History of Slovak Video Games and Their Localization

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Abstract

Localization of video games is starting to attract attention in the Slovak academic environment. However, there are still some unresearched topics, especially when it comes to the origins of localization in Slovak. In this paper, we aim to investigate the history of Slovak video games and their localization, focusing on the period from the late 1980s to the late 1990s, and to gather the missing information on this issue from a linguistic and pragmatic viewpoint, both quantitatively and qualitatively.

1. Introduction

Every year, the number of video games developed in Slovakia¹ is increasing². The earliest available statistics elaborated by the Slovak Game Developers Association (hereinafter referred to as the "SGDA") show that the number of new games released by Slovak game developers has increased since 2017. Although the data has not been traced diachronically, except for 2017 and 2018, and each new report focuses on different categories of games, we can still observe an increase in developed video games. To track the exact number of released Slovak video games is a demanding and time-consuming process, especially when it comes to the newer games now released in digital form. Thanks to collaboration with Maroš Brojo, General Manager of the SGDA, we now have a list of over a thousand video games released by Slovak game developers. Research on their localization and language support is not a simple task compared to the video games released for older systems, since their testing requires a lot of funding due to the lack of sufficient information on language support, as we constantly point out in our other works (Koscelníková 2020, 2021). We thus decided to first focus on the first decade of Slovak video game development (late 1980s to late 1990s) and trace the origins of localization of Slovak video games from or to Slovak, and other video games localized into Slovak. We will analyse the quality of researched video games based on our model of translation specifics of video games (Koscelníková 2021).

Slovak video game developers are constantly contributing to the video games market with interesting and captivating video games. We

¹ We use the term "video game" to cover all kinds of video games from computer games through browser games to mobile games.

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cannot say the same about the research investigating the origins of the first Slovak video games (up to 1993 and after the separation from the Czech Republic in 1993) and the origins of localization from and to Slovak. There have been several academic works published on this matter by Jaroslav Švelch (2018, 2019, 2021a, 2021b), who is so far the only researcher actively writing about the first Slovak video games in the context of Czechoslovak gaming, while also authoring the only monograph on the history of Czechoslovak gaming. Aside from academic works, the publications Počítačové hry I and Počítačové hry II by František Fuka mention Slovak video games or developers. Unfortunately, the choice of developers and games in these volumes is biased. Apart from books, the first Slovak video games were mentioned in magazines for specific platforms such as the first Slovak magazines aimed at PC users and PC games BiT (1991) and FIFO (1990), the first Czechoslovak magazines on video games Počítačové hry (1989, only a single issue was published), and the still published Czech magazines Score (1994), Level (1995) and ZX Magazín (1989); but papers on the first Slovak video games from the viewpoint of localization and translation studies besides our attempt have yet to be published. In comparison with the research on the first video games, within our researched period there has been a single Slovak article on localization by Benko and Rajčanová (1998) providing the first probe into localization itself. Video game localization started to be briefly mentioned 15 years later (Gáll 2013), but in terms of a complex work mapping video game localization and its specifics, our dissertation was the first work fully covering the issue of localization of video games and its specifics from a linguistic and pragmatic viewpoint published only this year (Koscelníková, 2021). Up to this year, video game localization has been mentioned in the form of a few Bachelor or diploma theses, or academic articles partially investigating the issue.

In the foreign academic milieu, apart from students' final theses, there have been several monographs and dozens of papers published on game localization since 1999 (Mangiron 2018), of which we can mention The Game Localization Handbook by Chandler (2005), Game Localization by Mangiron and O'Hagan (2013), Video Game Translation and Cognitive Semantics by Sajna (2016). Within our researched period, a monograph by Esselink (1998) and several other authors started to shed light on the issue of localization, with Chandler (2005) authoring the first monograph on the issue of game localization. The lack of information on the origins of localization from and to Slovak inspired us to investigate the circumstances that instigated the creation of the first Slovak video games and their very nature. With a list of video games developed by the Slovak game development studios provided by Maroš Brojo, a list that we have categorized and are constantly completing, we divided all the video games by year. We then realized it would be impossible to investigate all the video games on the list, since it is impossible to simply detect their complete language support and thus focus on their localization.

In Slovakia, video games started to be developed upon the arrival of microcomputers to the market, which provided their users with other options, apart from fulfilling work tasks and doing research. Some computers already contained pre-installed video games that inspired Slovak enthusiasts to try to create their own video games based on those concepts. The first Slovak video game developers seized the opportunity and started to create video games with original stories like SRSO2 (1997, Softhouse Ltd) and Kliatba noci [Curse of the Night] (1993, Microtech Systems), but also with adapted or imitated stories like Star Trek - The Next Generation (1997, Rider Software) or Il Noma Della Rosa [The Name of the Rose (1993, Orion Software). In this paper, we aim to investigate the first Slovak video games, not merely from the viewpoint of localization, game or translation studies but also the language used in these video games, whether they were localized and proofread, the user interface they offered, and also from the sociological aspect – what kind of video games were developed and who developed them. Since it is difficult to find out the total number of video games made by Slovak game developers after 2000, and bearing in mind the enormous number of such video games, we plan to divide this research into several papers and research this issue from a diachronic approach. In this paper, we will focus on the first Slovak video games we found until 1999. We will work with online databases and the database of Slovak video games provided to us by the General Manager of the Slovak Game Developers Association, Maroš Brojo. We will focus on video games developed by Slovak video game developers, observe the first localizations from Slovak and to Slovak, and analyse them based on our translation specifics model (Koscelníková 2021).

2. Database of Slovak video games (Archives)

There are several ways to obtain information on the first Slovak video games – at the Slovak Museum of Design which has over 1,000 Slovak video games in its database with the oldest dating back to 1985 (in 2017, the first Slovak video games were exhibited for the first time at the festival Fest Anča, at an exhibition named *Piráti a pionieri* [Pirates and pioneers]), and at Cibien's Corner Gaming Museum (in the Czech Republic). Apart from museums, there are rich online databases cataloguing Czech and Slovak video games released for "abandonware" or the software no longer being maintained. With the help of Maroš Brojo from SGDA, and thanks to the rich local archives of old Slovak and Czech games like Herní Archeolog, Česko-Slovenský Speccy Archiv, Zx-Spectrum Games, Tesla PMD 85 Infoserver, Archiv Československých her a vývojářů, Staré hry a Časopisy - Retrogaming portal, as well as foreign archives like Atarimania or World of Spectrum,³ we successfully examined the origins of the first Slovak video games, focusing on video games made from late the 1980s to the late 1990s. We even cross-checked the database provided by Maroš Brojo with

³ Websites of these databases are provided in the bibliography.

the database of Slovak and Czech video games available at Herní Archeolog,⁴ a detailed document thoroughly detailing year of origin, the purpose of the video game and name of the developer. Within the given period from the late 1980s to the late 1990s, we have examined in total 124 video games.

3. First computers and video games

In order to fully understand the nature of the first Slovak video games, we must first have a closer look at the available hardware on which they could be programmed. In his monograph, Jaroslav Švelch mapped the situation of computer games in Communist Czechoslovakia and mentioned that "in Communist-era Czechoslovakia, numerous state and military institutions, factories, universities, and research centres had been purchasing and running computers since the 1950s. In 1974—not too long before the advent of microcomputers—358 domestically produced and 709 foreign-made computers were running throughout the country" (Švelch 2018, 12).

The early days of the first programmers were onerous, since, as Švelch (2018) further states, microcomputers like the Sinclair ZX Spectrum (United Kingdom) were not affordable for most Czechoslovak citizens and computer enthusiasts struggled to get them. As confirmed also by our research, in line with Švelch's observations, the ZX Spectrum-48 was the most popular platform (of our research sample, 86 games were designed for this platform), later followed by Atari 800. According to Švelch, the lack of domestic retail infrastructure resulted in programming games for microcomputers rather than consoles. With TVs as monitors, these computers – predecessors of consoles – were pioneers of today's console gaming.

The Czechoslovak computers PMD-85, Didaktik and Maťo were other frequently used systems. Video games developed at the end of the 1990s were produced for computers supporting the DOS operating system. We provide an overview of the investigated video games by platform in Table no. 1 found in the conclusion of this paper.

There were several types of video game narratives produced in Slovakia for the first time. Švelch mentions that "the overwhelming majority of 1980s Czechoslovak games were amateur productions created outside of an industrial context. Many of them, especially the early ones, were ports, conversions, or clones of existing works"⁵ (Švelch 2018, 153-154). The owner of the portal Herní Archeolog, an unknown enthusiast aiming to find the first Czechoslovak video game, considers 1984 to be the year when the first game was developed. The first Slovak video games were developed hand in hand with the first Czech video games and were intended

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⁴ Link to the database is provided in the bibliography.

⁵ In his book *Gaming the Iron Curtain (2018)*, Švelch further reasons his terminology.

mostly for a domestic audience. Some of the first Slovak video games were however created in English, like *Space Raiders* (1986, Dušan Kertés), *AirRaid* (1987, unknown author from Nitra) and *Glutton* (1987, GB Soft); some had English interface and Slovak messages, e.g. *Cobra* (1987, Miroslav Urda), *Bombarder [Bomberman]* (1987, Kamasoft), *Space Invaders* (1985, IFO Software) or *Tanková bitka [Tank Battle]* (1987, Kiki Software) and most researched games were in Slovak. In the following part, we will focus on the sociological and technical aspects of these video games – who made them and how.

4. Target practice or pioneering video games

Compared to today's situation, the first Slovak video game developers found it difficult to obtain the hardware they could create the first video games on. Observing the situation in the former Czechoslovakia, computers cost four to five times more than the average Czechoslovak monthly salary (Švelch 2018, 47). When enthusiasts found a way to obtain computers, usually illegally, or had to wait until the price dropped, and connected them to TVs serving as monitors, they started to tinker, experiment and eventually create the first games as a method of learning how to program. These video games were usually homebrew imitations or original creations. As Svelch further puts, it was a mostly masculine scene, with home brewers (domestic location amateur programmers, sole creators, local distribution, and an experimental ethic – p. 157) usually high school or university students. The texts appearing in the first Slovak video games were therefore not edited or proofread by linguists but created by mere enthusiasts enjoying programming and entertaining their peers and acquaintances. Therefore, they contained some mistakes and sometimes inappropriate or overly expressive phrases.

The interface of the first Slovak video games practically contained commands to run the video game and choose the preferred controls (usually Kempton joystick or keyboard) or to redefine the pre-set controls. There were no credits at the end of the game, but the creators introduced themselves at the beginning of the video game, or their names appeared as logos in the main interface. This concerned mostly single-player games (since, as Švelch explains using the example of the ZX Spectrum, "The Spectrum's tiny keyboard and lack of standard joystick interface made it particularly difficult to share", p. 57), or offered the option to play against the computer. In terms of graphics, the first Slovak video games were either black-and-white (for the PMD 85 platform) or colour (for the ZX Spectrum platform and Atari 8-bit and DOS systems). The latter games for the DOS operating system had modest options. One game, *The Strangers* (1997, Ablaze Entertainment), was localized into ten languages, which was rare at that time.

Most of the first Slovak video games were text adventure games, relying on players' ability to navigate through the invented game space via text commands. In the next section, we will analyse the nature of these

texts in video games, focusing on the linguistic choices of the video game creators, and the first localizations or translations of video games.

4.1 A free space to make a boy's dream reality

Text is crucial for video games. It navigates a player through the game and helps convey a message or entertain game enthusiasts. In the former Czechoslovakia, video games were not only a means of mere entertainment. With regard to our research sample, certain video games served as a means of expressing one's opposition to communism, e.g. Czech video game P.R.E.S.T.A.V.B.A. [RECONSTRUCTION] (1988, ÚV Software), the Czech video game 11/17/1989 (1989, Doublesoft and Hoblsoft) and the Slovak video game Satochin [Shatokhin] (1988, Sibylasoft). Some video games were created to express the admiration of other video game developers, e.g. the Slovak video game Fuksoft (1988, Sibylasoft) paying homage to Czech studio Fuxoft. The motivation besides creating something new and learning was usually to show off one's ability to code in the form of adaptations of already released foreign video games, e.g. Minesweeper (1996, Softhouse Ltd) as a remake of Microsoft's Minesweeper, or Something Happened (1989, Peter Machala Software) inspired by Czech game *The Sting 3*. Since legislation on copyright was only introduced after the Velvet Revolution (Svelch 2018), the issue of copyright was not relevant. Many of the first Slovak video games openly copied original video games, usually of British or American origin, with their own twists or completely in Slovak, or with changed colours and the addition of new game mechanics.

In terms of the language used in the first Slovak video games, the texts in these video games were the exclusive work of game creators, and the concept of proofreading text was not common in those times. As mentioned above, amateur students made the first Slovak video games (as opposed to professionals) in their spare time. We could observe that the language used in those video games was straightforward and playful. In our research sample, we noticed several concepts we will introduce in the following paragraphs. Regarding the taxonomy model of narrative-oriented game texts introduced by Mangiron and O'Hagan (2013), our researched games were mostly text-oriented games with user interface and narrative text including dialogues (in-game assets). Only Next Space (1997, Magic Systems) and Mutation of J.B. (1996, Invention) have dubbed narrative. The majority of the researched video games were text-oriented logical games based on typing commands that were supposed to drive a player towards the end. Many contained simplistic graphics within the scope of the given media they were created for. In terms of texts and their specifics, we have found several commonalities guintessential for their given period of origin: a) idioms and informal phrases, b) attention to unskilfulness, c) mocking players, d) use of pejoratives, e) specific recipients and characters, f) artistic features and playfulness, g) lack of diacritics, h) heterogeneous forms of addressing player.

The first common attribute of the first Slovak video games were a) idioms and informal phrases. In Figure 1, the running introductory text appeared at the bottom of the main menu, playfully communicating with the player.



Figure 1. An example of informal text in *Boulderdash*⁶

The creator refers to himself as a mad person through the Slovak expression "strašiť vo veži" translated as "to have bats in the belfry". The full moving sentence was "You might think I possibly have bats in the belfry to offer you such an old game. I bet somebody else would have created such a game, if I hadn't". It was a common practice among video game creators to speak openly with their players and put themselves in the position of people thinking outside of the box, resembling crazy people. We can find similar informal phrases in *Fuksoft* (1987, Sybilasoft) introduction ("dufam, ze sa zachovas ako gentleman a nenechas svojho priatela v stichu" back translated as "I hope you'll be a gentleman to the last, and won't let me down!", or in HoZaKla (1990, Hico & Fico Software) introduction ("Prvé dva týždne si v škole vegetoval" back-translated as "During the first two weeks at school you have been loafing around."

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⁶ Text in the picture: Boulder Dash – settings, records, start, "that I possibly have bats in the..."

Another common feature of the researched sample is b) attention to unskilfulness, more precisely the self-deprecating attempts of creators to point to their own unskillfulness resulting in unpopular games (Figure 2). In the introductory text, the creator unnecessarily proclaims his former video games had been unsuccessful. Such behaviour towards themselves not only indicated they were not professional programmers, but also that the text in the game might not have been consulted with anyone, since it also contained a grammatical error ("predoslich" instead of "predoslych"). A reception study on the influence of such texts on players would also be welcome, but it is out of the scope of our research.

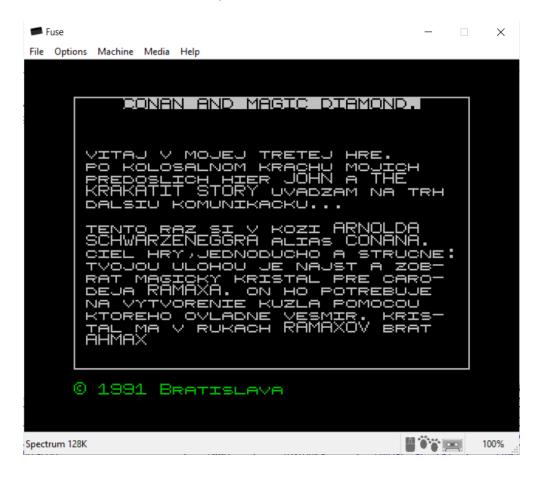


Figure 2. An example of the creator pointing out their unsuccessful games – Conan I^7

⁷ Text of the game: title – Conan and Magic Diamond. Welcome to my third game. My previous games John and The Krakatit Story were a disaster and now I am releasing another text game... This time, you act as Arnold Schwarzenegger alias Conan. The goal – simply and briefly: your task is to find and retrieve a magical crystal for the magician Ramax. He needs it to create a spell which will help him rule the universe. Ramax's brother Ahmax currently owns the crystal. ©1991 Bratislava

We can find similar mentions in *Mayday* (1989, Peter Machala Software) where the author apologizes to Sybilasoft, Thomas Block and all who had harmed themselves thanks to the game, and he continues to have a similar attitude in his other game *Something Happened* (1989, Peter Machala Software).

A not so common but author-specific example was c) mocking players and openly laughing at their poor skill, usually when they had lost the game. In the following example, the creators encourage players, but also ridicule a possible negative outcome (Figure 3). The message for the player can be loosely translated as "I hope you won't be stuck as a museum exhibit for much longer". Another example can be found in *SRSO2* (1997, Softhouse, Ltd) when a player loses without scoring any points. The final text says "Tak! Ani si sa nenazdal a je tu koniec hry. <u>Získal si naozaj veľa bodov. To bol teda výkon, len čo je pravda.</u> Musíš začať hrať znovu" backtranslated as "Game over! You have scored really a lot of points. <u>What a performance!</u> Start over!"

It was also common to d) use pejoratives in Slovak video games in connection with the antagonists or non-playable characters in a game. In Figure 4, we see the message "skapal" or "he bit the dust", which appears immediately after the player kills any enemy in the video game. In Slovak, "skapal" expresses a negative stance towards the enemy. However, a localized version of the given example contains translation "He's died", thus we can say that in case of localization, the invariant was not preserved in the localization. A neutral alternative would be to say "zomrel" or "he died". Such an example shows the openness and lack of supervision over game texts, making it a free space without rules. Such freedom of speech was due to the lack of legislation, as well as the obtained freedom after the Velvet Revolution. While books and audiovisual content were proofread and supervised, such practices did not exist in the video game industry at the time (and texts in games by Slovak developers receive hardly any proofreading). Another example of pejoratives can be found in Bony a klid po slovensky (1989, Robert Madaj) about an illicit moneychanger e.g. when mentioning a Vietnamese that tries to talk to the main character gibberish - patlanina in Slovak.

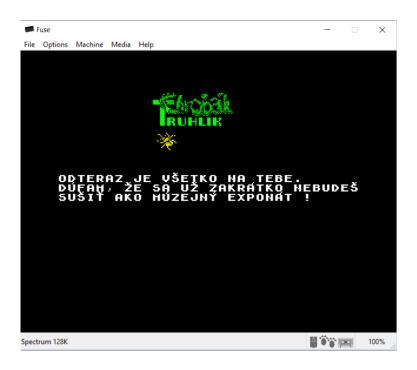


Figure 3. An example of mocking players – Chrobák Truhlík [Pouch the Beetle]

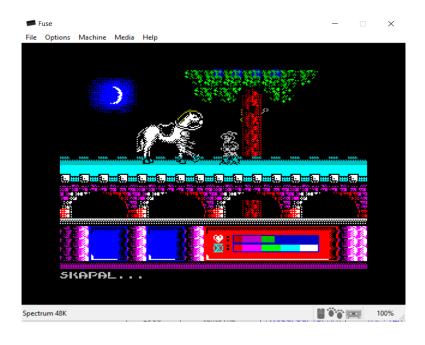


Figure 4. Use of pejoratives – Kliatba noci [Curse of the Night]

The next common feature of early Slovak video games was to be made for e) specific recipients or include specific characters, e.g. mention or use friends and acquaintances as game characters for entertainment purposes (Figure 5). It usually concerned best friends, other video game creators or even schoolteachers. In the following example, the opening credits star "Professors from the secondary school of electrical engineering

Prešov as the enemies". Compared to current Slovak video games oriented more at a foreign audience, the first Slovak text games were designed to entertain the friends and family of the creators, containing specific names and surnames of their friends and acquaintances. Another example can be found in *Fuksoft* (1988, Sybilasoft), where the creators used their friends and František Fuka, a Czech video game creator active during the researched period, as the main character that must be rescued.



Figure 5. An example of casting friends or acquaintances in a video game for entertainment – *Phantom F4 I*

There were also video games with f) artistic and playful texts – rich, creative and playful texts designed to appeal to players' imaginations. We can find such an introductory text in the video game about a short devil Krpat (1995, Bizard). The text is full of colloquialisms and words from Western Slovak dialects. It mainly aims to entertain a male audience by indicating that all mothers-in-law or mean landladies will go to hell ("it is a devil specializing in mothers-in-law as well as mean landladies"). Among our researched games, Krajina tieňov [Twilight] (1995, Ultrasoft) contains a poem by the made-up poet Oscar M. Thamon. Video game creators also playfully described death and failure to proceed in order to maintain the artistic features of a text, e.g. in Kewin I (1988, Kamasoft) when a player

died, somebody "tickled his ribs with a javelin" (posteklil ostepom medzi rebrami).



Figure 6. Artistic introduction found in video game Krpat

Apart from the lexis-specific issues, we could also find several examples of g) lacking diacritics, which was specific to the given researched period. Besides that, we found grammatical errors in several games, so it is safe to say that video game creators were not following any style guides, did not review the text before publishing it and worked with programming software that might or might not support character encoding. In Figure 7, we can see an example of a simple text interface, describing the game mechanics and controls.



Figure 7. An example of a text without diacritics - *Plutonia*

In terms of addressing players, this differed from game to game and there were h) varying forms of addressing players. Some games used informal forms of address, e.g. *Plutonia* (1987, Sibylasoft), *Prípad II [The Case II]* (1988, Shrap Software) or *Prvá akcia [First Action]* (1992, DSA Computer Graphics), and some preferred polite forms of address, e.g. *Podraz 4 [The Sting 4]* (1987, Antok Software), *Something happened* (1989, Peter Machala Software) or *Virus 7* (1989, Zdensoft). Most of our researched video games were only in Slovak.

Another typical feature of Slovak video games in the researched period was i) hybrid use of languages. Plenty of games contained text in both English and Slovak, e.g. having menu commands or credits in English and the rest of the text in Slovak, e.g. Kewin II (press any key) or hybrid texts, e.g. $Conan\ I$ (1991, Ultrasoft) – see Figure no. 2, or had English titles, e.g. $Dokonala\ vrazda\ 2$: $Bukapao\ (1991,\ Ultrasoft)$.

Apart from these common features, the quality of the text would mostly meet current style guides like *The Rules of Slovak Orthography* (with several exceptions containing grammatical errors or period-specific lexis).

5. The first localized video games from and to Slovak

Probably the first video game giving players the option to choose between Slovak and English was Tetris 3 (1992, Shop for Games), the only video game for microcomputers offering such an option. The first localized video game into Slovak was probably a localization of the British video game Colossus4Chess (1986, CDS Microsystems) from an unknown author. It contained fewer than 50 words and it mostly involved word-for-word translation, e.g. "Your move" translated as "Tvoj tah", "Illegal" translated as "Chyba" and "Let me think" translated as "Rozmyslam". The function of such texts was maintained and we can state that it was a seamless localization. When it comes to Slovak video games localized to English, each version was distributed separately in Slovak and English, e.g. Kliatba noci [Curse of the Night] (1993, Microtech Systems), Komando 2 [Commando 2] (1992, Microtech Systems), Towdie (1994, DSA Computer Graphics), Pedro series (1992-1993, Gold Storm) and Sherwood (1992, DSA Computer Graphics), and we could not find any information on localizers. We assume that Slovak video game developers made these localizations themselves. In terms of quality of the given texts, Kliatba noci [Curse of the Night] contained artistic and entertaining lexis, e.g. in the game's opening credits (Figure 8). The game contains rather short phrases appearing at the bottom of the screen and we already noticed that the expressivity of the Slovak text was not preserved regarding the in-game text. However, the credits are adequately localized and maintain an invariant expressive and semantic nature.



Figure 8. Comparison of *Kliatba noci* original and localization

Komando 2 (Commando 2) is a simple fighter video game. Besides opening credits and menu, it contains introductory descriptive texts providing a player with the context for each territory they must superate (Figure 9).



Figure 9. Introductory texts in Commando 2

From the viewpoint of text expressiveness, all the translation strategies were preserved, regarding the informative function of texts. We encountered only minor deviations or inaccurate translations probably resulting from the limited number of characters in the given strings.

Another localized game, *Towdie* (1994, DSA Computer Graphics) is also an example of a quality localization, containing in-game menu, commands, as well as introductory and final texts. In terms of equivalence, the invariant expressive nature of lexis used in the video game was preserved (Figure 10).



Figure 10. Final text in *Towdie*

The scope of this article does not allow us to elaborate on the rest of the localized video games, but it is safe to claim that for the given period, they met the standards of the current taxonomy model introduced by Mangiron and O'Hagan in 2013, or the basic standards for Slovak orthography and grammar.

Regarding the first credited localizer (translator) of video games, we found Ľudovít Wittek, a video game creator, who in 1988 translated three British games – *Three Weeks in Paradise* (1986, Mikro-Gen) as *Tri tyzdne v raji!*, and *Sceptre of Bagdad* (1988, Atlantis Software) and *Trap Door*

(1988, Piranha) without localizing the games' titles. Another British video game, *Rambo 2* (1995, Ocean Software) was also localized into Slovak by an unknown author. Among other localizations, we also found a localization of Portugal erotic game Sexcrime (1985, Omycronsoftware) into Slovak by Disoft Skalica in 1988.

Later, when DOS operating systems were used, the first localizations were no longer sold separately, and we could find the option to change the language directly in the settings, as is the common practice in today's video games. However, only a single game had plenty of languages to choose from, *The Strangers* (1997, Ablaze Entertainment). It was an exception, and within our researched period from the late 1980s to late 1990s, there was no other game besides *Tetris 3* and *The Strangers* with more localizations to choose from directly in the video game.

6. Conclusion

The late 1980s and late 1990s were a fruitful period in terms of Slovak game development. Since the first Slovak video game developers were amateur students creating products for entertainment, it is difficult to talk about any linguistic practices adopted. We have found that all video game texts were written by the creators themselves without any editing or proofreading by linguists or language professionals. Nevertheless, the quality of the researched video games and their texts often met contemporary standards, despite the period they were created in and the lack of language skills of their authors. Despite their creators not having enough linguistic competence in terms of localization and language editing, their video games contained a minimal number of language errors. We were able to track down probably the first localizations of foreign video games by Ľudovít Wittek, a developer and founder of the Ultrasoft development company. The first Slovak video games focused mostly on a d audience, and the trend was slowly changing towards the late 1990s. In the following tables, we provide an overview of the researched video games by platform and language.

Number of Slovak video games	Platform
13	PMD-85
2	Maťo (also supporting PMD-85)
10	Atari (400/800)
86	ZX-Spectrum (48, 128)
11	PC-DOS
2	Amiga

Table 1. Overview of research sample by platform

Number of Slovak video games	Language
74	Slovak only
25	English only
13	combination of Slovak and English
1	Czech
9	distributed separately with Slovak
	and English
2	offering more localizations

Table 2. Overview of research sample by language

As we can see, the most popular platform between the late 1980s and 1990s was the ZX-Spectrum and most video games were distributed in Slovak only. Nowadays, Slovak is hardly ever found in video games, since English is a compulsory language taught in Slovakia from primary school. The reception of such texts in those times has not been researched. We can only assume that the number of developed video games was due to their popularity. The early Slovak video games represented media offering uncontrolled and free space to express oneself. In our paper, we attempted to shed light on the as yet unresearched topic of the origins of localization in Slovakia, and we investigated 124 Slovak video games published between the late 1980s and the late 1990s. We plan to continue with research focusing on the next decade in the future.

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Used games:

Game (Year of Origin, Creator)
11/17/1989 (1989, Doublesoft and Hoblsoft),
AirRaid (1987, unknown author from Nitra),
Bombarder (1987, Kamasoft),
Bony a klid po slovensky,
Boulderdash (1993, Romborsoft),
Cobra (1987, Miroslav Urda),
Colossus4Chess (1986, CDS Microsystems),
Conan I (1991, Golden Circle),
Dokonala vrazda 2: Bukapao (1991, Ultrasoft),
Glutton (1987, GB Soft),

Fuksoft (1988, Sibylasoft), HoZaKla (1990, Hico & Fico Software), Chrobák Truhlík (1990, Sibylasoft), Il Noma Della Rosa (1993, Orion Software), Kewin I (1988, Kamasoft), Kliatba noci (1993, Microtech Systems), Komando 2 (1992, Microtech Systems), Krpat (1995, Bizard), Minesweeper (1996, Softhouse Ltd), Mutation of J.B. (1996, Invention) Next Space (1997, Magic Systems), Pedro na ostrove pirátov (1992, Gold Storm), Pedro v krajine pyramíd (1993, Gold Storm), Pedro v strašidelnom zámku (1993, Gold Storm), Phantom F4-I (1992, DSA Computer Graphics), Plutonia (1987, Sibylasoft), Podraz 4 (1987, Antok Software), P.R.E.S.T.A.V.B.A. (1988, ÚV Software), Prípad II (1988, Shrap Software, Prvá akcia (1992, DSA Computer Graphics), Rambo 2 (1995, Ocean Software), Sceptre of Bagdad (1988, Atlantis Software), Sherwood (1992, DSA Computer Graphics), Sexcrime (1985, Omycronsoftware), Something Happened (1989, Peter Machala Software), Space Invaders (1985, IFO Software), Space Raiders (1986, Dušan Kertés, PMD 85), SRSO2 (1997, Softhouse Ltd), Star Trek - The Next Generation (1997, Rider Software), Satochin (1988, Sibylasoft), Tanková bitka (1987, Kiki Software), Tetris 3 (1992, Shop for games), The Strangers (1997, Ablaze Entertainment), Three Weeks in Paradise (1986, Mikro-Gen), Towdie (1994, DSA Computer Graphics), Trap Door (1988, Piranha), Virus 7 (1989, Zdensoft)