ACADEMIC VALUES AS A BASIS FOR INTERNATIONAL SCIENTIFIC COMMUNICATION

VALORES ACADÊMICOS COMO BASE PARA A COMUNICAÇÃO CIENTÍFICA INTERNACIONAL

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Received: 05 Jan 2023 Accepted: 25 Fev 2023 Published: 10 Mar 2023



Abstract: International scientific communication is acquiring ever greater economic, political and cultural importance, it more and more influences the development of stable international relations not only in the sphere of science and education. The aim of this research is to determine how much international scientific communication is based on academic values. This communication cannot be founded on non-scientific values and interests since that leads to science losing its own criteria of success in scientific activities and, correspondingly, to the loss of science advancement strategy in general. Science cannot adjust itself to extraneous opportunistic interests, on the contrary – it must propose scientific solutions to highly relevant specific practical problems from other social systems - economy, politics, law etc. Therefore, international scientific communication not merely advances the authority of academic values but is itself based on academic values as a guarantee of unfaltering compliance with scientific interests in the development of not only scientific or educational projects but also of those related to industry, defense, culture etc. Over the recent 5

years, scholars of the National Academy of Sciences of Ukraine have been confidently enhancing their participation in international publishing. The percentage of Ukrainian scientists' publications in foreign scientific journals in relation to their publications in Ukrainian ones has increased from 28% in 2018 to 36% in 2022. Neither COVID-19 pandemic nor the full-scale russia's military invasion of Ukraine in 2022 could inhibit this steady growth.

Keywords: Academic values. International scientific communication. Scientific interest. International relations. Publishing activity. Ukraine.

Resumo: A comunicação científica internacional está adquirindo uma importância econômica, política e cultural cada vez maior, influenciando cada vez mais o desenvolvimento de relações internacionais estáveis, não apenas na esfera da ciência e da educação. O objetivo desta pesquisa é determinar o quanto a comunicação científica internacional se baseia em valores acadêmicos. Essa comunicação não pode se basear em valores e interesses não científicos, pois isso faz com que a ciência perca seus próprios critérios de sucesso em atividades científicas e, consequentemente, a estratégia de avanço da ciência em geral. A ciência não pode se ajustar a interesses oportunistas externos, pelo contrário, ela deve propor soluções científicas para problemas práticos específicos altamente relevantes de outros sistemas sociais - economia, política, direito etc. Portanto, a comunicação científica internacional não apenas promove a autoridade dos valores acadêmicos, mas também se baseia nos valores acadêmicos como uma garantia de conformidade inabalável com os interesses científicos no desenvolvimento não apenas de projetos científicos ou educacionais, mas também daqueles relacionados à indústria, à defesa, à cultura etc. Nos últimos cinco anos, os acadêmicos da Academia Nacional de Ciências da Ucrânia têm aumentado com confiança sua participação em publicações internacionais. A porcentagem de publicações de cientistas ucranianos em revistas científicas estrangeiras em relação às suas publicações em revistas ucranianas aumentou de 28% em 2018 para 36% em 2022. Nem a pandemia da COVID-19 nem a invasão militar em grande escala da Rússia na Ucrânia em 2022 poderiam inibir esse crescimento constante.

Palavras-chave: Valores acadêmicos. Comunicação científica internacional. Interesse científico. Relações internacionais. Atividade editorial. Ucrânia.

1. Introduction

The idea of affirming democratic values in education as the basis for implementing and developing democratic values in society is the classics of education philosophy. One of the works by American thinker John Dewey (Dewey, 1916) addressed that issue. However, of no less importance for democracy is the affirmation of academic values as those recognized in society – both in the sphere of education and science themselves and beyond them, in other spheres of social life - politics, economy, law etc. As academic integrity teaches people to be honest not because the deceit will be criticized by others but because honesty guarantees a better result in science, in economy, in politics, in law, and in all other areas as well. If earlier each scholar was proving this truth predominantly for his own country, for its good and prosperity, in today's globalized world, where the phenomena of social turbulence are on the rise, national prosperity can be guaranteed only by the prosperity of the entire global civil society. In this context, the establishment of successful international scientific communication becomes especially important, and that is provided, first of all, by the agreed procedures of such communication [Kubalskyi, 2022]. The procedures of international scientific communication are designed to ensure its transparency and effectiveness, so the affirmation of academic values as the conceptual basis for elaborating these procedures and implementing them plays a high-priority role. Philosophy, however, did not immediately arrive at such, seemingly obvious, conclusion: even now not everyone correctly interprets the classical thesis of German philosopher and sociologist Max Weber concerning the freedom of science from values (Weber, 2015). Other political philosophy classics, such as Carl Schmitt (Schmitt, 2018) and adherents of the "real politics" concept ("Realpolitic", Germ.) (Herwig, 2016) state that values, in general, are worth very little in comparison with the material force of economy and army. Yet, the current situation in Ukraine proves the exact opposite: to protect European values, Ukrainian state and society have mobilized all material and human resources, the European Union, Great Britain, the USA and other leading democracies of the world go to considerable expense for protecting democratic values. The unanimous support of Ukraine by those countries in defending Ukrainian democracy in its struggle against authoritarian russia is based on the support of such policy by the peoples of leading world democracies. Democratic education and academic values as the core of this

education ensure such determination and unity. Academic values are among the principal ones, which proved to be common for Ukraine and the leading world democracies.

Thus, to solve the problem of clarifying the theoretical foundations of affirming academic values as the basis of international scientific communication, it is necessary to consider successively three issues: the role of values in science, the significance of academic values in international relations, and the achievements of Ukrainian science in the affirmation of academic values as the result of more pro-active international scientific communication.

2. The role of values in science

Science must be free from extraneous influences – such basic understanding of academicism was proposed by Max Weber and it is in this sense that he spoke about the freedom of science from values (Weber, 2015). It is difficult to object to the idea that neither science nor education should be under religious, political, economic or any other external pressure. At the same time, values actually influence decision-making by scientists – both for the benefit of science and to the detriment of it (Seifert, 2021; Weinberger, & Bradley, 2020; Wilholt, 2009). Hence, the question should be not about the withdrawal of values from science but, rather, about the skillful and conscious using of values in science – in such a way that academic values should always be the main ones.

In general, the characteristic feature of the academic sphere is that its success depends on the maximum focusing of all those involved on mastering knowledge (Stegenga, 2022). Nothing can inhibit that – this is the essence of the academic sphere. However, to ensure such autonomy, one still has to rely on values – but, primarily, on the values of science and education themselves, viz., first of all, on academic values.

As to the presence of not only values but also of its own special interest in science, that was once classically described by German philosopher Jürgen Habermas (Habermas, 1968).

Modern researchers are unanimous in supporting the important role of values in science. However, they already mean not merely academic values but other ones as well. First and foremost, scholars give attention to the importance of three factors for writing a successful scholarly study and, correspondingly, to the significance of three groups of values for scientist: "The "Knowledge Transfer" model, in its simplest form, has three components: creating the knowledge (doing the research), translating and transferring it to the user, and incorporating the knowledge into uses. (Cooper, 2015: 67). Correspondingly, the values of truth and scientific discovery are not the only ones necessary for scientist's success: also necessary are the values of

comprehension and accessibility (translation and transfer) of the scientific knowledge produced, as well as the applied value of that knowledge.

Yet, it seems important to emphasize that all other values can be taken into account for science and education only on condition that they promote the affirmation of academic values and facilitate the pursuit of cognitive interest. In all other cases the influence of values on science is questionable even from the viewpoint of the context and certainly are harmful in the perspective of strategic advancement of science. In their recent study, American researchers Naomi Oreskes and Erik M. Conway show how illusory and disastrous for scientists is reliance on market demand as a guideline for building the strategy of scientific research (Oreskes & Conway, 2023).

Hence, the pursuance of the values and interests that are extraneous for science and education would make science and education parts of something else – religion, politics, production, struggle for someone's rights etc. In the latter case, science and education would lose their criteria of success, since those would be displaced by the criteria of other social systems. Then science and education would be lost and, in the final analysis, that would not be beneficial to the social systems that want to absorb them: domination of religion in education (as in Iran or Afghanistan), ideologization of education (as it was in Nazi Germany or the USSR), excessive conformity to the canons of political correctness or cancel culture – these and other threats destroy education imperceptibly but inevitably.

As opposed to that, when science from academic positions, with the involvement of education, helps deal with difficult and acute problems of other social systems, this is beneficial to science and education as well as to those social systems. That way, science, education and the entire academic sphere win their well-deserved recognition and achieve true autonomy: other social systems become interested not to hinder science and education in producing the necessary knowledge and practical solutions based on it, which are necessary for those systems.

It is here that the key role of values in science comes to light – to prove the priority of academic values to all others in the cases when science is faced with the tasks of interacting with other social systems.

Although in the social life of every particular country the recognition of the significance of academic values is ever increasing, the importance of some or other values in international life is still considered separately. One can wait, as Kant proposed in his concept of "perpetual peace", for that infinitely distant moment when everyone becomes intelligent and responsible and starts acting in accordance with the rules (Kant, 1795), like scientists faithfully follow the

rules of conducting scientific experiments. But a gradual increase in the influence of academic values on international communication, without waiting for ideal conditions to arise, would be more realistic.

As of today, academic values are important almost exclusively in the sphere of scientific communication and academic exchange (Novitzky, et al., 2020). At a first glance, that is not sufficient for producing an influence on international relations, yet, on condition of firmly following the course taken, we can step by step achieve greater respect for the principles and values of scientific communication as an exemplar of rational behavior. This is stated by researchers who stress the important role of ethical standards in science (Matas, 2018). It is important that scientists themselves should deeply realize their own ethical mission (Oreskes, 2021).

Academic values play an important role in conducting scientific research, especially in publicizing the results of those studies. Gradually, although not very fast, the number of international research projects is increasing. They are mainly based on special grants provided by some states or international organizations. Such projects as the European project Horizon 2020 [European Commission, 2023], as well as Open Science UNESCO project can serve as good examples (Corker, 2018). The European countries involved in the Bologna Process are interacting extensively in the framework of international cooperation in higher education.

Just these few examples are sufficient to see significant achievements and even greater prospects of international integration in the sphere of science and higher education. Of great importance here is to elaborate criteria of performance record for such integration, which is to be based on international scientific communication (Winsberg, et al., 2014).

In the future, participants of these international scientific projects, especially international projects in higher education, will be the agents of change in other spheres of social life – economy, politics, law, the sphere of art and culture. For that, scholars should make efforts to gain trust in society (Oreskes, 2019). Then scientists as the agents of change would come to new spheres with their own experience of successful international cooperation and would strive for sharing that experience in new areas of activities.

However, this influence would not be direct and immediate. Besides, such influence could be related to the personal features of these agents of change rather than to the special influence of academic values.

So, special international programs are needed. In them, from the very beginning, international scientific and educational communication would be directly related to specific

economic, political, cultural and other projects – such as dual education and other forms of training necessary specialists for economy, politics, the sphere of culture etc., which are involved in production. These could also be academic projects whose stakeholders would be representatives of transnational corporations from various countries, international NGOs of various directions (from human rights defenders to environmentalists), local self-government bodies and local communities of various countries etc. To some extent, such programs are elements of the UN comprehensive plan "Transforming Our World: the 2030 Agenda for Sustainable Development" (United Nations, 2023). Yet, this plan is only a frame structure that needs specific local content.

Also necessary are special programs for advancing academic values as important criteria for evaluating the success of international cooperation. Such advancement programs must also be multi-subject ones and include not merely general popularization of science and higher education – they should engage general public in discussing certain socially important academic projects, as well as considerably broader participation of experts from the academic sphere in various decision-making groups for socially important issues, their broader involvement in supervisory boards and public councils, other advisory and control bodies, both state-run and private. This necessitates respective political decisions that are to be accompanied by changes in national legislations and international law.

3. Achievements of Ukrainian science in the establishment of academic values as a result of more pro-active international scientific communication

With a view to enhancing the importance of the international scientific activity of scholars for establishing the value-related basis of stable international cooperation, in general, it is worth to focus on the data concerning the more pro-active activities of researchers of the National Academy of Sciences (NAS) of Ukraine in the international scientific area. As an example, we will consider the publication activity of the associates of the NAS of Ukraine over 5 recent years and provide its comparative analysis in the context of the major social changes in Ukraine and the world in this period.

Ukrainian scientists support wide international contacts with their foreign colleagues, in particular, they publish the outcomes of Ukrainian scientific studies at foreign publishing houses and in foreign scientific journals. E.g., nearly one sixth of all scientific monographs prepared in the reporting year, foreign publishers issued 41 titles (16%) of the scientific monographs by NAS scholars. The majority of books were issued by European publishers (National Academy of

Sciences of Ukraine, 2023, p. 463). The monographs were mainly published in countries of the West – the majority of them in Europe, some in the USA, but some also in countries of the East – in China and Uzbekistan: "... in collaboration with scientists of Germany, Poland, Mexico and Pakistan, published were monographs... Scientific monographs of Ukrainian scholars were also issued in China, Denmark, Germany, Great Britain, Hungary, Moldova, the Netherlands, Poland, the USA, Uzbekistan" (National Academy of Sciences of Ukraine (2023). The situation with the publication of scientific articles in foreign journals is nearly the same.

Besides, National Academy's own journals support close cooperation with their foreign colleagues. The majority of them are included in various international scientometric bases, and foreign scientists are members of their editorial boards. In particular, 62 (22%) of Academy's editions are included in leading scientometric bases Web of Science and Scopus. 14 journals are reissued by foreign publishers" (National Academy of Sciences of Ukraine (2023).

Interesting data on the dynamics and scope of the publication activity of research associates of the National Academy of Sciences of Ukraine over the recent 5 years can be found in the report.

Table 1 The dynamics and scope of the publication activity of research associates of the National Academy of Sciences of Ukraine

Year	Books		Monographs		Scientific articles	
	Titles	Volume	Titles	In	In total	In particular,
		Accounting		particular,		in
		and		those		international
		publishing		published		journals
		sheets		abroad		
2018	553	10125.2	438	71	18466	5188
2019	574	9644.8	425	55	17296	5222
2020	477	8144.2	372	66	15303	4873
2021	550	10229.7	428	73	15476	5299
2022	344	5415.6	264	41	13733	5013

Source: National Academy of Sciences of Ukraine (2023).

Table 1 shows a certain rise of publication activity of research associates of the National Academy of Sciences of Ukraine in the recent 5 years, which was accompanied by two noticeable downturns – in 2019 in connection with the beginning of the COVID-19 pandemic, and in 2022 – in connection with russia's full-scale military aggression on the territory of Ukraine. The first recession was overcome quite quickly due to scientists' adaptation to the transfer to

predominantly remote scientific communication, but the other recession resulted from the situation when a large number of Ukrainian scientists either had to flee abroad due to the war, migrate from the zone of hostilities to the west of Ukraine or they abandoned research and started military service in the Armed Forces of Ukraine or other structures. In any case, in 2022 a large part of Ukrainian scientists was forced either to suspend or significantly reduce their research activities.

At the same time, if one looks at the relative numbers rather than absolute ones, the situation with publishing research results in foreign editions and international journals appears more optimistic.

Table 2 Publishing research results in foreign editions and international journals

Year	Percentage of monographs	Percentage of articles published in		
	published abroad	international journals		
2018	16.2	28.1		
2019	12.9	30.2		
2020	17.7	31.8		
2021	17.0	34.2		
2022	15.5	36.5		

The percentage of monographs issued by foreign publishers in 2022 decreased much less than in 2019. And the percentage of scientific articles published in foreign journals did not decrease even under the influence of the two unfavorable factors (COVID-2019 pandemic and the full-scale military aggression of russia against Ukraine).

Such steady dynamics of publishing the results of scientific activities of NAS research associates can be explained by the corresponding policy of Academy leadership aimed at encouraging such publications, as well as the confident accession of Ukrainian scholars to the European scientific area. In general, a conclusion should be made that the orientation towards academic values helps Ukrainian scientists advance their professional activities even under very unfavorable social circumstances.

The acknowledgement of the scientific results of researchers from Ukraine by foreign journals and foreign publishers not only shows the recognition of the high quality of the academic achievements of Ukrainian scholars but also is the establishment of increasingly broader and deeper international scientific cooperation of Ukrainian and foreign researchers on the basis of academic values. All that promotes political, economic, legal and cultural relations of Ukraine with the world. But it also promotes more efficient Ukraine's cooperation in military

theory and military technologies with the countries that are leaders in scientific and military dimensions.

4. Conclusion

Academic values play an increasing role in building stable and constructive international relations, in particular due to their beneficial influence on the development of democratic values as the basis of international cooperation. The supremacy of academic values is indisputable for the sphere of science and education: all other values there are to be subordinated to academic values. This ensures the autonomy of scientific research. Such autonomy is strengthened when the results of scientific studies and scientific discoveries contribute to the solution of concrete practical problems of other social systems – economy, politics, law etc. In international relations, academic values can play a much greater role than they do now: the success of framework international programs such as the European program Horizon 2020, and UNESCO Open Science project, as well as the perspective UN plan "Transforming Our World: the 2030 Agenda for Sustainable Development" necessitates the development of national programs for advancing academic values not merely as the program of appropriate modern support to science and education but as the program of scientifically backed long-term- social development. A certain progress in this respect is witnessed in Ukraine. In particular, over the recent 5 years, the percentage of scientific publications of research associates of the National Academy of Sciences of Ukraine in foreign scientific journals has been rising. This demonstrates the expansion and deepening of international scientific cooperation of Ukrainian researchers. However, there still is an unrealized potential - both in advancing academic values within Ukraine and in involving Ukrainian scientists to various educational, economic, political, military, cultural and other international programs.

References

National Academy of Sciences of Ukraine (2023). Report on the activities of the National Academy of Sciences of Ukraine in 2022. Kyiv: **Akademperiodika.** 593 p.

Cooper I. Diane. (2015). How to write an original research paper (and get it published). **Journal of the Medical Library Association,**103(2):67-8. doi: 10.3163/1536-5050.103.2.001

Corker, K. (2018). **Open Science is a Behavior**. Center for Open Science. https://www.cos.io/blog/open-science-is-a-behavior

Dewey, J. (1916). **Democracy and Education. An Introduction to the Philosophy of Education.** New York: The MacMillan Company. 434 p.

European Comission. (2023). **Horizon 2020**. https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-2020 en

Habermas, J. (1968). Erkenntnis und Interesse. Frankfurt: Suhrkamp Verlag. 368 S.

Herwig, Holger H. (2016). The Demon of Geopolitics: How Karl Haushofer "Educated" Hitler and Hess. Rowman & Littlefield Publishers. 292 p.

Kant, Immanuel (1795). **Zum ewigen Frieden: ein philosophischer Entwurf** (1 ed.). Königsberg: bey Friedrich Nicolovius. doi:10.3931/e-rara-25308

Kubalskyi, O. (2022). Communicative Approach to Determining the Role of Personality in Science. **Anthropological Measurements of Philosophical Research**, 22, 36-48. DOI: doi: https://doi.org/10.15802/ampr.v0i22.271325

Matas, Jesús A. Valero. (2018). Values and science: an analysis the ethics in the science. **Sociology International Journal** 2(3):257–265. DOI: https://doi.org/10.15406/sij.2018.02.00056

Novitzky, Peter, Bernstein, Michael J., Blok, Vincent, Braun, Robert, Chan, Tung Tung, Lamers, Wout, Loeber, Anne, Meijer, Ingeborg, Lindner, Ralf & Griessler, Erich. (2020). Improve alignment of research policy and societal values. The EU promotes Responsible Research and Innovation in principle, but implementation leaves much to be desired. *Science*. Vol 369, Issue 6499. pp. 39-41. DOI: 10.1126/science.abb3415

Oreskes, Naomi. (2021). Scientists Should Admit They Bring Personal Values to Their Work. Value neutrality among researchers is a myth that hurts the public trust of science. **Scientific American**. April 1, 2021. doi:10.1038/scientificamerican0421-73

Oreskes, Naomi. (2019). Why Trust Science? (Princeton, NJ: Princeton University Press). 392 p.

Oreskes, Naomi, Conway, Erik M. (2023). **The Big Myth: How American Business Taught Us to Loathe Government and Love the Free Market** (London: Bloomsbury) 576 p.

Schmitt, Carl (2018). **The Tyranny of Values and Other Texts.** Tr. from German and ed. by Samuel Garrett Zeitlin (Editor), Russell A. Berman (Editor). Telos Press Publishing. 230 p.

Seifert, Vanessa. (2021). Great expectations. How values influence decisions in science. *Chemistry World.* 29 APRIL 2021. https://www.chemistryworld.com/opinion/how-values-influence-decisions-in-science/4013532.article

Spagnesi, Lorenzo. (2023). Regulative idealization: A Kantian approach to idealized models. **Studies in History and Philosophy of Science**, Volume 99, Pages 1-9. https://doi.org/10.1016/j.shpsa.2023.02.002

Stegenga, Jacob. (2022). Evidence of effectiveness. *Studies in History and Philosophy of Science*, Volume 91, Pages 288-295. https://doi.org/10.1016/j.shpsa.2022.01.001

United Nations. (2023). **Transforming our world: the 2030 Agenda for Sustainable Development.** https://sdgs.un.org/2030agenda

Weber, Max (2015). *Weber's Rationalism and Modern Society*, tr. from German and ed. by Tony Waters and Dagmar Waters (New York: Palgrave Macmillan)

Weinberger, Naftali, & Bradley, Seamus. (2020). Making sense of non-factual disagreement in science. Studies in History and Philosophy of Science Part A, Volume 83, Pages 36-43. https://doi.org/10.1016/j.shpsa.2020.01.004

Wilholt, Torsten. (2009). Bias and values in scientific research. **Studies in History and Philosophy of Science Part A,** Volume 40, Issue 1, 92-101. https://doi.org/10.1016/j.shpsa.2008.12.005

Winsberg, Eric, Huebner, Bryce, & Kukla, Rebecca. (2014). Accountability and values in radically collaborative research. **Studies in History and Philosophy of Science Part A,** Volume 46, Pages 16-23, https://doi.org/10.1016/j.shpsa.2013.11.007