an exactly self-contained definition of 'human-centric,' the first mention of the necessity of this approach claims that human-centric AI systems rest 'on a commitment to their use in the service of humanity and the common good, with the goal of improving human welfare and freedom.'[26] Further in the text AI HLEG claims that this approach has been defined (by them) as an approach 'in which the human being enjoys a unique and inalienable moral status of primacy in the civil, political, economic and social fields.'[27] This material also posits that human-centric design is such design that 'leaves meaningful opportunity for human choice.'[28]

[17] See, in this regard, Djeffal, The EU AI Act at a Crossroads; Ebers, The European Commission's Proposal for an Artificial Intelligence Act. The particular disruption occasioned by the late emergence of generative AI as a regulatory concern illustrates the degree to which the Acts final architecture diverged from the HLEG's original conception of its subject matter.
[18] The commitment is the base for both documents however the contrast in elaboration is stark: the HLEG's Ethics Guidelines devote considerable discursive space to the philosophical foundations of the human-centric approach, including a dedicated glossary definition, whereas the AI Act's Article 1 invokes the concept in a single clause without definition or elaboration.
[19] See Recital 7 of the AI Act.
[20] Braidotti, "A Theoretical Framework for the Critical Posthumanities"; Braidotti, Posthuman Feminism, 22.
[21] Käll, "Critical Posthumanism, Justice, and Law," 629.
[22] Floridi, "The 4th Revolution," 26.
[23] Braidotti, Posthuman Knowledge, 3.
[24] As in the case of emerging technologies, the law is more stable. Estevez, "Glossary of Human-Centric Artificial Intelligence," 3.
[25] "Ethics Guidelines for Trustworthy AI."
[26] "Ethics Guidelines for Trustworthy AI," 6.
[27] "Ethics Guidelines for Trustworthy AI," 10.
[28] "Ethics Guidelines for Trustworthy AI," 12.

These formulations are worth pausing over, for they collectively instantiate a specific and historically particular figure of the human as an exceptional subject possessed of a 'unique and inalienable moral status,' whose primacy is pre-political given and not contingent regulatory choice. This is the figure of the liberal humanist individual – the rational, rights-bearing, self-determining subject whose exceptionalism with respect to all other beings, or with respect to the technological, is what the posthumanist project places under critical pressure.[29] The 'meaningful opportunity for human choice' that human-centric design preserves further reinforces this picture: the human is the choosing, controlling subject; the AI system is the instrument over which that choice must be maintained.

Lastly, the very end of the Recommendation contains a glossary of terms that provides perhaps the most exhaustive definition:

The human-centric approach to AI strives to ensure that human values are central to the way in which AI systems are developed, deployed, used and monitored, by ensuring respect for fundamental rights, including those set out in the Treaties of the European Union and Charter of Fundamental Rights of the European Union, all of which are united by reference to a common foundation rooted in respect for human dignity, in which the human being enjoy a unique and inalienable moral status. This also entails consideration of the natural environment and of other living beings that are part of the human ecosystem, as well as a sustainable approach enabling the flourishing of future generations to come.[30]

This definition is both the most elaborated and the most revealing formulation the AI HLEG produces. Its liberal humanist anthropocentrism is structural: the 'human being' occupies the definitional centre, endowed with a dignity and moral status that is 'unique and inalienable,' that is distinct from and elevated above every other entity. Non-human actors appear as the 'human ecosystem.' Their consideration is instrumentalised by the grammar of the definition, which grants them relevance insofar as they sustain the human subject. What is absent from this definition is any acknowledgement that the boundaries of the 'human' are contested, historically variable, and politically consequential, and that the entities positioned at the periphery of the human ecosystem might stand in a more complex and constitutive relationship to the regulatory subject[31] than the definition's spatial metaphors suggest.

Besides the AI HLEG establishing this definition as authoritative, it has also been chosen by the European Joint Research Centre for its Policy Report on Human-Centric Artificial Intelligence.[32] In this report, all policy-relevant glossaries included in international and European documents were considered[33], and this definition was chosen as the most useful for policymaking.[34] The institutional resonance is quite significant: a single definition articulating an unreflective liberal humanist anthropocentrism has been elevated to the status of the operative conceptual framework across the documentary corpus. The definitional vacuum that subsequent sections will identify, is therefore a consequence of this early consolidation around a formulation that treats the primacy of the human subject as axiomatic, as a proposition that does not require justification.

Even though the use of 'human-centric' in the Ethics Guidelines is often indirect, we can see its presence in several recommendations. For example, the requirement of designing AI systems in such a way they allow for a meaningful human choice means that human oversight should be guaranteed extensively and at all times.[35] Even the remaining recommendations suggest strong focus on some form of guiding anthropocentrism, for example by setting the human agency as a key point for trustworthy AI.

This output of the AI HLEG has been accompanied by a Communication released by the European Commission (the 'Communication').[36] Once again, it informs us that the human-centric approach is a prerequisite of trust building in AI systems, as well as a result of the trustworthy operation of AI. It also provides us with the closest thing to a definition one can find when it refers to the human-centric approach as one that '… places people at the centre of the development of AI and is thus worthy

[29] Braidotti, The Posthuman, 26–30; Käll, "Critical Posthumanism, Justice, and Law," 630–631; Williams, "Locating LAWS," 4–6. The figure of the rights-bearing, self-determining individual as the normative centre of Western liberal law is precisely the construct that posthumanist jurisprudence identifies as both historically contingent and exclusionary in its effects. Not least because, as Williams demonstrates in the context of autonomous weapons, it consistently fails to account for those who are most directly affected by the regulation in question but who do not map onto the idealised subject at its centre.
[30] "Ethics Guidelines for Trustworthy AI," 37.
[31] Williams, "Locating LAWS," 4–6.
[32] Estevez, "Glossary of Human-Centric Artificial Intelligence."
[33] Estevez, "Glossary of Human-Centric Artificial Intelligence," 4–6.
[34] Estevez, "Glossary of Human-Centric Artificial Intelligence," 34.
[35] "Ethics Guidelines for Trustworthy AI," fn 28.
[36] "Building Trust in Human-Centric Artificial Intelligence."

of the public's trust. This implies that AI applications should not only be consistent with the law but also adhere to ethical principles and ensure that their implementations avoid unintended harm. Diversity in terms of gender, racial or ethnic origin, religion or belief, disability and age should be ensured at every stage of AI development. AI applications should empower citizens and respect their fundamental rights.[37] It then reiterates basic EU values, such as the rule of law and protection of fundamental rights,[38] thus tying the human-centric approach to respect for these values. Similarly, André Calero Valdez et al. in their study of the role of Human-Computer Interaction methodology in the trustworthiness of AI note that the respect for these values, as identified by the Communication, ought be achieved 'by focusing regulation on transparency, explainability, and the human ability to understand and control AI systems.'[39]

Based on this, it might seem that AI HLEG has chosen the most fitting definition, in its quest to define conditions for Trustworthy AI. However, even some of the members of the AI HLEG have gone on to criticise the choice of this definition as well as this approach at large.[40] Before we move on to the criticism and other theoretical perspectives, it is necessary to introduce the second relevant document – the AI Act.

The AI Act is one of the world's first complex regulations of Artificial Intelligence that passed after considerable discussions and had to contend with the quickly developing nature of the technology.[41] It was enacted after the AI HLEG concluded its publications and as such its creation has been informed by their recommendations.[42] This is reflected in many aspects of the Act, such as its focus on discrimination or protection of fundamental rights.[43] The AI Act has further taken from the recommendations the approach of treating its subject matter in human-centric fashion. Such an approach should, per the Recitals, contribute to trustworthy AI, allowing it to be a 'tool for people' to increase their well-being and respect fundamental rights.[44] A similar view has already been expanded by some other works such as Valdez et al., that note that this approach to development and deployment of AI technology should enhance people's abilities, not replace them.[45]

The goal should come as a result of meeting the legal requirements such as proper data governance, non-discrimination and fairness, diversity; and the general ethical approach to AI.[46] The Recitals also put forth several key elements that are more oriented towards the technology, such as traceability of the processes and their explainability with subsequent monitoring and ongoing impact assessment.[47]

The last mention of this approach is located in Article 1 which posits 'The purpose of this Regulation is to improve the functioning of the internal market and promote the uptake of human-centric and trustworthy artificial intelligence (AI), while ensuring a high level of protection of health, safety, fundamental rights enshrined in the Charter, including democracy, the rule of law and environmental protection[48], against the harmful effects of AI systems in the Union and supporting innovation.

Putting all of the EU's documents together, we could synthesise some of the meaning of 'human-centric' as understood by European lawmakers. It is hardly a subject of discussion whether the AI Act, at least by its own claims, utilises the human-centric approach or whether such approach is favoured by the AI HLEG, but understanding the meaning and effects of this approach is a more complicated task. What we have learnt is that human-centric AI should be law-abiding, as mentioned in the Communication. It should follow ethical principles suggested by the AI HLEG: it should be diverse in its development,[49] empower citizens,[50] and respect their fundamental rights. This should be achieved by the utilisation of explainable AI, which

[37] "Building Trust in Human-Centric Artificial Intelligence," 1.
[38] "Building Trust in Human-Centric Artificial Intelligence," 2.
[39] Valdez , "The European Commitment to Human-Centered Technology," 249.
[40] Floridi, "The European Legislation on AI."
[41] Such was the case with firstly the boom and then the specific regulatory provisions concerning generative AI: Djeffal, "The EU AI Act at a Crossroads."
[42] See AI Act and its Recital 7.
[43] See AI Act Recital 8 or Krištofík, "ODR and Online Courts."
[44] AI Act Recital 6.
[45] Valdez , "The European Commitment to Human-Centered Technology," 258.
[46] AI Act Recital 27.
[47] AI Act Recital 27.
[48] It is interesting to note that the 'environmental protection' was one of the last additions and does not appear in the earlier versions of the text.
[49] This is one of the points most lacking in substantial development as we do not know what type of diversity and at which point of the development would satisfy this requirement.
[50] This once again lacks any substantial development but we understand this to encompass other 'citizen-rights' related issues such as to enhance the rule of law. In itself that does not offer much of a development of this term, however the Council of Europe has just very recently published its Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law that is trying to tackle

should result in AI that enhances, not replaces, the human. The definitional instability documented across these sources is therefore the surface manifestation of a deeper conceptual commitment: the presupposition of the liberal humanist subject as the normative centre of the regulatory field, a presupposition so foundational as to render explicit definition unnecessary.

## 3. Posthuman Europe

Previous sections established that the EU's human-centric approach, across both its primary instruments and preparatory works, consistently reproduces a liberal humanist anthropocentrism in which the human subject is constructed as prior to, and in structural opposition against, the technological/non-human. The present section deploys critical posthumanist methodology to subject that construction to analytical scrutiny to accomplish three tasks. First, posthumanism is introduced as a specifically jurisprudential deconstructive project, one concerned with non-speculative rendering visible the foundational binaries upon which Western liberal law operates and whose naturalisation forecloses alternative regulatory imaginaries.[51] Second, the EU's regulation is identified as a paradigmatic target for such, as its anthropocentric premises are presented as axiomatic and not as contingent choices requiring justification. Third, this section demonstrates what posthumanist methodology reveals about the structural limitations of this framework that cannot be perceived from within it.

In one of his articles, Luciano Floridi, as a member of the AI HLEG, examines the philosophical approaches of the EU to the regulation of AI.[52] Our previous struggle with pinning down a concise interpretation of the term 'human-centric' is perhaps best expressed when Floridi notes that the proclaimed human-centric approach to the regulation is both 'anachronistic' and 'trivially true.' That the approach is 'trivially true' indicates that human-centricity functions as an unexamined normative baseline. That it is simultaneously 'anachronistic' signals its inadequacy for technologies that increasingly blur the boundary between human cognition and computational process, and whose social consequences extend well beyond the interests of the liberal humanist subject. It is this combination that makes the EU's approach a paradigmatic target for posthumanism.

Floridi's account of the internal discussions that accompanied drafting of the AI HLEG's recommendations are interesting as well. He recalls that it was necessary to keep at bay attempts to introduce 'fanciful' terms like AI with 'subjective experience' that were originally supposed to appear in the draft.[53] As a result of not utilising them, Floridi observes that the AI Act 'treats AI as a technology for solving problems and performing tasks, not as some kind of Frankenstein's monster.'[54] The choice of Shelley's figure is revealing; it locates the regulatory imagination within a long tradition of Western cultural anxiety about the artificial, in which the created being is constitutively other: external to the human community it threatens. To distance the regulation from such language goes beyond a methodological decision as it reaffirms the boundary between at the very moment when the pressure of the technology was beginning to render that boundary contestable.

It thus seems that the intentions and the texts oscillate between establishing almost an arbitrary duality between the human and the machine and at the same time acknowledging this arbitrariness of such duality by denoting it as anachronistic and contemplating deployment of terms that would normally be reserved for humans. However, while trying to move away from the territory that would acknowledge the more complex relationship between the human and the machine, the preparatory works have seemingly dissolved a different posthumanistic dichotomy by shifting the focus from the human-centric towards the more-than-human,[55] by identifying the enhancement of human capacities as the goal of AI deployment. This oscillation is quite symptomatic of the structural instability that posthumanist critique is designed to expose: a regulatory framework that cannot coherently articulate its own foundational dichotomy, and whose unreflective anthropocentrism generates contradictions that proliferate at the level of definition and application alike.

### *3.1 Posthuman Dichotomies*

An approach that at the same time hints and denounces the move beyond the anthropocentric, might seem a rather unsure attempt at posthumanism (or an unsure attempt to denounce it). To properly evaluate what is at stake, it is necessary to establish what posthumanism, as a jurisprudential methodology, commits its practitioners to. Posthumanism encompasses a wide range of theoretical orientations, not all of which are analytically productive for the purposes of legal scholarship, and the failure to distinguish between its speculative and its critical variants has been a persistent source of confusion in discussions of technology

the relationship between the AI and Rule of Law, which could serve as an interpretive guide despite the fact that there is no direct institutional relation. See "The Framework Convention on Artificial Intelligence."

[51] Käll, "Critical Posthumanism, Justice, and Law," 642-643; Herbrechter, "Critical Posthumanism," 4.

[52] Floridi, "The European Legislation on AI."

[53] Floridi, "The European Legislation on AI," 218-219.

[54] Floridi, "The European Legislation on AI," 219.

[55] Herbrechter , "Critical Posthumanism," 4; Coskun, "More-than-Human Concepts," 1-4.

regulation.[56] We follow Käll's jurisprudential elaboration of the posthumanist project, which provides both the analytical rigour and the normative orientation required to justify the constructive move in Section 4.

While (legal) posthumanism as a methodology operates with the existing western (law) binaries of the human and non-human,[57] the aim is to utilise this approach to draw attention to such binaries and to the purposes they serve within the legal order, not necessarily to transcend them.[58] The ultimate goal is to make such binaries, often unquestioned, visible - making it possible to reconsider the hugely neoliberal and Eurocentric values that form our law.[59] This is where posthumanism comes into play as an inherently deconstructive project,[60] which does not propose a wholesale replacement of existing legal categories but a critical interrogation of the foundational assumptions of those categories.

By subscribing to (posthumanistic) deconstruction, that starts with drawing attention to the existing binaries dominating understanding of law, as well as society at large, we are then able to consider the next move – evaluating whether those binaries are necessary or productive. As such, we are allowed to focus on '.... humanism's anthropocentrism, essentialism, exceptionalism, and speciesism.'[61] The goal of postanthropocentric ethics is to decentre the idea of the liberal humanist subject – who is most commonly understood as the property-owning individual man.[62] This decentring reconfigures legal subjectivity, without dissolving it, it asks who is excluded by the normative figure at the centre and what a more adequate account of the legal subject would require.

It is this insistence on the 'standard' subject of the Western law that posthumanism tries to reconfigure. Centring of the 'rational, rights-holding, masculine individual' of liberal thought[63] can be seen in the regulatory insistence on human control, an absolute oversight required by the AI Act.[64] The much-stressed aspect of human oversight seems to be playing a central role, besides else, in ensuring the ultimate goal of increasing 'human well-being,' despite the technologically problematic nature of providing a meaningful human oversight in such systems.[65] From a posthumanist perspective, this almost artificially-stressed duality reinforces the position of AI-based technology as the 'eternal other' to and within our society.[66]

The posthumanist jurisprudential method reveals what cannot be perceived from within the anthropocentric framework, that insistence on human oversight is both a technical requirement and an ontological claim, as it presupposes a coherent human subject capable of exercising meaningful control. The same structural problem plays a central role in the discourse on Lethal Autonomous Weapons (LAWs).[67] That particular discourse has already produced a more advanced engagement with the posthumanist implications of the human/machine binary in legal regulation[68]. John Williams, examining the concept of 'meaningful human control,' observes the very specific and exclusive meaning of 'man' in 'human-centric' shifts to include only the 'rational, rights-holding, masculine individual,' with the consequence that those most directly affected by the regulated technology, those 'currently living under the drones,' are systematically excluded.[69] The approach and its definition already tell us who is worthy of being considered a human. The regulation of LAWs, while maintaining the dichotomy, focuses on the 'machine.' It seems that we are unable to separate the base dichotomy, not even to a degree that would provide us with concise definition.

[56] The distinction between critical posthumanism, as developed by Braidotti, Käll, and Stefan Herbrechter, and transhumanist or speculative posthumanist accounts that centre on technological enhancement of human biological capacities, is fundamental to the analytical approach adopted here. The former is a critical theoretical and jurisprudential project concerned with the foundational assumptions of Western liberal law; the latter is a normative programme concerned with the technological transformation of the human organism. The AI HLEG was correct to exclude speculative posthumanist terminology from its regulatory framework. The critical posthumanist methodology deployed in this article operates at an entirely different level of analysis. See Herbrechter, "Critical Posthumanism," 5–8; Braidotti, The Posthuman, 26–30; Käll, "Critical Posthumanism, Justice, and Law," 629–631.
[57] Käll, "Critical Posthumanism, Justice, and Law," 629.
[58] Käll, "Critical Posthumanism, Justice, and Law."
[59] Plumwood, Feminism and the Mastery of Nature, 4.
[60] Herbrechter, "Critical Posthumanism," 4.
[61] Herbrechter, "Critical Posthumanism."
[62] Braidotti, Posthuman Knowledge, 74-75.
[63] Williams, "Locating LAWS"; Braidotti, "A Theoretical Framework for the Critical Posthumanities"; Braidotti, Posthuman Feminism, 22.
[64] See Article 14 of the AI Act.
[65] Enqvist, ""Human Oversight" in the EU Artificial Intelligence Act," 11.
[66] Nath, "From Posthumanism to Ethics of Artificial Intelligence," 195.
[67] Parsley, "Automating Authority."
[68] See for example overview provided at Williams, "Locating LAWS," 4 5.
[69] Williams, "Locating LAWS," 12.

This structural inability to provide a regulatory foundation from within the framework leads us to seek alternatives. It is here that the jurisprudential character of the posthumanist method becomes decisive. Käll is explicit that posthumanist jurisprudence as much an experimental and collective practice as it is a critical one; one that does not offer singular definitional answers but operates through processes of ongoing reconceptualisation.[70] This processual character, far from representing a jurisprudential deficiency, is in fact the appropriate methodological response to a regulatory domain characterised by rapid change and ontological complexity. This account provides the analytical bridge between the critique of the EU's human-centric approach and the regulatory alternative proposed in Section 4. The posthumanist approach recommends itself as a productive framework, since it seeks a 'neo-materialist cartography' as an approach to understanding the relevant phenomena; one that understands our society and the beings within it as conjointly engaged in a multi-layered posthuman predicament, including the ecological, the socio-economic, and the psychic-affective dimensions of the joint ecology of being.[71]

### *3.2 The Ontological Problem and the Human in Posthuman*

The key objective of the posthumanistic approach is to highlight the existing dichotomies of Western law, with the aim of their reassessment and potential transcendence where they prove to be counterproductive. If we are to adopt posthumanistic methodology, it needs to move beyond the identification of those dichotomies to a deeper question: what specific metaphysics of the subject underlies them, why is that metaphysics inadequate to the conditions of the information age, and what theoretical resources are available for its reconfiguration? The EU's human-centric approach is not merely definitionally imprecise (a deficiency that could be remedied through better legislative drafting) but is grounded in a specific and historically particular ontology of the human subject that is structurally inadequate to its regulatory domain.

This ontological problem requires us to return to the AI HLEG and a previous working group that identified several 'risk factors' involved in introducing AI into society.[72] Their considerations focused on humans retaining a central role in society; in other words, retaining their position not in relation to the machine, but against it. This opposition stemmed from risk factors such as the devaluation of human skills or the erosion of human self-determination; specifically as a consequence of the severe economic harm resulting from redundancy, intimately tied in individual identity to self-esteem and social role.[73] The subject whose interests this framework is designed to protect is a specific figure: the individual economic agent whose sense of self and social position is constituted through productive labour and whose autonomy is threatened by technological displacement. The universal human of Enlightenment aspirations has been transformed to the possessive individual of liberal political economy; a figure whose historical particularity is rendered invisible by the universalising grammar of 'the human' in 'human-centric.'

Braidotti's critical posthumanist jurisprudence, together with Floridi's ontocentric information ethics, creates an interesting framework for us. Braidotti is explicit that if posthumanism is to be understood as a critical project, it must be perceived as a critique of advanced capitalism and its influence on Western liberal democracies,[74] precisely because of their shared investment in the individual property-owning subject as both starting and normative endpoint. Braidotti contends that the goal of posthumanist jurisprudence is a jurisprudential engagement countering the negative forces of anthropocentrism and advanced capitalism on law.[75] It is the identification of late-stage capitalism and the liberal humanist subject it presupposes, as the opposing structural force that the human-centric regulatory framework, despite its proclaimed universalism, serves to reinforce. The human against which the machine is regulated is therefore the property-owning, labour-performing, autonomy-exercising individual of neoliberal political economy, and it is this figure that the Act's risk-factor framework is designed to protect from technological displacement. It is worth noting that this subject is a narrower category than humanity in its fullness.

This diagnosis can be found as well in Floridi's conceptualisation of the information age. His information ethics, which is the foundational framework for the ontocentric approach of Section 4, proposes that an equal and inherent value should be given to all 'informational subjects', i.e. all existing subjects that retain informational property and therefore contribute to the underlying informational reality.[76] As such, there is no a priori hierarchy of subjects within the regulatory field (with the liberal humanist subject at its apex), rather it is constituted by a relational network of entities, whose value is constituted through their interdependant informational being. The contrast with the EU's foundational ontology of human-centrism is quite stark as it

[70] Käll, "Critical Posthumanism, Justice, and Law," 645–646.
[71] Braidotti, Posthuman Knowledge, 64.
[72] Floridi, "AI4People."
[73] Floridi, "AI4People."
[74] Braidotti, The Posthuman, 37-41.
[75] Braidotti, The Posthuman, 41-45.
[76] Floridi, "The 4th Revolution," 25 58.

presupposes a pre-given hierarchy where the human occupies a 'unique and inalienable' position, in contrast to Floridi's informational ontology which recognises no pre-political hierarchy of subjects.

However, the convergence between these two frameworks extends beyond their rejection of liberal humanist anthropocentrism. They both utilize the Spinozian tradition to articulate their non-anthropocentric approach. Braidotti's posthuman subject is indebted to Spinoza's monist ontology and its conception of a single immanent substance from which all entities spring, from which no hierarchical distinction can be made.[77] Floridi's framework has been shown to broadly follow a Spinozian philosophy also in its conception of the infosphere as a relational field within which informational subjects participate without any already pre-given hierarchy.[78] Their shared philosophical background is not merely of genealogical interest as it accounts for their joint commitment to monist relational ontology, which is at the same time incompatible with the structure of the anthropocentric (Western) law.

The relational understanding that is not set within the dichotomies and static order of Western law[79] allows us to see the subject as an assemblage and not as a pre-constituted individual.[80] Technology, on this account, is not an external instrument managed by a sovereign human subject, but part of the social and informational environment that forms human and non-human actors alike. Francesco Gualdi and Antonio Cordella's study of human-machine assemblages in judicial AI makes the point concretely:[81] when courts fully incorporate AI into the judicial workflow rather than treating it as a tool outside legal reasoning, accountability improves. The artificial boundary is not just hard to maintain – keeping it up gets in the way of building accountability in the first place.

The fact that the EU's human-centric approach rests on preconditions that are both historically particular (anachronistic) and structurally inadequate for our information age is the basis of arguments advanced in Section 4. Posthumanist jurisprudence as a project does not offer a singular definitional solution as it is a collective practice of an ongoing reconceptualisation.[82] The absence of a singular definition of the term 'human-centric' in the EU's documents may be seen as a certain approximation of the (posthumanist) procedural character. At the very least, regulation that cannot define its central term has not yet foreclosed the option of its reconceptualisation.

There is considerable criticism of the Act from various perspectives[83] which also offers us the application of numerous interpretative frameworks to this issue. Valdez et al for example, have argued for the utility of Human-Computer Interaction Studies in interpreting the meaning of the 'human-centric.'[84] They have posited the possibility of human oversight as a key value. While the usefulness of such a premise will be examined further, we may once again object that it ignores the nature of machine learning which often makes the systems opaque.[85]

In another study, Anna Chiara Pirozzoli examines the concept of human-centric regulation, yet does not provide a concise definition.[86] This absence is mended by its focus on a different dimension and goals of human-centric regulation. The identified goals ought to ultimately be the equitable and responsible use of technology. To this end she proposes that 'governance should be based on principles of equity, accessibility, and inclusivity to avoid widening digital disparities and inequalities.' She further notes that '(t)his is the essential requirement for achieving a balanced coexistence between humans and artificial intelligence' again noting the dichotomy between the 'man' and the 'machine.'[87]

[77] Braidotti, Posthuman Knowledge, 47–53; Braidotti, The Posthuman, 56–58. On the Spinozian foundations of Braidotti's posthumanism, see in particular her engagement with the concept of potentia as a non-hierarchical conception of the power of becoming that is distributed across all entities within a single immanent plane of existence, rather than concentrated in a sovereign human subject positioned above and against the natural and technological world.
[78] Hongladarom, "Floridi and Spinoza on Global Information Ethics," 175–179. Hongladarom's analysis demonstrates that Floridi's conception of the infosphere as a single relational field of informational entities within which moral consideration is distributed without pre-given hierarchy exhibits a structural affinity with Spinoza's monist ontology that is not merely analogical but reflects a substantive philosophical convergence. The implications of this convergence for the compatibility of Floridi's and Braidotti's frameworks are developed further in Section 4.
[79] Käll, "Critical Posthumanism, Justice, and Law," 629–49; Conley, "Of Rhizomes," 32–44.
[80] Gualdi, "Artificial Intelligence and Decision-Making."
[81] Gualdi, "Artificial Intelligence and Decision-Making."
[82] Käll, "Critical Posthumanism, Justice, and Law," 645.
[83] Krištofík, "ODR and Online Courts."
[84] Valdez, "The European Commitment to Human-Centered Technology," 255.
[85] Enqvist, ""Human Oversight" in the EU Artificial Intelligence Act," 517-518.
[86] Pirozzoli, "The Human-Centric Perspective in the Regulation of Artificial Intelligence."
[87] Pirozzoli, "The Human-Centric Perspective in the Regulation of Artificial Intelligence." 106

Pirozzoli's study further draws parallels between the regulation of personal data in the EU and the efforts to regulate AI. This comparison is common for AI regulation, specifically as it regards the Brussels effect.[88] Pirozzoli, however, situates these efforts within the context of what could be interpreted as a European 'digital constitutionalism.'[89] This emerging framework is marked by an ongoing struggle over the regulation of digital platforms, service providers and the data that this ecosystem produces. The battle over data represents a key tension between European institutions and transnational corporations. This struggle has been largely defined by the fight for access, control and protection of data and information, as well as the digital self at large defined by this information.[90]

This section presented a setup for the following constructive argument. First, it argued that critical posthumanist jurisprudence works as a legal and not merely philosophical deconstructive method as it exposes the binaries built into Western law and traces their regulatory effects, without dissolving legal subjectivity or giving up on normative argument altogether. Second, it applied that method to the EU's human-centric framework and located its problem. This is not a drafting error that better legislative language could fix, because the framework assumes the liberal humanist individual as the stand-in for 'the human,' and that assumption no longer holds up once we look at the technological conditions it is meant to regulate. The Braidotti–Floridi convergence matters here because it shows that the resources to move past this impasse already exist, and that they converge on a Spinozist ontology of relations which does not fit with the hierarchical anthropocentrism the current framework takes for granted. The question now is what that alternative actually demands of AI regulation in practice, and whether it can deliver on the AI Act's own stated goals better than the anthropocentric premises it currently rests on.

## 4. Posthuman as Human-Centric

### *4.1 Ontocentric Posthuman Jurisprudence*

The solely human-centric discussion of AI regulation conceptualises humans as being at the centre of the broader relations and networks of exchange in technologically mediated society.[91] Ugo Pagallo, who sees this approach as responsible for the 'mess' in environmental regulation, suggests that the way out should be adopting an ontocentric approach instead.[92] Before examining the implications of this proposal for the AI Act, it is necessary to articulate what an ontocentric posthuman jurisprudence actually is, what it requires of the law, and what foreclosed regulatory possibilities it opens. The following section therefore provides an analytical synthesis of the theory sketched out above.

The constitutive commitments upon which ontocentric posthuman jurisprudence rests distinguish it from both the anthropocentric framework as well as more speculative posthumanism. The first is its ontological commitment, its insistence on the fact that the regulatory field is not constituted by a pre-given hierarchy of subjects. Instead, the ontocentric view conceptualises a relational network of human and non-human entities, including technological systems, environmental actors and the informational infrastructure that mediates the relations. Each node of the network posseses an inherent value by virtue by their informational quality as well as their participation in the shared reality of the (Floridian) infosphere.[93] The Infosphere as such is an ontological characterisation of being in the information age, one in which the boundaries between the human and the technological do not lie undisturbed.[94] A framework that is built upon their separation must therefore present an ontologically incoherent description of the domain it wishes to govern.

The second commitment is a jurisprudential one. Based on Käll's and Braidotti's critical frameworks, we must see law as a relational and procedural enterprise that is not engraved within a fixed hierarchy.[95] This approach does not dissolve legal subjectivity, nor abandon a normative project, but reconfigures both. The law needs to understand governed entities as assemblages of human and non-human entities that are not a mere fixed points in static regulatory hierarchy. Further it needs to recognize that it shapes them as nodes in a network of co-constitutive relations,[96] meaning that it cannot treat any single element of such network as ontologically prior to, and independent of, the field of relations within which it exists. Posthumanist jurisprudence is however able to extend coherent regulatory consideration to the full range of affected entities, including those whose interest are currently rendered invisible by the virtue of the liberal humanist subject at the apex of the current framework.

[88] Tarafder, "Will the EU AI Regulations Give Rise to Another "Brussels Effect"?" 45-47.
[89] De Gregorio, "The Rise of Digital Constitutionalism in the European Union," 40-43.
[90] Pagallo, "Dismantling Four Myths in AI & EU Law," 252-253.
[91] Mellamphy, "Re-Thinking 'Human-Centric' AI."
[92] Pagallo, "Dismantling Four Myths in AI & EU Law Through Legal Information 'About' Reality," 257.
[93] Floridi, "Global Information Ethics."
[94] Käll, "Critical Posthumanism, Justice, and Law," 630 - 1, Conley, "Of Rhizomes, Smooth Space, War Machines and New Media," 32 -5.
[95] Käll, "Critical Posthumanism, Justice, and Law," 632 - 4.
[96] Gualdi, "Artificial Intelligence and Decision-Making," 2297.

This is closely followed by the normative commitment relevant to our discussion of the AI Act. An ontocentric posthuman jurisprudence does not ask us to abandon human-oriented values, those of dignity, autonomy or protection of fundamental rights (i.e. the proclaimed goals of the AI Act), as it seeks to 'merely' reconceptualise them within its framework. Further, the decentring of the regulatory subject should not be seen as detrimental to the Act's normative ambition. Recognising that human flourishing in the information age is constitutively dependent on the broader informational, ecological, and social networks within which human actors are embedded, the framework requires the law to protect those networks not as instrumental conditions of human welfare but as bearers of independent ontological significance – ultimately meeting the proclaimed goals of human-oriented values.[97]

Ontocentric posthuman jurisprudence can therefore be at the same time critical in its engagement with the premises of existing frameworks and constructive in its capacity to provide a coherent regulatory foundation that has the potential to better fulfil the Act's proclaimed goals. The following section examines the constructive capacity of ontocentric posthuman jurisprudence.

### *4.2 Ontocentric Posthuman Jurisprudence and the AI Act*

The concept of Floridian ontocentricity focuses on the informational nature of reality. In his ontocentric ethics he ascribes an inherent equal value to all 'informational subjects' which are all subjects in existence that retain informational character and jointly construct the underlying information-based reality.[98] Such an understanding of reality does not therefore create division between subjects, but conceives being in the information age as inherently relational without having a firmly set order or even boundaries of outside and inside.[99] These characteristics of ontocentric jurisprudence create a regulatory basis, through which we should read the basic requirements of the AI Act that were identified as furthering the anthropocentric agenda.

Firstly, the Act concerns itself with human oversight which plays a central role in increasing the assurance of 'human well-being' and allows us to fulfil other aspects of the Act, such as ensure respect for fundamental rights and legal compliance. From the anthropocentric point of view this requirement is foundationally necessary, however nearly unobtainable.[100] The last point demonstrates the structural ontological inadequacy that posthumanism critiques. What relational understanding allows us to do is to see subjects as assemblages[101] and thereby reconstruct the oversight itself. Ontocentric oversight is therefore not an exercise of sovereign control but an ongoing relational exercise of actors within the infosphere that creates conditions of actors' accountability. 'Ontocentric Article 14' should therefore be interpreted as a requirement of designing the regulatory and technical in such a way that it maintains the relational accountability as an assemblage, for example via imposing transparency obligations on developers, ongoing monitoring requirements, and the cultivation of distributed human understanding across the network of actors involved in a system's deployment. Oversight, in this regard, is not a single chokepoint of point-in-time approval of AI outputs.

This directly ties to the issues of explainable AI, mandated under Articles 13 and 17.[102] An anthropocentric framework understands explainability primarily as a mechanism that asserts human control. The system has to make the decision intelligible to the (human) oversight it is subjected to.[103] This however faces technical limitations as many AI approaches, such as deep learning, are foundationally resistant to any post-hoc interpretations. The ontocentric view should reframe explainability in a way that preserves the normative function and extends it beyond this technical impasse, by understanding explainability as a property of the assemblage that allows the networked system of human and non-human actors to render the conditions of its operation sufficiently transparent to sustain collective accountability and democratic governance. Explainability requirements should therefore be constructed in such a manner that generates and maintains the informational conditions under which the broader network of affected actors can exercise meaningful participation in the governance of the systems.

Lastly, ontocentric jurisprudence can be utilised in interpreting the Act's dual goal of supporting innovation and extending protection. Within an anthropocentric framework, these goals stand in inherent tension with one another. The protection of the human subject from the technological other limits the freedom of the technological to develop, and fostering innovation risks eroding the protections the human subject requires. Understanding them as parts of a relational assemblage allows us to perceive them as each requiring the other. While the suitability of this approach for environmental protection has been explored,[104] this

[97] Floridi, "Global Information Ethics," 14; Floridi, "The European Legislation on AI."
[98] Floridi, "Global Information Ethics."
[99] Käll, "Critical Posthumanism, Justice, and Law," 635; Conley, "Of Rhizomes," 32.
[100] Enqvist, "'Human Oversight' in the EU Artificial Intelligence Act," 531; Krištofík, "ODR and Online Courts."
[101] Gualdi, "Artificial Intelligence and Decision-Making," 2297.
[102] Gyevnar, "Bridging the Transparency Gap," 4; Krištofík "Epistemic trustworthiness of AI," 356.
[103] Pagallo, "Dismantling Four Myths in AI & EU Law," 256-259, Krištofík, "The Role of Privacy," 24.
[104] Lorenz, "Information Ecology of a University Department."

approach seems fit for achieving the remaining goals as well. The lens of Science and Technology Studies (STS) asks us to see the role of technology in shaping the social processes.[105] Taken together with the ontocentric approach, it allows us to think of the mechanical as part of the normative, part of the social, and naturally as part of the regulated at the same time. The necessity of the relational understanding for this benefit has already been demonstrated, although unwittingly, in the existing regulation. It is scattered across the whole of the regulation and seemingly requires itself to exist as such in order to be able to exist at all.[106] Ontocentric posthuman jurisprudence resolves the innovation/protection tension by reconceptualising both within a relational framework in which the flourishing of the technological and the protection of the social are understood as constitutively interdependent.

What we are left with is a rather counterintuitive observation that using a posthumanist approach does not lead to abandonment of the fundamental values.[107] After all, Floridi's infosphere is oriented towards the human as well as towards object-being.[108] Floridi posits his ontocentric approach as being fit to serve as the foundational framework for the regulation of AI[13] as it does not require us to abandon the proclaimed goals of the European regulation of AI; it even allows us to reach those goals more efficiently. What the three applications developed in this section demonstrate is that ontocentric posthuman jurisprudence is not a departure from the Act's normative ambitions but their more adequate realisation: a framework capable of protecting fundamental human values not despite but through its recognition of the relational character of the informational world in which those values must be sustained.

### *4.3 Imagining Relational Futures*

It is worth noting that the ontocentric posthuman jurisprudence has not been created in a vacuum. It finds relevant sources within a tradition of cultural legal scholarship whose goal it is to reimagine the human, the technological, and their constitutive relations in the relational fashion of the ontocentric jurisprudence. Engaging this tradition is not relevant merely for the 'multi-disciplinarity' but it provides analytical tools within the imaginative resources of cultural legal studies to think beyond the human/machine binary in legally generative terms. In this regard we may turn to Kieran Tranter's engagement with science fiction (sci-fi) as a medium through which alternative legal ontologies of the human-technology relation are explored. He argues that cultural (sci-fi) engagements go beyond reflecting our current anxieties but actively generate alternative legal imaginaries.[109] The sci-fi's AI from Asimov's robot jurisprudence to the distributed cognition of Tchaikovsky are characterised exactly by their constitutive entanglement with the social and environmental networks within which they are embedded. As cultural scholarship demonstrates, the liberal humanist ontology underlying current regulatory frameworks is inadequate to the relational conditions of our time. Ontocentric posthuman jurisprudence may be understood as the attempt to translate that imaginative demonstration into the language of regulatory theory.

Andreas Philippopoulos-Mihalopoulos's 'lawscape,' i.e. an understanding of law not as a system of sovereign commands issued by human subjects to govern an external world of objects, but as an atmospheric and relational phenomenon that is co-constituted by and constitutive of the spatial, material, and social environment within which it operates,[110] is of interest. As such, the lawscape is not separable neither from the actors it governs as it is produced in a process of mutual constitution that the sovereign command model of law systematically misrepresents. At the theoretical level, the lawscape concept provides a specifically legal elaboration of ontocentric relational ontology that is grounded in legal theory and therefore provides an additional point of view for the framework. At the applied level, the lawscape concept demonstrates what is wrong with the AI Act's regulatory approach, which treats the human subject as prior to and separable from the AI systems it governs. The Act misrepresents the atmospheric and constitutive character of the human-technology relation it is designed to manage, and thereby generates regulatory requirements (human oversight, individual explainability) that are structurally inadequate to the governed conditions.

Further, Mireille Hildebrandt's more normative work on the legal implications of smart technologies and their challenge to the foundations of Western law[111] is of interest here. Analysis of the 'onlife' condition (the interpenetration of online and offline existence in the information age) provides another account of why the ontological presuppositions of existing frameworks are inadequate. Her argument that smart technologies do not merely extend human agency but reconstitute the conditions of human

[105] Feenberg, "Critical Constructivism: An Exposition and Defense," 17; Cresswell, "Actor-Network Theory and Its Role."
[106] Viljanen, "AI Applications and Regulation: Mapping the Regulatory Strata," 5–6.
[107] Floridi, "The Green and the Blue" 26-30; Braidotti, Posthuman Knowledge, 177-178; Hongladarom, "Floridi and Spinoza on Global Information Ethics," 176.
[108] Lorenz, "Information Ecology of a University Department," 55.
[109] Tranter, Living in Technical Legality, 4-9.
[110] Philippopoulos-Mihalopoulos, Spatial Justice:, 15-23. See also Philippopoulos-Mihalopoulos, "Towards a Critical Environmental Law," 18–38, for the extension of the lawscape concept to more-than-human regulatory contexts.
[111] Hildebrandt, Smart Technologies and the End(s) of Law, 41.

subjectivity resonates with the ontological claim that the EU's human-centric regulatory framework presupposes a liberal humanist subject whose separability from technological systems is precisely what the information age has rendered untenable. Hildebrandt's work further connects to ontocentric posthuman jurisprudence through her insistence that adequate legal responses to smart technologies require not merely new rules but new foundational concepts adequate to the relational character of the assemblages.[112]

These contributions demonstrate that ontocentric posthuman jurisprudence is not a purely exogenous theoretical import but the formalisation of developed regulatory imaginaries. The imaginative resources of sci-fi jurisprudence, the atmospheric relationality of the lawscape, and the onlife reconstitution of legal subjectivity all point toward the same conclusion. The ontology of the human-centric approach is inadequate to the relational conditions of technological being, and a regulatory framework premised on networked assemblage is philosophically available and legally necessary.

### *4.4 Reorienting the Regulatory Framework*

This analysis generates a number of regulatory implications. The fundamental one asks who counts as the 'human' in 'human-centric,' or as Tyson E. Lewis has put it 'the embrace of "the human" obscures those who remain un-embraced; marginalised groups who are too slowly being accepted as equal or even included, and who are still far from counting as fully human in the eyes of too many.'[113] This question ought to be central to the regulation, specifically when it proclaims human-centricity. The AI Act's risk classification, its fundamental rights impact assessment, and its provisions on non-discrimination all presuppose a universal human subject whose interests the regulation serves equally. Ontocentric posthuman jurisprudence requires that this presupposition be rendered explicit, examined, and where necessary corrected, by asking whose interests are being centred and whose are structurally excluded.

The second implication concerns the treatment of non-human actors, more specifically the environment. The ontocentric framework allows us to view technology and society as interconnected and co-constitutive as informational agents within the infosphere. This relational understanding reconceptualises the goals of the AI Act, such as protecting fundamental human values. Whereas the oppositional understanding limits one by the other, a relational understanding encourages their joint development. Seeing the regulatory subjects as existing jointly within the infosphere requires the regulation to be read as extending protection to the environment as part of the non-human (as well as, arguably, the human) interest.[114] The consequence of such is that environmental impact assessment should not appear as a late addition to a framework, but should be reconceptualised as a constitutive dimension of the regulatory enterprise from the outset, reflecting the ontocentric understanding that human and environmental flourishing are mutually constitutive.

Further, even the architecture through which AI regulation is enforced is concerned here, as the ontocentric approach requires new institutional forms that are capable of operating relationally and not strictly hierarchically and thereby sustain the distributed accountability that cannot be located at a single sovereign chokepoint. This has implications for the AI Act's supervisory architecture as the national authorities and the European AI Office are all designed around a command-and-control model premised on the human subject's oversight. The ontocentric approach would require these institutions to create governance capacities for the relational constitution and its accountability that extends regulatory voice to those currently excluded from the liberal humanist framework. It would further require an ongoing monitoring processes capable of tracking the constitutive effects of AI systems on the social and environmental networks within which they operate.

The counterintuitive outcome of the previous analysis concerns the anxiety of abandoning the human-centric values of the current frameworks. While understandable, this concern rests on the assumption that the human subject is adequately protected only when at the centre, in opposition to the technological other. Ontocentric posthuman jurisprudence demonstrates that decentring the human subject and reconceptualising it as a node in a relational network does not diminish but enhances the protection of human values, by situating those values within the relational conditions of their actual reproduction in the information age. If we are willing to transcend this existing artificial dichotomy, the regulatory regime will be able to orient itself more genuinely and effectively towards the human. The transcendence ought to extend the scope of protection while simultaneously providing a more adequate foundation for the protection it already proclaims.

The practical benefit of ontocentric posthuman jurisprudence for the AI Act is reconstructive as it does not require the Act to be discarded and replaced, but to be reinterpreted and progressively redesigned in light of a more adequate understanding of the ontological conditions it governs. Section 4.2 provides the entry points for this reconstruction within the existing legislative

[112] Hildebrandt, "Law as Information in the Era of Data-Driven Agency," 1–30.
[113] Lewis, Technology, Media Literacy, and the Human Subject, 78.
[114] Dedeoğlu, "Posthumanism for Sustainability," 33–57.

framework. The cultural legal resources of Section 4.3 provide the imaginative and jurisprudential corroboration that such reconstruction is both philosophically available and legally generative. And the question of who counts as the human in human-centric regulation, examined in this section, provides its normative urgency, as a regulatory framework that cannot answer that question has not been honest in the pursuit of its stated goals.

## 5. Conclusion

The regulation of AI is often criticised for coming too late to be truly effective and for falling into mere pragmatic descriptivism of the already existing state of the things.[115] Its (un)timeliness seems to be reflected further in its approach to the regulated subject matter. We have demonstrated that this is not as much a matter of legislative pace, as much as it reflects in the foundational conceptual framework of the regulation. The EU's proclaimed human-centric approach constructs the human subject in structural opposition to the machine – an opposition that is simultaneously anachronistic and trivially true. The analysis of this article has shown that this foundational dichotomy does not present a definitional imprecision that could be amended by legislative action because it is a constitutive ontological inadequacy that systematically forecloses the regulatory objectives the Act itself proclaims.

The human-centric framework seeks to place humans at the centre of AI development. However, as this article has argued, this approach, while well-intentioned, is fundamentally limited and fails to account for the broader ecological, technological, and ethical challenges that AI poses, and risks creating a regulation too narrowly focused on a historically particular conception of the human subject to serve the populations it claims to protect. The persistence of the human/machine dichotomy in the EU's regulatory approach, i.e. the framing of AI as an external tool subject to human control, limits the scope of AI regulation and misrepresents the constitutive interdependence of actors in the information age. What the analysis of the AI Act's specific provisions has demonstrated is that this misrepresentation generates regulatory requirements that are structurally inadequate to the relational conditions they purport to govern.

In response we proposed an ontocentric posthuman jurisprudence that synthesises Floridi's information ethics and the relational ontology of the infosphere with Braidotti's critical posthumanities as a regulatory foundation capable of meeting the Act's proclaimed objectives more fully. This framework rests on several commitments: an ontological commitment to the relational and co-constitutive character of actors within the reality of the infosphere; a jurisprudential commitment to law as a relational and processual enterprise; and a normative commitment to the reconceptualisation of human-oriented values within a relational framework adequate to the conditions in which they must be protected in the information age. These commitments define a framework that is simultaneously critical, in its deconstructive engagement with the liberal humanist premises of the existing regulation, and constructive, in its capacity to provide a regulatory foundation for AI governance.

Adopting this approach should lead us to reconsider the limitations in answering the question of who actually is the human in the human-centric approach and generally in Western law. Posthumanism's focus on breaking down binaries could open new pathways for AI governance. By rejecting the assumption that humans must always be in control of AI, a posthumanist approach encourages a more flexible regulatory framework that allows AI to operate within a network of relationships not subjecting it to a rigid oversight. This could foster innovation by enabling AI systems to develop in ways that are not constrained by notions of anthropocentricity, while still ensuring accountability and ethical considerations. Crucially, decentring the human subject does not require us to forgo the fundamental values that the regulation seeks to protect.

While the EU's human-centric approach to AI regulation represents an important step toward safeguarding human rights and dignity, it ultimately falls short in addressing the broader challenges. By adopting a posthumanist framework, the EU could create a more adaptive, ethical, and sustainable regulatory environment. This shift would better align AI regulation with the realities of the digital and ecological age while also offering a more inclusive and forward-thinking approach to governance, one that recognises the interconnectedness of all actors, whether human, machine, or the environment, in shaping the future.

**Disclosure Statement**

SciSpace has been utilized for researching relevant articles. Claude with associated skill baoyu-translate has been used to translate part of the text in Section 4 into English. Output has been reviewed and thoroughly rewritten by the author. Claude has been utilised to check for placeholders left in the text, empty or unformatted footnotes and untranslated sections that might have been left in the text.

[115] Polčák, Pojem a Metoda Práva Informačních Technologií, 5.

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