

THE CONSTITUTIONAL RIGHT OF PARENTS TO RAISE THEIR CHILDREN IN THE FACE OF ARTIFICIAL INTELLIGENCE, IDEOLOGY, AND DIGITAL EDUCATION: THE METAVERSE AS A NEW EDUCATIONAL AGENT?

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Abstract. The research subject of this work is prospecting the answer to the question: Does the development of the artificial intelligence, immersive environments and paperless education lead to limitation or modification of the constitutional parental right to direct the upbringing and education of their children consistently with their value system? This study tests the hypothesis stating that, the rapid technological evolution in education formally does not abrogate parental rights regarding education and upbringing of their children in line with their value system, but significantly undermines its actual implementation, what calls for a fresh interpretation of constitutional duties to protect this right by the state and international organizations. In this study the following research methods were applied: a doctrinal legal research (analyzing the Constitution of the Republic of Poland, legal analysis of Statutes and European Union law), functional method (Fundamental Rights Impact Assessment, mainly the parental right to direct the upbringing of their children), comparative legal analysis (constitutional law – EU legislation), and the elements of the axiological analysis. Scope of research: Constitutional law of the Republic of Poland, Statutory law, EU regulations (AI Act), Constitutional Law scholarship and Law and Economics and the literature concerning educational processes in metaverse. The closing conclusion of the work is that the development of artificial intelligence, immersive environments and paperless education does not abrogate or transform parental rights regarding education and upbringing of their children in accordance with their value system. The realization of this right, however, necessitates new parental competencies and the assistance from an ideologically neutral state and international organizations, in particular the European Union.

Keywords: the right of parents to raise their children; Article 48 of the Constitution of the Republic of Poland; paperless education; artificial intelligence in education; metaverse; children's rights; governmental interference in upbringing.

INTRODUCTION

The right of parents to raise their children in accordance with their religious beliefs and worldviews for decades has constituted an indisputable

foundation of constitutional and international standards of human rights protection.¹ Nevertheless, since the 1980s, axiological shifts has been observed in the public sphere, determined in large part by a liberal-left ideology. This process has led to formation of a new cultural paradigm, referred to as *liberal-left consensus*, resulting from the alignment of social liberalism with left-wing thought [Legutko 2012, 45].

Within the framework of this consensus the redefinition of the vision of society has taken place, at the center of which the individual was placed, moving away from the primacy of the community. The primacy of individual rights over the common good, has led to a rising skepticism toward permanent institutions including entities such as the nation-state, religious institutions, and the nuclear family. The new paradigm promotes the affirmation of a plurality of lifestyles, moving away from an objective value hierarchy and promoting axiological equivalence of diverse individual choices. Z. Bauman writes about the shaping of morality in the absence of a fixed ethical code, which is a typical characteristic of postmodernity in its “liquid” nature [Bauman 2012, 48-56].

The transformations occurring within the social structure and the mental sphere of the individual have undergone significant acceleration and deepening in the 21st century due to the dynamic development of (ICT tools) Information and Communication Technologies tools and the Artificial Intelligence systems. These phenomena affect not only the way the individuals operate within both public and private spaces, but also they exert an influence on the fundamental categories of constitutional and social law – including the conception of family, marriage, upbringing, the role of the state, and the relationship between the individual and the state.

Furthermore, it is not merely a matter of ideological change – which, in the 1980s and 1990s, began to influence the shape of legal regulations concerning the organization of society – but also a profound transformation of the communication mechanisms, the exercise of political power, and the fulfillment of state tasks. Ultimately, these processes lead to a redefinition of classical models of education – for children, youth, and adults alike – as well as a shift of certain educational and informational functions from the family and public institutions to digital and algorithmic systems [Wrzesień 2024, 21-30].

Consequently, the development of digital technologies and artificial intelligence becomes not merely a technological factor, but also a constitutional and axiological one, necessitating a re-evaluation of the constitutional limits of state interference into individual rights, as well as reflection on the scope of family autonomy and the protection of individual rights in the information society.

¹ Here are some selected publications pre-dating the widespread adoption of AI. See Stecko 2017a, 195-206; Ożóg 2015, 263-85; Agarwal 2025, 1-57.

A consequence of these transformations is a departure from the nuclear family model as the dominant social pattern. The family has come to be perceived as a fluid construct, subject to historical and cultural change, which has led to the relativization of biological origin in favor of so-called functional parenthood.² From the perspective of legal dogmatics, it is of significant importance that the traditional family has come to be recognized as one of many equivalent forms of social coexistence. At the same time, marriage itself has been reduced to the role of a private contractual relationship, which has weakened its institutional link to procreation and has become the foundation for the demand of full symmetry among all forms of intimate unions. Currently, these tendencies exert an overwhelming influence on the evolution of the legal order, particularly in the fields of family, constitutional, and international law [Huntington and Scott 2019, 1371].

In light of the broadly understood cultural transformations briefly outlined above, the question arises: namely, whether – under the conditions of the dynamic social, axiological, and technological transformations of the 21st century, particularly in the context of the development of the information society and artificial intelligence tools – it is still possible to maintain the classical understanding of the parent’s right to raise their child in accordance with their own values, as established in international law and within the constitutional orders of democratic states; or whether there is a need for its re-interpretation in light of new forms of influence exerted by the state and the digital environment on the process of upbringing and education?

1. THE NORMATIVE FRAMEWORK OF THE PARENTS’ RIGHT TO RAISE THEIR CHILDREN IN ACCORDANCE WITH THEIR OWN CONVICTIONS

The right of parents to raise their children in accordance with their own convictions is normatively anchored in both international and domestic law, while its axiological justification carries a distinct historical dimension. The experiences of the 20th century demonstrate that this right was particularly susceptible to state interference and appropriation within totalitarian systems, such as communism and fascism. In both of these political models, education was subordinated to overriding ideological goals, and the child was treated not as a subject of family upbringing, but rather as a tool for realizing the interest of the state, molded in accordance with the prevailing political

² Based on Article 8 of the ECHR, applying an expansive interpretation, the ECHR protects “family life” also where there is no biological bond, see for example application 76240/01 of 28.06.2007 in the case of *Wagner and J.M.L. v. Luxembourg*.

doctrine. Consequently, this led to a systemic displacement of family autonomy from the educational process [ibid.].

It is worth noting that certain elements of such thinking were already present in classical political philosophy, particularly in the works of Plato, who subordinated the upbringing of children to the good of the political community and did not recognize the existence of an autonomous parental right to shape a child's convictions in accordance with their own system of values [Popper, Gombrich, and Havel 2012, 86-120].

From a historical–doctrinal perspective, the right of parents to raise their children in accordance with their own convictions has been strongly present in the Christian tradition, particularly in the teachings of the Catholic Church, as well as in natural law concepts emphasizing the primordial nature of the family in relation to the state [Warchałowski 2010, 57-65; Misztal 2009, 66-67; Laskowski 1985, 234-45].

However, it was not until after World War II that this right was explicitly formulated at the normative level of international law. It was first expressed in Article 26 of the Universal Declaration of Human Rights of 1948, according to which parents have a prior right to choose the kind of education that shall be given to their children. Although this regulation was general in nature, it constituted a significant point of reference for the further development of international standards for the protection of parental educational autonomy [Szwed and Cała-Wacinkiewicz 2022, 116-17].

A more precise formulation of this right was subsequently included in Article 2 of Protocol No.1 to the European Convention on Human Rights of 1950, which obliges the State to respect the right of parents to ensure such education and teaching in conformity with their own religious and philosophical convictions. Similarly, Article 18(4) of the 1966 International Covenant on Civil and Political Rights imposes an obligation on States Parties to respect the liberty of parents; and, as the case may be, legal guardians, to ensure the religious and moral education of their children in conformity with their own convictions [ibid., 116-18].

A significant clarification of the scope of this right was brought by the 1989 Convention on the Rights of the Child. In accordance with Article 5 of the Convention, the State is obliged to respect the primary responsibility of parents for the upbringing of the child, including the right and duty to provide direction and guidance, as well as parental care, in a manner consistent with the child's degree of development and maturity. This regulation emphasizes the subsidiary role of the state toward the family and the necessity of not infringing upon parental autonomy in the sphere of axiological beliefs. This protection is complemented by Article 29(1)(c) of the Convention, which points to the upbringing of the child in a spirit of respect for its own cultural identity, family values, and traditions [Misztal 2009, 64-75].

At the European Union level, the right of parents to ensure the education and teaching of their children in conformity with their convictions is enshrined in Article 14(3) of the Charter of Fundamental Rights of the European Union. This regulation bridges the freedom to create and run educational facilities with the parents' right to provide their children with an upbringing and teaching that aligns with their religious, philosophical, and pedagogical beliefs. Although the exercise of these rights may be subject to national regulations, it must not lead to violate of the essence of the constitutionally and internationally protected educational autonomy of the family [Wróbel 2013, 398-405].

Under the influence of international law in the 1970s, the right of parents to raise their children in accordance with their own convictions has also begun to appear in more recent constitutions and statutory provisions. In the Polish legal system, Article 48(1), is of fundamental importance, in connection with Article 53(3) of the Constitution of the Republic of Poland, in which the constitution-maker stipulated that parents are entitled to shape the process of their children's upbringing in accordance with their own system of beliefs and values, including religious ones. In accordance with the international legal standards presented above, it was established that the exercise of this right should, however, be carried out with respect for the child's degree of development and maturity, as well as with due regard for the child's autonomy in the sphere of conscience, religion, and their evolving personal convictions [Florczak-Wątor 2023; Kubiak 2023].

In legal literature, the upbringing of a child is understood as a process consisting of shaping their attitudes, evaluations, and value system through the conscious influence of the parents. This includes passing on moral standards, the principles of social coexistence, and ethical models that shape an individual's behavior in their private and public spheres [ibid., 171; Czarnek 2023, 23-40].

However, upbringing is not exclusively of a private nature. It also fulfills a social function, influencing the child's preparation for participation in the life of the community and the realization of values protected from the perspective of the public interest. For this reason, parental upbringing rights, although constitutionally protected, are neither absolute nor unlimited in time. As a general rule, it is accepted that the constitutionally protected right of parents to raise their children expires once the child reaches legal majority [Sarnecki 2016].

The extent of parental responsibility is guided above all by the child's welfare, which includes their psychological, and moral growth. While this criterion serves as the fundamental benchmark for evaluating parenting practices, it also justifies state intervention in situations where the exercise of parental rights would lead to a violation of the child's rights or interests. The constitutional manifestation of this protection is Article 72(3) of the Constitution

of the Republic of Poland, which guarantees the child special protection from public authorities [Stanisz and Walencik 2024, 361-79; Ciućkowska 2024, 309; Janik-Skowrońska 2023, 411-26].

Notably, in the Act of 25 February 1964 – the Family and Guardianship Code³ – the right of parents to raise their children in accordance with their own system of beliefs and values is not explicitly stated. This does not mean, however, that such a principle is absent from the legal order, as the national legislator incorporates it indirectly through the legal construct of parental authority. Pursuant to Article 95(1) of the Code, this authority encompasses, in particular, the exercise of care over the child's person and property, as well as the child's upbringing, with due regard for their dignity and rights. On this basis, legal scholarship derives that the legislator assumes the existence of a sphere of parental educational autonomy, although its full normative framework is established at the constitutional and international levels [Kędziera 2023, 105; Sitek 2014, 377].

Article 48(1) of the Constitution of the Republic of Poland establishes the right of parents to rear their children in accordance with their own convictions as one of the fundamental guarantees of family autonomy in a democratic state ruled by law, as referred to in Articles 2 and 7 of the Constitution. This right, although not absolute in nature, defines the constitutional boundaries of state intervention into the axiological sphere of a child's upbringing and education, mandating that the family be treated as an entity primary to public institutions.

At the statutory level, this principle is reflected in the Act of 14 December 2016 – Education Law (Article 1, items 2 and 3, and Article 86), which defines education as a process implemented with respect for the child's age and stage of development, and emphasizes the school's supportive, rather than substitutive, role towards the family. Furthermore, upbringing is defined broadly as supporting a child's development in all dimensions of their personality, which remains fundamentally consistent with the constitutional concept of the best interests of the child and international standards for the protection of family rights.

Simultaneously, however, these regulations reveal a significant tension between the normative assumption of respecting parents' pedagogical autonomy and the practical functioning of the public education system. Allowing the activities of associations and external organizations on school premises, while formally contingent upon the consent of the director and the opinions of the school council and parents' council, in practice leads to a partial shift of the socialization process and the formation of attitudes beyond the real control of parents. Ultimately, these mechanisms do not always ensure parents have

³ Journal of Laws of 2023, item 2809.

real influence over the axiological dimension of pedagogical impact, especially when educational content takes the form of indirect programs, workshops, or digital resources [Jakubowski 2021, 168-72].

In this context, note should be taken of the Regulation of the Minister of Education of 7 April 2025 on the manner of school teaching and the scope of content concerning knowledge of human sexuality, the principles of conscious and responsible parenthood, the value of the family and life in the prenatal phase, as well as the methods and means of conscious procreation included in the core curriculum for general education.⁴ This legislative act has become one of the most debated elements of contemporary state educational policy.

Under the provisions of the above regulations, a new school subject was introduced across primary and secondary education. Its curriculum content is, in essence, strictly aligned with the title established by the legal act. Even at the legislative and implementation stages, this regulation sparked an extensive public debate, including protests from certain parental and civic groups pointing to the strong axiological and ideological component of the new core curriculum.

There is no doubt that the state possesses the constitutional and statutory competence to conduct its own educational policy and to shape curricula within the framework of the public education system. At the same time, however, a question arises regarding the scope of real instruments available to parents in situations where the curriculum content interferes with a child's moral, religious, or philosophical convictions, and thus with the constitutionally protected right of parents to raise their children in accordance with their own value system, as enshrined in Article 48 of the Constitution of the Republic of Poland.

While paragraph 5(1) of the Regulation provides for an obligation to organize information meetings with parents, during which the teacher presents the objectives and content of the curriculum, this mechanism remains purely informative in nature. Consequently, there is a lack of normatively guaranteed instruments that would enable parents to exert a real influence on the form or modification of educational content, particularly regarding its axiological dimension. In consequence, informing parents without the possibility of co-decision-making may lead to a factual weakening of the constitutional right to raise children in accordance with held values, including religious and ethical ones.

As a result, the constitutional guarantee of parents' right to raise their children in accordance with their own value system is at times reduced to a mere formal declaration, while the actual educational process undergoes gradual institutionalization. This phenomenon raises a question about

⁴ Journal of Laws of 2025, item 467.

the limits of permissible state interference in the sphere of child upbringing, and whether the existing legal framework is sufficient to protect the essence of the right arising from Article 48 of the Constitution of the Republic of Poland under the conditions of modern education [Babiuch 2014, 177-98].

2. THE METAVERSE AS A NEW ENVIRONMENT FOR THE EXERCISE AND LIMITATION OF CONSTITUTIONAL RIGHT OF PARENTS TO RAISE THEIR CHILDREN

Modern children's education increasingly relies on the use of ICT tools and artificial intelligence systems, as well as on functioning within virtual social environments, which are gradually becoming an essential element of the socialization and education process.

However, before a deeper analysis can be undertaken regarding the realization of parents' rights to raise their children in accordance with their own value systems within an education conducted in the metaverse, it is necessary to introduce the concept of this new space of human activity itself, as well as the fundamental characteristics of education functioning within it. The metaverse is a multidimensional phenomenon that can be perceived from sociological, psychological, and pedagogical perspectives, as well as from a normative-legal point of view. In the subject literature, it is most commonly defined as a persistent, shared virtual space in which users can engage in social interactions, learn, work, create, and undertake economic and legal activities, typically in real time.⁵

This phenomenon is characterized in particular by immersion – a sense of being submerged in a digital environment, often through the use of VR technology – as well as by continuity of existence (functioning independently of the presence of any specific user), multi-user capability, and the integration of various technologies such as artificial intelligence, blockchain, and digital identities. A significant feature of the metaverse is also the blurring of boundaries between the physical and digital spheres, leading to the emergence of hybrid forms of social and educational activity [Sun et al. 2022, 20].

From a legal and social perspective, the metaverse represents a new space for the exercise of rights and freedoms, but at the same time, it gives rise to new risks, including those related to the protection of personal data, digital identity, digital property, and the best interests of the child. For this reason, it is increasingly analyzed not only as a technological phenomenon but also as a new normative ecosystem [Gupta and Pal 2023, 1-21; Dizaji and Dizaji 2023, 138-51; Orzeł 2022, 312-17].

⁵ UNICEF Office of Research – Innocenti. *The Metaverse, XR and Children: A Rapid Analysis*. UNICEF Innocenti, 2023, pp. 5-6.

Returning to the issue of education conducted within the metaverse, it must be stated that it is not possible, within the scope of this study, to present all the new forms and methods of teaching functioning in this space. For this reason, further considerations will be limited to the three most widespread and representative models of digital education.

The first of these immersive education, which involves learning within a Virtual Reality (VR) environment relies on immersion in a simulated reality – for instance, through a virtual school, a virtual laboratory, or by experiencing life within a specific community [Wojciechowska 2025, 275-93; Selwyn 2016, 23-27; Zuboff 2019, 331-36]. The second approach is Avatar-Based Pedagogy, which involves the learner functioning as an avatar. Within this framework, the student can select their gender, appearance, and identity traits to test various social roles and relationships within the virtual world [Basińska et al. 2012, 229-48]. Lastly, there is algorithm-driven social education, where the algorithm curates educational content and rewards desired behaviors by grading points or unlocking access to further materials [Musiał 2023, 133-45].

What challenges do new metaverse teaching methods create for parents? In the case of immersive education, parents lack access to educational content because it is not delivered through textbooks or traditional curricula. Axiological transmission occurs through lived experience rather than verbal content. The child internalizes values before the parent has a chance to explain or challenge them.⁶

When learning involves avatars, they become tools for children to experiment with identity beyond real-time parental oversight. Consequently, the line between traditional upbringing and digital self-design becomes increasingly blurred. Parents often fail to understand how avatars influence a child's self-esteem, their perception of social roles, and the shaping of their identity through so-called "avatar literacy."⁷

Algorithm-driven social education means parents remain unaware of the criteria used for selecting and prioritizing educational content. They lack insight into which attitudes and values are being rewarded, and they have no access to the algorithmic upbringing program that effectively shapes the child's behaviors and preferences. These are merely selected examples of the challenges parents face in the process of their child's education and socialization within the metaverse [Rola 2020, 159-81; Livingstone and Blum-Ross 2020, 1-28].

These and other forms of metaverse-based education lead to a situation where a significant number of parents lack the necessary competencies

⁶ *Innovating Education and Educating for Innovation*, OECD, Paris 2016, pp. 19-22; Stéphan et al. 2019.

⁷ *Children's Rights in the Digital Age*, London School of Economics, EU Kids Online 2020.

to realistically, consciously, and effectively exercise their constitutional right to raise their children, as specified in Article 48(1) of the Constitution of the Republic of Poland. This specifically concerns axiological competencies regarding experiential education, avatar literacy, and algorithmic competencies necessary to understand the mechanisms of selection, personalization, and prioritization of educational content performed by digital systems and artificial intelligence.

As a consequence, parents are increasingly unable to either fully comprehend or reliably evaluate the pedagogical messaging their child is exposed to. This leads to a weakening of their actual ability to exercise the right to raise their child in accordance with their own value system, despite its formal guarantee at both constitutional and international levels. Even though the metaverse and AI systems are not legal entities, in practice, they perform educational and axiological functions. This leads to the erosion of the actual realization of parents' constitutional right to raise their children.

The findings above serve as a starting point for further analysis of the scope and limits of parents' constitutional rights in the context of digital education. Specifically, they raise the question of whether the metaverse and AI-based educational systems can be considered a new indirect agent of the upbringing process – one that competes with both parents and schools.

3. CONSTITUTIONAL BOUNDARIES OF STATE AND TECHNOLOGICAL INTERVENTION IN CHILD UPBRINGING – TOWARDS A NEW INTERPRETATION OF ARTICLE 48 OF THE CONSTITUTION OF THE REPUBLIC OF POLAND

The considerations presented in the previous sections lead to the conclusion that the constitutional right of parents to raise their children in accordance with their own value system is currently in a state of structural tension. This tension is no longer just a result of the classic state intervention in child-rearing seen in 20th century totalitarian regimes. Instead, it arises from the indirect and diffused mechanisms of influence typical of contemporary democratic states operating in an information society [Bielecki 2020, 17-23, 39-44; Załoga and Bryczek-Wróbel 2023, 716-20].

Unlike the direct forms of educational ideology of the past, contemporary limitations on parental educational autonomy are hybrid in nature. These limitations are shaped simultaneously by the state's normative decisions, such as school curricula and the admission of third-party entities into schools, by the institutional practices of the education system, as well as by the extra-legal yet factually significant impact of digital technologies and algorithms-including artificial intelligence systems and metaverse

environments. These mechanisms do not formally abolish the parents' right to raise their children, but they systematically limit the possibility of its actual exercise [Indelicato 2025, 88].

From the perspective of constitutional law, a question of particular significance arises: whether Article 48(1) of the Constitution of the Republic of Poland – hitherto interpreted primarily in the context of the relationship between parents, the state, and the school – remains sufficient to protect the educational autonomy of the family in a situation where a significant part of the socialization process and shaping of attitudes is shifting to digital environments that remain outside direct public control. The metaverse and AI-based educational systems – although lacking legal personality – in practice perform pedagogical and axiological functions, influencing the child's identity, their hierarchy of values, and their perception of social roles [Bielecki 2020, 15-18].⁸

In this sense, one can speak of the emergence of a new, indirect educational agent – one that is neither the parent, the school, nor the state in the classical sense, but rather a product of the interaction between technology, the market, and cultural norms. This phenomenon carries significant implications for constitutional interpretation: the protection of the parents' right to raise their children cannot be limited to a formal prohibition of direct interference. Instead, it should also encompass a state obligation to create legal frameworks that prevent the factual erosion of this right [Bielecki, 2020, 30-33].

From the perspective of human rights standards – particularly the case-law of the European Court of Human Rights – the right of parents to raise their children in accordance with their own convictions requires not only formal recognition but also a real possibility of influencing the axiological dimension of the child's education and socialization. If technological development leads to a situation in which parents are able neither to identify nor to evaluate the educational content affecting their child, the protection afforded by Article 2 of Protocol No.1 and Article 8 of the ECHR becomes illusory.

Consequently, the metaverse and artificial intelligence systems can no longer be perceived solely as neutral educational tools. From a constitutional perspective, these systems constitute a new field of conflict between the autonomy of the family and the state's obligation to protect the best interests of the child, requiring profound reflection on the scope and content of the parents' right to raise their children in the 21st century. The focus of this reflection shifts from the question of *whether* the state may interfere in upbringing, to the question of *what* legal mechanisms are necessary to prevent implicit and technologically mediated interference in the axiological sphere of the child's upbringing by the parents?

⁸ Folgerø and Others v. Norway, 15472/02, ECHR 2007, points 84-102.

4. CONCLUSIONS DE LEGE LATA AND DE LEGE FERENDA - CONSTITUTIONAL PROTECTION OF PARENTAL EDUCATIONAL AUTONOMY IN THE AGE OF AI

4.1. *Conclusions de lege lata*

An analysis of the prevailing constitutional, international, and EU regulations leads to the conclusion that the right of parents to raise their children in accordance with their own convictions remains formally well-protected; however, this protection is increasingly declarative rather than functional in nature.

Under Polish law, Article 48(1) of the Constitution of the Republic of Poland, interpreted in conjunction with Article 53(3) and Article 72, establishes a negative obligation on the state to refrain from arbitrary interference in the axiological sphere of upbringing. The case-law of the Constitutional Tribunal consistently emphasizes that the family is an entity primordial to the state in the process of child-rearing, and interference by public authorities may occur only when necessitated by the best interests of the child or the protection of the rights. However, the constitutional interpretation to date was developed within the realities of an analogue education model, in which the school and the state constituted the primary sources of potential interference.

A similar limitation is evident in the case-law of the European Court of Human Rights concerning Article 2 of Protocol No. 1 to the ECHR. The Court emphasizes the state's obligation to maintain ideological neutrality and to ensure that parents have a real possibility to object to indoctrination. At the same time, however, the ECHR has yet to develop standards regarding indirect, technologically mediated educational influence, in which axiological content is conveyed not by a teacher or a curriculum, but by algorithms and immersive environments.

At the European Union level, the protection of the right of parents to ensure the education and teaching of their children in conformity with their own convictions was confirmed in Article 14(3) of the Charter of Fundamental Rights of the European Union. At the same time, however, EU regulations concerning digitalization and artificial intelligence – in particular the AI Act – focus on user protection, system safety, and risk management, without explicitly addressing the relationship between technology and the constitutional rights of the family. As a result, parental rights remain outside the direct scope of technological regulations, even though it is these very technologies that increasingly shape the socialization process of children.

4.2. *Conclusions de lege ferenda*

The aforementioned findings lead to the conclusion that a reinterpretation of the constitutional right of parents to raise their children is necessary

– one that is adapted to the realities of a digital and algorithmic society. The reinterpretation should not lead to a restriction of this right, but rather to its functional strengthening, so as to preserve its real, and not merely formal, character [Stecko 2017b, 210].

Firstly, at the constitutional and doctrinal level, it is justified to hold that Article 48 of the Constitution of the Republic of Poland encompasses not only protection against direct state interference but also the state's obligation to counteract structural and technological mechanisms that displace parents from the upbringing process. Consequently, this implies the necessity of considering the impact of educational platform algorithms and metaverse environments when assessing the compliance of public authorities' actions with the Constitution [Ziegler, Eichner, and Cahn 2023, 3].

Secondly, at the statutory level, consideration should be given to introducing real participatory instruments for parents in the field of digital education that go beyond a purely informational model of consultation. The right to raise children in accordance with one's own convictions requires not only knowledge of the content affecting the child but also the possibility to co-determine such content or to refuse participation in specific forms of digital education [Jaroszevska 2024, 5].

Thirdly, at the level of European Union law, it is justified to supplement AI regulations with the perspective of family and children's rights, treating educational AI systems and immersive environments as areas of high constitutional risk. The AI Act could thus serve as a foundation for developing standards of axiological transparency for algorithms used in children education [Gasparri and Tesi 2025, 291-313].

FINAL CONCLUSIONS

From the perspective of international law, constitutional law, and human rights standards, the dynamic development of digital technologies – including immersive environments known as the metaverse – requires a reassessment of the effectiveness of guarantees regarding the parents' right to raise their children in accordance with their own convictions. Article 2 of the First Protocol to the ECHR, traditionally interpreted as an instrument protecting parents from direct state interference in educational content, does not fully account for situations where axiological messaging is delivered indirectly through algorithms, personalization mechanisms, and the digital architecture of the educational environment. Under such conditions, the state may maintain a formal – and at times merely apparent – ideological neutrality; however, the child's socialization process is increasingly shaped by technological entities and machine learning models, remaining beyond the effective control of parents.

A similar tension can be observed at the level of national law. Article 48(1) of the Constitution of the Republic of Poland was shaped within the paradigm of parent-state-school relations characteristic of analog education. Meanwhile, digital education environments based on artificial intelligence systems lead to the weakening of the functional effectiveness of the right, despite its unquestioned normative status. An additional factor limiting the effectiveness of this constitutional guarantee is the insufficient preparedness of parents to understand and monitor the technological mechanisms that influence the upbringing process.

Consequently, it seems justified to formulate a postulate based not so much on the redefinition of Article 48 of the Constitution of the Republic of Poland, but rather on its extended functional interpretation that takes into account the realities of algorithmic education. This interpretation should be linked to the “human oversight” standard provided for in the AI Act, so as to provide parents with real and enforceable instruments for supervising artificial intelligence systems that impact the axiological sphere of a child’s upbringing.

The protection of international and constitutional parental rights in the 21st century thus requires a shift in focus from the control of educational content to the control of the technological architecture of the upbringing process. Only by extending legal reflection to algorithms, personalization models, and the design of digital environments will it be possible to preserve the real, rather than merely declaratory, autonomy of the family in the conditions of digital transformation [Holzinger, Zatloukal, and Müller 2025, 59-62].

This is not a matter of opposing technology to the family, nor of hindering educational innovation; rather it is about restoring the constitutional balance between family autonomy, state responsibility, and the influence of private entities shaping the digital space of socialization. For if the upbringing process is increasingly shifting to environments designed by algorithms, the lack of adequate legal instruments may lead to the erosion of the real substance of parental rights, while maintaining their formal, declaratory character. In this sense, the challenge is not the digitalization of education itself, but rather a constitutional interpretation of its impact on the relationship between family, state, and technology.

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