

## ORIGINAL PAPER



DOI: 10.26794/2304-022X-2026-16-1-76-88  
UDC 005.94:001.101/893:004.912:347.77/78;303.022;808.1/2(045)  
JEL D22, D83, I23, O32, O34, M10

# Conceptualizing the Phenomenon of Academic Borrowing within the Knowledge Management Paradigm

V.P. Krylov

Financial University under the Government of Russian Federation, Moscow, Russian Federation

## ABSTRACT

The lack of consensus regarding quantitative measures for assessing text originality gives rise to the problem of interpreting the results generated by algorithms of information systems designed to detect academic borrowing in texts, as well as the comparability of expert evaluations of the originality of intellectual outputs. The **aim** of this study is to reveal the nature and essence of the phenomenon of academic borrowing through the methodology of knowledge management. The author considers quality management of the work performed by research units as a new function of knowledge management capable of regulating the quality of scientific knowledge. An original interpretation of the nature and essence of academic borrowing is proposed, distinguishing between its epistemological nature and its ethical-deontological essence. It is demonstrated that the contemporary (1990–2025) discourse on academic borrowing has been shaped by digital transformation and comprises approximately sixty definitions, which the author classifies into three groups. This inventory is conducted with a view to constructing a systematic terminological framework for academic borrowing. The **findings** of the study may be useful to specialists in general issues of the science of science and epistemology; in management studies, particularly in the field of knowledge management, including the organization and supervision of research activities; in the regulation of copyright and intellectual property rights; in the preparation, editing, and processing of academic texts; and to faculty members, students, and postgraduate researchers engaged in these areas, as well as to all those who require skills in academic writing.

**Keywords:** phenomenon of academic borrowing; knowledge producer (knowledge worker); research unit; quality of knowledge; circulation of unreliable knowledge; pistemological nature of academic borrowing; ethical-deontological essence of academic borrowing; semantic field of academic borrowing

**For citation:** Krylov V.P. Conceptualizing the phenomenon of academic borrowing within the knowledge management paradigm. *Upravlencheskie nauki = Management Sciences*. 2026;16(1):76-88. DOI: 10.26794/2304-022X-2026-16-1-76-88

## INTRODUCTION

The informatization and digital transformation of all spheres of life necessitate a reconsideration of the phenomenon of academic borrowing. Alongside the well-known Antiplagiat system in Russia, a number of functionally similar tools have become widespread, including Author.net, Detector-plagiata.ru, Etxt Antiplagiat, Plagiata.NET, Copyscape.ru, Findcopy.ru, Miratools, Istio.com, Advego Plagiatus, Praide Unique Content Analyzer, and Double Content Finder [1, 2]. In 2025, this range was further expanded with the introduction of the {do}mate system.<sup>1</sup> The growing diversity of software solutions has only intensified the challenge of interpreting their results. At present, there is no unified approach to the quantitative assessment of text originality, plagiarism, self-plagiarism, improper and unethical borrowing, or self-citation. Without the harmonization of expert perspectives on these definitions, it is impossible to standardize procedures for the expert evaluation of the originality of intellectual outputs (IO).

In this context, we consider it essential to conduct a systematic analysis of the phenomenon of academic borrowing within the framework of knowledge management.

## PROBLEM STATEMENT AND RESEARCH METHODOLOGY

A comprehensive understanding of the nature and essence of the phenomenon of academic borrowing is most effectively achieved from the perspective of knowledge management (KM). In earlier historical periods, reflections on knowledge were primarily the domain of theoretical philosophers, who engaged with the issues within the fields of epistemology and gnoseology. At the same time, a materialist analysis of world culture led to the conclusion that knowledge emerges autonomously under

conditions of creative freedom exercised by the individual in the process of understanding the world. A fundamental shift in perceptions regarding the very possibility of managing cognitive activity occurred in the second half of the twentieth century. This shift was driven by the recognition of the economic value and utility of knowledge, as well as by the growing awareness that knowledge itself can be subject to management.

## THE QUALITY OF RESEARCHER'S WORK

In 1979, Peter F. Drucker, a leading authority in management theory, introduced the concept of the “knowledge worker” into scholarly discourse [3]. He was among the first to argue that the performance of knowledge producers should be evaluated not by the volume of labor expended, but by the quality of the outcomes achieved [4–6].

As a functional domain, KM initially emerged as the management of organizational knowledge in the context of creating and delivering commercial goods and services. The knowledge-based theory of the firm, proposed in 1996 by Robert M. Grant [7], continues — nearly three decades later — to shape the research agenda in this area of management science [8]. At the threshold of the second quarter of the twenty-first century, the universal applicability of the KM paradigm has become increasingly evident, extending to organizations of all types, including research institutions and universities<sup>2</sup> [9–12].

The present study focuses on so-called research units: individual scholars or groups engaged in collaborative scientific activity and producing new academic knowledge. It should be noted that, to date, in the fields of science and higher education, KM tools have been applied primarily to organizational knowledge.

<sup>1</sup> An intelligent system for the analysis of scientific and educational texts. URL: <https://www.domate.ru/>

<sup>2</sup> Blyumin, A.M. Knowledge management in research activities: a textbook. Moscow: Dashkov and Co. 2022, 296 p.

We argue, however, for the introduction of an additional function of knowledge management — namely, quality management of research work produced by such units.

This argument is grounded in two key considerations. First, it concerns human resources. As early as 2003, the prominent economist Boris Milner observed that “knowledge management is based on the capabilities of modern information technologies and human resources” [13]. Autonomy, reflexivity, and the capacity for self-management were identified by P. Drucker — apparently proceeding from a presumption of good faith — as defining characteristics of knowledge workers. However, empirical practice demonstrates that such individuals may engage in delinquent behavior, including various forms of copyright infringement and academic misconduct. The scale of this phenomenon has now reached a point where isolated incidents are evolving into a systemic challenge to the reliability and integrity of scientific knowledge.

The second consideration arises from the expanding capabilities of contemporary information technologies, particularly those associated with artificial intelligence (AI). Its appeal as a technical assistant to research units is certain to increase rapidly and may ultimately pose a significant risk to science, given AI’s current limitations in reliably assessing the validity of knowledge — unless timely preventive and mitigating governance mechanisms are established. In the pre-digital era, unreliable scientific knowledge, often associated with delinquent practices, once introduced into academic circulation, tended to remain marginal and gradually fade into obscurity. In contrast, in the context of digitalization, such knowledge is far more likely to be disseminated widely and to become uncontrollably intertwined with verified facts. Without purposeful and sustained counteraction, this trend will inevitably lead to the contamination and, ultimately, the devaluation of the corpus of scientific knowledge. Accordingly, to effectively anticipate and miti-

gate the adverse consequences of delinquent behavior by research units in the context of digitalization and the advancement of AI technologies, it is essential to develop a modern system for managing the quality of scientific knowledge.

### MANAGING KNOWLEDGE GENERATION PROCESSES

As early as 1998, Dorothy Leonard and Sylvia Sensiper emphasized that knowledge creation is a social process grounded in personal interaction and interpersonal relationships, through which individuals’ creative potential is realized [14]. In 2007, Vladimir E. Raskov synthesized key parameters of the organizational context and KM instruments, highlighting the autonomy of teams generating new knowledge; the absence of standardized, mandatory rules and procedures; the diversity of cultural and professional backgrounds within autonomous groups; as well as uncertainty and constructive chaos. An organizational culture conducive to knowledge creation is therefore characterized by an orientation toward originality and novelty, a high tolerance for risk, acceptance of errors, and the absence of objectively superior models in the search for new solutions [15].

These universal characteristics, valid within the framework of the knowledge-based theory of the firm, require specific reinterpretation when applied to teams directly engaged in research and development — that is, within higher education and scientific institutions.

It is essential to recognize that managerial attention is primarily directed toward the circulation of so-called tacit knowledge. Defined by Richard Lubit (2001) and David W. DeLong (2004) as the manifestation of experience at an intuitive and largely unconscious level — expressed as a readiness to act in a particular context — this type of knowledge is inseparable from individuals’ life experience, values, beliefs, and emotional domains, which underscores its inherently holistic nature [15].

A structural unit of an organization engaged in research and development may be viewed as a focal point of tacit knowledge aligned with the subject matter and specific features of the research undertaken. It is characterized by an informal environment of scientific creativity and emotionally charged interaction, which together create conditions for the realization of the creative process under a high degree of interpretive freedom. Dorothy Leonard and Dorothy Strauss (2006) argue that the originality and value of collaborative creative inquiry are directly determined by the diversity of participants' expertise, their cultural backgrounds, and the intensity of competing viewpoints [16].

According to J.-C. Spender and Andreas G. Scherer (2007), the essence of knowledge management lies precisely in developing approaches to governing agent-based practices under conditions of uncertainty, with practice understood as the embodiment of tacit knowledge [17]. Finally, Ikujiro Nonaka, Florian Kohlbacher, and Nigel Holden (2006) identify as a key element of KM the distinctive phronetic<sup>3</sup> role of the leader responsible for managing knowledge generation processes. Within this concept — encompassing both practical and ethical dimensions — the leader's capacity to discern the common good and to determine how it may be achieved is of central importance [15].

We, in turn, argue that the phronetic role of the leader of a research team also entails the responsibility to ensure lawful conduct on the part of researchers. Its fundamental principles — respect for human rights and freedoms, avoidance of harm to life and health, and protection of the environment — are enshrined in Russian legislation (Article 4(7) of the Federal Law on Science<sup>4</sup>). Among the most prevalent

violations are infringements of intellectual property rights, the majority of which concern the author's moral (non-property) rights.

It should be noted that the contemporary Russian culture of intellectual property protection has not yet reached full maturity. The law enforcement practice concerning dispute resolution in this area for the period 2004–2022 is comprehensively analyzed in the work of V.N. Lopatin,<sup>5</sup> based on extensive long-term research conducted by the Russian Research Institute for Intellectual Property under the auspices of the Federation Council of the Federal Assembly of the Russian Federation. Nevertheless, the practice of safeguarding authors' personal non-property rights remains largely unexplored. It can be suggested that such protection is sporadic, extremely limited, and constrained by the inefficiency of legal mechanisms, including the absence of mediation procedures — a point rightly noted by V.N. Lopatin. At the same time, the active development of information systems that enable automated text comparison, originality assessment, and detection of borrowed fragments is expected to advance disputes over authorship to a fundamentally new level.

## RESEARCH RESULTS

The originality of intellectual property objects (IPOs) is aimed at protecting the intellectual rights of authors and is assessed using expert evaluation methods. Its specificity is determined by an evident reliance on the subjective judgment of the specialist. An expert's conclusion regarding the degree of originality of an IPO is grounded in the constitutional right of individuals to creative freedom and may serve as a basis for the application of state coercive

<sup>3</sup> Phronesis (Ancient Greek: φρόνησις, Latin: phrónēsis) is a type of wisdom associated with practical action — practical or everyday wisdom (one of the intellectual virtues according to Aristotle).

<sup>4</sup> Law No. 127-FZ of August 23, 1996, "On Science and State Scientific and Technological Policy." URL: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_11507/](https://www.consultant.ru/document/cons_doc_LAW_11507/)

<sup>5</sup> Lopatin, V.N. (2023). On the current state of regulation and law enforcement in the field of intellectual property in the Russian Federation. Current issues of protection of intellectual property rights in modern conditions. Analytical Bulletin of the Federation Council of the Federal Assembly of the Russian Federation. Moscow: Information and Analytical Directorate of the Office of the Federation Council, pp. 7–41.

measures. Therefore, such an assessment cannot be arbitrary and must be objectified to the greatest extent possible through a system of standardized terminology, unified procedures, and verification of the competencies of the experts making the decisions. Furthermore, we argue that legal liability should be established for those who make expert judgments.

As the prominent Soviet linguist A. A. Reformatsky [18, p. 164] rightly noted, terms carry a socially obligatory character, as they reflect socially organized reality. Accordingly, a consensus must be achieved among experts regarding approaches to assessing the originality of IPOs, and the formalized results of this consensus could form the basis for the unification of reports on text similarity checks, including within the “Antiplagiat” system. Additionally, it is important to systematize the terms reflecting the relationships between the corresponding concepts, thereby forming a coherent terminological system.

### THE NATURE AND ESSENCE OF ACADEMIC BORROWING

From a cultural perspective, creativity in all its manifestations is inseparable from borrowing. This appears to be rooted in the social nature of humans. As far back as 2,500 years ago, the ancient Chinese philosopher Confucius stated: “There are three paths to knowledge: the path of reflection is the noblest, the path of imitation is the easiest, and the path of experience is the bitterest.”<sup>6</sup> Imitation — which essentially constitutes borrowing — has permeated all spheres of creative activity since time immemorial. Our focus here is limited to scientific and technical creativity and the associated use of prior results in the creation of new scientific, technical, or educational outcomes — that is, academic borrowing.

<sup>6</sup> Likhtenstein, E.S. *A Word about Science: Aphorisms, Sayings, Literary Quotations*. Moscow: Znanie, 1981, 271:100.

A defining feature of creative outputs is the uniqueness of the resulting product. However, the uniqueness of any given creative product is dialectically grounded in the experience of preceding generations of its creators; thus, every creation contains a measure of universality.

From an epistemological standpoint, S.A. Lebedev (2020) convincingly demonstrated that the structural complexity of scientific knowledge inevitably gives rise to epistemological pluralism [19], caused by the constructive nature of scientific thinking (epistemological basis), the diversity of methods of scientific inquiry (methodological basis), and the fragmentary nature of any scientific theory in relation to its subject matter (logical basis). An unavoidable consequence of the ontological, epistemological, and logical-methodological pluralism of science is the pluralism of truth criteria across domains, levels, and types of scientific knowledge [19].

Moreover, as early as 1996, J.-Ch. Spender proposed the concept of epistemological pluralism as a methodological foundation for knowledge management. He distinguished four types of knowledge that could serve as a basis for developing a knowledge-based theory of the firm: individual explicit, individual tacit, social explicit, and social tacit, emphasizing the latter as having particular strategic value from a knowledge-based perspective [20, 21].

It is likely that social tacit knowledge constitutes the primary “nutrient medium” in which individual explicit knowledge matures and crystallizes, subsequently entering scientific circulation through mechanisms of authorship. In the realm of academic creativity, this knowledge emerges as a result of the dialectical transformation of the general and the particular into the singular. This allows us to assert the epistemological nature of borrowing: as the outcome of imitation and continuity, it is implied in the well-known metaphor of “standing on the shoulders of giants.” The study of the origin of this metaphor brilliantly

illustrates how new individual explicit knowledge is formed and matures within the depths of social tacit knowledge. Our approach to interpreting borrowing as an integral component of knowledge — and as a mode of its existence — requires clarifying its epistemological nature by examining the relationship between the epistemological, gnoseological, and cognitive components in the structure of borrowing.

It is well established that the subject of epistemology concerns the philosophical content and structure of knowledge, whereas gnoseology focuses on the process of knowing. In both cases, intersubjectivity is implied, understood as the shared experience of interacting subjects and the general significance of its results, which enables mutual understanding. Yet, in the “here and now,” only individual knowing subjects — specific humans with specific cognitive capacities — exist. Knowledge acquires the quality of intersubjectivity when it transforms from the individual to the social, passing through three stages of maturation: the cognitive stage, as a product of the mental activity of individual thinkers; the gnoseological stage, as the result of discourse within the thinking society; and the epistemological stage, as a means of reflecting truth. Throughout this process, borrowing is inseparably intertwined with the formation and transformation of knowledge. At the first (cognitive) stage, borrowing most often manifests as imitation. At the second (gnoseological) stage, it appears as continuity between discrete individually expressed ideas of people connected by shared assumptions and views. At the third (epistemological) stage, borrowing embodies the generalized experience of humanity’s understanding of particular objects. Thus, the epistemological nature of borrowing also encompasses its gnoseological and cognitive dimensions. Based on the intersubjectivity of knowledge, we argue that borrowing represents a specific mode of existence of social knowledge.

At the cognitive stage of knowledge formation, due to its intersubjective nature, individual thinkers may independently arrive at identical conclusions. The history of science provides numerous examples supporting this claim, and in sociology, this phenomenon is referred to as “multiple independent discoveries.”<sup>7</sup> Robert K. Merton (1963) defined these as cases in which a discovery was made independently by each working scientist [22]. However, it is important to note a significant practical point: when several researchers working autonomously reach the same conclusion, their works (i.e., the texts of their publications) are never identical. The idea is the same, but the text is not.

The intersubjectivity of knowledge also determines the existence of limits to borrowing. A practically significant interpretation of these limits is provided in Part Four of the Civil Code of the Russian Federation.<sup>8</sup> In our view, the theoretical limit of borrowing is absolute truth.

We posit that within the structure of an individual’s mental activity, processes of imitation and borrowing play a fundamental role, forming the basis of cognitive activity according to the principle of *a posteriori* knowledge (knowledge derived from experience). Only certain individuals, due to exceptional mental ca-

<sup>7</sup> Examples of multiple independent discoveries include the formalization of differential and integral calculus, independently carried out in the seventeenth century by Isaac Newton, Gottfried Wilhelm Leibniz, and other mathematicians; the rediscovery of oxygen in the eighteenth century by Carl Wilhelm Scheele, Joseph Priestley, and Antoine Lavoisier; the law of the physical state of gases, independently formulated in the seventeenth century by Robert Boyle and Edme Mariotte; the independent development of the theory of non-Euclidean geometry in the early nineteenth century by Nikolai I. Lobachevsky in Russia, János Bolyai in Hungary, and Carl Friedrich Gauss in Germany; and the development of the theory of biological evolution in the nineteenth century by Charles Darwin and, independently, Alfred Russel Wallace.

<sup>8</sup> Civil Code of the Russian Federation (Part Four) No. 230-FZ of December 18, 2006 (as amended on July 23, 2025), Section VII, Articles 1259, 1349–1352, 1412–1413, 1448, 1465, 1473. URL: [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_64629/](https://www.consultant.ru/document/cons_doc_LAW_64629/) [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_64629/2bb6d57fd429e6c04ee080e73ceef708aa442fc8/](https://www.consultant.ru/document/cons_doc_LAW_64629/2bb6d57fd429e6c04ee080e73ceef708aa442fc8/)

**An Inventory of Definitions Characterizing the Manifestations of the Borrowing Phenomenon and Present in Scientific Circulation at the Present Stage (1990–2025) (in Alphabetical Order)**

Manifestations corresponding to the natural epistemological nature and ethical essence of academic borrowing	Manifestations contradict the ethical essence of academic borrowing	Phenomena not related to academic borrowing (adjacent polysemous categories)
Conscientious self-citation [25]	Duplicate (multiple) publication [24]	Author self-citation [28–30]
Borrowing established terms (including definitions, anatomical and physiological concepts, classifications) and illustrations [23] <sup>1</sup>	Conscientious self-citation in incorrect form [25]	Bibliometric self-citation (self-citation, rarely self-reference) [28]
Paraphrase <sup>2</sup>	Duplicate publication [25] <sup>3</sup>	Direct self-citation [28]
Republication, reprinting (copywriting) [25] <sup>3</sup>	Borrowing individual words, expressions, text fragments, formulas, plots, ideas [26]	Co-author self-citation [28]
Proper borrowing in correct form <sup>4</sup>	Redundant publication [25] <sup>3</sup>	Self-citation-T (Kurpakov V. Yu.) <sup>5</sup>
Direct quotation <sup>2</sup>	Slicing (fan publication) [24]	Journal self-citation [28, 31]
Self-citation <sup>2</sup>	Multiple submissions, salami slicing <sup>2</sup>	Disciplinary self-citation [28, 32, 33]
Self-citation-T (Kurpakov V.Yu.) <sup>5</sup>	Dishonest borrowing in dissertation work [27]	Publisher self-citation [28, 34]
Citing (Citedness, Citation, Quotation) <sup>2</sup>	Dishonest self-citation (self-plagiarism) [25]	Institutional self-citation [28, 35–37]]
	Unauthorized borrowing <sup>6</sup>	Country-level self-citation [28, 38, 39]
	Unauthorized borrowing (plagiarism) <sup>4</sup>	Fractional self-citation (degree or Jaccard coefficient of self-citation) [28, 40]
	Paraphrase (rewriting) [25]	Self-citation coefficient [28]
	Reworked publications [25] <sup>3</sup>	Self-citation index s [28, 41]
	Gift author <sup>2</sup>	Self-citation rate coefficient [28]
	Proper borrowing in incorrect form <sup>4</sup>	
	Direct copying of publication [25] <sup>3</sup>	
	Self-plagiarism [25]	
Self-plagiarism [23]		

Окончание таблицы / Table (continued)

Manifestations corresponding to the natural epistemological nature and ethical essence of academic borrowing	Manifestations contradict the ethical essence of academic borrowing	Phenomena not related to academic borrowing (adjacent polysemous categories)
Citing (Citedness, Citation, Quotation) <sup>2</sup>	Plagiarism <sup>7</sup>	Self-citation rate coefficient [28]
	Plagiarism [23] <sup>1</sup>	
	Plagiarism <sup>2</sup>	
	Plagiarism (Kurpakov V.Yu.) <sup>5</sup>	
	Very small, small, large, very large plagiarism [26]	
	Idea plagiarism [23, 42]	
	Coded plagiarism [26]	
	Criminal plagiarism (legal reference "Dissernet") <sup>8</sup>	
	Mosaic plagiarism [23, 43, 44] [23, 43, 44]	
	Non-criminal plagiarism (legal reference "Dissernet") <sup>8</sup>	
	Direct plagiarism (verbatim, text plagiarism) [23, 42, 44]	
	Updated plagiarism [26]	
	Meaningful plagiarism [26]	
	Edited and partially edited plagiarism [26]	
Partially clean plagiarism [26]		
Clean plagiarism [26]		

Source: compiled by the author.

Notes: 1 – Based on recommendations of World Association of Medical Editors, WAME), Italy; 2. Kirillova O.V., ed. Methodological recommendations for the preparation and design of scientific articles in journals indexed in international scientometric databases. Moscow: ANRI; 2017. 144 p.; 3 – Based on the analysis of recommendations of Committee on Publication Ethics, COPE), United Kingdom; 4 – Shakhrai S.M., Arister N.I., Tedeev A.A. On plagiarism in dissertations for an academic degree. Moscow: MII; 2015. 191 p.; 5 – Kurpakov V.Yu. Copyright in a modern university: materials of an additional professional development program.; 6 – Belenkaya O.S., Strelkova I.B., Filippova O.A., Chekhovich Yu.V. Methodological recommendations for expert assessment of the originality of dissertation texts in the Antiplagiat system. St. Petersburg: Lan; 2021. 92 p.; 7 – Plagiarism. Large academic dictionary of the Russian language. T. 16. Moscow; St. Petersburg: Nauka; 2011. 638 p.; 8 – The legal concept of plagiarism and some features of its application in practice. URL: <https://www.dissernet.org/about/instructions-and-documents?key=ЮРИДИЧЕСКОЕ%20ПОНЯТИЕ%20ПЛАГИАТА%20И%20НЕКОТОРЫЕ%20ОСОБЕННОСТИ%20ПРИМЕНЕНИЯ%20ЕГО%20НА%20ПРАКТИКЕ.%20СПРАВКА%20ЮРИСТОВ%20«ДИССЕРНЕТА/»>

capacities —specifically, a highly developed level of abstract thinking — are capable of *a priori* cognitive activity (knowledge preceding experience). Thus, in the process of transforming from individual tacit knowledge to social explicit knowledge, knowledge undergoes a distinctive cascade of transformations, similar to the way songs, epic tales, proverbs, and omens were transmitted orally in ancient times. The essence of borrowing, which is both necessary and inevitable in cognitive activity, lies in the fact that the individual who employs it relies on certain principles of morality and ethics, the meaning of which can be summarized by the biblical injunction: “Thou shalt not steal.”

Since Merton, the ethical norms of scientific practice have unequivocally condemned plagiarism and fraud in all their forms and manifestations, leaving no room for justification. Consequently, it is the principles of the scientific ethos that must guide researchers whenever a research unit, working with borrowed material, produces new scientific knowledge. This implies that the natural systematization and classification of academic borrowing can only be grounded in an ethical-deontological principle, namely: 1) respecting scientific priority when presenting facts, ideas, hypotheses, and theories, and acknowledging the sources of one’s scientific and creative inspiration; 2) observing authorship rights and the author’s right to attribution; 3) ensuring the generation of new scientific knowledge as the justification for the borrowing undertaken.

### MANIFESTATIONS OF THE PHENOMENON OF ACADEMIC BORROWING

The contemporary discourse on academic borrowing has developed over the past 35 years (1990–2025), a period during which this issue has reemerged with renewed intensity. In 2016, A.S. Ostrovskaya [23], based on a content analysis of publications indexed in the international Scopus database under the keyword

“Plagiarism,” noted that between 2000 and 2015, the number of publications mentioning the term “plagiarism” increased eightfold; in the field of medicine, threefold; and in non-medical disciplines (including biomedical research), thirteenfold. What explains this exponential growth in publications on plagiarism after 2000?

It is known that in 1994 the WebCrawler service — the world’s first text-based search engine — began operating. From 1995, the AltaVista service allowed users to formulate queries and receive responses in “natural languages” (the user’s native language), with Russian added in 1996. In 2005, domestic users were offered the “Antiplagiat” plagiarism detection system. These developments have significantly enhanced the relevance of the issue of academic borrowing over the past 35 years.

New IT capabilities have revealed its complex phenomenology (the terminological apparatus of academic borrowing comprises approximately 60 concepts) and the considerable inconsistency of existing definitions (see *Table*). Analyses of these definitions show a semantically rich and complex field for the phenomenon of academic borrowing. This is because, within a single semantic space, heterogeneous manifestations coexist: those consistent with the natural epistemological and ethical essence of academic borrowing (citation, paraphrase, proper lawful borrowing, conscientious self-citation, republication); those contradicting it (plagiarism, self-plagiarism, multiple publications); and finally, phenomena not strictly belonging to academic borrowing but semantically related due to polysemy.

In conducting an inventory of the definitions of the phenomenon of academic borrowing, our goal was not to trace the natural evolution of each term. Rather, we selected from this set a circle of concepts deemed necessary and sufficient for an expert to prepare relevant managerial decisions. We hope to continue this work by describing the methodological

apparatus of academic borrowing, elucidating the specifics of its main manifestations, analyzing the polysemy of the most significant definitions, and proposing a classification of academic borrowing for practical use by experts.

### CONCLUSION

1. The theoretical and methodological discourse of knowledge management provides a productive scientific foundation for the systematic study of the phenomenon of academic borrowing.

2. Managing the quality of work of research units — the producers of knowledge — can be

considered a new function of knowledge management, capable of ensuring the quality of new scientific knowledge.

3. Academic borrowing possesses an epistemological nature as well as an ethical (ethico-deontological) essence.

4. The phenomenon of academic borrowing is characterized by a complex semantic field of existing definitions, which can be divided into three groups: categories consistent with the natural epistemological and ethical essence of academic borrowing; categories contradicting this essence; and phenomena not directly related to academic borrowing (adjacent polysemous categories).

### REFERENCES

1. Chirkin E.S. Automated test systems for illegal borrowing. *Vestnik Tambovskogo universiteta. Seriya: Gumanitarnye nauki = Bulletin of Tambov University. Series: The Humanities*. 2013;(12):164-174. (In Russ.).
2. Zvonnikova E.D. Comparison of information systems of automatic check of original texts. *Nauchno-metodicheskii elektronnyi zhurnal "Konsept" = Scientific and Methodological Electronic Journal "Koncept"*. 2015;(8):126-130. URL: <http://e-koncept.ru/2015/15282.htm>. (In Russ.).
3. Drucker P.F. Managing the knowledge worker. *Modern Office Procedures*. 1979;(24):12-16.
4. Drucker P.F. The age of social transformation. *The Atlantic Monthly*. 1994; 274(5):53-80. URL: <https://www.theatlantic.com/past/docs/politics/ecbig/soctrans.htm>
5. Drucker P.F. Knowledge-worker productivity: The biggest challenge. *California Management Review*. 1999;41(2):79-94. DOI: 10.2307/41165987
6. Drucker P.F. Managing oneself. *Harvard Business Review*. 2005;77(2):64-74. URL: <https://hbr.org/2005/01/managing-oneself>
7. Grant R.M. Toward a knowledge-based theory of the firm. *Strategic Management Journal*. 1996;17(S2):109-122. DOI: 10.1002/smj.4250171110
8. Orekhova S.V., Nikitina O.M. Knowledge management: Any changes in the research agenda? *Upravlencheskie nauki = Management Sciences*. 2024;14(1):103-116. (In Russ.). DOI: 10.26794/2404-022X-2024-14-1-103-116
9. Lunev A.P., Tomashevskaya Yu.N., Koshkarov A.V. Knowledge management in higher education: Theory and practice. *Upravlencheskie nauki = Management Sciences*. 2022;12(2):86-97. (In Russ.). DOI: 10.26794/2304-022X-2022-12-2-86-97
10. Tikhomirov V.P., Dneprovskaya N.V. Knowledge management system as a university digital transformation environment on the case of MESI. *Informatsionnoe obshchestvo = Information Society*. 2022;(5):44-57. (In Russ.). DOI: 10.52605/16059921\_2022\_05\_44
11. Khegay E.V., Babak L.N., Filatkina M.D., Filatkina I.D. Knowledge management at the higher education institution as a factor of academic entrepreneurship development.

- Kreativnaya ekonomika = Journal of Creative Economy*. 2017;11(1):45-60. (In Russ.). DOI: 10.18334/ce.11.1.37267
12. Ignat'eva E.Yu. Knowledge management in the quality management of the educational process in higher education. Veliky Novgorod: Novgorod State University; 2008. 280 p. (In Russ.).
  13. Milner B.Z. Knowledge management. Moscow: INFRA-M; 2003. 178 p. (In Russ.).
  14. Leonard D.A., Sensiper S. The role of tacit knowledge in group innovation. *California Management Review*. 1998;40(3):112-132. DOI: 10.2307/41165946
  15. Raskov V.E. Knowledge management as an independent field of research: The main controversial issues. *Vestnik Sankt-Peterburgskogo universiteta. Menedzhment = Vestnik of Saint Petersburg University. Management Series*. 2007;(3):34-58. (In Russ.).
  16. Leonard D.A., Straus S. Putting your company's whole brain to work. In: Leonard D. Managing knowledge assets, creativity and innovation. Singapore: World Scientific Publishing Co. Pte. Ltd.; 2004:287-299. DOI: 10.1142/9789814295505\_0012 (Russ. ed.: Leonard D.A., Straus S. Kak zastavit' rabotat' kollektivnyi mozg kompanii. In: Upravlenie znaniyami. Moscow: Alpina Business Books; 2006:64-91.).
  17. Spender J.-C., Scherer A.G. The philosophical foundations of knowledge management: Editors' introduction. *Organization*. 2007;14(1):5-28. DOI: 10.1177/1350508407071858
  18. Reformatsky A.A. Thoughts on terminology. Modern problems of Russian terminology. Moscow: Nauka; 1986. 199 p. (In Russ.).
  19. Lebedev S.A. Pluralism of scientific truths and their criteria. *Vestnik Severo-Vostochnogo federal'nogo universiteta im. M.K. Ammosova. Seriya: Pedagogika, psikhologiya, filosofiya = Vestnik of North-Eastern Federal University. Pedagogics. Psychology. Philosophy*. 2020;(4):133-143. (In Russ.).
  20. Spender J.-C. Making knowledge the basis of a dynamic theory of the firm. *Strategic Management Journal*. 1996;17:45-62. DOI: 10.1002/smj.4250171106
  21. Spender J.-C. Pluralist epistemology and the knowledge-based theory of the firm. *Organization*. 1998;5(2):233-256.
  22. Merton R.K. Resistance to the systematic study of multiple discoveries in science. *European Journal of Sociology*. 1963;4(2):237-282. DOI: 10.1017/S0003975600000801
  23. Ostrovskaya A.S. Plagiarism in the XXI century: Who needs it? *Voprosy sovremennoi pediatrii = Current Pediatrics*. 2016;15(2):148-153. (In Russ.). DOI: 10.15690/vsp.v15i2.1532
  24. Kotlyarov I.D. Plagiarism in scientific publications. *Nauchnaya periodika: problemy i resheniya = Scholarly Communication Review*. 2011;(4):6-12. (In Russ.).
  25. Kuleshova A.V., Chekhovich Yu.V., Belenkaya O.S. Walking the razor's edge: How to avoid self-plagiarism when you recycle your texts. *Nauchnyi redaktor i izdatel' = Science Editor and Publisher*. 2019;4(1-2):45-51. (In Russ.). DOI: 10.24069/2542-0267-2019-1-2-45-51
  26. Levin V.I. Plagiarism, its essence and measures to prevent and handle it. *Vysshee obrazovanie v Rossii = Higher Education in Russia*. 2018;27(1):143-150. (In Russ.).
  27. Gelfand M.S. Plagiarism in dissertations. *Obrazovanie i nauka = Education and Science Journal*. 2018;20(3):160-181. (In Russ.). DOI: 10.17853/1994-5639-2018-3-160-181

28. Pislyakov V.V. Self-citation and its impact on scientific workflow assessment: The review of publications. Part I. *Nauchnye i tekhnicheskie biblioteki = Scientific and Technical Libraries*. 2022;(2):49-70. (In Russ.). DOI: 10.33186/1027-3689-2022-2-49-70
29. Westbrook J.H. Identifying significant research. *Science*. 1960;132(3435):1229-1234. DOI: 10.1126/science.132.3435.1229
30. Tagliacozzo R. Self-citations in scientific literature. *Journal of Documentation*. 1977;33(4):251-265. DOI: 10.1108/eb026644
31. Raisig L.M. World biomedical journals, 1951-60: A study of the relative significance of 1,388 titles indexed in Current List of Medical Literature. *Bulletin of the Medical Library Association*. 1966;54(2):108-125.
32. Earle P., Vickery B. Social science literature use in the UK as indicated by citations. *Journal of Documentation*. 1969;25(2):123-141. DOI: 10.1108/eb026468
33. Narin F., Pinski G., Gee H.H. Structure of the biomedical literature. *Journal of the American Society for Information Science*. 1976;27(1):25-45. DOI: 10.1002/asi.4630270104
34. Zhou Y. Self-citation and citation of top journal publishers and their interpretation in the journal-discipline context. *Scientometrics*. 2021;126(7):6013-6040. DOI: 10.1007/s11192-021-03995-y
35. Wallmark J.T., Eckerstein S., Langered B., Holmqvist H.E.S. Increase in efficiency with size of research teams. *IEEE Transactions on Engineering Management*. 1973;EM-20(3):80-86. DOI: 10.1109/TEM.1973.6448434
36. Moed H.F., Burger W.J.M., Frankfort J.G., van Raan A.F.J. A comparative study of bibliometric past performance analysis and peer judgement. *Scientometrics*. 1985;8(3-4):149-159. DOI: 10.1007/BF02016933
37. Moed H.F., Burger W.J.M., Frankfort J.G., Van Raan A.F.J. The use of bibliometric data for the measurement of university research performance. *Research Policy*. 1985;14(3):131-149. DOI: 10.1016/0048-7333(85)90012-5
38. Minasny B., Hartemink A.E., McBratney A. Individual, country, and journal selfcitation in soil science. *Geoderma*. 2010;155(3-4):434-438. DOI: 10.1016/j.geoderma.2009.12.003
39. Shehatta I., Al-Rubaish A.M. Impact of country self-citations on bibliometric indicators and ranking of most productive countries. *Scientometrics*. 2019;120(2):775-791. DOI: 10.1007/s11192-019-03139-3
40. Schubert A., Glänzel W., Thijs B. The weight of author self-citations. A fractional approach to self-citation counting. *Scientometrics*. 2006;67(3):503-514. DOI: 10.1556/Scient.67.2006.3.11
41. Flatt J.W., Blasimme A., Vayena E. Improving the measurement of scientific success by reporting a self-citation index. *Publications*. 2017;5(3):20. DOI: 10.3390/publications5030020
42. Singh A.J. Plagiarising plagiarism. *Indian Journal of Community Medicine*. 2007;32(1):5-6. DOI: 10.4103/0970-0218.53379
43. Howard R.M. A Plagiarism pentimento. *The Journal of Teaching Writing*. 1992;11(2):233-245. URL: <https://www.citationproject.net/wp-content/uploads/2018/03/Howard-Plagiarism-Pentimento.pdf>
44. Das N., Panjabi M. Plagiarism: Why is it such a big issue for medical writers? *Perspectives in Clinical Research*. 2011;2(2):67-71. DOI: 10.4103/2229-3485.80370

## ABOUT THE AUTHOR



**Vitaliy P. Krylov** — Cand. Sci. (Med.), Assoc. Prof., Scientific Secretary of the Scientific Attestation Commission, Financial University under the Government of the Russian Federation, Moscow, Russian Federation  
<http://orcid.org/0009-0001-4107-4298>  
vpkrylov@fa.ru

*Conflicts of Interest Statement: The author has no conflicts of interest to declare.*

*The article was submitted on 18.11.2025; revised on 05.12.2025 and accepted for publication on 02.03.2026.*

The author read and approved the final version of the manuscript.