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## НАЗВИ КОМЕРЦІЙНИХ КОСМІЧНИХ АПАРАТІВ

# NAMES OF THE COMMERCIAL SPACECRAFTS

#### **ABSTRACT**

Introduction. Over the past decade, the modalities of space exploration and the space business have undergone significant evolution. Importantly, there is a gap in interdisciplinary research related to the onomastic dimension of latter processes due to the insufficient number of studies of the current spacecraft names. Following the calls for a broader connection of onomastics with extra-onomastic methodologies, and in order to expand the onomastic terminological system, to understand the types of names, their taxonomy, and larger sociopolitical interactions between these names and the world, the paper explores spacecraft names (cosmoporeionyms) as a specific onomastic (sub)class from an interdisciplinary lens of onomastics and other fields of study.

**Purpose of study.** The goal of the study is to analyze the understudied in the literature, emerging names of contemporary commercial spacecrafts as a specific component of the onomastic system. The object of research is the names of contemporary commercial spacecrafts that are operational or in the development stage. To reach the primary goal of the study, two key research questions should be answered: 1. What kind of names exist in the contemporary evolving onomastic ecosystem of "New Space," and how does this landscape look from the standpoint of onomastic classification and taxonomy? 2. Which ongoing extra-onomastic socio-political and technological features affected and motivated the emergence of these names?

**Data and methods.** Due to the interdisciplinary essence of research and the nature of the empirical material, in this paper, we use the mixed-method approach. To analyze the official names of commercial spacecraft, the traditional onomastic approach of thematic classification from the standpoint of naming motivations was implemented together with a method of mini-cases, where the onomaturgy of one of the most powerful companies, Blue Origin, was analyzed in more detail. The primary empirical material is presented by data from the websites of leading global commercial space technology companies, as well as governmental organizations, and other information resources regarding the New Space economy. Though not all the companies specialized in spacecrafts, the information from 106 current private space technology companies was collected and analyzed.

Results and conclusion. Enhanced onomastic taxonomy of spacecrafts is proposed, where we can distinguish the following seven types of spacecrafts and related technological devices: space vehicles (including launch system vehicles, space cargo vehicles, crewed space vehicles), space probes (including interplanetary spacecrafts, orbiters, landers, rovers, asteroid-mining vehicles), rocket engines, artificial satellites (including satellites and satellite constellations), modular space stations, space telescopes, and other space vehicles and related technological tools.

The naming patterns and thematic scope of cosmoporeionyms are wide, considering the range of options and motivations for the spacecrafts' onomaturgs. Six most visible thematic groups of current cosmoporeionyms can be distilled, including memorial, mythological, astronymic, zoonymic (mostly ornithonyms, the names of birds), and letters from the Greek alphabet. Other groups of cosmoporeionyms might also be distinguished, but their role now is marginal (e.g., toponymic, ideological, and other names). The mini-case study of the onomastic system of Blue Origin company reveals the techno-utopian "blue planet" and nationalistic American new frontier thematic clusters.

The study also reveals that for multi-billionaire techno-capitalist entrepreneurs, the naming of spacecrafts and related elements of "New Space" is a symbolic instrument to express their power, their visions of space nationalism, and for the accelerated privatization of space exploration.

**Keywords:** spacecraft naming, cosmoporeionym, onomaturgy, "New Space," technocapitalism

#### INTRODUCTION

Over the past decade, the modalities of space exploration and the space business have undergone significant evolution (Peeters, 2021). In 2010, 131 objects were launched into Earth orbit or beyond, whereas in 2024, there were 2849 objects, such as satellites, probes, landers, crewed spacecrafts, and space station flight elements<sup>1</sup>. Currently, we can observe an ongoing rapid shift from a state-centric to a commercialized and privatized space age, or "New Space" (Eriksson & Newlove-Eriksson, 2023, p. 49). The "New Space" entrepreneurs, such as Elon Musk and Jeff Bezos, with rapidly emerging new technological solutions (such as 3D printing and reusable rockets) and business models, have been the key drivers of these processes, which involve cost reduction and demand growth. Consequently, the new and upcoming wave of reusable rocket services, including companies such as SpaceX, Virgin Galactic, Blue Origin, iSpace, Deep Blue Aerospace, and others, has transformed the space sector (Baber & Ojala, 2024).

Intriguingly, all these new political-economic processes have reflected in the emerged modalities of the spacecraft *onomaturgy* ("the art of naming"; see e.g., Vuolteenaho & Basik, 2023). Importantly, there is a gap in interdisciplinary research related to the onomastic dimension of latter processes due to the insufficient number of studies of the current spacecraft names despite the recent call "to place the names

<sup>&</sup>lt;sup>1</sup> https://ourworldindata.org/grapher/yearly-number-of-objects-launched-into-outer-space

of vehicles increasingly at the heart of onomastic endeavors" (Kovács, 2023, p. 379). Furthermore, there is also a call for a broader connection of onomastics with extraonomastic methodologies, including new fields of research related to new technologies, artificial intelligence, robotics, and natural sciences (Gałkowski, 2022, p. 65). Following this call, and in order to expand the onomastic terminological system, to understand the types of names, their taxonomy, and larger socio-political interactions between these names and the world, there is a need to explore spacecraft names as a specific onomastic (sub)class from an interdisciplinary lens of onomastics and other fields of study.

#### THEORETICAL BACKGROUND

The vehicle names are considered an under-researched area in contemporary onomastics (Kovács, 2023). Notably, as a proper name of a vehicle, *poreionym* (from Greek πορεΐον – "transportation means"), is an internationally known term, which has been used by onomasticians worldwide (see Подольская, 1978, p.112; Room, 1996, p. 84; Flatz, 2008, p. 76; Gałkowski, 2022, p. 58; Karpenko & Neklesova, 2024, p. 74). Historically, the names of the objects of aerospace have been discussed since the emergence of the first spacecraft (Pearce, 1962; Wells et al., 1976). For the names of spacecraft, the term *cosmoporeionym*, a subclass of *poreionyms*, was proposed (see Торчинський, 2008, pp. 208–209), while the term *cosmonym* was also suggested (Ткаченко, 2015, p. 646).

Taxonomically, Zelinsky (2002, p. 257) classified all vehicles in the *Artifacts* category, and spacecrafts were mentioned as a separate type together with other types of vehicles (ships and boats, trains, etc.). The most recent spacecraft names taxonomy, proposed by Kovács (2023, p. 376), includes the following types: *spaceship names* (e.g., Enterprise; SpaceX, provided as an example by Kovács, is, in fact, the name of the company, not a spacecraft), *names of probes* (*Pioneer*), *names of satellites* (*Astra*, *Thor*), and *other spacecraft names* (former *Mir* space station). Importantly, despite a particular analogy, Torchynskyi (2008, pp. 184–185) distinguishes between *cosmoporeonyms*, the vehicles used for space flights and involving a return to Earth, and *techno-satellitonyms* (the names of the artificial

satellites), the technical means intended for long-term flights around various space bodies without returning to Earth.

Considering the empirical base of this work, the theoretical political-economic and geographical literature on New Space economies served as a crucial theoretical-conceptual basis of research (e.g., Gudmundsson, 2018; Denis et al., 2020; Peeters, 2021; Bennett, 2022; Eriksson & Newlove-Eriksson, 2023; Baber & Ojala, 2024; Bernstein, 2024).

Despite the above-mentioned theoretical foundation of this paper, the analysis of the emerging contemporary onomastic landscape of the spacecraft names has remained outside the scope of recent studies. Hence, this paper partially eliminates this existing research gap.

#### **PURPOSE OF STUDY**

The purpose of the study is to analyze the understudied in the literature, emerging names of contemporary commercial spacecrafts as a specific component of the onomastic system. The object of research is the names of contemporary commercial spacecrafts that are operational or in the development stage. Although in this paper we sometimes use the names of the government-led spacecrafts as examples only, we will not focus on them.

To reach the primary goal of the study, two key research questions should be answered:

- 1. What kind of names exist in the contemporary evolving onomastic ecosystem of "New Space," and how does this landscape look from the standpoint of onomastic classification and taxonomy?
- 2. Which ongoing extra-onomastic socio-political and technological features affected and motivated the emergence of these names?

#### **DATA AND METHODS**

In this paper, due to the interdisciplinary essence of research and the nature of the empirical material, we use the mixed-method approach. To analyze the official names of commercial spacecraft, the traditional onomastic approach of thematic classification from the standpoint of naming motivations was implemented together with a method of mini-cases, where the onomaturgy of one of the most powerful (for now) companies, Blue Origin, was analyzed in more detail.

The primary empirical material is presented by data from the websites of leading global commercial space technology companies, governmental organizations, and other information resources regarding the New Space economy<sup>2</sup>. Though not all the companies specialized in spacecrafts, the information from 106 current private space technology companies was collected and analyzed<sup>3</sup>.

One of the shortcomings of this research is that despite the small number of names as a result of the specific objects – spacecrafts (in comparison with other vehicles, for example, the names of the cars or ships), not all the onomastic samples were collected due to the dynamic essence of the contemporary private space industry (for example, some projects were closed, others have not yet emerged, some projects were merged, some are not disclosed the information due to the competition, etc.) The second aspect is that we analyze the names of civilian spacecrafts (see similar approach and the comments in Kovács, 2023, p. 365). However, we believe the collected empirics provide an opportunity to reach the goal of this study and elucidate the general picture of the "New Space" onomastic ecosystem.

## RESULTS AND DISCUSSION

## Taxonomy of the spacecraft names

First, we should discuss the current taxonomic system of *cosmporeionyms*, the term we consider the core in this segment of onomastic classification. Referring to the taxonomy proposed by Kovács (2023), he states that it "may be extended further in every category by dividing, for example, ship types" (Kovács, 2023, p. 376). Inevitably, due to the current technological innovations in the "New Space era"

<sup>&</sup>lt;sup>2</sup> The sources include the following list: <a href="https://www.axiomspace.com/">https://www.virgingalactic.com/</a>; <a href="https://www.virgingalactic.com/">https://www.virgingalactic.com/</a>; <a href="https://www.vastspace.com/">https://www.vastspace.com/</a>; <a href="https://www.nasa.gov/humans-in-space/commercial-space/commercial-space-stations/">https://www.nasa.gov/humans-in-space/commercial-space/commercial-space-stations/</a>; <a href="https://spaceflightnow.com">https://spaceflightnow.com</a>; <a href="https:

<sup>&</sup>lt;sup>3</sup> https://spacecrew.com/space-companies

(Baber & Ojala, 2024), not only have different types of spacecrafts emerged, but also their various elements and tools. As a result, *any* taxonomy of spacecraft names will eventually require modification.

We can distinguish the following types of spacecrafts and related technological devices.

## 1. Space vehicles.

## 1.1. Launch system vehicles.

There are many types of launch system vehicles currently worldwide. Among them, the leading are American systems, such as *Falcon 1, Falcon 9*, and *Falcon Heavy* (SpaceX), *Minotaur 6* and *Antares* (Northrop Grumman Innovation Systems), and *New Glenn* (Blue Origin).

# 1.2. Space cargo vehicles.

The former examples of the cargo vehicles include the Soviet *Progress-M* and the American *Cygnus*. Some current examples of the developed or developing commercial space cargo vehicles are *Dragon2* and *Dragon* XL (SpaceX), *Enhanced Cygnus* (Northrop Grumman Innovation Systems), and *Dream Chaser* (Sierra Space).

## 1.3. Crewed space vehicles.

For this type, the well-known in the past were the names of the Soviet *Vostok* and *Soyuz orbital* vehicles, as well as the orbital American Space Shuttle Orbiter and the *interplanetary Apollo* vehicles. Currently, commercial crewed space vehicles are represented by *Crew Dragon* and *Starship* (SpaceX), *Dream Chaser* (Sierra Space), and *Nyx Earth* (The Exploration Company). *Suborbital* examples include *New Shepard* (Blue Origin), *SpaceShip Two* (The Spaceship Company), and *Tycho Deep Space* (Copenhagen Suborbitals).

# 2. Space probes.

These types include the unpiloted devices sent to explore space and collect scientific information about the Universe, represented mainly by government-led agencies (NASA, CMSA, or ESA). Among them, there are various types: *interplanetary spacecrafts* (e.g., *Voyager*), *orbiters* (e.g., *Magellan*), *landers* (e.g.,

Chang'e), and **rovers** (e.g., Yutu). Some recent commercial examples are represented by a variety of lunar landers, such as *Blue Ghost M1* (Firefly Aerospace), *IM-1 Odysseus*, and *IM-2 Athena* (Intuitive Machines), and **asteroid-mining vehicles**, such as *Brokkr* and *Odin* (AstroForge).

## 3. Rocket engines.

This is a new taxonomic group that reflects the growing number of named commercial rocket engines. Some current examples include *Merlin* and *Raptor* (SpaceX), *Ripley* (Ursa Major), *Miranda* (Firefly Aerospace), *RocketMotor Two* (Virgin Galactic), *Archimedes* (Rocket Lab), and *BE-4*, or *Blue Engine-4* (Blue Origin).

#### 4. Artificial satellites.

In this taxonomic group, two subgroups should be distinguished: *artificial satellites* and *satellite constellations*. At the turn of the 21st Century, only 14 countries operated satellites, but now satellites from 91 countries, including Rwanda, Botswana, and Zimbabwe, have reached orbit. In May 2025, there were more than 11700 active satellites.<sup>4</sup> However, commercial artificial satellites and satellite constellations, such as the internet constellation *Starlink* (SpaceX), with 7,875 satellites in June 2025<sup>5</sup>, or *Kuiper* (Amazon), with planned 3236 satellites (Peeters, p. 2021), have overwhelmed Earth orbit in recent years. Due to the large number of satellites, there are many *techno-satellitonyms* (Торчинський, 2008), though not every satellite has a name.

## 5. Modular space stations.

This taxonomic group required separation due to the important role of such elements in space exploration in the past and their growing current role in the "New Space" technological ecosystem. The Soviet *Salyut* and the American *Skylab* were the first space stations that operated in the 1970s. Currently, there are only two operational space stations, the *International Space Station (ISS)* and China's

<sup>&</sup>lt;sup>4</sup> <u>https://www.livescience.com/space/space-exploration/how-many-satellites-could-fit-in-earth-orbit-and-how-many-do-we-really-need</u>

<sup>&</sup>lt;sup>5</sup> https://www.space.com/spacex-starlink-satellites.html

Tiangong Space Station. Among the planned private stations are Haven-1 and Haven-2 (VAST), Axiom Station (Axiom Space), Orbital Reef (Blue Origin), and Starlab (Starlab Space).

## 6. Space telescopes.

Space telescopes can also be considered as a taxonomic group. Most of them are operated by government-led agencies, such as *Hubble* (NASA) or the projected giant space telescope *Xuntian* ("Survey the Heavens," Chinese Manned Space Agency<sup>6</sup>). However, some of them developed in universities and other independent labs, such as *SPARCS*, or *Star-Planet Activity Research CubeSat* (University of Arizona), and *ASTERIA*, or Arcsecond Space Telescope Enabling Research In Astrophysics (MIT).

## 7. Other space vehicles and related technological tools.

This last group includes miscellaneous types of named space vehicles and related technological devices, such as remote robotic tele-manipulators (*Canadarm 2* and *Dextre* by Canadian company MDA), satellite buses (*Photon* by Rocket Lab Corporation), lunar modules (*Starship HLS/Human Landing System* by SpaceX), spacecraft logictical platforms (*Blue Ring* by Blue Origin) the components of orbital manufacturing, and many others. In the future, some of them can also be considered as a specific taxonomic group; however, at the moment, their role and nomenclature are marginal.

## Thematic variegation of the cosmopereionyms

The naming patterns and thematic scope of cosmoporeionyms are broad, considering the range of options and motivations for the spacecrafts' onomaturgs, the creators of the names. Several most visible thematic groups of current cosmoporeionyms that can be distilled (see Table 1).

<sup>&</sup>lt;sup>6</sup> https://www.scientificamerican.com/article/china-delays-launch-of-its-xuntian-space-telescope/

Table 1.

The most typical thematic groups of current cosmoporeionyms

Some thematic groups of	Examples
cosmoporeionyms	
Memorial	Archimedes (Rocket Lab), New
	Shepard (Blue Origin), Hadley (Ursa
	Major)
Zoonymic	Falcon (SpaceX), Merlin (SpaceX),
	Lemur (Spire)
Mythological	<i>IM-2 Athena</i> (Intuitive Machines), <i>Nyx</i>
	Earth (The Exploration Company),
	Odin (AstroForge),
Astronymic	Antares (Northrop Grumman
	Innovation Systems), Spica
	(Copenhagen Suborbitals), Enhanced
	Cygnus (Northrop Grumman
	Innovation Systems)
Earth's natural phenomena	Orbital Reef (Blue Origin), Lightning
	(Firefly Aerospace), <i>Photon</i> (Rocket
	Lab Corporation)
Greek letters	Epsilon (IHI Corporation), Firefly
	Alpha (Firefly Aerospace),
	Virgin Galactic Delta-Class
	(Virgin Galactic)

Since the early stages of the Space Age, some categories, such as *memorial*, *mythological*, *zoonymic* (first of all, ornithonyms, the names of birds), and the names of *the letters from the Greek alphabet* (see Pearce, 1962), have remained popular in space vehicle nomenclature for now. Furthermore, *memorial* (mostly anthroponymic) and mythological themes are still dominant. Anthroponymic memorial names played the key role in naming state-led space projects in the past – from *Galileo*, *Da Vinci*, and *Magellan* to *Amundsen*, *Einstein*, and *Lem* – so the names of famous people practically invaded space. Some cosmoporeionyms also commemorate *nautonyms* (the names of the ships, Karpenko & Neklesova, 2024, p. 59). For example, the shuttle *Atlantis* honored the oceanographic research vessel *Atlantis*.

Interestingly, the mythological onomaturgic theme, traditionally represented in Ancient Greek mythology, has been shifted to other mythological traditions. For example, Nordic mythological names of spacecraft are also popular (e.g., gods Odin and Thor, or dwarf-blacksmith Brokkr). Intriguingly, mythology (not the ideologically motivated names, like in the past) is now a typical theme for the state-owned Chinese Manned Space Agency (CMSA) program's cosmoporeinoyms<sup>7</sup>: the spacecraft *Shenzhou* ("Divine Vessel"), the multimodule space station *Tiangong* ("Heavenly Palace"), the core module *Tianhe* ("The Harmony of Heavens"), the cargo transport spacecraft *Tianzhou* ("Heavenly Ship"), the two space labs *Wentian* ("The Quest for Heavens") and *Mengtian* ("Dreaming of Heavens"), and lunar rovers *Yutu* ("Jade Rabbit", a mythological companion of the Goddess of Moon, Chang'e). These names, rooted in Chinese mythology and ancient traditions, create a new national identity, driven by the cultural heritage brand of China as a technologically advanced space nation.

**Zoonyms** (basically, *ornithonyms*) are typical for new commercial and stateled space projects. Sometimes, the clusters of the "bird's names" are invented by onomaturgs in one company. For example, *Merlin* (the name of a small falcon, *Falco columbarius* species) is now a rocket engine developed by Elon Musk's SpaceX company for use on its *Falcon 1*, *Falcon 9*, and *Falcon Heavy* launch vehicles. According to some sources, the name *Falcon* can also have only a tangential relationship to the bird, as it was given after the fictional starship "Millennium Falcon" from the now classic *Star Wars* movie<sup>8</sup>.

Various *astronymic names* reflect different celestial bodies and space phenomena, such as stars, satellites, planets, constellations, and nebulas, which are also elements of the spacecraft nomenclature. Notably, the morphemes *star* and

<sup>&</sup>lt;sup>7</sup> https://www.chinadaily.com.cn/a/201804/26/WS5ae12347a3105cdcf651a87b.html; https://theconversation.com/china-is-using-mythology-and-sci-fi-to-sell-its-space-programme-to-theworld-162973

<sup>8</sup> https://www.space.com/40547-spacex-rocket-evolution.html

space are very popular elements for the cosmoporeionyms-composites (e.g., Starlink, Starship, SpaceShip Two).

A variety of **Earth's natural phenomena**, including physical, geochemical, mineralogical, and meteorological features, have been used in the past (*Proton*, *Energiya* – "energy", *Iridium*, *Buran* - "snowstorm") and continue to be a motivation source for contemporary commercial spacecrafts nomenclature (e.g., *Neutrino*, *Electron*, *Spectrum*, *Kinetica*).

Though *ideological names* thematic category was popular in the past for the Soviet (*Soyuz* – "Union," *Mir* – "peace") and Chinese (*Dong Fang Hong* - "The East is Red," *Shuguang* – "Dawn," meaning "the dawn of communism") spacecrafts, it is basically unrelated to the current commercial spacecrafts. However, the nationalistic ideology aspects still can be seen for some state-led developing projects (e.g., the projected Russian spacecraft *Oryol* - "Eagle" can have both a zoonymic motivation and nationalistic connection to the Russian coat of arms). The nationalistic sentiments can also be visible in new commercial projects, as discussed later in this paper in a *Blue Origin* mini-case.

Indeed, the discussed thematic groups represent only the most typical onomastic segment of the commercial spacecrafts' nomenclature. For example, *toponymic* names of spacecrafts, such as light rocket *Taymyr1A* developed by Lin Industrial company (Yost & Fishman, 2018), are much less visible in the onomastic landscape of the contemporary commercial "New Space" than in the past (for example, the previous period satellites and launch vehicles *Amazonas*, *Anatolia* 1, *Dnieper*, *Tigris*). There is also a wide variety of unexpected thematic motivations for contemporary onomaturgs that can be found in the miscellaneous spectrum of unique exemplars of the commercial cosmoporeionyms. For example, SpaceX company founder, techno-billionaire Elon Musk, named his spacecraft *Dragon* (first version was *Magic Dragon*) after the 1960th hit song "Puff, the Magic Dragon," by music group *Peter*, *Paul and Mary*9.

<sup>&</sup>lt;sup>9</sup> https://www.space.com/15799-spacex-dragon-capsule-fun-facts.html

## Mini-Case Study: Blue Origin.

We will consider the contemporary onomastic landscape of the "New Space" through the prism of the commercial space company Blue Origin's onomaturgy. The company was established in 2000 by Jeff Bezos, one of the wealthiest people in the world, the owner of the world's largest American online shopping retailer, "Amazon." Unlike Elon Musk's SpaceX, Blue Origin is funded mainly by Bezos' own money, which makes the company all the more important in space history" (Gudmundsson, 2018, p. 13).

Jeff Bezos named the company Blue Origin, which means "Earth." The name emphasizes the Earth as the origin point for all humanity's endeavors. Thus, this *ergonym* (a business organization name, see Karpenko & Neklesova, 2024, p. 37) established the "blue" onomastic thematic cluster for the spacecrafts and other tools, later developed in this space enterprise.

Significantly, there is "a strong element of techno-utopianism" in the New Space when technology is seen as "the solution to both the survival and betterment of humanity" (Eriksson & Newlove-Eriksson, 2023, p. 37). All these aspects are reflected in the onomastic landscape of Blue Origin's commercial spacecrafts.

Blue Origin has designed and produced the reusable *BE-4*, *BE-3U*, and *BE-7* engines, where the *BE* abbreviation means "Blue Engine," continuing the "blue Earth" onomaturgic theme.

In 2023, Blue Origin unveiled a new spacecraft platform for in-space logistics and delivery, such as span hosting, transportation, refueling, data relay, etc. According to the company website, this platform should support a variety of space missions in medium Earth orbit out to the cislunar area (meaning between the Earth's orbit and the Moon). The name of this platform is *Blue Ring*.

The next "blue" component in the company's onomastic cluster is *Blue Moon Mark* 1 and *Blue Moon Mark* 2 spacecraft-landers. They provide access to the

<sup>&</sup>lt;sup>10</sup> https://www.blueorigin.com/about-blue

Moon for both cargo and crew spacecrafts and subsequently can land up to 3 tons and 20 tons on the lunar surface.<sup>11</sup>

The last example related to the "blue" onomastic cluster is a commercial destination, a floating mixed-use business park, in low Earth orbit (LEO) about 400 km above Earth. It is called *Orbital Reef*, generally continuing the theme of the blue planet and referring to the new "ecosystem" (such as a reef in the ocean) in space. The absence of the term "blue" in the name can be explained by the fact that several other companies are involved in this project, led by Blue Origin (Sierra Space, Boeing, Arizona State University, etc.).

The second onomastic theme in Blue Origin's cosmoporeionyms is related to the concept of "space as new frontier" and American nationalism. Notably, the "new frontier" theme as the American nation's identity element was incorporated by NASA into the American space program, and most Americans still accepted the symbolic frontier legacy and its connections to space (Mangus, 1999). New "space barons," such as Jeff Bezos, used this well-known and symbolic theme for the American general public in their onomastic experiments, using the names of the famous American astronauts as the object of national honor.

Blue Origin's *New Shepard* is a reusable suborbital crewed spacecraft system, oriented on space tourists, which flies 10-12 minutes before touchdown. It was named after astronaut Alan Shepard, the first American in space. A heavy lift launch space vehicle, *New Glenn*, is named after John Glenn, the first American to orbit Earth.

The ongoing race for extraterrestrial resources through their exploitation is reflected in the company's mission: to "harness the vast resources of space". Ultimately, the onomastic system of Blue Origin company reflects techno-utopian "blue planet" and nationalistic American new frontier thematic clusters.

 $<sup>^{11}\,\</sup>underline{https://www.space.com/astronomy/moon/lunar-landers-and-transporter-tankers-blue-origin-unveils-its-blue-print-for-the-moon}$ 

## **CONCLUSIONS**

In conclusion, this paper is the first attempt to study the multifaceted onomastic system of commercial "New Space," which is represented in the names of different types of spacecrafts and other vehicles and devices. At the moment, we can distinguish the seven largest taxonomic groups, including the names of *space vehicles*, *space probes*, *rocket engines*, *artificial satellites*, *modular space stations*, *space telescopes*, and *other space vehicles and related technological tools*. In addition, the main thematic onomastic clusters of names can be distilled, including *memorial*, *zoonymic*, *astronymic*, *related to the Earth's natural phenomena*, and *the letters of the Greek alphabet*. Other groups of cosmoporeionyms might also be distinguished, but their role now is marginal (e.g., *toponymic*, *ideological*, and *other names*).

The study revealed that for multi-billionaire techno-capitalist entrepreneurs, the naming of spacecrafts and related elements of "New Space" is a symbolic instrument to express their power, their visions of space nationalism, and for the accelerated privatization of the space exploration and the potential cislunar activities such as extraterrestrial mining, in-orbit manufacturing, lunar bases, etc., (see Peeters, 2021, p. 217). This symbolic technology is correlated with the technotoponymic clusters in urban areas, which include various classes of urbanonyms, which are used by "hi-tech corporate business elites in the neoliberal production of futuristic dehumanized urban places" (Басік, 2024, p. 16).

Some **prospects for further research** on the cosmoporeionyms lie at the intersection between onomastics, political geography, and techno-humanities. Several potential directions for future scientific explorations on this topic are related to the unofficial names of spacecrafts (not analyzed in this work), political-economic dimension of onomastic landscape in space, and a more detailed classification of names based on the potential merger of the "Old Space" and "New Space" names. Finally, it would be crucial to continue analyzing the constantly evolving and everchanging onomastic system of the new commercial space economy, including ergonymic segment.

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#### *АНОТАЦІЯ*

**Вступ.** Протягом останнього десятиліття способи дослідження космосу та космічний бізнес зазнали значної еволюції. Важливо зазначити, що існує прогалина в міждисциплінарних дослідженнях, пов'язаних з ономастичним виміром останніх процесів,

через недостатню кількість досліджень сучасних назв космічних апаратів. Слідуючи закликам до ширшого зв'язку ономастики з позаономастичними методологіями, з метою розширення ономастичної термінологічної системи, розуміння типів назв, їх таксономії та ширших соціально-політичних взаємодій між цими назвами та світом, у статті досліджуються назви космічних апаратів (космопорейоніми) як специфічний ономастичний (під)клас з міждисциплінарної точки зору ономастики та інших галузей дослідження.

Мета дослідження. Метою дослідження є аналіз маловивчених у літературі, нових назв сучасних комерційних космічних апаратів як специфічного компонента ономастичної системи. Об'єктом дослідження є назви сучасних комерційних космічних апаратів, що перебувають у експлуатації або на стадії розробки. Для досягнення основної мети дослідження необхідно відповісти на два ключові дослідницькі питання: 1. Які типи імен існують у сучасній ономастичній екосистемі «Нового Космосу», що розвивається, і як цей ландшафт виглядає з точки зору ономастичної класифікації та таксономії? 2. Які поточні позаономастичні соціально-політичні та технологічні особливості вплинули та мотивували появу цих імен?

Дані та методи. З огляду на міждисциплінарну сутність дослідження та характер емпіричного матеріалу, у цій роботі ми використовуємо змішаний методологічний підхід. Для аналізу офіційних назв комерційних космічних апаратів було застосовано традиційний ономастичний підхід тематичної класифікації з позиції мотивації найменування разом із методом міні-кейсів, де детальніше проаналізовано ономатургію однієї з найпотужніших компаній — Blue Origin. Основний емпіричний матеріал представлений даними з веб-сайтів провідних світових комерційних компаній космічних технологій, а також урядових організацій та інших інформаційних ресурсів щодо економіки «Нового Космосу». Бо не всі компанії спеціалізуються на космічних апаратах, було зібрано та проаналізовано інформацію від 106 чинних приватних компаній космічних технологій.

Результати та висновки. Запропоновано розиирену ономастичну таксономію космічних апаратів, де можна виділити наступні сім типів космічних апаратів та пов'язаних з ними технологічних пристроїв: космічні апарати (включаючи ракети-носії систем запуску, космічні вантажні апарати, космічні апарати з пілотом), космічні зонди (включаючи міжпланетні космічні апарати, орбітальні апарати, посадочні модулі, марсоходи, апарати для видобутку астероїдів), ракетні двигуни, штучні супутники (включаючи супутники та супутникові сузір'я), модульні космічні станції, космічні телескопи та інші космічні апарати та пов'язані з ними технологічні інструменти.

Моделі найменувань та тематичний охоплення космопореонімів є широкими, враховуючи діапазон варіантів та мотивацій для ономатургів космічних апаратів. Існує шість найпомітніших тематичних груп сучасних космопореонімів, які можна виділити, включаючи меморіальні, міфологічні, астронімічні, зоонімічні (переважно орнітоніми, назви птахів) та літери грецького алфавіту. Також можна виділити інші групи космопорейонімів, але їхня роль зараз незначна (наприклад, топонімічні, ідеологічні та інші назви). Міні-тематичне дослідження ономастичної системи компанії Blue Origin розкриває техноутопічну «блакитну планету» та націоналістичні тематичні кластери американських нових фронтирів.

Дослідження також показує, що для мультимільярдерів-підприємцівтехнокапіталістів назви космічних кораблів та пов'язаних з ними елементів «Нового космосу» є символічним інструментом для вираження їхньої влади, їхнього бачення космічного націоналізму та прискореної приватизації космічних досліджень.

**Ключові слова:** найменування космічних кораблів, космопорейонім, ономатургія, «Новий космос», технокапіталізм

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