

Video games and less widely spoken languages: The Baltic States

Mária Koscelníková
Constantine the Philosopher University in Nitra, Slovakia

Abstract

Another decade has begun, and video game developers are aiming to provide higher quality video games to give customers the best product possible. In terms of localization, it is difficult to assess whether there has been an increase in the number of languages included in games. Regarding less widely spoken languages in particular, the available range of video game translations is often unpredictable and arbitrary. In our research, we aim to map the situation in selected European countries. Several less widely spoken European languages share similar characteristic features, e.g. Slovak and Czech, Serbian and Croatian, Swedish and Norwegian, and along with financial considerations this results in a high probability of the language with the higher number of speakers being the only available chosen representative of the given region. Following our ongoing research,¹ the paper examines the situation in the Baltic states and focuses on legislation and practice regarding the localization and translation of video games in Estonia, Lithuania and Latvia.

Introduction

During the video game localization process, the chances of a less widely spoken language featuring in a video game are variable². Having observed hundreds of video games made by developers from countries with official languages that are less widely spoken, there is no guarantee that a video game will be localized into that less widely spoken language, and if it happens, its presence might not be sufficiently visible to the user. In the case of widely spoken languages (e.g. English, German, Spanish, Italian), we observed their availability in most video games regardless of type, genre or popularity. Video games in widely spoken languages are common (Chandler, 2020), and these languages are also easier to find in translation, since they are often included in the list of supported languages in a video game. However, when a gamer

¹ Koscelníková, Mária. 2020. Localization of video games into less widely spoken languages: The issue of localization of video games into languages sharing a common history (on the example of Slovak and Czech legislative parallels). Submitted to The Journal of Internationalization and Localization. The paper investigates the Balkan states.

² This work was supported by the Scientific Grant Agency VEGA under the project No. 2/0166/19.

wants to play a video game in a less widely spoken language, we observed that the information about language support for said language is not uniform and often unreliable, as in the case of the Latvian video game *Flashing Lights* (Excalibur Games, Latvia) offering 17 languages on Steam, but in fact having 18 available languages, with Latvian omitted from the language support information. Languages like German, French or Spanish have an advantage over less widely spoken languages, since any video game will most likely feature a widely spoken language. Video game developers are governed by market demand and revenues in specific regions, and bearing this in mind, it is not surprising that the most frequent languages appearing in video games are, besides English, Japanese, German, French, Spanish, Italian, Portuguese, Chinese, Russian and Korean. It is not so common to encounter video games featuring less widely spoken languages, and in the case of mutually understandable languages or languages sharing similar features, it is usually the language with larger number of speakers that appears in a video game. As a long-term researcher of video game localization and specific video game markets, we observed the position of Slovak in relation to Czech from the legislative and pragmatic viewpoint and the phenomenon interested us enough to compare the issue with the rest of less widely spoken European languages that share similar features such as language family or morphology and discover the practices of video game developers in relation to legislation and end user. This paper shall investigate the practices in the Baltic states as the second strategic region of our interest with languages sharing similarities. Our interest in this paper is purely language and market oriented, however we also acknowledge the political history of the researched countries that influenced the current situation.

After years of observing video games, we assume there is no guarantee of a less widely spoken language featuring in a video game (regardless of whether the video game was made by a development studio in a country with a less widely spoken language as an official language, or regardless of any uniform or publicly declared reasons why the less widely spoken language should or should not appear in it. As seen in many interviews,³ video game developers investigate market demand showing them which languages are sufficiently beneficial to feature in a video game, or sometimes they consider the demands of fans.⁴ Budgets also motivate developers in including or

³ Interview with the founder of the most successful Slovak video game development studio, Šimon Šicko: <https://slovakstartup.com/2016/10/23/simon-sicko-pixel-federation/>.

⁴ Excerpt from an interview with one of the biggest Czech video game developers, 2K Czech on the remake of the game *Mafia – Definitive edition*: “The game will have a new Czech dubbing, an exceptional thing in our small market. Did you plan to include the Czech dubbing since you’ve started to work on the remake? A: “Definitely. Some of our fans considers the Czech version

excluding languages in a video game. In the first stage of our research⁵ (soon to be published), we have discovered that legislation demanding localization of video games does not necessarily mean that a video game will indeed be localized into a given language (the Slovak and Croatian case) and even without explicit legislation, a country with a less widely spoken language may enjoy video games with said language included in the language support (e.g. the Czech Republic, Serbia). Despite these circumstances, legislation should be respected, but in the case of incorrect, insufficient and inexplicit wording of laws on localization, we assume that many developers have the opportunity to act on their own assumptions, a phenomenon that could easily be prevented by institutions that could supervise the use of language in video games. An example of a functioning supervising institution regarding Slovak audiovisual works (films, television and radio programmes) is the Slovak Council for Broadcasting and Retransmission that superintends the use of language in Slovak radio and television broadcast.⁶

Shared linguistic features also might favour a language with more speakers. Inconsistent practices motivated us to research the European situation thoroughly and this paper will focus on Estonian, Latvian and Lithuanian localization practices. The following chapter shall depict the chosen methodology as well as key terms used in this article. This paper is our second paper investigating the situation of video game localization into less widely spoken languages, with the first paper aimed at the Balkan states soon to be published.

1 Key terms and methodology

Localization of video games has become a regular and natural process accompanying video game development, but not every language appears in a video game, especially less widely spoken ones. In our research, we work with the term **less widely spoken language** to distinguish such languages from the widely spoken languages regularly appearing in video games. For the purposes of this paper, we worked with the renowned database *Ethnologue*, annually providing data on the most spoken languages. We consider **less widely spoken language** a language with less than 15 million speakers. In

of Mafia the very definitive edition...” (own translation from Czech) <https://www.reflex.cz/clanek/rozhovory/102226/exkluzivni-rozhovor-s-tvurcem-remaku-mafie-kolik-bude-mit-hra-misi-a-proc-paulie-vypada-tak-jak-vypada.html>.

⁵ See the 1st footnote.

⁶ The Slovak article refers to a fine for the mislabelling of a TV programme previously labelled as suitable from 12 years of age instead of 15. <https://www.teraz.sk/slovensko/media-rvr-ulozila-pokuty-i-upozornen/501940-clanok.html>.

terms of less widely spoken European languages, the newest data published in 2020 placed Slovak (7 mil. speakers, #143 place), Czech (13 mil. speakers, #88 place), Hungarian (13 mil. speakers, #95 place), Swedish (13 mil. speakers, #93 place), Finnish (6 mil. speakers, #160 place), Danish (6 mil. speakers, #164 place), Norwegian (5 mil. speakers, #171 place), Serbian (9 mil. speakers, #127 place), and Croatian (7 mil. speakers, #150 place) into this category. Languages with less than 4 million speakers like Slovenian, Estonian, Latvian and Lithuanian were not even included in the top 200 list.⁷

We started our research with a comparison of Slovak and Czech legislative parallels with the legislative parallels of the Balkan states, specifically the ones with languages similar to each other – Serbia, Croatia and Slovenia,⁸ and tried to devote the rest of our research to other geographical regions with languages similar to each other. We were motivated purely by language similarities and market practices, realizing the different political situations that led to the current language legislation. Beginning with the Balkan states, we continue with **the Baltic states**, but regarding the term Baltic states, we must specify its use. Baltists and historians like Dini (2014) and Kasekamp (2010) point out various uses of the term, and historians like Hiden (1994) and Smith (2012) automatically encompass Estonia, Latvia and Lithuania under the term Baltic states without explanation. Despite Dini (2014) carefully depicting the appellative, technical, linguistic, geographical and toponomastic approaches towards the term, for the purposes of our research and interest in the Baltic region we will work with Hiden's conception and when mentioning the Baltic states, we will refer to Estonia, Lithuania and Latvia.

Having the key terminology clarified, we will focus on the methodology that is mostly uniform for all our papers related to the localization of video games into less widely spoken languages. The main aim of our research is to find the similarities and differences in the practices on the respective markets and to map the appearance of less widely spoken languages in video games. Having observed Slovak and Czech relations and market practices, we have spotted a unique relationship as a result of the historical events preceding the separation of Czechoslovakia in 1993. Czech is legally recognized as comprehensible by the Slovak state, and the Slovak audiovisual and multimedia market is significantly influenced by this circumstance (Perez and Jánošíková 2018, 22-32), with an abundance of Czech localizations in the Slovak market. Slovak is overshadowed by Czech and it is almost certain that the language with the greater number of speakers is dominant and the only language covering the whole region. The question of acceptance of this situation by Slovak gamers is so far unresearched. To verify tendencies of video game developers, we need to look at the language and audiovisual or

⁷ Ethnologue database: <https://www.ethnologue.com/guides/ethnologue200>, accessed in November 2020.

⁸ See the 1st footnote.

multimedia-related legislation and look for any legal obligations related to the localization of video games, since their existence should demand and result in localization into the respective languages.

In the Slovak and Czech case, Slovak legislation considers Czech language comprehensible, and distributors of multimedia works in Slovakia may produce video games with Czech localization only provided that the origin of the video game is Czech.⁹ The wording of the Slovak legislation is clearly not explicit enough since the Slovak market contains plenty of video games of non-Czech origin with Czech localizations. The lack of a control mechanism such as an institute with enforcement powers causes the persistence of the situation, as well as the European age rating system PEGI, which clashes with Slovak legal requirements and wordings, and gives distributors and developers the option to exclude Slovak from the list of localized versions. In comparison, the Czech Republic does not consider Slovak comprehensible, since there is no legislation on a state language, neither is there legislation covering video game localization. Video game developers often argue that the Slovak market is small and non-profitable¹⁰ (economically this is true, however a sociological or behavioural survey of Slovak gamers has not been done yet and any internal market analyses of video game developers are of a private nature) or they often mention doing analyses as part of their research¹¹ and vice versa, indicating a not very bright future for Slovak localizations. A behavioural survey would clarify the preferences of Slovak gamers; so far none has been elaborated.

The Slovak-Czech data gave us the opportunity to systematically compare these circumstances with the rest of the less widely spoken languages that share a common history or linguistic features, with an aim of investigating how other similar less widely spoken languages cope with such circumstances, whether the situation will be the same and the fate of less widely spoken languages in game localization will be endangered, as well as to show the good

⁹ The Slovak Act on Audiovisual Media 40/2015 Coll., available at: <http://www.aic.sk/files/AIC-subory/ACT-on-Audivision-EN.pdf>, see part four

¹⁰ In the article "Ako vytvoriť hru? GameDev na Slovensku" (How to create a video game? Game development in Slovakia) published in April 2020, a Slovak video game developer mentions that the Slovak market is tiny, and it does not make sense to aim a video game at Slovak gamers: <https://www.redbull.com/sk-sk/michal-ferko-ako-vytvorit-hru-gamedev-slovensko-powerplay-local-gaming>.

¹¹ In the article for Slovak magazine *Téma*, the most successful video game entrepreneur, Šimon Šicko, constantly emphasizes the importance of market analyses as a key to their success: <https://hnonline.sk/tema/2213250-nase-hry-hraju-miliony-ludi-na-svete-hovori-sef-slovenskej-firmy-ktorej-uspechmi-sa-chvali-aj-stat>.

practices used in other countries where the market flourishes with local language versions of video games.

Firstly, we will look for linguistic parallels in the legislation regarding an official language in each researched country. Such formulations indicate the number of official languages used and how or when the translations into the official language(s) should be realized. Specifically, we will try to find a mention of “comprehensibility” of any other language as per the Slovak legislation on the state language. Secondly, we will observe the mention of localization of video games in the legislation. We will state all the legislative circumstances and valid rating systems in Table 1. From the legislative viewpoint, video games are a new medium the localization of which started to be provided in the late 1980s with the expansion of American and Japanese video games (Chandler, Deming 2012). Video game localization does not have a long tradition in translation studies, and relevant literature was published only at the beginning of the 21st century (Esselink’s in 2001, Deming’s and Chandler’s in 2012, first in 2005, O’Hagan’s and Mangiron’s in 2013, Bernal-Merino’s book in 2015). We can only expect that this slow implementation will be repeated in the respective legislative systems, depending on the popularity of video games as well as the community interested in their localization. The legal specification and requirements of video game localization should shed light on market conditions. Thirdly, the presence of video game developer associations shows the establishment of video game localization practices. The associations often group the most significant and active video game developer studios and provide information about them. They also organize various video game and localization related events that help the community to thrive and advance. We will observe whether the researched countries have such an organization and check the works of the given video game developer studios. Finally, it is rather rare to find a less widely spoken language present in more prominent video game titles, especially when the developer studio is not from a country with an official language considered less widely spoken. There is however a higher probability that local video game developers will include their official languages in their video games and we will try to examine such games, their availability and number of languages featured in them. The examined developer behaviour might indicate the future direction of a given language.

The findings of our paper shall provide a mapping of market practices regarding video game localization into less widely spoken languages and show the possibilities of such localization based on the positive examples of the researched countries. We will present selected video games across various platforms and genres to show the heterogeneous practices adopted across the market, since the limits of this article do not allow us to provide the full lists of researched video games. However, we plan to revisit the topic in the future and publish the full list of researched video games.

2 Languages of the Baltic states – similarities and differences

Of the countries sharing a common history, and linguistic or cultural similarities, Estonia, Latvia and Lithuania represent a rare phenomenon – their contrasting Indo-European and Finno-Ugrian linguistic origins. Under Russian rule for a notable period, Russian notably influenced the language use of the inhabitants of the Baltic states. As we mentioned earlier, historians and Baltists do not have a uniform opinion of the countries that should belong under the label “Baltic states”, since many consider the Baltic states “all the countries facing the Baltic Sea” (Dini 2014, p. 36). However, it refers to diverse countries in terms of language with a clash of two different language families, Indo-European and Finno-Ugrian, with Estonia more related to the Finno-Ugrian group, and Latvia and Lithuania belonging to the Indo-European family. Regarding similar historical parallels and struggles, we decided to work with Hiden’s understanding of the term (2014), as well as from the game market viewpoint, since Estonia, Latvia and Lithuania are considered a single region in many publications and are not spoken about separately.¹² The term Baltic states is an “accepted geopolitical meaning” (Dini *ibid.*) for the countries of Estonia, Latvia and Lithuania.

With an alluring strategic location for both Eastern and Western worlds, the Baltic states struggled heavily for independence. Being in the spotlight of the Scandinavians, Germans and Slavs, the three countries were influenced by many nations. The Russian Empire was another influential milestone in the development of the three languages due to russification under the Soviet Union and compulsory Cyrillic in Lithuania, as well as Germans that were also present, but not so notable in terms of language (Hiden and Salmon 1994). We also must note that compared to our soon-to-be published research on the Balkan states, the Baltic states did not experience disputes or wars with each other in modern history. In the case of the Baltic states, historical circumstances might play a small role in the language support offered by the given developer studios, and we will try to demonstrate this using the examples in the tables.

Our assumption is supported by a detailed study called *Europeans and their languages*, published by Eurobarometer in 2012. Despite not being able to find any recent study in such a format, the data presented indicate possible tendencies of Baltic recipients and we can expect the presence of certain phenomena in localized video games. We expect that besides Estonian, Latvian or Lithuanian respectively, Russian might appear in the video games of the given countries and possibly serve as a substitute for their mother tongue, since 56 % of Estonians, 67 % of Latvians and 80 % of Lithuanians mentioned Russian as the most widely spoken foreign language (Eurobarometer 2012). However, the situation in 2020 might be completely different and,

¹² Analysis of the Baltic Industry, http://baltic-games.eu/files/bgi_analysis_results_sep_2018-compressed.pdf, see page 11.

unfortunately, there has not been a similar study that would compare the answers of the respondents with the present situation. The political situation since then could have changed the preferences, but as mentioned similar research has not been done in recent years. Based on the data published so far we expect Russian to be present in video games to the current day. Despite all the countries having legislation covering the status of the state language as well as one official language, we expect English, as well as Russian to be present instead of the Baltic languages and serving as an umbrella language. English as a standard language used in video games is an omnipresent means of communication, and often it is the only language through which gamers can experience the game. The phenomenon of a widely spoken language representing other similar but less widely spoken languages resembles the Slovak and Czech language situation, with Czech dominating both Czech and Slovak markets and leaving a smaller chance for Slovak language to appear in video games. The important factor in localization being realized is legislation, defining a framework or processes necessary to be performed in every country. In Slovakia, despite the legislation dealing with the distribution of localized video games covering games for children, its ambiguous wording in terms of recipients and video game labelling coincides with the applied European video game labelling system, PEGI, and we assume it gives video game distributors and developers the opportunity not to strictly follow the legislation (Koscelníková 2017). We were interested in the existence of such legislation in the researched countries, the recognition of the video games in it, the required languages a video game shall be localized into, protection of minors and based on the ambiguous definition of a video game in the Slovak legislation, we wanted to see how the legislation of the researched countries consider a video game. We provide an overview in Table 1.

COUNTRY	PO P.	VG IN LEGISLATION	LOCALIZATION OF VG SOLELY INTO THE GIVEN LANGUAGE	PROTECTION OF MINORS	VG CONSIDERED AUDIOVISUAL WORKS
ESTONIA	1.3 mil.	No	Not identified	PEGI	Unknown
LATVIA	1.9 mil.	No	Not identified	PEGI	Unknown
LITHUANIA	2.8 mil.	No	Not identified	PEGI	Unknown
SLOVAKIA	5.5 mil.	Yes (partially)	No	PEGI	Multimedia works

CZECHIA	10.7 mil.	No	Not identified	PEGI	Not mentioned
---------	-----------	----	----------------	------	---------------

Table 1: Comparison of legislative circumstances and valid rating systems so far

As we can see, the researched Baltic countries do not have any legislation requiring localization of video games into their respective languages. Finding a video game with Estonian, Latvian or Lithuanian shall then provide us a signal and interest in the localization into those languages.

3 Video game localization in the Baltic states

3.1 Estonia

Being the smallest of the researched countries, Estonia has a population of 1,329,916 people (Eurostat, July 2020). Regarding legislation, Estonia has the Language Act with the newest version in force as of 2011. According to this act, Estonian is the official language in Estonia and there is no mention of a comprehensible language comparable to the Slovak legislation. The same act also mentions the use of the state language in audiovisual works; however, the term audiovisual works is not specified. Estonians have a Language Institute responsible for legal enforcement. Legislation covering video games was nowhere to be found. Translation is, however, required for foreign audiovisual works and "a foreign language text shall be accompanied by an adequate translation into Estonian in form and content" (§18, Chapter 4). Non-compliance is punished, and it is related mostly to broadcasting. In terms of audiovisual legislation, Estonia has the Media Service Act of 1 January 2014, but video games are nowhere to be found there. Legislation covering video game localization is yet to find support.

When it comes to associations and interest in video game localization, Estonia does not have an independent video game developers' association per se, only a "chapter" of the International Game Developers Association (hereinafter referred to as "IGDA"). However, IGDA Estonia has an active and elaborate website offering plenty of data regarding video game developer studios. Out of 79 listed members of the association, we found 10 active game development studios and investigated more than 50 games, in which we tried to find language support trends and tendencies. Of them, almost each contained English and Russian as we expected, and we have not found any game in Estonian so far. Most of the games were released for Android or iOS, with a small number of games for PC. We can see that being the smallest country and having no legislation covering translation of video games, and with a widespread understanding of Russian, Estonians might be left to rely on

firstly English, then Russian more than on their mother tongue. We present selected researched video games in **Table 2**. Considering the limitations of the paper, for all the following appendices we will use the abbreviations of the languages. Regarding this and the following tables, EFIGS stands individually for English, Spanish, German, French, and Italian, PT (BRA) for Brazilian Portuguese and PT only for Portuguese, RU for Russian, TUR for Turkish, POL for Polish, CHIN for Chinese, JAP for Japanese, KOR for Korean, VT for Vietnamese, CZ for Czech, UA for Ukrainian, HUN for Hungarian, LAT for Latvian, LIT for Lithuanian, EST for Estonian, BAH for Indonesian, DAN for Danish, GRE for Greek, MAL for Malaysian, IND for Indian, S MEX for Mexican Spanish, CRO for Croatian, ROM for Romanian, and BLR for Belarusian.

STUDIO	VIDEO GAME	PLATFORM	LANGUAGES	OFFICIAL LANGUAGE INCLUDED
Creative Mobile	Hot Wheels Infinite Loop	Android	8 (EFIGS, PT BRA, RUS) English only	No
	Drag Racing 4x4	Android		No
Dev Game	Kid-E-Cats series	Android	Language offer spans from 17 – 19 languages: EFIGS, CHINESE traditional and simplified, JAP, KOR, VT, S MEX, IND, THAI, PT (PT and BRA), POL, IRANIAN	No
	The Fixies series (Fixiki)	Android		No
PlayFlame	Oil Hunt 2	Android	EFIGS, CHIN, RUS EFIGS, CHIN, JAP, TUR, PT	No
	Monster Fishing Legends	Android		No

Table 2: Selected Estonian researched video games

Table 2 shows us that the range of languages offered is varied and does not conform to any specific or obvious rules. The choice of languages might be random or crowdsourced, but investigating these circumstances was not the aim of our paper and thorough research on this topic would be welcomed.

IGDA Estonia is optimistic about the future, as its representative Marianna Krjakvina mentions on estonianworld.com,¹³ Estonia has successful studios that have achieved millions of downloads worldwide, but only the future can tell where their industry will go.

3.2 Latvia

Latvia was the next researched country, with a population of 1,907,094 (Eurostat 2020). Section 5 of Latvia's Official Language Law no. 428/433 of 9 December 1999 mentions that "any other language used in the Republic of Latvia, except the Liv language, shall be regarded, within the meaning of this Law, as a foreign language", indicating that there is no "comprehensible" language that could substitute the needs of Latvians as in the Slovak case. The current wording of the law might have been influenced by the political situation, since Russian as a close language is present in Latvian games lacking Latvian. A thorough sociological study surveying the attitude of Latvian gamers towards the lack of Latvian would be welcomed. In Section 17, (1) we noticed an interesting phenomenon mentioning "videos" exhibited in public, specifically "films, videos and parts thereof to be exhibited in public shall be recorded or dubbed in the official language, or be supplied, concurrently with the original sound recording, with subtitles in the official language, observing the existing literary norms of the language". Again, no specific reference of video games was present, but we can note that the Latvian law demands translation into the official language without exceptions. In the case of audiovisual legislation, Latvia also has a valid law on electronic media as of 11 August 2010, where we again looked for a mention of video games without success. Video games are not mentioned in the official available translations of Latvian legislation. A certain clue can be found in Section 31 regarding European audiovisual works, that "are: 1) literary dramatic works, serials, films, documentary, art, education and similar creative works produced in Latvia and other European Union Member States", where the term "similar creative works" could be related to video games; however without explicit explanation we cannot consider such a specification to be accurate. As we will

¹³ Interview on game industry in Estonia:
<https://estonianworld.com/technology/estonia-on-the-road-of-becoming-a-gaming-industry-hotspot/>.

show later, despite the absence of specific, explicit legislation we found many video games in Latvian.

Video game developers' associations can be an influential element in helping the video game industry to advance. In the case of Latvia, we encountered the official page of the Latvian Game Developers Association, however, the whole page was in Latvian, which limited the data available for our research. Regarding our communication with Elviss Strazdins, Chairman of the Latvian Game Developers Association, their "homepage is being translated into English" and they are currently working on a report for 2019. We also obtained a list of Latvian video games on Steam we could investigate. We could still note the video games mentioned on the website; however, some of them were results of a competition organized by the association, with plenty of games being outdated, unavailable or inaccessible. We inspected a total of 44 games, of which many were in Latvian only, which is a positive signal for the future of Latvian in video games. However, Latvian video games appearing on Steam often lacked Latvian and offered only Russian as a closest language; however, there were exceptions like the video game *Flashing Lights* by Excalibur games, officially supporting 17 languages, but actually offering 18 including Latvian. Along with Slovak, Estonian and Lithuanian, Latvian is in a group of unsupported Steam languages, which does not necessarily mean the language will not appear in a video game.¹⁴ Besides video games stated on the website, we used the website gamedevmap.com listing video game developers by country. The list contained seven studios, of which some were both located in Latvia or Lithuania, and the information about the origins of games was ambiguous. Besides the studios listed in this portal, we randomly found a successful Latvian video game developer, Estoty, creating games for Android and iOS, with a rich portfolio of 45 games with millions of downloads, but the games were in English only. Beside the Estoty studio, we encountered another 37 games of smaller studios, which also tried to incorporate Latvian into their games. We thus inspected a total of 126 games, of which barely a third were available in Latvian; however, the website offered a list of many video games with Latvian titles but dead URL addresses, thus we can note attempts to create video games in Latvian. Compared to the other researched countries, Latvian was the most supported language. We can see that Latvians did not have a problem incorporating Latvian into their games. However, the presence of Russian was not as strong as in Estonian video games. We state selected inspected games in **Table 3**.

¹⁴ A list of supported languages of the platform can be unrolled after clicking on "language" in the top right corner of the website:
<https://store.steampowered.com/>.

STUDIO	VIDEO GAME	PLATFORM	LANGUAGES	OFFICIAL LANGUAGE INCLUDED
Unknown	Čališa Piedzivojumi, Uzcel gaismas pili, Silent Neighbours	Windows (.exe format)	Latvian only	Yes
			English only	No
Estoty	Train taxi, 2048 Infinity Loop Blueprints, Drive and Park	Android, iOS	English only	No
Ambergames	1100AD	Browser	25 – EFIGS, RUS, KOR, PT, POL, CZ, CHIN, JAP, NED, ROM, ISR, LAT, LIT, GRE, UA, HUN, DAN, TUR, BAH, THAI, VT, EST (interface only , not all were functioning)	Yes, but the game remained in English
Mad Sword	Clash of Diamonds – Match 3 Alien Assault	Android	EFGS, NED, RUS	No
		Android	ENG, RUS	No
Soaphog	Jam Garden	Android	English only	No
	Go there, do not know where, bring it, do not know what	Windows	ENG, LAT	Yes
	Clay transformations	Windows	ENG, LAT	Yes
Excalibur Games	Flashing Lights	Windows	17, but 18 after	Yes

			installing and opening the game (EFIGS, CHIN simplified and traditional, RUS, JAP, LAT, NED, SWE, SUI, TUR, CZ, POL, PT Bra, DAN)	
Coldwild Games	Blades of the Righteous	Windows	English only	no

Table 3: Selected Latvian researched video games

Randomly selected video games show us again the different practices adopted by Latvian video game developers. We can see in Table 3 that some developers opted for video games in English only, some included specifically English and Latvian, and video games usually not relying on text offered a rich language palette. We can see the interest of the studios in promoting Latvian in their video games; however, the example of Flashing Lights indicates that there might be more video games with Latvian about which gamers are not properly informed. The future of Latvian games looks promising, with information about a large number of game-related events on the Latvian game developer association website.

3.3 Lithuania

The final researched country, Lithuania, has a population of 2,793,592 (Eurostat July, 2020). It is the largest of the researched Baltic states. In the Lithuanian Law on the State Language of 31 January 1995, there is no mention of any other languages besides Lithuanian that should be used in the territory of the Lithuanian Republic. In comparison with the Slovak and Czech situation and similar to the rest of the Baltic states, the official translation of the Lithuanian Law on the State Language did not mention other languages in terms of comprehensibility; even Latvian, which is considered to be the closest language to Lithuanian, was not mentioned. In terms of video game-related legislation, we could not find audiovisual legislation, only an act on the

provision of information to the public of 2 July 1996 mentioning the term audiovisual work in relation to “a cinematographic work or any other work expressed by cinematographic means which is comprised of interrelated moving images with or without sound recorded (fixed) in a material visual recording medium”. Despite the appearance of audiovisual media-related definitions, there is no direct mention of the characteristics of video games. According to this law, we could characterize a video game under the term media (Article 2, 87), which means “a newspaper, journal, bulletin or any other publication, a book, television program, radio program, film or any other production of audio and video studios, the information society media and any other media used for public dissemination of information. Under this Law, an official, technical and service document as well as securities shall not be attributed to the media.” Video games again do not explicitly exist in Lithuanian legislation, and our findings were confirmed via personal communication with Gediminas Tarasevičius, representative of the Lithuanian Game Developer Association (LZKA). It is again up to Lithuanian video game developers to implement Lithuanian in their games.

Regarding Lithuanian game production, there are 20 members, half of which offer an abundance of video games. We observed the largest number of games per country, almost 150 games, of which language support varied from studio to studio. We also encountered Lithuanian language support (Tag of Joy), and rarely all three Baltic languages in a game (Everyday Hero by Tag of Joy). Many games included widely spoken languages and Russian, and many were in English only. Supported platforms varied; there were a lot of quality games for PC. Of all three researched countries, Lithuania offered the widest choice for gamers, however, there were certain games in Lithuanian only, not localized into English, so only Lithuanians can find them and it is harder to work with the data. We assume that there might be more video games in the Baltic languages not localized into English. We again chose various examples and mentioned them in **Table 4**.

STUDIO	VIDEO GAME	PLATFORM	LANGUAGES	OFFICIAL LANGUAGE INCLUDED
Nordcurrent	Cooking Fever	Android	15 (EFIGS, BAH, MAL, LIT, POL, RUS, CHIN simpl. and trad., JAP, KOR	Yes No No
	The Order of Time		6 (EFIGS, RUS)	

	Guardians Gamebanjo		ENG, RUS	
Nieko	Vilniečio Id Island of Books	Windows	Lithuanian only Lithuanian only	Yes Yes
Strange Fire	Shoppe Keep Shoppe Keep 2	Windows Windows	ENG, GER ENG, RUS, TUR, CHIN, JAP	No No
Tag of Joy	Monster Buster Everyday Hero	Android	7 (EFIGS, RUS, LIT) 7, (ENG, CRO, ROM, BLR, EST, LIT, LAT)	Yes Yes
On5	Catomic RollerCoaster Tycoon 4 Mobile	Android	11 (EFIGS, NED, RUS, JAP, CHIN, KOR, LIT English only	Yes No
TutoTOONS	Series - Smolsies Fluvsies Kpopsies Animal Hair Salon series	Android	English only	No
Sneaky Box	Kakes Makes nuotykliai	Android	Lithuanian only	Yes

Table 4: Selected Lithuanian researched video games

The chosen Lithuanian video games also show an interest in including Lithuanian in video games. English is usually the first or only available language; however, in the case of Windows games published e.g. on Steam, we cannot be sure if this is the definitive language portfolio of a given video game. A thorough research on Steam practices towards less widely spoken languages would also be welcomed.

In terms of the future of Lithuanian game development, the association is active in organizing many events for developers, establishing network of game developers and offering plenty of data to work with. Public awareness might indicate otherwise and with the most promising network of video game developers and many successful video games, it is possible that Lithuania will continue to thrive and create many video games including Lithuanian. In terms of language, it is hard to tell the unequivocal direction of Lithuanian game developers, only broader research might give us insight into practices implemented in the future.

Conclusion

In the environment of video game localization, less widely spoken languages appear in a video game based on random criteria. During our research, each of the countries in which less widely spoken European languages were analysed revealed completely different and heterogeneous practices. In our paper, inspired by our former research on Slovak and Czech legislative parallels and the unfavourable position of Slovak in the Slovak video game market due to the dominant position of the Czech language (Koscelníková 2017), we compared the situation with the Baltic states, looking at their language and audiovisual-oriented legislations, market practice, developer habits in terms of language support and relations with each other.

All the researched Baltic countries lack legislation regulating video game localization. The practices of video game developers vary from country to country. Due to the strong history and influence of the Russian language, Russian was often included in language options in the researched video games. English as the video game lingua franca, was present in the majority of researched video games. The Baltic studios produced many popular games, especially for the Android operating system. We also noted that many video games were made in Lithuanian or Latvian only, which might have limited our research, and there might be more video games than we could omit. Despite these circumstances, we investigated more than 200 video games and the inclusion of the respective less widely spoken languages was relatively common, even without the existing legislation. We want to point out the missing information on the Steam platform that could help us save time buying, installing and browsing video games for PC. All three countries have more or less active video game developer associations trying to push the industry further, as well as promoting their native tongues along with the Russian language, the domination of which was not so significant. Further research will be necessary, but so far we can see that there are countries with less widely spoken languages without video game related legislation in force that still produce video games in their native tongue despite the influence of a widely spoken language. The only exception is Estonia so far, but future research on the Scandinavian countries might show otherwise.

We plan to continue the research and add the Northern European states to the perspective, as well as examples of positive and promising practice even in countries smaller than Slovakia. We hope to fill the gap in the academic research on video game localization, and to promote less widely spoken languages as well as to point out their importance in the modern media that video games represent.

References:

Bernal-Merino, Miguel. 2015. Translation and Localisation in Video Games: Making Entertainment Software Global. Boston: Routledge.

Dini, Pietro Umberto. 2014. Foundations of Baltic Languages. Vilnius: Vilnius University

Esselink, Bert. 2001. A Practical Guide to Localization. Vol 4. Amsterdam/Philadelphia: John Benjamins Publishing Company

Hiden, John, and Salmon, Patrick. 1994. The Baltic Nations and Europe: Estonia, Latvia and Lithuania in the Twentieth Century. London and New York: Longman Group UK Limited

Chandler, Heather Maxwell, Deming, Stephanie. 2012. The Game Localization Handbook. 2nd edition. London: Jones & Bartlett Learning, LLC

Chandler, Heather Maxwell, 2020. The Game Production Toolbox. Boca Raton: Taylor & Francis Group.

Kasekamp, Andres. 2010. A history of the Baltic States. New York: Palgrave Macmillan

O'Hagan, Minako, Mangiron, Carmen, 2013. Game Localization: Translating for the global digital entertainment industry. Amsterdam/Philadelphia: John Benjamins Publishing Company

Koscelníková, Mária. 2017. Audiovisual Translation — Video Games: Subtitling of Video Games In Slovakia. Banská Bystrica: Univerzita Mateja Bela.

Perez, Emília, Jánošíková, Zuzana, 2018. The rise of subtitling in dubbing Slovakia. In: Translatologia. Nitra: Univerzita Konštantína Filozofa. Vol. 2, Issue 1 - pp. 22-32.

Smith, David J., Hiden, John. 2012. Ethnic Diversity and the Nation State. Oxon: Routledge.

Ethnologue. 2020. What are the top 200 most spoken languages? <https://www.ethnologue.com/guides/ethnologue200>. Accessed on: 15 October 2020

Audiovizuálne Informačné Centrum. 2020. Slovak legislation on Audiovisual Media <http://www.aic.sk/files/AIC-subory/ACT-on-Audivision-EN.pdf>. Accessed on: 15 October 2020

Baltic Game Industry. The Baltic Sea Region as a Hotspot for the Game Industry. 2018. http://baltic-games.eu/files/bgi_analysis_results_sep_2018-compressed.pdf. Accessed on: 15 October 2020

European Commission. Special Eurobarometer Report: Europeans and their languages. 2012. https://ec.europa.eu/commfrontoffice/publicopinion/archives/ebs/ebs_386_en.pdf. Accessed on: 15 October 2020

Rigi Teataja. Estonian Language Act. 2019. <https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/504122019002/consolidated>. Accessed on: 15 October 2020

Rigi Teataja. Estonian Media Service Act. 2013. https://www.riigiteataja.ee/en/compare_original/506112013019. Accessed on: 15 October 2020

Estonian World. Estonia on the road of becoming a gaming industry hotspot. 2018. <https://estonianworld.com/technology/estonia-on-the-road-of-becoming-a-gaming-industry-hotspot/>. Accessed on: 15 October 2020

LIKUMI (Legal Acts of the Republic of Latvia). Latvian Law on Electronic Media. 2018. <https://likumi.lv/ta/en/en/id/214039> Accessed on: 15 October 2020

LIKUMI (Legal Acts of the Republic of Latvia). Latvian Language Act. 2000. <https://likumi.lv/ta/en/en/id/14740-official-language-law>. Accessed on: 15 October 2020

Gamedev.lv. Latvian Game Developer Association. <https://www.gamedev.lv/>. Accessed on: 15 October 2020

Gamedevmap. List of video game developers. gamedevmap.com. Accessed on: 15 October 2020

IGDA (The International Game Developers Association). Estonian Chapter.

<http://www.igdaestonia.org/> Accessed on: 15 October 2020

Statistical Office of the Republic of Serbia. <https://www.stat.gov.rs/en-US/>. Accessed on: 15 October 2020

Eurostat. Population of Member EU States. 2020. https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=proj_19np&lang=en. Accessed on: 15 October 2020

Lithuanian Game Developers Association. Members. <https://www.lzka.lt/nariai/>. Accessed on: 15 October 2020

Lietuvos Respublikos Seimas. Lithuanian Act on the State Language. <https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/TAIS.21941?jfwid=rivwzvpng>. Accessed on: 15 October 2020

Lietuvos Respublikos Seimas. Lithuanian Law on the Provision of Information to the Public. <https://e-seimas.lrs.lt/portal/legalActPrint/lt?jfwid=-11o1b4v9z&documentId=13fd4df178a711e99ceae2890faa4193&category=TA D>. Accessed on: 15 October 2020

Redbull. Ako vytvorit hru? | GameDev na Slovensku w/ Michal Ferko. 2020. <https://www.redbull.com/sk-sk/michal-ferko-ako-vytvorit-hru-gamedev-slovensko-powerplay-local-gaming>. Accessed on: 9 December 2020

Hospodárske noviny. Naše hry hrajú milióny ľudí na svete, hovorí šéf slovenskej firmy, ktorej úspechmi sa chváli aj štát. 2020. <https://hnonline.sk/tema/2213250-nase-hry-hraju-miliony-ludi-na-svete-hovori-sef-slovenskej-firmy-ktorej-uspechmi-sa-chvali-aj-stat>. Accessed on: 9 December 2020

Steam. <https://store.steampowered.com/>. Accessed on: 9 December 2020

Slovak Startup. Simon Sicko and The Story of Pixel Federation. 2016. <https://slovakstartup.com/2016/10/23/simon-sicko-pixel-federation/>. Accessed on: 9 December 2020

Teraz. Rada pre vysielanie a retransmisiu uložila pokuty aj upozornenie. 2020. <https://www.teraz.sk/slovensko/media-rvr-ulozila-pokuty-i-upozornen/501940-clanok.html>. Accessed on: 13 December 2020