

Home > Issue06 > Mangiron & O'Hagan article

Game Localisation: Unleashing Imagination with 'Restricted' Translation Carmen Mangiron and Minako O'Hagan, Dublin City University, Ireland

ABSTRACT

From its humble beginning in the 1970s, the video games industry has flourished and become a world-wide phenomenon. Although most games are developed in Japanese and English, the globalisation of popular culture and the desire to expand to new markets have led most producers to localise their games into many target language versions. This has brought about the emergence of a new field in translation, game localisation, which combines elements of audiovisual translation and software localisation. This paper looks at the specific features of game localisation which give it its unique nature. It examines the priorities and constraints associated with translation of this particular genre, which relies heavily on imagination and creativity to deliver a satisfactory game experience. Using as a case study the best-selling PlayStation series, *Final Fantasy*, examples are presented to illustrate the challenges game localisers face, focusing particularly on linguistic and cultural issues.

KEYWORDS

Video games, game localisation, transcreation, software localisation, screen translation, *Role Playing Games (RPGs)*

BIOGRAPHY: Carmen Mangiron

Carmen Mangiron is Lecturer in Spanish in the School of Applied Languages and Intercultural Studies and a member of the Centre for Translation and Textual Studies at Dublin City University. She also teaches game localisation in the Universitat Autonoma de Barcelona and is one of the localisers of the PlayStation game series *Final Fantasy* into Spanish. She is currently completing a PhD on the treatment of cultural references in the translations of the Japanese novel *Botchan*. E-mail: carmen.mangiron@dcu.ie

BIOGRAPHY: Minako O'Hagan

Minako O'Hagan is Lecturer in Translation Technology in the School of Applied Languages and Intercultural Studies and a member of the Centre for Translation and Textual Studies at Dublin City University. She is currently working on a research project on the application of CAT (Computer-Aided Translation) tools to subtitle translations for DVDs. Her publications include *The Coming Industry of Teletranslation* (OHagan, 1996) and *Translation-mediated Communication in a Digital World* (OHagan & Ashworth, 2002).

E-mail: minako.ohagan@dcu.ie

1. Introduction

During the last decade the translation industry has seen the dramatic rise of the software localisation sector which is now part of the composite industry termed GILT, short for Globalisation, Internationalisation, Localisation and Translation. GILT posits translation in the context of globalisation, which encompasses wider issues such as making products or services available to international markets, involving legal, financial, marketing and other enterprise

decisions in facilitating localisation (Fry, 2003). The need for localisation emerged in order to create target market versions (also known as *locales*) of content in electronic form, notably computer software. Software localisation is different from the traditional concept of translation in the sense that the former calls for the linguistic transfer to be combined with software engineering, as the translated strings (lines of text) need to be compiled back into the given software environment. Localisation is a dynamically evolving sector, responding to the demand arising from new types of electronic content to be made global-ready. As such, localisation practices are presenting new dimensions of translation which are not yet fully explained (O'Hagan and Ashworth, 2002; Pym, 2004). While theory is still catching up with the practice of localisation, a commonly accepted principle in the industry is that localised products should retain " the look and feel of the locally-made products" (Fry, 2003). This is a somewhat different mantra from the translation studies theoretical foothold with the basic notion of the source and target texts and the idea of equivalence.

In this paper, we focus on the emerging localisation practice of video games (referred to as 'game localisation' hereafter) and highlight the unique features involved in the translation process. On the basis of examples from *Final Fantasy* (FF) games, the best selling Japanese role playing game (RPG) titles, we will argue that the translation issues arising from this domain call for a new model that we call 'transcreation' to explain the freedom granted to the translator, albeit within severe space limitations.

2. Game Localisation

The history of video games goes back to the 1960s when the first video game, *Spacewar*,was brought to life at Massachusetts Institute of Technology. Since then, technological advancements have completely changed the video games landscape. These early games required the least amount of translation, as the games consisted mainly of dots and lines with very few command lines. By comparison, today's major game titles present many elements to be translated, reflecting intricate gameplay features with breathtaking 3D graphics, surround-sound and incorporation of human voices as well as in-game cinematics, known as 'cut-scenes'. Video games can be classified into different genres such as adventure/action, sports/racing, RPG, first/third person shooter, simulation, etc. Certain games, such as RPGs, have complex storylines, leaving ample scope for translation. These games tend to include the most text, and are therefore considered most suitable to discuss the challenges involved in translation (Mangiron, 2004).

Games come in different forms, including PC-based, console-based, and handheld games as well as arcade games, but in this article we follow Frasca's (2001:4) definition of video games as " computer-based entertainment software, using any electronic platform [...], involving one or multiple players in a physical or networked environment". Accordingly, we regard game localisation as comparable to that of business software albeit we will be highlighting the differences between them.

Video games as a business sector is known as 'interactive publishing', the naming of which highlights the unique feature of this medium, as compared with cinema, for example. This is a technology-driven sector and it is constantly evolving with the developers maximising the use of cutting edge technology to demonstrate their creative talents. One of the most recent developments is the technical capability to incorporate human voices for in-game dialogues. This has replaced the use of written text in many cases, in turn giving rise to the need for dubbing and subtitling when games are localised. Games publishers are usually responsible for localisation and they may also be developers of the games. The actual localisation may be outsourced or carried out in-house. There are a number of specialised game localisation vendors who provide a full range of localisation services. Once the localisation process is complete, the reviewing process takes place as part of quality assurance (QA) with linguistic and functional testing. Finally, the publishers are required to provide a release candidate (final localisation version) for verification by the platform manufacturers, such as Sony, Nintendo or Microsoft. More detailed descriptions of the localisation cycle are provided in Chandler (2005a) and O'Hagan and Mangiron (2004). Despite all these activities taking place in the industry, it is only within the past few years that game localisation has started to be recognised by the wider localisation industry and a paucity of work on video games remains in the area of Translation Studies (O'Hagan, 2005).

3. Similarities and differences in localisation of software and games

Games localisation shares similar aspects with software localisation. The commonality stems from the fact that both involve combining language translation and software engineering, where translated text strings need to be appropriately placed within the software. This requires the string length to be within the allocated space, which in turn constrains the translation freedom. Both follow a similar localisation cycle which starts ideally with the internationalisation process and undergoes a set of QA procedures before the release of the final version. Another similarity lies in the use of the sim-ship (simultaneous shipment) model, where the original product, normally in English language, is released together with the localised versions. This is an accepted model in the localisation industry today, but has a significant implication for translation, where the translator has to work with unstable source content which could keep changing throughout the duration of the project. Most games released in Europe seem to follow this model as opposed to the model where the localised versions lag behind the release of the original. The latter is common among Japanese game developers/publishers. Localisers working under the sim-ship model are likely to face the added stress of having to carry out the task without being able to see - or play - the finished game and have to translate strings whose contexts are not always available.

There are also a number of distinct differences between software localisation and game localisation. For example, while the former has English as the main source language with predominant North American cultural references, the latter has certain prominence of Japanese. During the 1980's the main thrust of video game playing was centred in Japan (Roturier, 2003), but since then it has grown to be a worldwide phenomenon, forming part of the global pop culture. This owes much to localisation, without which the games industry would not have grown to be global. The games industry now commands worldwide revenue equivalent to the box office revenue of the film sector (Newman, 2004).

Another difference between game and software localisation lies in the fact that whilst functionality has been the key priority in the software localisation paradigm, in a game this functionality must be achieved with a high degree of creativity and originality. Although it is crucial that games should not freeze or crash and that they should be user-friendly, the fact that they are quirky and fun to play is equally or even more important. This is because the main purpose of a game is to entertain the user, whereas the utilitarian dimension is the goal of business software. Game localisation industry experts (Chandler, 2005b; Darolle, 2004) suggest that standardisation of the localisation practices as achieved in software localisation is not always transferable to the games paradigm where each genre, and even title, begs different approaches to retain the distinct flavour unique to the original game.

4. Game Localisation and Screen Translation

Game localisation also shares many characteristics with audiovisual translation, since most localised games are currently dubbed or subtitled, or both. Japanese games are usually dubbed into English and subtitled into other European languages whereas games that are originally produced in English are either dubbed or subtitled into other languages. Although most game players who come from 'dubbing countries', as established in cinema and television conventions, prefer this mode for games as well, subtitling seems to be a more attractive option for developers. The reasons for this are mainly the time and high cost implications of dubbing a game, as well as the status of English as lingua franca in the international gaming community. As far as the dubbing process is concerned, it is very similar to dubbing a movie or an animated film. The script is translated taking into account the amount of time available for each spoken sentence, and lip synchronisation is also considered whenever possible. The script is subsequently recorded by professional voice actors in a studio.

By comparison, subtitling for games is quite different from the screen translation conventions used for subtitling films, although it shares some features in common with DVD subtitling. For example, most dubbed games include intralingual subtitles. Interlingual subtitles are also used for those target languages into which the game is not dubbed. As is possible with DVDs, the users also have the possibility of controlling the subtitles, i.e. they can pause and restart while playing the game. However, game subtitles usually appear at a faster speed than in cinema, so as to keep pace with generally rapid game actions. Another difference is that in subtitling for games the semantic unit is not given as much importance as in cinemas; one will often find a characters dialogue segmented into two or even more lines of subtitles which do not necessarily follow semantic units. On the other hand, the length constraints of the subtitles need to be adhered to

strictly and are often measured by pixels instead of number of characters in order to maximise the space available. Accordingly, localisers are usually availed of custom-made programs that allow checking the length of the subtitle on screen. This gives them an approximate idea of how many characters correspond to the maximum number of pixels allowed per line. Another significant difference in game subtitling is that in some games, such as FF, the name of the character who is speaking is labelled by default at every appearance of the character, even for the dialogue exchange that is segmented. Players have the option of turning this feature off at the in-game configuration menu, where they can set their preferences. The instances in which these name labels do not appear are the following:

- When the voice belongs to a narrator's monologue, in which case the text appears in italics, in the same way as in cinema subtitle conventions.
- When the name of the character has not been introduced yet. In this case there are two options: not to have a name label, or to use three question marks followed by a colon, to indicate that this is a new and unknown character.
- When the character speaking is an NPC (non playing character) whose name is not relevant to the development of the story.1

Another feature of the subtitles in games is the use of a different colour, usually light blue or yellow, to highlight important information, such as place names, which is relevant for the gameplay and helps the player advance in the game.

5. Translation issues

The main priority of game localisation is to preserve the gameplay experience for the target players, keeping the 'look and feel' of the original. The brief of the localiser is to produce a version that will allow the players to experience the game as if it were originally developed in their own language and to provide enjoyment equivalent to that felt by the players of the original version. In order to achieve this it is crucial that the translators are familiar with the game domain. They must be aware of common building blocks of games, elements such as the register and terminology, the kind of humour present in the game, the use of puns, etc. They also need to be able to recognise allusions and intertextual references to other genres of global popular culture, such as comics and films.

Today the demographics of game players range from low teens to adults. Due to the wide spectrum of players for which games are designed, the localised game must be innovative and exciting, and, at the same time, it has to be easy to play and understand.2 For this reason, translators are often given *carte blanche* to modify, adapt, and remove any cultural references, puns, as well as jokes that would not work in the target language. Localisers are given the liberty of including new cultural references, jokes, or any other element they deem necessary to preserve the game experience and to produce a fresh and engaging translation. This type of creative licence granted to game localisers would be the exception rather than the rule in any other types of translation. The technique of *compensation*, i.e., introducing a new feature in the target text to compensate for a different one that could not be reproduced somewhere else in the text is commonly used, and accepted, in translation studies. However, the extent of freedom in including new features in game localisation, regardless of the original content, departs completely from one of the central notions of traditional translation theories: fidelity to the original. With games, fidelity takes a different meaning whereby the translator does not have to be loyal to the original text, but rather to the overall game experience.

One example of this creativity in games localisation is found in the use of linguistic variation, a translation technique described by Molina and Hurtado (2002) as the introduction in the target text of dialects absent in the original for characterisation purposes. The translation of accents and dialects is a controversial issue in translation studies, and it is only used in specific translation genres, notably theatre plays, childrens literature, comics, animated movies and games. In the example below, from the localised US versions of *Final Fantasy X-II*, the merchant called Oaka speaks Cockney, although there was no specific accent present in the original Japanese version:

O'aka: I owe it to those lads who died defending *me* shop, and III not be letting *em* down. O'aka: *Ye* will come and stop in once in a while, wont *ye*?

This is done in an attempt to give the game the right look and feel, by adding a humorous touch that brings it closer to the player. As one fan puts it: "I personally think that Cockney was a good choice, its very charming and amusing in the way that you would never have expected it in a fantasy world".3

As the above example demonstrates, game localisers enjoy almost absolute freedom, and it may sound like a translators dream come true. However, it comes with a condition: game localisation is constrained by severe space limitations. This is particularly the case when dealing with certain elements of the game user interface, such as menus, help, warning messages, and tutorials. In FFgames, for instance, help messages can only have one line, items in menus have a fixed length, and abbreviations must be avoided for the sake of clarity. The names for weapons, items, and abilities, which are common features in games, often need to be re-created, since literal translation is not possible or tends to exceed the space available. This can be particularly challenging with Japanese as the source language. Due to the use of *kanji* (ideographs), two or three character combinations can often be enough in the original Japanese to achieve an inventive name with multiple connotations, but the same does not apply to most European languages. Thus, a considerable creative effort is required from the localiser, whose solutions have to be contained within the space constraints. This issue is elaborated further in the case study below.

6. Case study: Final Fantasy

The following section provides examples and an analysis of the freedom exercised by the American translators in the US localised versions of the games FFX and FFX-2, in order to preserve the gameplay experience albeit within the space limitations. These FF titles are published as Sony PlayStation2 games, and the whole FF series is considered as one of the most successful RPG titles in the world. It has sold to date over 48 million units worldwide.4 The rationale for choosing FF series for our study lies in the fact that: (i) they are commercially significant games world-wide; (ii) they are Japanese games localised into many other locales, highlighting translation issues; (iii) and one of the authors of this paper was involved in their localisation, thus gaining first hand insight into the actual process involved.

As an overall strategy for localising these FF titles, the translators opted for a domesticating approach in a Venutian sense (Venuti, 1995); or, to follow Toury's terminology (1980), an acceptable translation which aims to bring the game closer to the target culture. This domestication is achieved mainly by the use in the target text of idiomatic and colloquial language, the adaptation of jokes, sayings and cultural references, and the re-creation of new cultural references and plays on words. All this gives a distinctive, original flavour to the localised version. We will now examine some examples, grouped according to the translation strategies implemented. These examples have been chosen particularly to highlight the liberty taken by the translators, which is not so common in other types of translation. We intend to draw attention to the translation features that are unique to the video games domain, or at least far more prevalent than in other translation genres.

6.1. Re-naming of key terminology and character names

Names used for weapons, items and abilities form essential key terminology in video games, and are the result of considerable inventiveness by the game creators and, in turn, the translators, who have to translate them with the added challenge of having to fit them within the limited space available on the screen. Furthermore, these translations are likely to be re-used for subsequent serialised games, thus making it doubly important to get them right the first time.

Many Japanese games have evocative names for various types of weaponry and take advantage of the ideographs they use, which can convey multiple meanings in minimum space. In FFX there are over a thousand different weapon names of fourteen different types. They must all be translated within a limit of approximately 15 characters. One of the weapons is a blade called 風林火山 (*fūrinkazan*), an expression made up of four Chinese characters denoting 'wind, forest, fire and mountain', and used in Japanese to mean: " as fast as the wind, as quiet as the forest, as daring as fire, and immovable as the mountain" .5 For obvious reasons, a literal translation will not be a solution, and re-invention is necessary. The American translators opted for the name 'Conqueror', completely different to the original but a powerful and evocative choice in English. Another example is $\bar{\kappa}$ 鳥風月 (*kachōfūgetsu*), the name of a 'katana' (Japanese sword), which allows the game

characters who use it to triple the points they earn in a battle. This name literally stands for 'flower, bird, wind, and moon', an expression that means " beauties of nature in Japanese" .6 However, the US name for this weapon is 'Painkiller', again very different from the original. While the Japanese weapon name has a poetic ring to it, the English one is rather humorous, possibly in order to fit better into American game culture.

Another significant freedom games translators may exercise, provided the strategy is ultimately approved by the developer, is changing the names of the characters in the game. For example, the American translators of FFX thought it necessary to change the name of one character, from Sano to Ormi. They may have considered that the original Japanese name Sano, that means 'healthy' in Spanish, could sound odd to an American audience with some knowledge of Spanish. Another example can be found in the translation of the name of the main character in FFIX, $\Im \varphi \mathcal{V}$ (Jitan) in Japanese, which was transliterated as Zidane in the US version. However, European translators considered this name could cause legal problems in Europe, as it is also the surname of a famous French footballer. In this instance, translators of different European languages were free to localise the name as they thought best. In the Spanish version, for example, the name Yitan was used, as it follows closely the phonetics of the Japanese original while avoiding the possible legal issue.

6.2. Contextualisation by addition

Another type of freedom taken by the translator may include the contextualisation of the situation by adding a new phrase or sentence. In the following example, the phrase 'perfect for the Dullwings' was deliberately inserted by the translators. Leblanc's reference to the 'Dullwings' becomes this way a direct attack aimed at degrading Yuna's opposition group, known as the 'Gullwings'. This addition, which is also a play on words, helps to make explicit the adversarial relationship between Leblanc and Yuna, drawing a smile on the players' face and hopefully engaging them more in the game with the inclusion of this amusing touch. A more literal translation of the original dialogue is provided in square brackets.

| Original Japanese | Localised American version |
|--|--|
| ルブラン: ふん、アタシにはわかるよ。 [Leblanc: Hm, I can tell.] そのスフィアはスカだね。 [That sphere is dud.] | Leblanc: Its obvious to a trained eye? |
| | That spheres just a dud. Perfect for the Dullwings. |

6.3. Re-creation of play on words

Humour is a key element in games, a feature this genre shares with comics and *manga*. Games are full of jokes whose function is to amuse and entertain the player. Many of these jokes are based in language deviance, mainly puns, which often cannot be translated literally. They have to be adapted to the target language and culture. The following example illustrates the translation of a Japanese play on words replaced by a new creation by the American translators, in an attempt at trying to produce a similar comic effect in English. The joke in Japanese is based on the fact that Rikku, one of the characters, deliberately breaks the grammatical rule by conjugating a noun, $tint t_{int}$ (daijobu, 'OK'), as if it were a verb. Her brother chides her, telling her to use the correct form.

| Original Japanese | Localised American version |
|------------------------|-----------------------------|
| | |
| アニキ: ダイジョウブか~? | |
| [Brother: Are you OK?] | |
| | Brother: Whats your status? |
| リック: ダイジョばナイ! | |
| [Rikku: Were "NO-K"] | |
| | |

| アニキ:「ダイジョばナイ」は間違い! [Brother: "NO-K" is not correct!] | Rikku: Disasterrific! |
|---|--|
| 「ダイジョウブではナイ」と言え! [Say "Were not OK"!] | Brother: 'Disasterrific' is not a word! |
| | Say 'disastrous' like the rest of Spira! |
| | |

This example also includes a case of strengthened contextualization with the addition, at the end, of the phrase 'like the rest of Spira!', 'Spira' being the name of the imaginary world where the game takes place.

6.4. Deliberate use of regional expressions

In order to instil the right 'look and feel' to the game, American localisers of FF often resort to including references to US culture, as well as puns, sayings, and idioms that are absent in the original. The aim is to give the game a local touch and allow the players to enjoy it as if it were an original game.

| Original Japanese | Localised American version |
|--|---|
| トブリ: ういうい! 大成功でしたねえ。雷平原ライ ブ。 [Tobli: Goodie! It was a big success. The live concert in the Thunder Plains.] | Tobli: Yunapalooza was a super smasheriffic success! |

In this example, 'the live concert in the Thunder Plains' has become 'Yunapalooza'. This is a play on words with the American term 'Lollapalooza', an annual rock festival held in different US locations. By using this local term, the American translators have included a target cultural reference, bringing the game closer to the players and allowing a greater degree of identification. They also contextualize it further and add a humorous spin to the translation by replacing 'Lolla' with 'Yuna', the name of the main character starring in the concert. They also use the term 'super smasheriffic', which combines the prefix 'super' with the neologism formed by blending 'smashing' and 'terrific'. The end result is a line that resembles cool street-speak; a linguistic feature common to many games.

As we have attempted to demonstrate above, game localisation seems to grant a high degree of freedom to the translators, which is closely linked to the nature of this medium. The choice by the translator of a particular linguistic solution in the target game cannot be explained simply on the basis of the relationship between the translation and the source text alone, and the gameplay feel has also to be taken into account. This is the dimension that we consider is relatively innovative and has rarely been mentioned in the other more conventional types of translation.

7. Conclusions and further work

Game localisation is an emerging professional practice and the translation process involved is characterised by a high degree of freedom and a number of constraints that distinguish it from any other type of translation, thus making it an area worthy of translation studies. The reason for this lies in the nature of video games as interactive digital entertainment which demands a new translation approach. Although it shares some similarities with screen translation and software localisation, game localisation stands apart because its ultimate goal is to offer entertainment for the end-user. To this end, the skopos of game localisation is to produce a target version that keeps the 'look and feel' of the original, yet passing itself off as the original. In game localisation, the feeling of the original 'gameplay experience' needs to be preserved in the localised version so that all players share the same enjoyment regardless of their language of choice (OHagan and Mangiron, 2004). No oddities should be present to disturb the interactive game experience, and this is the reason why game localisers are granted *quasi* absolute freedom to modify, omit, and even add any elements which they deem necessary to bring the game closer to the players and to convey the original feel of gameplay. And, in so doing, the traditional concept of fidelity to the

original is discarded. In game localisation, transcreation, rather than just translation, takes place.

We have barely scratched the surface of this fast growing area in GILT practices, drawing on the top selling Japanese RPG title *Final Fantasy* series. In our future analyses we wish to include a wider range of game genres and platforms in order to further highlight and generalise the unique nature of the translation issues that pertain to game localisation. In applying the notion of transcreation, a number of aspects can be raised, including the variables in the localisation process, the priorities and constraints inherent to this type of translation, the translators competence, the use of language in games, and the strategies and techniques used to preserve the gameplay experience. Finally, for games research we cannot stress enough the importance of establishing closer links between the industry and the academic world, in an area in which the industry is leading the field. Such a partnership can be particularly beneficial in the development of effective training courses that will prepare game localisation specialists able to meet the growing demand for good linguists in this field. Research on games is now gathering pace and developing as an independent study area in many parts of the world, although there is a striking paucity of work on game localisation. We are convinced that Translation Studies can make a significant contribution towards the establishment of this field of research as a truly interdisciplinary area of study.

Notes

1 Despite the fact that NPCs are secondary characters to whom the player does not necessarily need to talk in order to make progress in the game, they are important elements of video games, since they provide hints, additional information, reward players with rare items, etc., which are useful for the players to complete their quest.

2 While games are age rated, it is obvious that the wider the age coverage one game title can address without any modification, the more profitable it will be.

3 www.deadlybrain.org/oaka/biography.html

4 "FINAL FANTASY X-2 Hits Million-Unit Sales Mark"

www.orlandofloridaguide.com/entertainment/games/final_fantasy.htm

5 Source: Jim Breen-s WWW JDIC Server.

6 Source: Jim Breen-s WWW JDIC Server.

References

- Chandler, H. 2005a. " Current trends in games localization" . *LISA Newsletter Global Insider*. July.
- Chandler, H. 2005b. The Localization Handbook. Massachusetts: Charles River Media.
- Darolle, K. 2004. " Challenges in videogames localization" . *LISA Newsletter Global Insider*, XIII, 3.3.
- Fry, R. 2003. Localisation Primer. Revised edition. www.lisa.org
- Frasca, G. 2001. "Rethinking agency and immersion: video games as a means of consciousness-raising". Essay presented at SIGGRAPH 2001. http://siggraph.org/artdesign/gallery/S01/essays.html
- Mangiron, C. 2004. "Localising *Final Fantasy* Bringing fantasy to reality". *LISA Newsletter Global Insider*, XIII, 1.3.
- Molina, L. and A. Hurtado. 2002. " Translation techniques revisited: a dynamic and functional approach". *Meta* 47(4): 498-512.
- Newman, J. 2004. *Videogames*. New York and London: Routledge.
- O'Hagan, M. 1996. The Coming Industry of Teletranslation. Clevedon: Multilingual Matters.
- O'Hagan, M. Forthcoming. " From translating text to translating experience: videogames as a new domain for translation and research". *Translating Today*.
- O'Hagan, M. and D. Ashworth. 2002. *Translation-mediated Communication in a Digital Era*. Clevedon: Multilingual Matters.
- O'Hagan, M. and C. Mangiron. 2004. " Games localization: when *Arigato* gets lost in translation". *New Zealand Game Developers Conference Proceedings*. Otago: University of Otago.
- Pym, A. 2004. *The Moving Text: Localization, Translation and Distribution*. Amsterdam: JohnBenjamins.

- Roturier, J. 2003. *Video Games Localization: Constraints and Choices in the Industry*. Unpublished MA thesis. Dublin: Dublin City University.
- Toury, G. 1980. *In Search of a Theory of Literary Translation*. Tel Aviv: Porter Institute for Poetics and Semiotics.
- Venuti. L. 1995. *The Translators Invisibility*. New York and London: Routledge.

Home | Past Issues | Keyword Search | Editorial Board | Events | About | Contact | Help