

Received: August 2024  
Accepted: December 2024  
DOI: 10.7862/rz.2024.hss.40

Robert CIBOROWSKI<sup>1</sup>  
Karolina TRZASKA<sup>2</sup>  
Marian ZALESKO<sup>3</sup>

## LIBERTARIAN PREMISES OF KNOWLEDGE COMMERCIALIZATION IN HIGHER EDUCATION INSTITUTIONS

Academic freedom is part of the multi-faceted discourse on liberty. Enabling universities to fulfill their core mission of advancing knowledge is a fundamental element of pursuing academic freedom. The purpose of this article is to analyze the issue of academic freedom, including the conditions and processes involved in conducting research and accomplishing the objectives of higher education. Key factors in the process of knowledge production and commercialization include historical background, perception of independence paradigms, adopted university management models, and the size and structure of funding. Among the crucial premises for the commercialization of knowledge in higher education are the sense of community within the academic environment and accumulated past funding (related to the "Matthew Effect").

**Keywords:** knowledge commercialization, freedom, higher education.

### 1. INTRODUCTION

The 21st century presents an enormous challenge to developing economies (to which Poland belongs) as their socio-economic systems have been undergoing intense transformation. The rapid pace of change is most evident in the service sector and high-tech industries. Another cycle of Schumpeterian "creative destruction" is becoming increasingly apparent. The overall scope of these changes also impacts the structure of higher education sector, knowledge creation and commercialisation, but also the role of higher education in the global transformations.

What has become a "catalyst" for these transformations is knowledge, accelerating with the increasing globalisation of the world's economy. Economies have become more open, and greater competition has necessitated higher levels of innovation. At the same time, a number of political and economic transformations in the worldwide economy caused by

---

<sup>1</sup> Robert Ciborowski, University of Białystok, Poland; e-mail: r.ciborowski@uwb.edu.pl (corresponding author). ORCID: 0000-0002-5562-342X.

<sup>2</sup> Karolina Trzaska, University of Białystok, Poland; e-mail: k.trzaska@uwb.edu.pl. ORCID: 0000-0002-9927-7389.

<sup>3</sup> Marian Zalesko, University of Białystok, Poland; e-mail: mzalesko@uwb.edu.pl. ORCID: 0000-0002-1488-173X.

conflicts or climate change, are driving the need to reconstruct the approach to the role of knowledge. This is most evident in the increasing role of the state, both in the financing of innovations and in determining their directions and scope. The most important actors in the processes of knowledge production and diffusion are universities. Their mode and nature of activity is also changing dynamically.

Importantly, the traditional model of higher education institutions, focused on teaching and scientific research, has been vastly expanded to include elements linked to economic processes. This expansion aims to secure significant financial resources that would supplement budgetary allocations.

Interestingly, while the core mission and nature of these institutions remain unchanged, there is a shift in the expectations of students and potential business partners. The survival of universities will thus depend not only on achieving their primary objectives but also on their effectiveness in integrating more commercial solutions. Either the first or the second process must involve liberty of research.

The purpose of this article is to analyse the issue of academic freedom, including the conditions and processes involved in conducting research and accomplishing objectives in higher education. The article is based on a review of the relevant literature, OECD databases, Scimago Institutions Rankings, and Academic Freedom Indicators. The analysis includes a historical perspective on academic freedom.

## 2. THE ESSENCE OF FREEDOM

Freedom is a multidimensional category. It can be considered from various perspectives, including philosophical, legal, social, political, and economic dimensions. Consequently, the concept of freedom can be examined across various domains of knowledge, such as philosophy, law, political science, and economics. Greek philosophers were among the first to explore this concept. Later, scholars from other disciplines also reflected on it. The notion of freedom has significantly evolved since ancient times.

From a historical perspective, the ambiguity of the concept of “freedom” has led to disputes and the emergence of various viewpoints. For instance, some argue that a truly free individual is one who, guided by genuine knowledge and their own reason, can pursue goals they consider desirable for themselves (Socrates, Aristotle). Other approaches to freedom claim that: it is an inherent right of human beings (Thomas Hobbes); it is a product of cultural, legal, and institutional evolution (Charles Louis Montesquieu); it has a negative character and is defined as the absence of constraints (Thomas Hobbes); it has a positive nature and enables the pursuit of rational goals (Georg Wilhelm Friedrich Hegel); it primarily belongs to the individual and is expressed through their liberties (Benjamin Constant); it should be granted to collectives and serve as a measure of sovereignty (Jean-Jacques Rousseau). Apart from the broad philosophical understanding of freedom, it can also be related to more contemporary categories that emphasise the need to eliminate coercion in the spheres of: morality and religion (John Locke), economics (Adam Smith), and politics and customs (John Stuart Mill) (Przybyła, 2016).

An interesting approach to freedom is presented by Isaiah Berlin, who distinguishes between two concepts of freedom (Berlin, 1994): “negative freedom” and “positive freedom”. Then, he consistently defends the first one as the only one that can be implemented in the “real world”, in which there are constant conflicts of interests, highly differentiated conceptions of the good and competing human actions. “Negative freedom” is liberty from: interference in private matters, which in turn requires that the power of the

state be limited by a strong legal system. “Positive freedom”, on the other hand, is the freedom to: realise the greater good in history.

To this day, however, a consensus on how to perceive freedom has not been achieved<sup>4</sup>. Nicolas Grimaldi, among others, writes about this, pointing to the ambiguity and even the lack of clarity surrounding interpretations of the concepts of freedom (Grimaldi, 2007). It appears that there exist not only different “theories of freedom”, but also various methodologies for “constructing” these theories, which significantly impact their ultimate form and substantial content (Barwicka-Tylek, 2009).

It is important to understand, as pointed out by Benjamin Constant, that in antiquity, freedom did not mean the same as it does in modern times (and at present). The freedom of the ancient era encompassed everything that ensured citizens a significant role in exercising social power. During that period, philosophers were the only group of people that demanded a certain kind of individual independence. However, the independence of philosophers did not by any means resemble the individual freedom to which contemporary society aspires. Their independence consisted in the ability to renounce all worldly joys and emotions. Independence of modern people is important because it provides them with pleasures and accommodates emotions. Apparently, the progress of humanity resembles the development of an individual. The freedom that has been developing since the onset of modern times is what guarantees citizens independence. The ancients, in keeping with their disposition, primarily sought action, and this need for action was well-aligned with a substantial degree of social power. In contrast, modern individuals seek peace and the pleasures of life – benefits of personal independence – and for them, freedom consists in the guarantees ensured by institutions (Constant, 1980; 1992).

Institutions are the ‘rules of the game’ that establish structures by means of which people have historically created an order that has allowed them to reduce the uncertainty associated with economic activity (North, 2002). It is also important to note that institutions represent a historically shaped collection of stable principles, manifested in traditions, customs, or laws. Their role is to implement and enforce patterns of behaviour that govern social relations (Ménard, 1995).

In the institutions thus defined, certain rules of freedom are embedded within which modern societies operate: 1) freedom of action, provided that it is harmless or neutral; 2) freedom of opinion, which entails that individuals should enjoy the right to hold and express their opinions, whether personal or public, as long as this freedom does not lead to harmful behaviour; 3) freedom to manage one’s property and to practice one’s profession without infringing upon the rights of others who have the same freedoms (Constant, 1980).

J.S. Mill presented a very interesting approach to the role of freedom. He described it as follows:

In politics, freedom guarantees true democracy; in public debate, it is the guarantee of truth; in the life of an person, it is the condition for the emergence of genuine individuality; in social life, it serves as a criterion that characterises the least conflictual mores and customs; in the sphere of morality, it acts as a safeguard against coercion and anarchy (Mill, 2005).

---

<sup>4</sup> Ch. Montesquieu wrote that there was no other word to which more varied meanings were attributed and which appealed to people in so many different ways (Montesquieu, 1957).

As a society, we yearn for freedom because we have learned to expect it to facilitate the achievement of many of our objectives. Precisely because every individual knows so little and, in particular, because we rarely know which of us knows best that we trust the independent and competitive efforts of many to induce the emergence of what we shall want when we see it (Hayek, 2006). It seems that academic freedom is just such a category.

### 3. DETERMINANTS OF ACADEMIC FREEDOM

The concepts of “academic freedom” and “freedom of speech” have long been subjects of numerous debates. They are often used interchangeably, at times combined under the term intellectual freedom. Academic freedom has evolved from the 12<sup>th</sup>–14<sup>th</sup> century to the contemporary understanding of freedom as scientific inquiry, independent thinking, and the choice of fields of study (Savvina, 2020). In its widely accepted meaning, academic freedom encompasses publishing, research, and teaching activities. Enabling universities to fulfil their fundamental function of developing knowledge should constitute the essence of academic freedom (Evans, Stone, Roberts, 2020).

Based on jurisprudence, the scope of a scholar’s academic freedom relies on broad paradigms of independence, including economic, institutional, social, and professional independence. Therefore, for the paradigm of independence to be realised, the following conditions must be present (Butler, Mulgan, 2013):

- Freedom of research – absence of economic (financial) pressures that dictate research in a specific, predetermined direction. The possibility to accomplish goals through an unbiased quest for truth.
- Institutional independence – universities should provide environments conducive to creativity, experimentation, and knowledge transfer. Institutions ought not to impose methods, syllabuses, research scopes, or ways of disseminating research outcomes, although they can oversee adherence to fundamental standards;
- Ability to conduct research contrary to popular sentiment and social consensus;
- Occurrence of valuable “curiosity-driven” or “blue-sky” research, which are the cornerstones of knowledge advancement.

At the same time, certain limitations should be noted. Academic freedom involves the independence of exploring ideas and concepts by an individual in the capacity of a member of the academic community. It follows that individual independence and credibility should be based on academic qualifications (Barrow, 2009). Academic freedom is also constrained by Cartesian rationalism and the Western modes of thought (Lynch, Iwanczewska, 2016).

The perceptions of academic freedom vary depending on the university model. These models have evolved from traditional ways of knowledge creation, through entrepreneurial and relational ones, to systems involved in generating regional innovation.

The strength of an academic institution can be classified according to the type of its adopted strategy. Therefore, universities can be categorised as research-oriented – Humboldt/Oxbridge and *Ivy-leagues* (Harvard, Stanford, Princeton, etc.); entrepreneurial – MIT and Regionally-based universities (Warwick), and regional ones, such as the land-grant colleges in the USA or specialised training institutions in Europe (Pinheiro, 2012).

One of the management styles employed by universities is the traditional model proposed by Wilhelm von Humboldt. In this model, higher education institutions, striving to achieve academic excellence, engage in research activities based on the freedom to pursue them, which is a fundamental principle of academic life. This approach ensures that

universities maintain a strong academic core with relatively weak connections to the commercial processes.

There are four important reasons for which academic research is not susceptible to commercial imperatives. First, there is uncertainty regarding the utility and applicability of knowledge generated through basic research. Second, new insights often fail to impress experts initially. For instance, the first presentation of Darwin's theory of evolution did not leave a lasting impression on the group of scientist gathered at the Linnean Society meeting in London. Third, scientific solutions do not address contemporary questions or business needs, instead providing solutions to problems that are disconnected from collaborative partnerships. Fourth, funding criteria and the expected research outcomes present a barrier. Institutions that fund the majority of basic research use strictly formalised criteria that can impede the implementation of projects by new (smaller and less experienced) research institutions. Moreover, satisfactory results of research projects are typically measured by scientific publications or patents which often do not correspond to commercial needs.

In the early 1980s, the idea emerged of academic institutions actively participating in regional development. The concept involved building a strategy to incorporate the characteristics of an entrepreneurial university (as proposed by B. Clark and initially exemplified by MIT), while also seeking solutions for knowledge-based organisations. Based on educational, research and service-related linkages, universities are oriented towards partnership and user engagement, in line with the matrix proposed by Donald Stokes, known as Pasteur's Quadrant. According to Stokes, investment in research should be inspired by practical applications, because then it brings the greatest social benefits. This approach entails the highest chances of commercialisation; however, challenges such as securing funding and ensuring the attractiveness of innovation support continue to pose significant barriers.

Institutional and political traditions shape the strategies for higher education funding. The Humboldtian tradition of academic self-government emphasises the freedom of universities from external influence, despite these institutions being subject to stringent administrative regulations. The Napoleonic tradition involves a greater role of the state in the organisation and management of universities. In contrast, a distinctly Confucian model of higher education has developed in Singapore and East Asia (Marginson, 2010). Today, there is a noticeable convergence in political approaches to the funding of educational systems, with most of them being hybrids of these archetypal patterns.

Universities are evolving towards an academic entrepreneurship model that integrates science, education, innovative and research activity with commercialisation (Utanova et al., 2021). For university research to lead to commercialisation, it is necessary to expand the function of academic staff from purely academic researchers to that of founders and managers of enterprises (Qian et al., 2018). Efforts by academic researchers aimed at commercialisation can be divided into three case studies:

- The licensing process – universities participate in research and development as well as in the generation of intellectual property;
- The process of creating companies by universities – employees transition from academic research to founding enterprises but do not oversee subsequent commercialisation;
- The academic entrepreneurship model – the scholar has a dual identity, that of a researcher and an entrepreneur.

In a study by Chalmers University of Technology, a practical implication was proposed that universities should acknowledge alternative modes of academic research commercialisation instead of transforming reluctant researchers into entrepreneurs (Bergren, 2017). This suggests that creating spin-off companies is more advisable than the process of licensing and the dual role of the academic researcher-entrepreneur.

Higher education institutions in English-speaking countries typically operate with considerable autonomy. This stems partly from the distribution of funding sources. European universities are predominantly funded from public sources, whereas in British and American systems of higher education, it is private sources that dominate. In 2020, the highest proportion of expenditure on higher education from private sources was recorded in Great Britain, Columbia, Japan, Australia, USA, Chile, and Korea. At the same time, when examining the structure of funding in the context of the Q1 and Q4 results of the SCIMAGO ranking, no evident impact of the type of funding source on the evaluation of universities can be noticed (see Figure 1).

Furthermore, the opinions of researchers regarding the influence of private funding on academic freedom are divided. On the one hand, more intense co-operation of universities with the business sphere boosts the likelihood of commercial success. On the other hand, it can pose a threat to the impartiality and independence of research (Hugentobler, Müller and Morrissey, 2017). Unfortunately, such risks are rarely taken into consideration within policy frameworks, including quality assurance systems and higher education laws (ENQA et al., 2015).

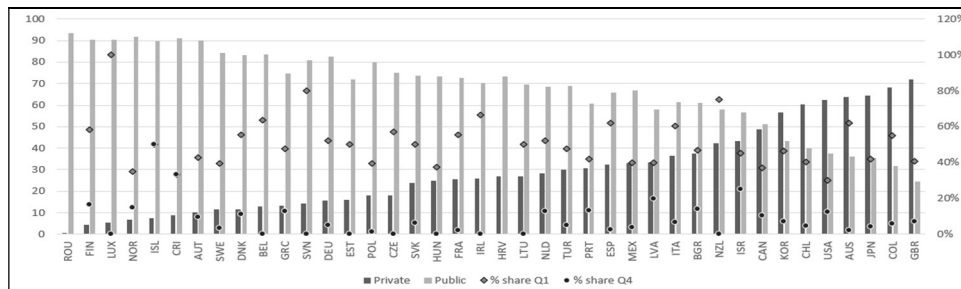


Figure 1. Expenditure on higher education and position in the SCIMAGO ranking in OECD, 2020 or latest available

Source: prepared on the basis of (OECD, 2024) and (Scimago Institutions Rankings, 2024).

Funding systems that rely on increased government support often result in substitution effects and exacerbate problems related to weak co-operation for commercialisation. This phenomenon has been observed in Chinese universities, although it varies depending on the specific university model. What is more, a common feature of a significant number of developing and highly developed countries is the unwillingness of academic employees to collaborate with businesses. This reluctance is caused by evaluation systems that are strongly oriented towards academic achievement (Wang et al., 2020). Universities which produce high-quality research and maintain lasting relationships with the industry sector also generate more inventions. This alone, however, is not enough to make them innovators. The accumulation of past funding has a bearing on the quality of academic research, and state funding is insufficient to close the development gap (Miyata, 2000). Revenues from licences are modest in relation to the research budgets of universities.

Instead of confining their activities to achieving rapid commercialisation results, such as license revenues, inventions, or patents, entrepreneurial universities ought to strive for long-term development through co-operation with industry and clusters.

The Academic Freedom Index (AFI) is a measure that allows for analysis of the aspect under discussion. It is based on five indicators: freedom of academic exchange and dissemination, freedom to research and teach, institutional autonomy, campus integrity, and freedom of academic and cultural expression (Kinzelbach et al., 2023). The global dynamics of individual factors affecting academic freedom are quite similar (see Figure 2). From a historical perspective, the Second World War saw a significantly sharper decrease in the level of freedom compared to the First World War. Between the early 1960s and the mid-1970s, all indicators showed a gradual downward trend. This decline was probably associated with the policies of the Soviet Union, military dictatorships in Latin America, as well as pressures of the Cold War on academic communities. From the 1980s onwards, a substantial improvement in the indicators took place, which accelerated in the 1990s, along with the wave of democratisation and digitalisation. Since that time, academic freedom has stabilised at a relatively high level. Relatively, the highest level of academic freedom is observed in the area of academic research, closely followed by the freedom to do research and teach. Institutional autonomy has been slightly more inert compared to the other factors, and since the 1990s, it has levelled off at the lowest standard. The reason for its lower dynamics is the slow pace of institutional processes. The freedom of expression for academic staff has been the most sensitive to political changes and evolution over time (Spannagel, Kinzelbach, 2023).

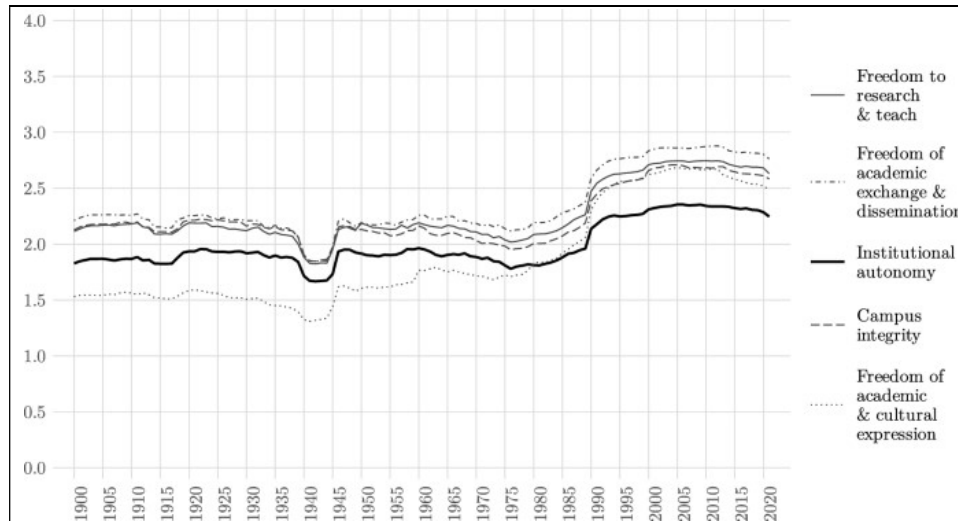


Figure 2. Global Patterns in Academic Freedom Indicators, 1900–2021

Source: (Spannagel, Kinzelbach, 2023).

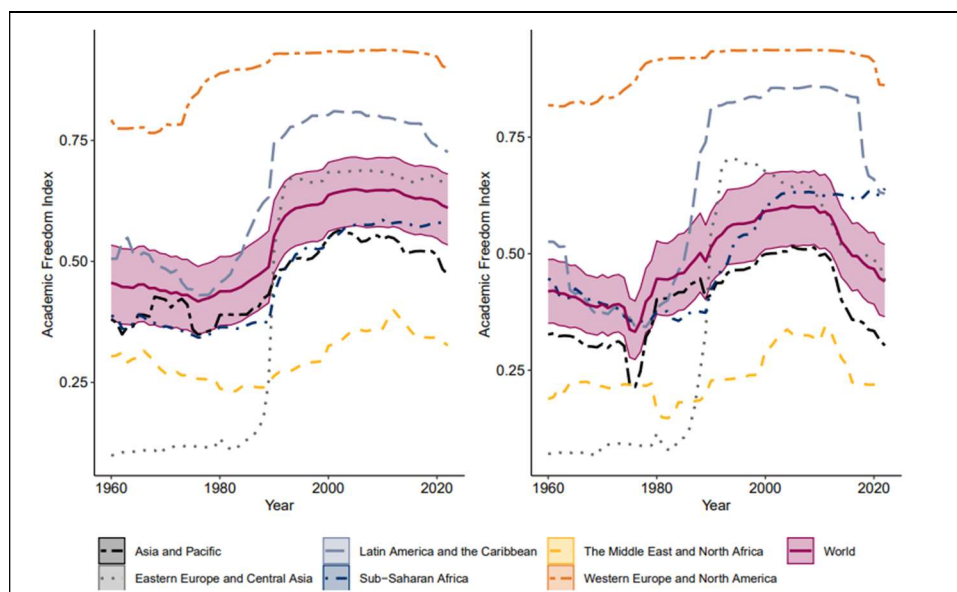


Figure 3. Average global and regional academic freedom indexes from 1960 to 2022

Source: (Kinzelbach et al., 2023).

Considering the national averages, a decline in the level of academic freedom worldwide has been recorded since around the year 2007. The regions most affected by these decreases include: the Middle East and North Africa, Latin America and the Caribbean, as well as Asia and the Pacific. Far more pronounced is the average decline in freedom weighted by population (see the right graph in Figure 3), where all countries (excluding Sub-Saharan Africa) experienced significant drops in the level of freedom (Kinzelbach et al., 2023). It can be noticed that in 2022, an average global citizen experienced academic freedom comparable to those of four decades earlier. The regions with the relatively highest and most stable levels of academic freedom are located in Eastern Europe and North America.

In summary, the assessment of academic freedom depends on a variety of historical factors, the perception of individual paradigms of independence, the adopted university management models, the evaluation of the outcomes of academic activity, the motives and durability of co-operation with the business sector, as well as past and current funding. In many OECD countries, there is a trend towards reducing the role of the state and increasing the autonomy of higher education. Control is exercised through evaluation of results in the areas of education, research, and economic impact. The efficiency of universities is influenced by factors that determine the streams of private, public, and philanthropic funding.

#### 4. CONSEQUENCES OF RESEARCH AND SCIENCE COMMERCIALISATION

A utilitarian justification for academic freedom is the pursuit of knowledge and the enhancement of the value of skilled workers, regardless of immediate outcomes. According to traditional models, the academic environment has never been profit-oriented or driven



by commercial imperatives. It has always been the *raison d'être* of scientists as well as a key element in the advancement of knowledge and the development of society (Butler, Mulgan, 2013).

The preservation of academic freedom within an economic context gives rise to tensions arising from privatisation, instrumentalisation, and commercialisation of knowledge. Traditionally, academic research has served the public good. Admittedly, many ideas have not been commercially exploited due to a lack of high-risk capital; however, freedom from the pressure to achieve short-term goals facilitates research. Conversely, the patenting of products or procedures by other institutions can have a negative impact on the development of academic inquiry (Evans, 2011).

Postmodernism, as a new approach to thinking and viewing higher education in the context of commercialisation, had led to a number of changes, including (Vakhovskiy, Babichev, Ivchenko, 2022):

- A shift in the status and mission of universities – the massification of higher education through increasing its accessibility and lowering the quality of education;
- A change in the status of knowledge – knowledge is increasingly perceived as a commodity, which enforces generation of utilitarian knowledge;
- Evolution of educational strategies – the commercial educational market is developing;
- Emergence of subordinate universities – under conditions of limited funding, today's universities are not autonomous but dependent on the state of the business sector;
- Teaching and research in academia are focused on creating educational and scientific products;
- The transformation of the student-teacher relationship into an egalitarian dialogue;
- Prioritising research that provides immediate benefits (such as applied research and developmental projects).

Contemporary universities are moving away from autonomy and academic freedom. This is part of a broader social crisis, as highlighted by W. Roepke. The rise of an increasingly collectivist state contributes to widespread social massification, which provides a foundation for more radical forms of democracy (Röpke, 1942). This represents a far-reaching consequence of the gradual decline of Western civilisation, manifesting in nihilism, lack of authority, modern cultural trends, and growing secularisation. Social massification, combined with an ultra-democratic system, devoid of liberal and authoritarian safeguards, can lead to radical forms of intolerance and despotism.

Roepke indicates several by-products of massification. First of all, language undergoes a transformation, adopting short, catchy soundbites and other simplistic, sometimes barely comprehensible forms. This is accompanied by a distortion of many concepts, leading to confusion in social discourse. Both language and communication become increasingly primitive. The trend towards proletarianisation of the masses has become evident not only on science, but also in art and culture. At the same time, the value system on which interpersonal relations were based has been eroding, resulting in modifications of the entire economic and social system. As a consequence, there is a deepening spiritual degradation, with means of expression and decision-making mechanisms increasingly centred around emotionalism and the sexualisation of life. Society has become reliant on agnosticism and relativism, which further exacerbates communication challenges.

Restrictions on academic freedom are linked to the creation of modern man, which causes various implications significant from the perspective of a personal freedom. Firstly,

there is a sense of existential emptiness, a longing for integration and closeness, and consequently a quest for ‘narcotics’ (such as radio, television, cinema, mass movements, ideologies, world-improving schemes, fashions, mass sports, peculiarities, messianism), which leads to even greater dependency and a search for security, fundamentally associated with the state. Conversely, there is a marked dissolving of the sense of individualism and personal responsibility (Gasset, 2004).

The expectation of security from the state is somewhat surprising, given that it is very closely associated with increasingly greater control and totalitarianism. Secondly, the so-called “public of industrial agglomerations” has emerged, reflecting the escalating relativism of our times. This phenomenon leads to a lack of critical assessment of certain attitudes and intolerance towards others, creating an atmosphere of self-censorship. Thirdly, we are witnessing a “cult of the colossal”, characterised by a transformation of state interventionism towards socialism or, as some authors suggest, towards a form of feudalism (Kotkin, 2020).

The issues outlined above can be seen as foundational elements of an ideal totalitarian state, whose essential feature is meticulous control over the population. Paradoxically, this process leads to a situation where coercion becomes unnecessary since most people willingly embrace a servile existence.

Restrictions on academic freedom also impact the utilisation of knowledge. Today, information is used far more frequently, but often without thorough examination or verification. Simultaneously, there are no conditions for improving how knowledge is applied. The concept of “industrial freedom”, which in the 19th century facilitated the direct transfers of academic knowledge to companies and the economy, no longer exists. Without it, the benefits of technological applications do not translate into reduced costs, decreased resource consumption, or increased public welfare. We live in an era of applications, when companies need entrepreneurs, engineers, and production managers. Therefore, economies with greater economic freedom and higher entrepreneurship levels are likely to reap more significant benefits from technological development.

Importantly, artificial intelligence will not change this as deep learning – on which it is based – is useful for tasks such as disease recognition, autonomous driving, or translation, but not for creating innovative scientific or research solutions. The shift from discoveries to applications leads to a lack of innovative approaches to research issues, while also reinforcing the greatest asset of the free market: bold entrepreneurs.

In the process of social and economic development, the goals and capabilities of higher education institutions play a crucial role. Currently, universities are characterised by a tendency towards conformity, aligning themselves with immediate demands. As institutions of long standing, today’s universities struggle to connect their past with their future. University education is moving towards practical applications, leading to a focus on novelty and fragmentation of knowledge. This raises a fundamental question: What should be done with education? Education that is often based on superficial erudition, contributory scholarship, textbook knowledge, narrow specialisation, and technocratic attitudes.

Concepts of contemporary universities have been based on commercialisation, ideologisation, and politicisation, often mixed with elements of infantilism and celebrity culture. They are morphing into modern corporations, or centres of business specialisation. This shift is evidenced by the emergence of environments driven by evaluation-based competition (mainly for grants) and the imperative to publish at any cost. The result is a proliferation of publications that are rarely read, and over time, this trend diverts young

talents from intellectual pursuits (such as reading, writing, or lecturing) towards quasi-business activities, including evaluation and application for grants. The race for points and grants should be replaced by a return to the spirit of open discussion, disinterestedness, and a broader, more communal collaboration (Nowak, 2014).

Currently, universities are systematically undermining the instinct for academic freedom “tour court”, while creating conditions for trading this freedom for material goods. To halt this process, it is essential to reconsider several issues, stimulate curiosity, broaden existential horizons, develop intellectual and emotional intelligence, and engage more deeply in culture. It is necessary to eliminate obedient and habitual thinking, weaken the influence of newspapers and the internet, and reject seemingly convenient solutions (Nowak, 2023). And above all, it is crucial to seek the truth since science relies on scepticism and suspicion. In every instance, one should not strive for consensus but rather challenge axioms (Popper, 2002).

## 5. CONCLUSIONS

As Jerzy Wilkin argued,

the strength and durability of universities stem, among other things, from the fact that they combine being large and generally efficient organisations with numerous traditions and social values. Universities are multi-functional institutions, and the roles which they play have are crucial for the sustainability and development of societies. The activities of modern universities, which include conducting research that expands the boundaries of science and providing high-quality education, have become very costly. To be able to afford this, these important institutions must be co-financed from both public and private funds (Wilkin, 2020).

The sense of community within the academic environment is central to fulfilling a university’s mission. This community is rooted in specific values and principles governing the functioning of universities as unique and inherently elite institutions (Wilkin, 2020).

As Albert Einstein once remarked, ‘To raise new questions, new possibilities, to regard old problems from a new angle, requires creative imagination and marks real advance in science’. Achieving this is possible through broadly understood academic freedom, which constitutes the foundation for the effective operation of universities. Freedom, as a vital value in contemporary society, should serve as a basis for universities to fulfil the essential tasks of higher education: the acquisition and dissemination of knowledge grounded in truth.

## REFERENCES

- Barrow, R. (2009). *Academic freedom: Its nature, extent and value*. “*British Journal of Educational Studies*”, 57(2).
- Barwicka-Tylek, I. (2009). *Portrety wolności. Studium z historii idei i postmodernizmu „stosowanego”*. Warszawa–Kraków: Wolters Kluwer.
- Berggren, E. (2017). *Researchers as enablers of commercialization at an entrepreneurial university*. “*Journal of Management Development*”, 36. DOI: 10.1108/JMD-06-2016-0117.
- Berlin, I. (1994). *Cztery eseje o wolności*. Warszawa: Wydawnictwo Naukowe PWN.

- Butler, P., Mulgan, R. (2013). *Can academic freedom survive performance based research funding*. "Victoria U. Wellington L. Rev.", 44.
- Constant, B. (1992). *Spory wokół wolności: idee stare i nowe. O wolności starożytnych i nowożytnych*, „Arka”, 42.
- Constant, B. (1980). *Principes de politique* [In:] Hofmann, E., *Les „Principes de politique” de Benjamin Constant*, Vol. 2.
- ENQA et al. (2015). *Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)*, European Association for Quality Assurance in Higher Education. Brussels, Belgium.
- Evans, D. (2011). *Academic freedom and global health*. "Journal of Medical Ethics", 38. DOI: 10.1136/jme.2010.041251.
- Gasset, J. (2004), *Bunt mas*. Warszawa: Spectrum.
- Grimaldi, N. (2007), *Dylematy wolności*. Kraków: Wydawnictwo WAM.
- Hicks, D. (2012). *Performance-based university research funding systems*. "Research policy", 41(2).
- Hugentobler, M., Müller M., Morrissey F. (2017). *Private funding and its dangers to academia: an experience in Switzerland*. "European Journal of Higher Education", Vol. 7/2. DOI: 10.1080/21568235.2016.1275975.
- Kinzelbach, K., Lindberg, S.I., Pelke, L., Spannagel, J. (2023). *Academic Freedom Index – 2023 Update*. Dostępne na: [https://www.researchgate.net/publication/369109194\\_Academic\\_Freedom\\_Index\\_Update\\_2023](https://www.researchgate.net/publication/369109194_Academic_Freedom_Index_Update_2023).
- Kotkin, J. (2020). *The Coming of Neo Feudalism*. New York: Encounter Books.
- Lynch, K., Ivancheva, M. (2015). *Academic freedom and the commercialisation of universities: a critical ethical analysis*. "Ethics in Science and Environmental Politics", 15(1).
- Marginson, S. (2010). *Higher education in East Asia and Singapore: rise of the Confucian Model*. "Higher Education", Vol. 61/5. DOI: 10.1007/s10734-010-9384-9.
- Ménard C. (1995). *Markets as Institutions vs Organizations as Markets: Disentangling Some Fundamental Concepts*. "Journal of Economic Behavior and Organizations", 28(3).
- Mill, J.S. (2005). *Utylitaryzm. O wolności*. Warszawa: Wydawnictwo Naukowe PWN.
- Miyata, Y. (2000). *An empirical analysis of innovative activity of universities in the United States*. "Technovation", 20(8). DOI: 10.1016/s0166-4972(00)00024-9.
- Montesquieu Ch. (1957). *O duchu praw*, t. I. Warszawa: Państwowe Wydawnictwo Naukowe.
- North, D.C. (2002). *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.
- Nowak, P. (2014). *Hodowanie troglodytów. Uwagi o szkolnictwie wyższym i kulturze umysłowej człowieka współczesnego*. Warszawa: Kronos.
- Nowak, P. (2023). *Szkicownik mizantropa*. Warszawa: Kronos.
- OECD (2024). *Spending on tertiary education (indicator)*. DOI: 10.1787/a3523185-en [Access: 02.01.2024].
- Pinheiro, R. (2012). *In the region, for the region. A comparative study of the institutionalisation of the regional mission of universities*. Ph.D dissertation. Oslo: University of Oslo.
- Popper, K. (2002). *Logika odkrycia naukowego*. Warszawa: Aletheia.
- Przybyła, H. (2016). *Kategoria wolności w myśli starożytnej i średniowiecznej* [In:] Zagóra-Jonszta, U., Pęciak R., eds., *Kategoria wolności w wybranych kierunkach myśli ekonomicznej*. Katowice: Wydawnictwo Uniwersytetu Ekonomicznego w Katowicach.

- Qian, X.-D., Xia, J., Liu, W., Tsai, S.-B. (2018). *An Empirical Study on Sustainable Innovation Academic Entrepreneurship Process Model*. "Sustainability", 10(6). DOI: 10.3390/su10061974.
- Röpke, W. (1942). *Die Gesellschaftskrisis der Gegenwart*, Erlenbach/Zürich.
- Savvina, O. (2020). *Academic Freedom and Contemporary Universities* [In:] *4th International Conference on Culture, Education and Economic Development of Modern Society (ICCESE 2020)*. Atlantis Press. DOI: 10.2991/assehr.k.200316.147.
- Scimago Institutions Rankings (2024). *Overall Rank of OECD Universities* [Access: 02.01.2024]. Access on the internet: <https://www.scimagoir.com/rankings.php?sector=Higher+educ.&country=OECD>.
- Spannagel, J., Kinzelbach, K. (2023). *The academic freedom index and its indicators: Introduction to new global time-series V-Dem data*. "Quality & Quantity", 57(5). DOI: 10.1007/s11135-022-01544-0.
- Utanova, U., Rajabov, K., Inoyatov, K., Marufbaev, B. (2021). *Entrepreneurial Universities as a Modern Development Stage of the University 3.0 Concept*. "Technology". DOI: 10.14704/web/v18si05/web18281.
- Vakhovskiy, L., Babichev, O., Ivchenko, T. (2022). *Postmodernism and the Perspectives of University Education*. "Postmodern Openings", 13(3). DOI: 10.18662/po/13.3/498.
- von Hayek, F.A. (2006). *Konstytucja wolności*. Warszawa: Wydawnictwo Naukowe PWN.
- Wang, Y., Chen, Y., Li, W., Wang, T., Guo, L., Li-Ying, J., Huang, J. (2020). *Funding research in universities: do government resources act as a complement or substitute to industry funding?* "Economic Research-Ekonomska Istraživanja", 33(1). DOI: 10.1080/1331677x.2020.1746189.
- Wilkin, J. (2020). *Znaczenie uniwersytetów w epoce postprawdy*. „Nauka”, 1. DOI: 10.24425/nauka.2020.132622.

