

## **Актуальность англо-русских словарей в области разработки видеоигр**

**Леонова Анна Владимировна<sup>1</sup>, Белозёрова Анна Алексеевна<sup>2</sup>**

<sup>1,2</sup> Уральский федеральный университет имени первого Президента России

Б.Н. Ельцина, Екатеринбург, Россия

<sup>1</sup> [night\\_neon\\_light@mail.ru](mailto:night_neon_light@mail.ru)

<sup>2</sup> [a.a.belozeroва@urfu.ru](mailto:a.a.belozeroва@urfu.ru)

**Аннотация.** Научная статья посвящается исследованию игровой индустрии в России с целью доказать актуальность составления англо-русского словаря, касающегося разработки видеоигр. Обсуждаются особенности составления двуязычного словаря и предлагается решение к составлению англо-русских словарей в сфере разработки видеоигр. Статья полезна для специалистов в области лингвистики и информационных технологий.

**Ключевые слова:** словарь, английский язык, русский язык, видеоигра, разработка игр, индустрия видеоигр, двуязычный словарь

## **The Relevance of English-Russian Dictionaries in the Field of Video Game Development**

**Anna V. Leonova<sup>1</sup>, Anna A. Belozeroва<sup>2</sup>**

<sup>1,2</sup> Ural Federal University named after the First President of Russia B. N. Yeltsin,

Ekaterinburg, Russia

<sup>1</sup> [night\\_neon\\_light@mail.ru](mailto:night_neon_light@mail.ru)

<sup>2</sup> [a.a.belozeroва@urfu.ru](mailto:a.a.belozeroва@urfu.ru)

**Abstract.** The scientific article is devoted to the study of the gaming industry in Russia in order to prove the relevance of compiling the English-Russian dictionaries related to the development of video games. The features of compiling a bilingual dictionary are discussed and a solution is proposed for compiling an English-Russian

dictionary in the field of video game development. The article is useful for specialists in the field of linguistics and information technology.

**Keywords:** dictionary, English language, Russian language, video game, game development, video game industry, bilingual dictionary

Every year, mobile and computer games have an increasing target coverage in our society. The gaming industry affects not only on mass culture, education processes, but also on the economy of countries. New game genres appear, and, consequently, new game technologies, that game developers deal with.

The relevance of compiling English-Russian dictionaries in the field of video game development is explained not only by the fact that the number of users is increasing, therefore, the turnover and tools of video games are growing, but also by the fact that such specialized professional dictionaries that fully cover the process of video game development are not freely available. There are separate books devoted to game development, but it is difficult to call the glossary at the end of the book complete, because for those who wish to work in this area of knowledge, the knowledge simply will not be enough and the information in glossaries may not be relevant.

To justify the relevance of the topic, there is a need to define the concept of “video game”, the place of the gaming industry in Russia and the process of developing video games.

A video game is a game that uses images generated by electronic equipment [5]. Speaking about the place of video games in people's lives, one of the most important events in the world was the emergence of a new kind of games - "video games" or "electronic games". First electronic game consoles appeared in the 70s of the XX century, after this event, computer games appeared. The latter are a mixture of artistic and technological objects, like computer graphics and web design, where technologies are used not only as a tool for creating an artistic product, but also were included in the artistic content and aesthetic properties of the work [2].

According to G.M. McLuhan games are an integral part of popular art. This is a public reaction to the impact of a particular culture. He believed that technology is the

essence of the expansion of the living organism, and games are the essence of the expansion of the social man and the body politic. Games are precise models of culture that are used to adjust to the everyday stress in any social group [4]. Therefore, it can be said that the development of video games will always follow the development of mankind.

The Russian gaming sector began to form in the face of fierce competition with foreign gaming companies. However, this does not mean that Russian gaming companies are far behind the trends abroad, for example, the fairly rapid assimilation of companies to VR technologies when they appeared on the gaming market [7].

Due to the high demand and prevalence of computer games in Russia, there is a need for relevant specialists. There was no special education in the gaming field, but the first game design courses at the Scream School of computer graphics were created by 2011. In 2014, the first professional retraining program in the development and management of game projects was launched at the Higher School of Economics University. Today, there are programs for training in game design and programs for the management in the gaming industry and eSports throughout Russia [6].

The COVID-19 pandemic has had a strong impact on the development of the entertainment industry in the world. In 2020, there was an increase in the popularity of mobile games. The market for computer games and eSports in the same year grew by 8%, to 147 billion rubles in the Russian entertainment sector, and according to forecasts in 2021, it grew by 5%, to 158 billion rubles. In 2025, according to forecasts, mobile casual games will grow by 5% per year, up to 2 trillion rubles [6, 7].

Talking about the video game development life cycle, it is divided into the following stages: concept, prototyping, vertical slice, content production, closed beta testing, open beta testing, release, operation and support [3]. As we can see here, such specialists as programmers, game designers, 2D and 3D artists, animators, QA specialists, UI / UX designers, etc. take part in the development.

Given the fact that new technologies are developing every day and corresponding new professions appear in the video game industry: virtuality architect, designer of virtual worlds, designer of interactive interfaces in VR and AR, emotion designer,

game practitioner, infostylist, AR game producer, VR 360° movie director, choreographer of interactive shows, artist programmer [7].

Studying the above information about game development, we came to the conclusion that with the development of technology specialized terminology appears, which may not have analogues in Russian, for example, “golden master” is the final version of a software program that is sent to manufacturing and is used to make retail copies of the software. This raises the question of compiling a dictionary [9].

The terminology of various industries in countries develops at a non-uniform pace, obeys its own rules depending on the development of the industry itself, the use of these terms. Specialists in the gaming industry, as well as translators, need to create a certain system of constantly updated vocabulary, especially complex, unusual terminology [1].

In general, dictionaries such as ABBYY Lingvo, Macmillan, technical dictionaries can be used, but the creation of a bilingual terminological dictionary will definitely be of practical use among those who work in the gaming industry.

In a bilingual terminology dictionary, all terms must be precise and must be translated according to the industry in which they are used. It should also be taken into account that, in addition to official terms, there are terms that are specially modified for everyday communication between workers and do not exist in the dictionary. Such terms create problems in the interpretation of foreign texts.

Many translators and terminologists characterize and classify technical terms as follows: 1. Terms that have an international tone are transmitted by transliteration and do not need translation: hacker - хакер. 2. Terms that have direct equivalents in Russian and are conveyed by the corresponding equivalents: copyright – авторское право. 3. Terms that are translated by calque, where the meaning is conveyed using Russian words and expressions that literally reproduce the words and expressions of the English language: data storage – хранилище данных.

All of the above features of technical terminology and its translation must be taken into account when compiling a terminological dictionary. Valieva A.V. suggests the following steps when working on bilingual translation dictionaries:

The preliminary stage is a critical analysis of the current state of lexicography:

- a) analysis of existing vocabularies;
- b) study of the needs of the addressee - the end user of the dictionary.

First step: vocabulary design.

- a. Determination of requirements for dictionaries based on the received data.
- b. Development of the macrostructure of the dictionary.
- c. Development of the microstructure of the dictionary.

The second stage: selection of lexical material, compilation of a dictionary word register of the future dictionary. Direct analysis and description of special vocabulary included in the dictionary word register.

The third stage: preparation of the dictionary for publication (editing, clarification, etc.). Experimental verification of the compliance of the obtained product with the set goals [1].

In addition to the above, it should be taken into consideration that not only IT specialists who use technical terms work in the industry, but it is also artists, directors, so it makes sense to develop a dictionary that would be divided into sections depending on the type of activity in game development

If we talk about publication of the dictionary, then it can be published in different forms: in paper or electronic form. The main advantages of the electronic dictionary include: fast navigation due to hypertext and memorization functions, the presence of various types of search, the content of sound elements and animated illustrations, fast search capabilities, the ability to add notes or comments, takes up little space. The disadvantages include: getting used to the different interfaces of dictionaries, in case of a large number of functions, the inconvenience of using in a mobile application, the possible loss of time when applying search strategies by an inexperienced user, the high cost of some dictionaries, the occurrence of technical problems.

Turning to a paper dictionary, the following advantages can be distinguished: the period of learning to use these dictionaries passes faster than with electronic ones, does not lead to visual fatigue, unlike electronic ones. The disadvantages include: the heaviness of multi-volume publications, less practicality, pages turn yellow or

deteriorate over time. At the same time, it can be both an advantage and a disadvantage that it is easier to search for words in the dictionary, since there is only an alphabetical search [8].

As a result, given the trend of the world towards digital transformation and the fact that the gaming industry is closely connected with the use of personal computers, the most convenient way to read such a dictionary will be a mobile application, computer program, or website. Based on what was indicated earlier, it can be possible to propose the compilation of several types of dictionaries: 1. A unified dictionary of terms that would include all possible terms from programming to directing - such a dictionary, for example, would be suitable for the head of the game development department. 2. Dictionary, consisting of subsections for a particular profession. The dictionary would be suitable for people who want to get acquainted with different professions and their terminology, or who already work in this profession and want to deepen their knowledge.

Thus, the appearance of English-Russian dictionaries in the field of game development using advanced digital technologies will open up new horizons in this type of activity. Since information technology is improving every day, the games industry will develop in the same progression - all this leads to the fact that the vocabulary of terms will be replenished. When creating a dictionary, it is necessary to take into account the goals of the reader, the requirements for vocabulary, the terminology of video game developers and the choice of the form of publication.

#### **Список источников**

1. Валиева А.В. Филологические науки. Вопросы теории и практики [Электронный ресурс] – Тамбов: Грамота, 2013. – № 6. – Ч. 2. – С. 49-53. – URL: [https://www.gramota.net/articles/issn\\_1997-2911\\_2013\\_6-2\\_11.pdf](https://www.gramota.net/articles/issn_1997-2911_2013_6-2_11.pdf) (Дата обращения: 19.04.2023)
2. Галкин Д.В. Компьютерные игры как феномен современной культуры: опыт междисциплинарного исследования [Электронный ресурс] / Д.В. Галкин // Гуманитарная информатика. – № 3. – 54-71 с. – URL:

<https://cyberleninka.ru/article/n/kompyuternye-igry-kak-fenomen-sovremennoy-kultury-opyt-mezhdistsiplinarnogo-issledovaniya> (Дата обращения: 18.04.2023)

3. Зайцева И.А. Особенности разработки игровых приложений [Электронный ресурс] / И.А. Зайцева // Наука, техника и образование. – URL: <https://cyberleninka.ru/article/n/osobennosti-razrabotki-igrovyyh-prilozheniy> (Дата обращения: 19.04.2023)

4. Маклюэн Г.М. Понимание Медиа: Внешние расширения человека [Электронный ресурс] / Пер. с англ. В. Николаева; Закл. Ст. М. Вавилова. – М.; Жуковский: «КАНОН-пресс-Ц», «Кучково поле», 2003. – 464 с. – URL: [http://yanko.lib.ru/books/media/mcluhan-understanding\\_media.pdf](http://yanko.lib.ru/books/media/mcluhan-understanding_media.pdf) (Дата обращения: 18.04.2023)

5. Научно-технический энциклопедический словарь [Электронный ресурс]. – URL: [https://slovari.bibliofond.ru/ntes\\_word/ВИДЕОИГРА/](https://slovari.bibliofond.ru/ntes_word/ВИДЕОИГРА/) (Дата обращения: 18.04.2023)

6. Седых И. А. Индустрия компьютерных игр - 2020 [Электронный ресурс]. – URL: <https://dcenter.hse.ru/data/2020/07/27/1599127653/Индустрия%20компьютерных%20игр-2020.pdf> (Дата обращения: 17.04.2023)

7. Седых И.А. Технологии в индустрии развлечений – 2022 [Электронный ресурс]. – URL: [https://dcenter.hse.ru/data/2022/02/27/1753029634/Технологии\\_в\\_индустрии\\_развлечений-2022.pdf](https://dcenter.hse.ru/data/2022/02/27/1753029634/Технологии_в_индустрии_развлечений-2022.pdf) (Дата обращения: 17.04.2023)

8. Чумарина Г.Р. Сравнительная характеристика электронных и бумажных словарей в функциональном аспекте [Электронный ресурс] / Вестник Чувашского университета – Чебоксары: Чувашский государственный университет им. И.Н. Ульянова, 2009. – № 4. – С.265-270. – URL: <https://cyberleninka.ru/article/n/sravnitel'naya-harakteristika-elektronnyh-i-bumazhnyh-slovarey-v-funktsionalnom-aspekte> (Дата обращения: 19.04.2023)

9. Computer Dictionary [Электронный ресурс]. – URL: <https://techterms.com/definition/goldenmaster> (Дата обращения: 18.04.2023)

## References

1. Valiyeva A.V. Filologicheskiye nauki. Voprosy teorii i praktiki [Electronic resource]. – Tambov: Gramota, 2013. – № 6. – CH. 2. – pp. 49-53. – URL: [https://www.gramota.net/articles/issn\\_1997-2911\\_2013\\_6-2\\_11.pdf](https://www.gramota.net/articles/issn_1997-2911_2013_6-2_11.pdf) [Electronic resource]. - URL: [https://www.gramota.net/articles/issn\\_1997-2911\\_2013\\_6-2\\_11.pdf](https://www.gramota.net/articles/issn_1997-2911_2013_6-2_11.pdf) (Date of access: 19.04.2023)
2. Galkin D.V. Komp'yuternyye igry kak fenomen sovremennoy kul'tury: opyt mezhdistsiplinarnogo issledovaniya [Electronic resource] / D.V. Galkin // Gumanitarnaya informatika. – № 3. – 54-71 s. – URL: <https://cyberleninka.ru/article/n/kompyuternye-igry-kak-fenomen-sovremennoy-kul'tury-opyt-mezhdistsiplinarnogo-issledovaniya> (Date of access: 18.04.2023)
3. Zaytseva I.A. Osobennosti razrabotki igrovykh prilozheniy [Electronic resource] / I.A. Zaytseva // Nauka, tekhnika i obrazovaniye. – URL: <https://cyberleninka.ru/article/n/osobennosti-razrabotki-igrovykh-prilozheniy> (Date of access: 19.04.2023)
4. Maklyuen G.M. Ponimaniye Media: Vneshniye rasshireniya cheloveka [Electronic resource] / Per. s angl. V. Nikolayeva; Zakl. St. M. Vavilova. – M.; Zhukovskiy: «KANON-press-TS», «Kuchkovo pole», 2003. – 464 p. – URL: [http://yanko.lib.ru/books/media/mcluhan-understanding\\_media.pdf](http://yanko.lib.ru/books/media/mcluhan-understanding_media.pdf) (Date of access: 19.04.2023)
5. Nauchno-tekhnicheskiiy entsiklopedicheskiiy slovar' [Electronic resource]. – URL: [https://slovari.bibliofond.ru/ntes\\_word/VIDEOIGRA/](https://slovari.bibliofond.ru/ntes_word/VIDEOIGRA/) (Date of access: 18.04.2023)
6. Sedykh I. A. Industriya komp'yuternykh igr - 2020 [Electronic resource]. – URL: <https://dcenter.hse.ru/data/2020/07/27/1599127653/Industriya%20komp'yuternykh%20igr-2020.pdf> (Date of access: 17.04.2023)
7. Sedykh I.A. Tekhnologii v industrii razvlecheniy – 2022 [Electronic resource]. – URL:



[https://dcenter.hse.ru/data/2022/02/27/1753029634/Tekhnologii\\_v\\_industrii\\_razvlecheniy-2022.pdf](https://dcenter.hse.ru/data/2022/02/27/1753029634/Tekhnologii_v_industrii_razvlecheniy-2022.pdf) (Date of access: 17.04.2023)

8. Chumarina G.R. Sravnitel'naya kharakteristika elektronnykh i bumazhnykh slovarey v funktsional'nom aspekte [Electronic resource]. / Vestnik Chuvashskogo universiteta – Cheboksary: Chuvashskiy gosudarstvennyy universitet im. I.N. Ul'yanova, 2009. – № 4. – pp. 265-270. – URL: <https://cyberleninka.ru/article/n/sravnitelnaya-harakteristika-elektronnyh-i-bumazhnyh-slovarey-v-funktsionalnom-aspekte> (Date of access: 19.04.2023)

9. Computer Dictionary [Electronic resource]. – URL: <https://techterms.com/definition/goldenmaster> (Date of access: 18.04.2023)

### **Информация об авторах**

**Анна Владимировна Леонова** — студент Уральского гуманитарного института Уральского федерального университета (Екатеринбург, Россия). E-mail: [night\\_neon\\_light@mail.ru](mailto:night_neon_light@mail.ru)

**Анна Алексеевна Белозёрова** — кандидат педагогических наук, доцент кафедры иностранных языков Уральского гуманитарного института Уральского федерального университета (Екатеринбург, Россия). E-mail: [annabelz@yandex.ru](mailto:annabelz@yandex.ru)  
ORCID: 0000-0003-0341-3313

### **Information about the authors**

**Anna V. Leonova** — student of the Ural Institute of Humanities at the Ural Federal University (Yekaterinburg, Russia). E-mail: [night\\_neon\\_light@mail.ru](mailto:night_neon_light@mail.ru)

**Anna A. Belozerova** — candidate of Sciences in Pedagogy, Associate Professor at the Department of Foreign Languages of the Ural Institute of Humanities at the Ural Federal University (Yekaterinburg, Russia). E-mail: [annabelz@yandex.ru](mailto:annabelz@yandex.ru) ORCID: 0000-0003-0341-3313

