



DOI: 10.22363/2618-8163-2026-24-3-379-391

EDN: DAWBTO

Research article

The language of the technosphere in a dynamic aspect

Anna M. Plotnikova 

Ural Federal University named after the first President of Russia B.N. Yeltsin, *Ekaterinburg, Russian Federation*

✉ annaplotnikova@urfu.ru

Abstract. Technological development driven by digitalization, artificial intelligence, and state support for engineering education, determines the relevance of the studies of new words and meanings in lexis and phraseology of technosphere. The aim of this study is to identify functional and pragmatic features of the semantics of words and phraseological units related to the sphere ‘Engineering and Technology’ and developing figurative meanings. The material for the study includes words with the component “техно- ‘techno’” in modern Russian language and the associative semantic field of units in the “Concept for Technological Development of Russia until 2030”. The productivity of this word-formation model creates pragmatically marked language units that are semantically unrelated to the technical terminological system and characterize a person’s emotional and evaluative attitude towards technology and equipment. The author used both traditional methods of word-building and semantic analysis of lexical units and corpus and automated data processing methods. Basing on the text “The Concept of Technological Development of Russia until 2030”, the author shows the connection between the associative semantic field visually represented with a word cloud and the semantic field, demonstrates similarities and differences of the two fields. The associative-semantic field “Technology and technologies” broadens including collocations “technological sovereignty” and “technological leadership”, units reflecting the modernity. Synonymic, antonymic, and paronymic relations within the structure of the associative-semantic field under study are also analyzed. The broad combinability of the lexical units *технологический* (*technological*) and *технологии* (*technology*), which destructs the original semantics of the words, is described. The set expressions with the adjective *технологический* (*technological*) are characterized in a dynamic aspect. The technosphere vocabulary closely interacts with the lexicon of various fields of knowledge, having the strongest ties with the digital field. The study makes some predictions about the future development of technosphere vocabulary, which integrates into various areas of humanities and social sciences. The prospects for the research could be a systemic dictionary description of the technosphere vocabulary.

Keywords: lexis, neologisms, prefixoid, compound words, semantic field, associative-semantic field, lexical combinability, collocations

Conflict of interest. The author declares that there is no conflict of interest.

Article history: received 11.02.2026; accepted 10.05.2026.

© Plotnikova A.M., 2026



This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License
<https://creativecommons.org/licenses/by-nc/4.0/legalcode>

For citation: Plotnikova, A. M. (2026). The language of the technosphere in a dynamic aspect. *Russian Language Studies*, 24(3), 379–391. <http://doi.org/10.22363/2618-8163-2026-24-3-379-391> EDN: DAWBTO

Introduction

D.S. Likhachev wrote: “It is my deepest conviction that the 21st century must be the century of humanistic culture. Its dominance is imperative. Technology must be assigned a clearly subordinate role” (Likhachev, Samvelyan, 1988: 6). Contemporary social processes with their focus on artificial intelligence (AI), modern technologies, automation and robotization of various spheres of life rather point to the dominant role of technical knowledge. The importance of technology is emphasized in official documents and outlined in the Concept of Technological Development of the Russian Federation until 2030¹ with the following fundamental goals: achieving technological sovereignty, transitioning to innovation-oriented economic growth, and providing technological support for the sustainable development of production systems. Discussions regarding the significance of the country’s technological development and the vital role of engineering education and engineering professions contribute to the frequency of technology- and engineering-related vocabulary in journalistic discourse.

The rapid development of technology has led to the expansion of computer and technical terminology and the mediatization of many terms related to this field. These processes have sparked linguistic interest in issues that in various ways pertain to engineering and technology.

First, the vocabulary of the digital sphere is being documented; it has been included in both dictionaries of new words and specialized thematic dictionaries (Marinova, Volochek, 2023). The institutionalization of digital humanities includes terms such as “*dataset*,” “*dashboard*,” “*timeline*,” “*geographic information system*,” and “*automated text processing in the research field*” (Orekhov, Volodin, 2024).

Second, there are scientific works interpreting “digital” vocabulary and methods for its categorization (Marinova, 2023) and establishing connections and overlaps with other word classes (Turkina, 2025); there have been attempts to make its ideographic description (Plotnikova, 2024). E.S. Astapkina & A.A. Barkovich (Astapkina, Barkovich, 2026) tried to make neural network modeling of IT terminology.

¹ *Concept of Technological Development for the Period until 2030* (2023). Meeting of the Government of the Russian Federation No. 1315-r of May 20, 2023. *Collection of Legislation of the Russian Federation*, 22, Art. 3960.

Third, human-machine communication is being actively researched in different aspects: politeness strategies in human-neural network interactions, communication in chatbots, prompts as a text genre, and many other topics related to the analysis of various phenomena in high-tech communication (Komarova, 2025; Piperski, 2024; Ouyang, 2022; Pan, Doering, Kanda, 2024).

At the same time, there is a noticeable shift in research interest toward examining discourse concerning human-artificial intelligence interaction and studying new words emerged thanks to the development of AI technologies. Other areas of technological development and their representation in language are included in the linguistic context to a significantly lesser extent. In the last decade there is a noticeable expansion in the use of both basic words related to the technological sphere (e.g., *technology*, *industry*) and words containing the component “*techno-*,” which will be discussed in this article. These components function as part of compound words, both long established in the language (*techno park*, *techno center*, *technoscientific*) and neologisms (*techno-optimist*, *techno-pessimist*, *techno-thriller*).

The aim of the study is a functional-pragmatic analysis of Russian vocabulary related to the semantic field of technology to identify semantic features of words containing the components “*tech-*” and “*techno-*” and the dynamics of their usage.

Methods and Materials

The study employs general scientific methods (scientific analysis, description, comparison, classification, generalization) and specific linguistic methods: component-based and contextual analysis of word meaning, word-formation analysis, linguistic data processing (tokenization, lemmatization, stop-word removal); visualization methods (creation of a word cloud). To identify collocations and make their corpus analysis, approaches accepted in corpus studies were applied (Brezina, McEnery, Wattam, 2015).

The main research material was obtained by sampling units with the component “*techno-*” from the Russian National Corpus (RNC²). When searching for these units, pragmatonyms were excluded; these are typically names of organizations (*Technoavia*, *Technonickel*, etc.).

Data from explanatory and ideographic dictionaries were also used as sources. The latter include the “Large Explanatory Ideographic Dictionary of Russian Nouns”³ and the synopsis of the “Universal Ideographic Dictionary of

² *Russian National Corpus*. (n.d.). Retrieved March 10, 2026, from <http://www.ruscorpora.ru/>

³ Babenko, L. G. (Ed.). (2009). *Large Explanatory Dictionary of Russian Nouns*. Moscow: AST-Press Kniga Publ.

Russian Language”⁴. These dictionaries contain a section titled “Technology” relevant to our research, which includes such denotative-ideographic groups as people (*a mechanic, an electrician*), tools, implements (*drill, shovel*), technical devices (*battery, gas generator*), parts of technical devices (*battery cell, bushing*), technical fixtures (*screw, nut*), technical sets (*equipment, apparatus*), and technical processes (*conversion, assembly*).

When selecting the material, we considered homonymy, since the component *techno-* denotes a musical style. Accordingly, the words *techno-rock, techno-pop, techno-music, techno-fan* and some others were excluded from the sample. However, differences in the spelling of words with the *techno-* component can also serve as a marker: the first part of compound words with the component “technique” or “technical” is written as a single word, unlike words with the *techno-* component, which denotes a musical style. At the same time, the Russian National Corpus contains examples with the erroneous hyphenated spelling of “*techno-*” in cases where it marks the word’s affiliation with the technical sphere; this was taken into account during material selection.

Results

While the semantic field “Technology” has clear boundaries in ideographic dictionaries and is associated with production relations, devices, tools, and mechanisms used in both production and everyday life, the very concept of “Technology” turns out to be extremely vague. Its semantics is based on the ancient origin of the root, associated with experience and craftsmanship. Both technique and technology can be associated with the humanities and social spheres, hence there are such complex words as “*sociotechnical*” and “*sociotechnological*,” which are sometimes used as synonyms.

The analysis conducted shows that the boundaries of “technological” are extremely vague and, in some respects, bring this adjective closer to the thematically related adjective “digital”, which is characterized by semantic diffuseness and broad combinability.

The terms “technological sovereignty” and “technological leadership” are also frequently used as ideological concepts, often with rather vague meanings. Nevertheless, such expressions are stable, and this is confirmed by statistical data. The “Integrum” information retrieval system identified 10.396 instances of the phrase “technological leadership” and 23.041 instances of the phrase “technological sovereignty”.

⁴ Babenko, L. G. (Ed.). (2015). *Universal Ideographic Dictionary of the Russian Language: Prospect*. Moscow; Ekaterinburg: Kabinetnyi Uchenyi Publ. pp. 22–42.

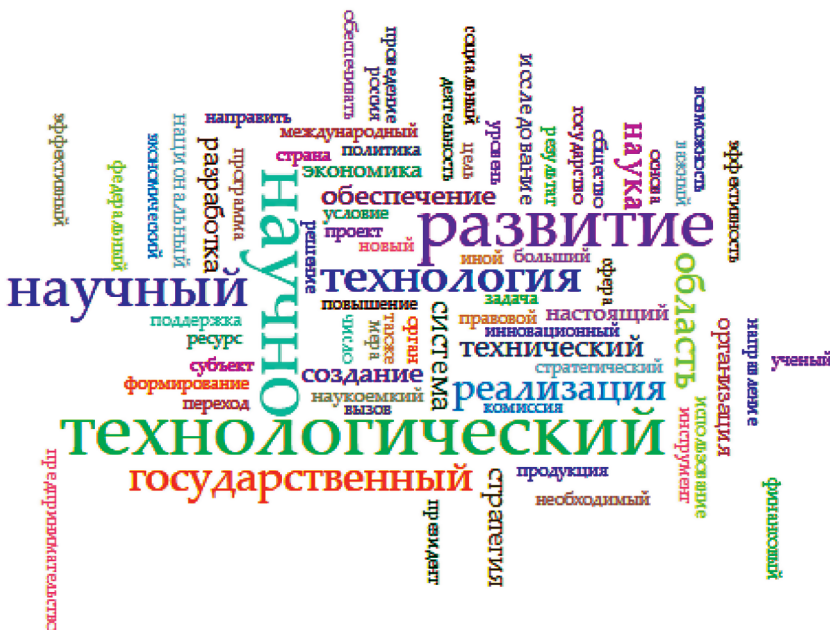
Discussion

The “Engineering and Technology” Semantic Field and the Digital Word Cloud

To make a lexical modeling of the technological sphere, we examined the Concept of Technological Development of the Russian Federation⁵ as a document text presenting a program for new technological areas development. In terms of genre and stylistic features, this is an administrative document of a prescriptive nature.

To model the associative-semantic field, statistical methods are used that involve text preprocessing with stop-word removal, lemmatization (reducing word forms to their base form) and data visualization in the form of a word cloud.

The analysis resulted in a word cloud (Fig.).



Word cloud representing the associative-semantic field “Equipment and Technologies”

Source: A word cloud generator was used: <https://wordcloud.online/ru>

Without delving into the theoretical issues of studying various types of fields (semantic, functional-semantic, associative), we note that the word cloud is similar to other types of fields in semantic relations, correlations between words: hyper-hyponymic, synonymic, and others (e.g., *science – technology*, *technical – technological*), the continuous designation of its conceptual domain (like a semantic field, a word cloud divides core units evenly), and the interconnection with other fields within the lexical system. In this case, we

⁵ Concept of Technological Development for the Period until 2030 (2023). Meeting of the Government of the Russian Federation No. 1315-r of May 20, 2023. Collection of Legislation of the Russian Federation, 22, Art. 3960.

observe a connection with the semantic field “State,” due to the nature of the document under analysis, which reflects the state strategy for technological development. The core and periphery of the semantic field and the digital cloud are based on the frequency of elements, with frequency proving to be the determining factor in the digital cloud. It is known that the font size in the figure correlates with the frequency of the units, and, of course, the words “technology,” “technological,” “science” (and their derivations), and “development” constitute the core of the field. The digital cloud is closest in structural features and essential characteristics to the associative-semantic field.

It is also characterized by its own meta lexicon. Let us note the frequency of words with broad semantics, such as “*field*,” “*sphere*,” “*condition*,” “*project*,” and “*resource*”, whose semantics apply to a very wide range of objects. The relatively new word “*challenge*,” formed by calquing and used in phrases such as “technological challenges” and “global technological challenges,” can also be included here.

Active processes in the technosphere lexicon

Corpus data demonstrate certain dynamics in the usage of some technosphere words. The most noticeable processes are those related to the use of the adjectives “scientific-technological,” “scientific-technical,” and “technological.” RNC data show that the frequency of the adjective “scientific-technological” is generally low and has been declining in the 2010s. According to corpus data, the peak frequency of the adjective “scientific-technical” occurred in the 1970s, when the fixed phrases “scientific-technical progress” and “scientific-technical revolution” were actively used, followed by a decline in frequency with an increase in usage observed again in the 2010s.

The meanings of the words “technique” and “technology” do not coincide. The meaning of the word “technology” has evolved over the course of a century; originally denoting the solution of a specific problem in a certain way, it subsequently came to denote methods in any activity, not necessarily industrial (e.g., *human resources management technologies*, *communication technologies*). Although not a Pluralia Tantum noun, this term is more often used in the plural form and combines with a wide range of terms denoting the sphere of technology application (e.g., *linguistic technologies*, *communication technologies*, *political technologies*).

The word “technique” also expands its semantics to denote various methods and approaches, which makes it possible to use it in the plural form, a form not used for the primary meaning of this term (*design techniques*). Both “techniques” and “technologies,” as well as “tools” (which are close in meaning), are widely used in managerial and psychological discourse, that is, they permeate other thematic spheres that are in no way related to techniques and technologies.

The word “technological” can be combined with the nouns “revolution” and “progress”. However, the contexts point to the importance of the novelty component (“technological” is used with words such as *innovation*, *novelty*) and the impact of technologies on society (“technological” refers to a *breakthrough*, *achievement*, *change*, *leap*, and *effect*). The contextual partners of the adjective “*technological*” also point to the dangers and errors associated with technology (*technological errors*, *failures*, and *problems*).

Nearly 13% of all contexts consist of the phrase “technological process,” which is examined in the context of the importance of scientific and technical achievements: “*In 1952–1953, Fadeev visited nine metallurgical plants in the Urals, in Moscow, in Dnipropetrovsk... In his notes, Fadeev describes the nuances of technological processes in detail. He lists a multitude of terms, not always explaining them. He believed that the modern Soviet person had to know them: ‘A reader unfamiliar with technology will look like a troglodyte in 10–20 years. Literature cannot be on par with troglodytes!’*” (V. Avchenko “Fadeyev”, 2017).

The phrases “technological leadership” and “technological sovereignty” emerged in the late 1990s and are frequently used in connection with situations of conflict, war, and global confrontation: “*The struggle for technological leadership, having cast aside the principles of the rule of law and free competition that had been proclaimed for decades, is turning into technological wars*” (Izvestia, June 6, 2019). These collocations are used in both academic texts on social issues and in socio-political articles, including texts devoted to the development of engineering education.

Technological metaphors, including the words “mechanisms” and “tools” as means of solving problems, are also actively used in various fields: *legal mechanisms*, *market mechanisms*, *action planning mechanisms*, *marketing tools*, and *financial instruments*.

There is a noticeable increase in the use of the word “optics,” which denotes a way of seeing the world, a model of interpretation. However, this meaning is not recorded in the lexicographical sources; it is realized in various contexts where the sphere of physical experience is projected onto the realm of intellectual activity: “*In order for authorship to touch the soul (and for this, in turn, to have systemic consequences at the level of aesthetics and poetics), it required a shift in general cultural optics, general cultural sensitivity, which was still more than decades away.*” (O. Balla From the Hero’s Personality to the Spirit of the Times. “Znanie — Sila”, 2008).

Thus, the material under study is interesting in that it reveals, in a sense, current trends associated with the extrapolation of the technological sphere into other areas of life, which are interpreted through the prism of observed experience. Technological terms demonstrate that social processes are formalizable and controllable in nature.

The words “technique” and “technology,” which are distinguished in lexicographical sources, are regarded in contemporary speech as interrelated and difficult-to-separate entities. In official documents, particularly in the “Concept of Technological Development of the Russian Federation until 2030” as a prescriptive document, “technological leadership” and “technological sovereignty” correlate with the development of technology, engineering education, and the emergence of innovative solutions. Therefore, we cannot study the semantic field “Technology” without reference to contemporary socio-political communication. The words in the associative-semantic field demonstrate both centrifugal and centripetal tendencies in the field’s structure. On the one hand, terms denoting technologies, technical manipulations, and tools designate a broader range of objects. On the other hand, the semantic field is enriched with words denoting human attitudes toward technology and technologies.

Words with the prefixoid techno-

The word-formation status of the component “*techno-*” in compound words also warrants separate comment. Units such as *eco-*, *bio-*, *nano-*, and *techno-* are classified as terminological elements, and compound words containing such elements are sometimes considered to be formed by means of abbreviation, although the status of these components is not defined. Similar elements are sometimes classified as prefixoids. Prefixoids occupy an intermediate position between function and root morphemes and are of particular interest for their capacity to convey a range of pragmatic meanings. For example, N. I. Konovalova (Konovalova, 2025) examines prefixoids as markers of evaluativeness, an aspect that is particularly relevant to the material analysed in this study.

The achievements of scientific and technological progress at the turn of the 20th and 21st centuries actualized prefixoids of Greek and Latin origin such as *nano-*, *cyber-*, and *crypto-* (Nikolina, Ratsiburskaya, Fatkhutdinova, 2020: 7), and among them is the prefixoid *techno-*.

The “Word Formation Dictionary”⁶ lists a small number of terms containing the element *techno-*: *technocontrol*, *technoproject*, *technotextile*, *technochemical*, *technoeconomic*. A review of corpus data reveals a broader range of such terms, which constitute the subject of this study.

The meaning of the prefixoid *techno-* is presented in the reference dictionary “Affixoids of the Russian Language”⁷:

⁶ Tikhonov, A. N. (1985). *Word-Formation Dictionary of the Russian Language* (Vol. 2). Moscow: Russkii Yazyk Publ.

⁷ Levashov, E. A. (Ed.). (2009). *Affixoids of the Russian Language. Experience of a Dictionary-Reference Book*. Saint Petersburg: Nestor-Istoriia Publ.; *Affixoids of the Russian Language: Information Retrieval Resource*. (n.d.). Retrieved March 15, 2026, from <https://affixoid.iling.spb.ru/glossary>

Techno. 1. The first part of compound words meaning “technology, technical” is written as a single word. Relates to technique, machines, mechanisms; technical.

2. The first part of compound words meaning “technology, technical” is written as a single word. Relating to technology; technologies (advanced, digital, information).

According to the RNC, such terms are numerous and can be divided into thematic areas:

1) enterprises, industrial complexes (*technopark, technocomplex, technocenter, technohub, technosector, technonetwork, technoincubator*);

2) global social processes (*technoevolution, technoscience, technosphere, technocatastrophe, technoworld, technoculture, technopolitics*);

3) people (*technoman, technophobe, technooptimist, technopessimist, technogenius, technomaniac, technohooligan, technoidiot*);

4) objects based on the use of technology and techniques (*technothriller, technoutopia, technodesign, techno-game, techno-toy*);

5) emotional attitudes toward technology and engineering (*technoskepticism, technopride, technomagic, technofetishism*).

Neither the context nor the semantics of many of these terms allows for a clear distinction between the prefixoids techno-1 and techno-2; this is particularly true in the area where language captures human-machine interaction, for example: “*Incidentally, the ‘post-human’ perspective may be contrasted with the ‘techno-human’ perspective, ‘a technologized, rational human’* (I. Alekseeva. Information Competence, Natural Intelligence, and the NBICS Revolution. “Information Society”, 2012).

The complexity of the lexicographic representation of prefixoids and the units derived from them are well illustrated in the article by Yu. S. Ridetskaya (Ridetskaya, 2023). This is true for the component “techno-” in expressive word formation when it is part of personal names, such as *techno-optimist, techno-pessimist, techno-genius, techno-moron, techno-fool, and techno-maniac*. They are not recorded in explanatory dictionaries or dictionaries of new words. However, when discussing issues of artificial intelligence and digital technologies, the terms “techno-optimist” and “techno-pessimist” are quite frequent. Here are a few illustrative examples: “*Techno-pessimists believe that living conditions, corrupt government, big cities, social pressure, screen images, social media, etc., deform human life*” (P. Kolozaridi. Telegram channel “Power lines and Swamps”); “*Meanwhile, techno-optimists dream of a future where robots will free people from monotonous work*” (Telegram channel “NOZH Magazine”); “*The ‘History of the Future’ Award is seeking techno-optimist writers. Requirements: a science fiction story with technological optimism...*” (announcement from the “Atom” Foundation for the Promotion of Scientific,

Educational, and Communication Initiatives). The RNC contains contexts with the words “*technoskeptic*” and “*technoskepticism*,” which, unlike “*techno-optimist*” and “*techno-pessimist*,” tend to be of an occasional nature: “*Evgeny Morozov is a technoskeptic of the digital age. The book “Techno-Hatred: How the Internet Has Taught Us Not to Think” by the American publicist of Belarusian origin Evgeny Morozov is a collection of articles written in 2012–2013 for leading American and European periodicals*” (D. Sanagursky. Evgeny Morozov — a techno-skeptic of the digital era. “*Culturological Journal*”, 2014).

In compound words, the prefixoid functions as an object, marking an indefinite set of various technical objects under evaluation. This approach to word-formation stems from the cognitive principle developed by E.S. Kubryakova: “...the semantics of a derived word and the form of its representation are based on a specific propositional structure formed in the human mind or formed during naming)” (Kubryakova, 2004: 408).

From the perspective of cognitive word formation, complex knowledge formats are encoded behind these units. The motivational paraphrase of the unit *technooptimist* is complicated by pragmatics: a *technooptimist* is a person who views the development of technologies with optimism, considers them a public good and believes that they will change the world for the better. The material shows that the word-formation model with the component “*techno-*” is productive for creating new words expressing an evaluative attitude toward technology.

Similar processes were characteristic of words with the “*nano-*” component, which has in the 2020s lost its word-formation activity, whereas its frequency at the beginning of century attracted the attention of researchers (Orekhov, 2014). The ability to form “serial formations” is characteristic of the *techno-* words we are studying (Fedorova, 2025: 144)

The productivity of this prefix expands its combinatorial possibilities, giving rise to such units as *technodelusion*, *techno-Europeanism*, *technopolitics*, *technomagic*, *technophobe*, and others.

Consequently, words with the prefixoid *techno-*, which significantly enrich the field under study, constitute interesting linguistic material that fix the productivity of this word-formation model and its pragmatic potential.

Conclusion

The analysis conducted allows us to conclude that the language of the technosphere, which is based on vocabulary and phraseology (if understood broadly, including collocations within phraseology), is actively changing due to the development of technologies and the awareness of their socio-political significance. This lexical group is a dynamic system influencing media discourse on engineering and technology. The lexicon of the “Engineering and Technology”

sphere develops derived meanings, and the semantics of the units “technology” and “technological” expands. This shows the expansion of these units and the blurring of the scope of word meanings. The convergence of the words “technique” and “technology” leads to a functional proximity between the paronyms “technical” and “technological.”

A promising avenue for further research could be a closer examination of the component “*techno-*” in compound words, such as “*sociotechnical*” and “*technohumanitarian*,” which denote the synthesis of technical and humanities knowledge, as well as a systematic lexicographical representation of words in the technosphere.

References

- Babenko, L. G. (2015). Synopsis (collection) of the ideographic classification of Russian vocabulary (general global structure of the dictionary). In *Universal Ideographic Dictionary of the Russian Language. Prospect* (pp. 22–42). Moscow; Ekaterinburg: Armchair Scientist Publ. (In Russ.).
- Barkovich, A. A., & Astapkina, E. S. (2025). Neural network modeling of the semantic field “Internet” in Russian-language discourse. *Russian Language Studies*, 24(1), 25–40. (In Russ.). <https://doi.org/10.22363/2618-8163-2026-24-1-25-40> EDN: XARBFO
- Brezina, V., McEnery, T., & Wattam, S. (2015). Collocations in context: A new perspective on collocation networks. *International Journal of Corpus Linguistics*, 20(2), 139–173. <https://doi.org/10.1075/ijcl.20.2.01bre> EDN: VLSMFD
- Fedorova, L. L. (2024). Occasional word composition patterns in linguistic creativity (based on the 2021 glossary of the online resource “New in Russian Lexicon”). In *Neologiya. Neografiya*. (pp. 140–162). Saint Petersburg: Institute for Linguistic Studies of the Russian Academy of Sciences. (In Russ.).
- Komarova, E. V. (2025). Prompt choice for large language models: Business communications. *Philology and Culture*, (1), 66–74. (In Russ.). <https://doi.org/10.26907/2782-4756-2025-79-1-66-74>
- Konovalova, N. I. (2025). Prefixoids as evaluation means. *Verba*, (2), 46–57. (In Russ.). [https://doi.org/10.34680/VERBA-2025-2\(16\)-46-57](https://doi.org/10.34680/VERBA-2025-2(16)-46-57) EDN: TCNNZY
- Kubryakova, E. S. (2004). *Language and Knowledge: On the Path to Gaining Knowledge about Language. Parts of Speech from a Cognitive Perspective. The Role of Language in Understanding the World*. Moscow: LRC Publ. (In Russ.). EDN: SUQHIP
- Likhachev, D., & Samvelyan, N. (1988). *Dialogues about yesterday, today and tomorrow*. Moscow: Sovetskaya Rossiya Publ. (In Russ.).
- Marinova, E. V. (2023). The Russian language of the digital society: Semantics, compatibility, pragmatics of keywords. *Russian Language Abroad*, (2), 24–28. (In Russ.). <https://doi.org/10.37632/PI.2023.297.2.005>
- Marinova, E. V., & Volochek, E. A. (2023). *Thematic Dictionary of Digital Society Terminology: Prospect*. Saint Petersburg: Redaktsiya al'manakha «Govor» Publ. <https://doi.org/10.48612/govor/r11t-t47t-tm73>
- Nikolina, N. A., Ratsiburskaya, L. V., & Fatkhutdinova, V. G. (2020). New phenomena in the sphere of derivational formants as reflection of the dynamics of the the Russian language word-formation system. *Science Journal of Volgograd State University. Linguistics*, 19(2), 5–19. (In Russ.). <https://doi.org/10.15688/jvolsu2.2020.2.1> EDN: YQCJIB
- Orekhov, B. V. (2014). Superminimum and nanopower: Prefixoids in the language of the internet. In *Modern Russian language on the Internet* (pp. 281–290). Moscow: LRC Publ. (In Russ.).

- Orekhov, B., & Volodin, A. (2024). Digital humanities in Russia and the end of history. *Digital Humanities Research*, 1(1), 63–85. (In Russ.). <https://doi.org/10.31860/cgi-2024-1-63-85> EDN: MLBYRT
- Ouyang, L., Wu, J., Jiang, X., et al. (2022). Training language models to follow instructions with human feedback. *Advances in Neural Information Processing Systems*, 35, 27730–27744.
- Pan, X., Doering, M., & Kanda, T. (2024). What is your other hand doing, robot? A model of behavior for shopkeeper robot's idle hand. *Proceedings of the 2024 ACM / IEEE International Conference on Human-Robot Interaction*. New York, 552–560. <https://doi.org/10.1145/3610977.3634986>
- Piperski, A. Ch. (2024). Politeness in the communication between humans and artificial intelligence. *Slovo.ru: Baltic Accent*, 15(4), 89–98. (In Russ.). <https://doi.org/10.5922/2225-5346-2024-4-6> EDN: ACYHVV
- Plotnikova, A. M. (2024). Lexicon of the ideographic sphere “Digital society” in dictionary and discourse. In L. G. Babenko (Ed.), *Linguistic semantics in the spatial dimension: Dictionary. Discourse. Corpus* (pp. 359–369). Ekaterinburg; Moscow: Armchair Scientist Publ. (In Russ.).
- Ridetskaya, Yu. S. (2023). The specificity of the description of prefixoids in neological academic lexicography. *Russian Journal of Lexicography*, (29), 28–51. (In Russ.). <https://doi.org/10.17223/22274200/29/2> EDN: UKCLUZ
- Turkina, E. B. (2025). Thematic field of “Artificial Intelligence” and its intersections with the microfield of “risks” in modern media discourse. *Communication Studies*, 12(4), 911–921. (In Russ.). [https://doi.org/10.24147/2413-6182.2025.12\(4\).911-921](https://doi.org/10.24147/2413-6182.2025.12(4).911-921) EDN: GHNRZO

Bio note:

Anna M. Plotnikova, Doctor of Philology, Associate Professor, Professor of Department of Theoretical and Applied Linguistics and Text Studies, Ural Federal University named after the first President of Russia B.N. Yeltsin, 51 Lenina St, Ekaterinburg, 620083, Russian Federation. *Research interests*: lexis, semantics, and lexicography. ORCID: 0000-0002-6027-2855. AuthorID: 74609. SPIN-code: 9586-5680. E-mail: annaplotnikova@urfu.ru

DOI: 10.22363/2618-8163-2026-24-3-379-391

EDN: DAWBTO

Научная статья

Язык техносферы в динамическом аспекте

А.М. Плотникова 

Уральский федеральный университет имени первого Президента России Б.Н. Ельцина,
Екатеринбург, Российская Федерация
✉ annaplotnikova@urfu.ru

Аннотация. Технологический поворот, обусловленный цифровизацией, развитием искусственного интеллекта, государственной поддержкой инженерного образования, определил актуальность исследования новых слов и значений, которые формируют лексику и фразеологию техносферы. Цель исследования — выявить функционально-прагматические особенности семантики слов и фразеологизмов, входящих в идеографический класс «Техника и технологии», и развивающих производные значения. Материа-

лом послужили слова с компонентом *техно-* в современном русском языке, а также ассоциативно-смысловое поле единиц, представленных в «Концепции технологического развития России до 2030 года». Продуктивность словообразовательной модели с префиксоидом *техно-* приводит к появлению прагматически маркированных единиц, семантически не связанных с технической терминосистемой и характеризующих эмоционально-оценочное отношение человека к технике и технологиям. Использованы как традиционные методы словообразовательного и семантического анализа лексических единиц, так и корпусные методы и методы автоматической обработки данных. На материале «Концепции технологического развития России до 2030 года» показана связь ассоциативно-смыслового поля, визуально представленного в виде облака слов, с семантическим полем и обозначены сходства и отличия этих двух типов полей. Ассоциативно-смысловое поле «Техника и технологии» расширяется за счет коллокатов «технологический суверенитет» и «технологическое лидерство», втягивая в свою орбиту единицы, которые отображают реалии текущего момента. Проанализированы синонимические, антонимические и паронимические отношения, возникающие в структуре исследуемого ассоциативно-смыслового поля. Охарактеризована широкая сочетаемость лексических единиц «технологический» и «технологии», размывающая исходную семантику этих слов. Рассмотрены устойчивые сочетания с прилагательным «технологический» в аспекте динамики этих единиц. Словарный состав техносферы активно взаимодействует с лексикой различных областей знания, обнаруживая наиболее тесные связи с цифровой сферой. Сделаны прогнозы относительно дальнейшего развития лексики техносферы, которая активно включается в различные области гуманитарного и социального знания. Перспективой исследования может стать системное словарное описание языка техносферы.

Ключевые слова: лексика, неологизмы, префиксоид, сложные слова, семантическое поле, ассоциативно-смысловое поле, лексическая сочетаемость, коллокации

Конфликт интересов. Автор заявляет об отсутствии конфликта интересов.

История статьи: поступила в редакцию 11.02.2026; принята к печати 10.05.2026.

Для цитирования: Плотникова А.М. Язык техносферы в динамическом аспекте // Русистика. 2026. Т. 24. № 3. С. 379–391. <http://doi.org/10.22363/2618-8163-2026-24-3-379-391> EDN: DAWBTO