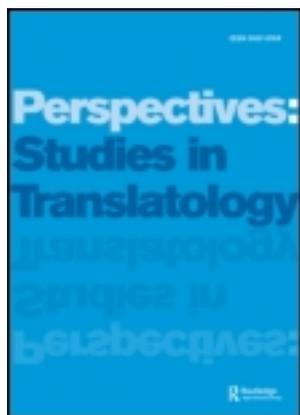


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The strange case of *The Big Bang Theory* and its extra-ordinary Italian audiovisual translation: a multimodal corpus-based analysis

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The (ab)use of a highly scientific and quaintly specialised language characterises the American sitcom *The Big Bang Theory* as a geek-oriented production which, by means of its humorous multimodal discourse, seems to be addressed to a community of speakers who co-share the same lexicon, ideas and habits, i.e. mainly young nerds. However, while in the source text the humorous discourse is primarily construed around some geeky in-jokes, the Italian audiovisual dubbed product seems to completely change the context of situation, thus avoiding any reference to the specificity of the language of the source text. The result is a predictable failure to accommodate the humorous discourse of the American series, preventing the Italian audience a full appreciation of its subtle humour. By means of an integrated multimodal and corpus-based approach, this paper aims to introduce the 'community factor' in the analysis of joke typologies staged in AVT artefacts. A multimodal model, which takes into consideration semiotically expressed humour, is introduced here, with the aim of capturing some interesting instantiations of the humorous discourse and specialised language which need to be re-allocated in the target product.

Keywords: semiotically expressed humour; dubbing; 'community factor'; multimodal corpus-based approach

We are like sailors who on the open sea must reconstruct their ship but are never able to start afresh from the bottom. Where a beam is taken away a new one must at once be put there, and for this the rest of the ship is used as support. In this way, by using the old beams and driftwood the ship can be shaped entirely anew, but only by gradual reconstruction. (Neurath, 1921, p. 198)

Introduction

Studies on audiovisual translation (henceforth AVT) have largely concentrated their focus of investigation on the semiotic mode of discourse: the complex interaction between text, image and sound. A multifaceted mechanism of representation such as an audiovisual product inevitably enacts multi-layered processes of communication that can only be investigated by means of an integration of several linguistic and more general semiotic methodologies. In audiovisual productions the meaning-making process is created by the juxtaposition of a composite array of semiotic resources (e.g. language, visual imagery, gesture, sound, music, etc.) and therefore integrated practices are required for analysing the meaning arising from the

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combination of these resources. Audiovisual texts construct multimodal discourses that are based on the interplay between linguistic utterances and semiotic representations on the screen by means of multifaceted semiotic cohesive devices. However, a comprehensive multimodal approach to the study of AVT should also aim to classify linguistic strategies and draw conclusions relating to the practice of translation adopted in semiotic artefacts. In particular, according to Chiaro (2006), the process of translating in audiovisual humorous texts is even thornier, since adaptors can only concentrate their efforts on the verbal code transmitted acoustically:

Films are multifaceted semiotic entities simultaneously communicating verbal signs acoustically (dialogue, song lyrics, etc.), visually (written texts, such as letters, newspaper headlines, banners, etc.), non-verbally but acoustically (music, background noises, etc.), and non-verbally but visually (actor's movements, facial expressions, setting, etc.). Yet, the translator's intervention is limited to only one of these aspects, i.e., the dialogue, leaving all the other features unchanged. In a comedy, which may well rely on several of these features concurrently in order to create the desired effect, if the verbal code is the only dimension which can be manipulated to aid the target culture in capturing the humour, the translator's job is a delicate one. (Chiaro, 2006, p. 198)

The multimodal approach of this study draws upon Halliday's theories of social semiotics (1978, 1994) and concerns 'the way people use semiotic "resources" both to produce communicative artefacts and events and to interpret them [...] in the context of specific social situations and practices' (van Leeuwen, 2005, Preface). In this perspective, a multimodal text can be seen as a semiotic unit that has a particular function and is related to its social system by means of its context of situation and culture (Egins, 1994; Halliday & Hasan, 1989). In addition, in the investigation of audiovisual texts and their interlingual adaptations, a quantitative corpus-based methodology could be seen without any doubt as a further development in the analysis of the translation process by looking at how the language in the source text is rendered in a target one, and by comparing the linguistic features and their frequencies in translated target texts and comparable source texts. Hence, in AVT studies a corpus-based approach as an aid to the analysis of texts can unquestionably find an empirical realisation (Baker, 1993; Bonsignori, Bruti, & Masi, 2008; Freddi & Pavesi, 2009; Quaglio, 2009).

This paper proposes an integrated approach – multimodal and corpus-based – which combines linguistic and semiotic resources in the analysis of dubbed humour, with the aim of identifying general trends in terms of language use and translational practices aided by corpus linguistics investigation. The small parallel and multimodal corpus under scrutiny consists of some selected episodes from the American sitcom *The Big Bang Theory* (2007–2012) and their Italian dubbed version. The comedy series is characterised by a geek-oriented linguistic construction which, by means of both its specialised and humorous discourse, seems to be addressing a community of speakers who share the same lexicon, ideas and habits, i.e. mainly young nerds. However, while in the source text the humorous discourse is primarily linguistically and visually shaped around some nerdy or geeky in-jokes, the Italian audiovisual translated product seems to entirely re-cast the 'context of situation', thus eliminating some fundamental references to the specificity of the language of the source text, and consequently preventing the Italian audience from gaining a full appreciation of its humour.

As for the methodology, this paper aims to introduce some examples for text notation of audiovisually enhanced humour that may be of assistance in developing joke typologies in AVT. A multimodal framework, which takes into consideration both verbal and nonverbal forms of humorous expression, is set up here with the purpose of capturing all the instantiations of the humorous discourse and specialised lexicon that need to be re-allocated in the target product.

The multimodal corpus: *The Big Bang Theory*

The empirical starting point for a multimodal investigation in this paper is provided by the collection of a small corpus of 87 transcribed episodes from the successful US TV series *The Big Bang Theory* (henceforth TBBT). The episodes collected, from the first (2007) to the fourth (2010) seasons, were available in DVD format in the English source language. However, their corresponding Italian dubbed versions had, at the time, not been released in DVD format. Therefore, the Italian episodes had to be recorded directly from TV broadcasting – from 2008 to 2012 – when the series was aired on the Italian commercial TV network, *Italia 1*, on the Mediaset network. The four series under scrutiny have a total running time of 29 hours and 26 minutes, with a mean running time of 20 minutes for each episode; the whole corpus consists of 191,432 tokens in the English source text and 192,202 tokens in the Italian parallel one.

TBBT, filmed in front of a live audience, was first aired on CBS on 24 September 2007 and co-produced by Warner Bros. Television and Chuck Lorre Productions.¹ The first dubbed series was broadcast in Italy on 19 January 2008 on the Italian pay-per-view digital terrestrial TV network *Steel* and later, on 20 September 2010, on the Mediaset network *Italia 1*. The Italian dubbing was carried out by the Rome-based company *Post in Europe*.

The TBBT storyline evolves mainly around the clumsy lives of two nerdy physicists, Leonard Hofstadter and Sheldon Cooper, employed at the California Institute of Technology, who share a flat in Pasadena, California. The geeky nerds are bound by an improbable friendship to their beautiful neighbour, Penny, a waitress and aspiring actress, with whom Leonard is infatuated and whose social skills and common sense humorously contrast with the geekiness of Leonard and Sheldon. The other two main characters in the show are the Desi Raj and Howard Wolowitz. Raj works as an astrophysicist in the Physics Department at Caltech, and has never been involved in any love relationship, mostly due to ‘selective mutism’, that is his complete inability to speak to women or even men with feminine traits; whilst Howard, a womaniser, is a Jewish aerospace engineer who still lives with his vociferous mother.

The show’s original dialogue is frequently interspersed with an English for special purposes register, focusing mainly on the specialised language of science, and in particular physics. The male characters recurrently refer to scientific theories, often writing formulas on the whiteboard they keep at home, and repeatedly make science-related jokes even when dealing with their difficult romantic love affairs. Professor David Saltzberg, PhD in physics, worked for the show as a science consultant, making sure that all the scientific dialogues and physics formulas, written on the whiteboard at the beginning of each episode, were correct (DeRusha, 2011).

In general, the original episodes of TBBT make use of linguistic strategies by which the community of nerds portrayed conveys messages in order to create their

social and professional in-group identity. Instances from the language of science, mathematics, technology, but also trading cards, comic books, television programmes, films, role-playing games, video games, fantasy, science fiction, and memorabilia reveal that the geeky language displays functions as a means of construing a specific shared identity. As a community, the male characters are able to cross linguistic and cultural boundaries with the humorous aim of setting themselves apart from the surrounding wider society in order to reinforce their in-group identity as geeks. The four nerds' language and attitudes serve in fact to build, on the small screen, a specific community of practice which, in the socio-linguistic studies of Eckert and McConnell-Ginet (1992, p. 464), denote 'an aggregate of people who come together around mutual engagement in an endeavor. Ways of doing things, ways of talking, beliefs, values, power relations – in short, practices emerge in the course of this mutual endeavor'. The TBBT televised 'community of practice' uses an in-group language borrowed from specialised discourse that is generally used to talk and write about specialised fields of knowledge within academic or occupational domains. Very often, the language of the dialogues tends to be obscure and complex or, on the contrary, highly precise and clear. Sheldon, in particular, speaks in paragraphs, using polysyllabic words derived from the very specialised written jargon of physics. Idiomatic expressions and metaphors such as 'a bio-social exploration with a neuro-chemical overlay', referring to a date with a girl culminating in a French kiss, are typical instances of the male protagonists' idiolect. Objectivity and repeated lack of any display of emotions, again a typical feature of specialised discourse, are linguistic markers often achieved by means of lexical density provided by the repetition of scientific formulas such as in 'Examining perturbative amplitudes in $N=4$ Supersymmetric Theories, leading to a re-examination of the ultraviolet properties of Multi-loop $N=8$ Supergravity using modern Twistor Theory'. These types of sentences very often happen to slip into general social conversations, for instance at dinner parties. Humour is particularly at work in the comedy when Penny, instead, speaks in plain, general English. As a result, most of the time the characters need to translate back and forth for each other in order to reach a full linguistic comprehension.

Humour and multimodality: semiotically expressed humour

In TBBT, verbally expressed humour is mainly instantiated on nerd-culture jokes and the resulting failure of Penny to understand them; or in general on the nerds' inability to make sense of the female world. As we can infer from the following exchange among Leonard, Howard and Penny about Sheldon's sexual interests, the three protagonists are able to build up a humorous dialogue by using totally different registers and lexical choices to address the same issue (Engel, Hagggar, Doyle, Rosenstock, & Cendrowski, 2008):

Penny: I know this is none of my business, but I just ... I have to ask – what's Sheldon's deal?

Leonard: What do you mean, 'deal'?

Penny: You know, like, what's his deal? Is it girls ...? Guys ...? Sock puppets ...?

Leonard: Honestly, we've been operating under the assumption that he has no deal.

Penny: Come on, everybody has a deal.

Howard: Not Sheldon. Over the years we've formulated a number of theories about how he might reproduce. I'm an advocate of mitosis.

Penny: I'm sorry?

Howard: I believe one day Sheldon will eat an enormous amount of Thai food and split into two Sheldons.

Leonard: On the other hand, I think Sheldon might be the larval form of his species and someday he'll spin a cocoon and emerge two months later with moth wings and an exoskeleton.

Penny: Okay, well, thanks for the nightmares.

The opposing scripts,² *normallabnormal*, are introduced by the speakers here by using completely different terminology: where Penny refers to Sheldon's sexual life as a 'deal', Leonard, re-routes that input by formulating a complex sentence that sounds as if it had been written for a scientific article rather than spoken in a friendly conversation. Moreover, the nerds' scientific register employed in sentences such as 'we've been operating under the assumption' and 'we've formulated a number of theories about how he might reproduce' is reinforced by a specialised lexicon brought into the humorous dialogue by means of scientific terms such as 'mitosis' and 'exoskeleton', which Penny inevitably fails to understand.

The idea of two opposing cognitive structures, in our case represented by the correlation between the scripts *normallabnormal*, can be formalised under the concept of script opposition as defined by Attardo (2001, p. 2): a script is 'a cognitive structure internalized by the speaker which provides the speaker with information on how a given entity is structured, what are its parts and components, or how an activity is done, a relationship organized'. Raskin's (1985, p. 99) main hypothesis of the 'Semantic Script Theory of Humor', which establishes two necessary and sufficient conditions for a text to be funny, is therefore proved:

- (a) the text is compatible, fully or in part, with two distinct scripts; and
- (b) the two distinct scripts are opposite (i.e. the negation of each other, if only for the function of a given text) on a list of dichotomies, such as *reallunreal*, *possibleimpossible*, *normallabnormal*, etc.

Both conditions, in Raskin's terms, are in fact semantically fulfilled, since the opposite sub-scripts – *sex/reproduction* vs. *no sex/mitosis* – are perfectly compatible on the simple dichotomy *normallabnormal*. However, given the multimodal nature of the TV product, the verbally expressed humour in the series also needs to be analysed with reference to a wide range of elements, shifting from textual and visual parameters to the sound effects employed to achieve a comic effect within the socially-challenged geek represented community.

Owing to the simultaneous and multimodal nature of communication, typical of TV productions, the analysis of TBBT humorous strategies needs to connect a semantic and pragmatic perspective to the study of visual humorous texts. Indeed, some important extra-linguistic aspects of multimodal texts including action, objects, visual images, voice pitch, facial expressions and gestures can be seen as fundamental markers in this kind of investigation. Therefore, the analysis of TBBT humour cannot be based merely on a linguistic examination, since the multimodal nature of the text and its multifaceted structures may also contribute to activate the same scripts, or even contradict each other, especially when travelling in translation. We should, therefore, expand the linguistic analysis by building up a semiotic framework of reference capable of integrating also visual script oppositeness activated by the images and/or the sounds present in video-narrative structures. To this end, we should start by expanding the

definition of script proposed by Raskin (1985), moving from the analysis of verbally expressed humour, which considers language as a primary input for the implementation of the humorous discourse, into *semiotically expressed humour* (SEH), which takes into consideration both linguistic and semiotic elements relevant for the construction of humorous effects. We can simply define a visual script by rewording Raskin's foundations as follows: a visual script is a piece of semiotic information surrounding an image, a word or a sound or inferred by them, separately or simultaneously. As a matter of fact, visual scripts may be activated both lexically and inferentially due to the nature of the visual text (see Balirano, 2007; Balirano & Corduas, 2008).

The methodology used for the transcription of the visual and verbal scripts for the analysis of humour in TBBT is based on some useful developments achieved in multimodal transcription by Thibault (2000) and Baldry and Thibault (2006). Pioneering an accurate and comprehensive multimodal language analysis, the authors offer a synoptic outlook for all the components of video-supported material, the so-called 'resource integration principle' (Baldry & Thibault, 2006, p. 4) and the 'meaning-compression principle', which 'refers to the effect of the interaction of smaller-scale semiotic resources on higher-scalar levels where meaning is observed and interpreted' (Baldry & Thibault, 2006, p. 19). According to Thibault (2000), since multimodality refers to the diverse ways in which several distinct semiotic resource systems are both co-deployed and co-contextualised in the meaning making of a text, a multimodal text can be seen as the result of the different ways in which elements forming different classes of phenomena are connected to each other in a larger whole. Since not all the categories used by Baldry and Thibault are instrumental to our analysis, several simplifications and integrations have been introduced in order to complement the nature of our text with the aims of this study (see Balirano, 2007; Balirano & Corduas, 2008).

The visual part of the analysis is generally represented by screenshots, whose minimum unit is given by the presence of a visual jab line or any verbal utterance; however, since CBS denied permission to use the series' copyrighted images for this article, in the multimodal grid for transcription of SEH (Table 1), the *visual frame* column does not represent the actual action from the TV screen, but only the description of the pictures needed to unfold technical devices of either verbally or semiotically expressed humour. In addition, an account of significant aspects of the action, together with a description of the characters involved in it, is supplied in the *scene* column. The verbal soundtrack is to be found in the *text* column, together with some comments on the relevant illocutionary and perlocutionary elements of the text. The last column includes a schematic representation of SEH, following Attardo's (2001, p. 88) taxonomy of line positions in humorous texts. A symbol has also been included to signal the presence of canned laughter (\uparrow) since, though it is simply a technical device, it has been proved that it can be conducive to mirth in the audience (Chapman, 1973). The multimodal script analysis makes it possible to extend Attardo's notion of text vector, which illustrates the typology of line position (Attardo, 2001, p. 88–92). Thus, while a vector may represent only one element of the humorous discourse, given the linear nature of verbally expressed humour, in the SEH column several elements may be combined together in a row. Table 2 shows the legend for text notation of the visual and verbal scripts that is used for the analysis of humour in TBBT.³ In Table 1, Frame 1 (F1) introduces the sub-script 'The Doppler Effect' based on the dichotomy *possible/impossible*. The script is also reinforced by the presence of canned laughter, which contributes to the humorous instantiation

Table 1. Legend for text notation of SEH.

[...]	Beginning and end markers of a text	J	Jab line
↳	The beginning of a text	↑	Canned laughter
-	Non-humorous text	P	Punch line
Δ	Visual jab	→	End of narrative
(Musical jab	...	Any occurrence of — and J/Δ/▶

working as a cohesive device throughout the scenes (see F1, F4, F6). In F6, the final punch line is enhanced by the combination of both text and image, which together, by means of high modality markers, emphasise the script opposition of the whole scene. Hence, Sheldon verbally declares his full ability to prove that he is in fact the Doppler Effect by means of the root modal ‘can’, while visually he is the carrier of the same concept, since he is wearing a striped costume which resembles the waves changing frequency in the visualisation of the Doppler Effect. Consequently, by means of the ‘resource integration principle’, both resources are fundamental to triggering the verbal and visual sub-script: ‘The Doppler Effect’.

The following row, presenting the symbol for text notation adapted from Attardo (2002) and applied to TBBT scene *The Doppler Effect* (Cohen, Goetsch, Litt, & Cendrowski, 2007), taken from the episode *The Middle Earth Paradigm* in Table 1, shows a typical interconnection of different semiotic resources enhancing SEH: [↳ □ J ↑ J □ □ J ↑ ... □ P ↑]. This form of audiovisual text notation, especially when the presence of canned laughter binds the translator to a somewhat fixed humorous prosody, might be useful for adaptors when having to face complex language transformation in order to reproduce SEH.

TBBT Italian dubbing: the community factor

In the US, the series has been an enormous success since its debut. During its fourth season, it turned out to be US TV’s highest rated sitcom and, in the demographic age ranging 18–49 (the show’s target age range), the series won the second highest rating in the sitcom category. The fifth season had an average of over 14 million viewers, boasting a peak audience of 16.54 million viewers.⁴ However, when the comedy travelled to Italy, despite this great audience success in the US and despite Italy being one of the dubbing countries that have developed better dubbing techniques by particularly focusing on the linguistic transposition of cinema and quasi-natural lip synch, Italian viewers did not react to the show with such great enthusiasm.

One of the possible reasons for this failure is certainly due to the fact that the Italian adaptation of the first episodes arbitrarily and quite illogically levels out many of the linguistic cultural references to the community of nerds represented in the show. The invasive Italian adaptation has inevitably modified several types of verbal humorous instantiations enacted within the original series and has consequently not been appreciated by the Italian audience, especially as in TBBT humour is the communicative strategy carried out mainly by means of the ‘resource integration principle’. Therefore, if the visual frame does not correspond to the actual words on the screen, humour does not work.

If we compare our parallel texts by means of a multimodal grid (Table 3), we can easily spot important differences in the two versions. Table 3 (Goetsch, Litt, Cohen, & Cendrowski, 2007) shows how incongruous the Italian adaptation is when the

Table 2. Multimodal script analysis of ‘The Doppler Effect’ scene.

#	Visual frame	Scene	Text	SEH
1	Leonard and Howard in the lobby.	Lobby of the apartment building. Leonard is dressed as Frodo. Howard appears to be Peter Pan. (There is a knock on the door. Raj enters dressed as Thor.)	RAJ: What? Just because I’m Indian I can’t be a Norse God? No, no, no, Raj has to be an Indian God. That’s macis. I mean, look at Wolowitz, he’s not English, but he’s dressed like Peter Pan. Sheldon is neither sound nor light, but he’s obviously the Doppler Effect.	[→
2	Same as above.	Same as above.	HOWARD: I’m not Peter Pan, I’m Robin Hood. RAJ: Really, because I saw Peter Pan, and you’re dressed exactly like Cathy Rigby. She was a little bigger than you, but it’s basically the same look, man.	J
3	Sheldon is the central character on the scene.	Sheldon enters in a body suit featuring black and white vertical lines.	LEONARD: Hey, Sheldon, there’s something I want to talk to you about before we go to the party.	□
4	Sheldon is the central character on the scene.	Sheldon in a wide shot. Sounding excited.	SHELDON: I don’t care if anybody gets it, I’m going as the Doppler Effect.	□
5	Leonard is the central character on the scene.	Leonard on a wide shot.	LEONARD: No, it’s not ...	J ↑ ...
6	Sheldon is the central character on the scene.	Sheldon in a wide shot is dressed as the Doppler Effect.	SHELDON: If I have to, I can demonstrate. Neeeeooooowwww!	□ P ↑]

‘resource integration principle’ is not taken into account. L1 stands for the English source text and L2 for the dubbed version in Italian, BT stands for back-translation into English.

In F2, L2 column, the Italian expression *non spingete* (don’t push) is very different from the original L1, ‘We’re locked out’. This is a real case of incongruence that works at different levels; indeed, what Italian viewers see on the screen does not correspond to what they hear: nobody is pushing Sheldon, who is simply explaining

Table 3. Example of incongruous dubbed dialogue.

#	Visual frame	L1	L2	BT
1	Leonard and Sheldon are facing a closed door.	LEONARD: I have 26 hundred comic books in there, I challenge you to find a single reference to Kryptonian skin cells.	LEONARD: Là dentro ho 2600 volumi di fumetti, ti sfido a trovare un solo riferimento alle cellule cutanee kriptoniane.	LEONARD: I have 26 hundred comic books in there, I challenge you to find a single reference to Kryptonian skin cells.
2	Same as above.	SHELDON: Challenge accepted. <i>We’re locked out.</i>	SHELDON: Sfida accettata. <i>Permesso ... non spingete, calma!</i>	SHELDON: Challenge accepted. <i>Excuse me ... Don’t push! Keep calm!</i>
3	Close shot on Sheldon.	RAJ: <i>Also, the pretty girl left.</i>	RAJ: <i>Perché la biondina ha chiuso la porta?</i>	RAJ: <i>Why did blonde lock the door?</i>

that they have been locked out. The Italian dubbed version of TBBT clearly demonstrates to what extent an interventionist and arbitrary approach to AVT inevitably affects the audience appreciation of the product.⁵

A corpus linguistics investigation could well be a very practical tool for adaptors when translating for the screen. Even the simple frequency wordlist from TBBT original dialogues may immediately inform the analyst of the type of lexicon used in the series and the way the members of the represented community interact linguistically on the small screen. Moreover, frequencies also tell us something about the importance of lexical items in the economy of the text in question. Table 4 shows a token list of specialised lexicon ranked by frequency, generated with the help of *WordSmith Tools 6.0*. The grid compares the frequencies of tokens between the two versions of the series.

As Table 4 illustrates, most tokens connected to the world of nerds are quantitatively reduced in the Italian version, which appears to be much more neutral than the source text with regard to the kind of language employed. Moreover, the homogenisation or even the reduced use of some words frequently repeated throughout the series such as ‘offline’, ‘chat’, ‘chat-room’ or references to social networks such as *MySpace* or *Twitter* are difficult to understand. These terms are of everyday use in Italian and hence immediately accessible even to a general audience. Yet, the Italian corpus presents a lower frequency of such tokens, which are instead very useful to highlight TBBT context of situation.

The examples in Table 5 present some extraordinary adaptations that tend to completely re-route some important contextualisation cues which belong to the nerds’ computer-mediated world, and which are therefore also very familiar to a wide audience of young surfers. In particular, the reference to the very famous web community *MySpace* is completely and groundlessly deleted in the Italian exchange, even though it frequently recurs in Sheldon’s life and works as a fundamental instantiation of the typical context of culture that triggers humour throughout the series.

Deleting or even reducing the specific nerdy references and in-group jokes from the original source text has contributed to the creation of a cultural product that totally diverges from the original one: while TBBT in its original version looks to the nerds and geeks in the audience and makes fun of them as supposedly able to fully appreciate this type of humour, the Italian version does not take into account this important *community factor* and pursues the mere marketable aim of addressing a wider audience of younger viewers.

Table 4. *WordSmith Tools 6.0* frequency list of specialised language from TBBT.

#	L1	Occurrences	L2	Occurrences
1	CELL*	46	CELLUL*	16
2	CHAT*	34	CHAT*	12
3	DNA	23	DNA	13
4	INTERNET	78	INTERNET	52
5	LAW*	16	LEG*	8
6	MATH*	12	MATEMATIC*	8
7	NATURE	21	NATURA	16
8	PHYSICS	27	FISICA	18
9	PROTOCOL	12	PROTOCOLL*	7
10	QUANTUM	34	QUANTI*	20

Table 5. Example of omission of geek-related terminology in the dubbed version.

#	L1	L2	BT
1	SHELDON: I have a very wide circle. I have 212 friends on <i>MySpace</i> .	SHELDON: Ti pregherei di guardare più in là del tuo pianerottolo. Io ho già 210 amici nel <i>mio sito</i> .	SHELDON: Please, try and look beyond your landing. I already have 210 friends on <i>my site</i> .
2	SHELDON: Chat? <i>We don't chat. At least not offline.</i>	SHELDON: Per parlare? <i>E dire: ciao, come va, bene, ciao?</i>	SHELDON: To chat? <i>And saying: Hi, How are you? Fine? Bye.</i>

The main problem with the Italian dubbing of TBBT arises when the language adapted in the humorous exchanges completely alters what Attardo (2001, p. 22) defines as the 'Knowledge Resources' of a humorous text, namely script opposition, narrative strategy, target, situation and logical mechanism. Another important knowledge resource is of course language itself, but according to Attardo (2002, p. 176, my emphasis) in the translation of humour, a translator needs to 'keep all Knowledge Resources (except *Language*) the same. So the simplest approach to translation is: substitute Language in Target Language (TL) for Language in Source Language (SL)'. In addition, dealing in particular with verbal humour, Attardo (2002, p. 178) maintains that since ethnic and national communities invariably select other communities as their underdogs, translation 'can be done by substituting the

Table 6. Example of arbitrary translation of humour in the parallel corpus (The Doppler Effect).

#	Visual frame	L1	L2	BT
1	Close shot on Sheldon dressed as the Doppler effect.	SHELDON: I don't care if anybody gets it, I'm going as the Doppler Effect.	SHELDON: Sappi che non aggiungerò a pennarello degli alieni in lontananza, sul mio costume.	SHELDON: I have no intention of drawing aliens in the background, on my costume.
2	Close shot on Leonard dressed as Frodo.	LEONARD: No, it's not ...	LEONARD: No, non era questo ...	LEONARD: No, it was not that ...
3	Close shot on Sheldon dressed as the Doppler effect.	SHELDON: If I have to, I can demonstrate. Neeeeeoowwww!	SHELDON: Né l'astronave che riparte a razzo. Neeeeeoowwww!	SHELDON: Nor a spaceship taking off like a rocket either. Neeeeeoowwww!
4	Close shot on Penny.	PENNY: Oh, hey, what's Sheldon supposed to be?	PENNY: E Sheldon da che cosa è vestito?	PENNY: Hey, what's Sheldon supposed to be?
5	Leonard is dressed as Frodo and Howard as Peter Pan.	LEONARD: Oh, he's the Doppler Effect.	LEONARD: Oh, da Effetto Doppler.	LEONARD: Oh, he's the Doppler Effect.
6	Close shot on Sheldon.	SHELDON: See, people get it.	SHELDON: Solo tu hai visto sbarre aliene.	SHELDON: You are the only one who saw alien bars.

appropriate group in the target culture'. Of course this is not always the case with AVT, where the target community's appearance and behaviour on the screen might be clear-cut and therefore any form of linguistic substitution or re-contextualisation of the group would come across as wholly inappropriate.

The emphasis on the community factor in AVT becomes, in the adaptation of TBBT, an overt focus-shift. The adaptors do not seem to pay attention to the representation of the specific linguistic group, therefore they fail to encompass also all the social practices encoded within that represented community. In Davies' words (2005, p. 560), a community of practice is in fact shaped around the need for 'doing and, more particularly, doing things in a way which reinforces membership in that community of practice. It is about local meanings, and individuals' management of their identities'. This implies that the community factor is to be seen as instrumental in any representation, since it invites the audience to actively recognise and participate in the process of meaning-making. In TBBT, if we take the artefacts of nerds' practice to be such variables as clothes, verbal language and facial and bodily gestures, then the potential audience must be able to immediately identify these important aspects, and then map any variation onto the social meaning that the represented community of nerds is trying to unfold. From a linguistic viewpoint, the community factor must necessarily present the actual linguistic practice of the represented community as equivalent to and consistent with all other represented community practices; therefore linguistic variation cannot occur in any other way. It is only when the audience is able to recognise the local social signification of practices, including linguistic practice, that it may gain access to full participation and understanding.

The following multimodal grid introduces another instantiation related to the lack of adherence to the 'resource integration principle' by means of a somewhat arbitrary translation, which, by destabilising the original script opposition, brings in the adaptor's meta-creative humorous effect. The resulting dubbed humour cannot be compared to the original one; moreover, it remains an arbitrary act since such a departure from the original is not justified.

In the Italian dubbed version, Sheldon's costume is repeatedly (in F1 and F3) and mysteriously said to symbolise a spaceship, but we can easily infer from F5 that his fancy dress in fact represents the Doppler Effect. The reason for such an intrusive script amendment in Italian is not straightforwardly visible: one might suppose that Sheldon had been joking so far, but since the audience is well aware that Sheldon's character is unable to produce voluntary humour, such a hypothesis would appear to simply imply that the adaptor was trying to completely transform the main protagonist's personal traits. Finally in F6, the flouting of the 'resource integration principle' is again at stake since in L2, after having announced several times that he was dressed as a spaceship, Sheldon teases Leonard for not having grasped what his costume represents. Yet, nowhere in the episode has Leonard ever commented on Sheldon's costume; hence the Italian adaptation completely lacks both linguistic and semiotic internal coherence.

Concluding remarks

The opening quotation of this paper reports the Austrian sociologist, political economist and anti-philosopher Otto Neurath's description of the ship metaphor. In his *Anti-Spengler* (1921), Neurath evoked a powerful image of a ship representing the

whole body of knowledge. He maintained that in the process of reconstruction, to look for new foundations outside the ship itself would be a huge mistake. The metaphor, thus, compares human knowledge to a ship that must be repaired at sea: 'we are like sailors who on the open sea must reconstruct their ship but are never able to start afresh from the bottom'. Any part of the ship can be replaced, provided there is enough of the rest on which to stand. A metonymic interpretation of Neurath's metaphor well applies to AVT since, as this paper has attempted to demonstrate, adaptation for the screen implies an act of semiotic and linguistic reconstruction that cannot start from *tabula rasa*. Adaptors, like Neurath's sailors on the open sea, mould their text by gradually reconstructing the entire constituent of the source text. The language is the product of continuous negotiation among the representatives of a given community, it is a constant compromise with what was done and agreed upon in the past. An adapted new text will come back to life from the linguistic re-contextualisation of the original artefact with its different semiotic resources. When dubbing an audiovisual product, whether an artistic or a commercial one, the audiovisual adaptor should in fact have the aims and intentions of the original scriptwriter and film director at heart and ideally not those of the distributor who commissioned the dubbed product.

There are, however, several technical problems when translating for the screen: one of the major constraints when dubbing a foreign film is not only that of lip-synchronisation, but the lack of direct cooperation between production and post-production. This implies that film directors and scriptwriters are not always fully aware of the fact that in the target dubbing country there is an adaptor who re-writes words and expressions in order to re-contextualise the original artefact, and that consequently the target audience will tend to identify with that localised product which has undergone considerable transformations, such as cultural appropriation, narrative manipulation and censorship. The adaptor of film dialogues, just like Neurath's sailors, hence acquires true co-authorial status. Thanks to a recent law in Italy, the dialogue adaptor is now considered an author to all intents and purposes. This status allows audiovisual translators to insert their own views into the text being adapted, although they should always comply with the source text's original meaning and narrative loop. There are several cases in which Italian adaptations offer more elegant and more efficient linguistic humorous solutions than those found in the original source text (see Chiaro, 2006). However, the adapted language placed over the original visual and acoustic resources should continue to be aimed at the audience to whom the audiovisual artefact was initially addressed.

In conclusion, the purpose of this paper has been two-fold: to introduce, by means of an integrated multimodal and corpus-based approach, the analysis of the so-called 'community factor' as a fundamental caveat that any adaptor should take into consideration when translating a specific community representation; and to present a model for text notation of semiotically expressed humour. This multimodal framework may be of assistance in developing vectors that might be of help to adaptors when facing the difficult task of translating audiovisually enhanced humour.

Notes

1. Due to its enormous and immediate success and the several awards received – such as the Television Critics Association Award, the People's Choice Award for Favorite Comedy, some best actors' Primetime Emmy Award for Outstanding Lead Actor and a Golden

- Globe for Best Performance – the show is going to be renewed with a new 2013–2014 season.
2. For the analysis of the humorous discourse, I will refer to Raskin's 'Semantic Script Theory of Humor' (1985), a theory which has its foundations in Chomsky's transformational generative grammar, later summarised in Attardo (1994, 2001), who combines this approach with several different methodologies in the field of linguistic-based humour research.
 3. Jab lines (Attardo, 2001) are humorous elements fully integrated in the text in which they appear without disrupting the flow of the narrative. They are indispensable to the development of the humorous text and differ from punch lines, which generally occur in a final position in jokes, since they may occur in any other position in the text. This difference may also result in a different textual function since the jab line does not interrupt the course of the text; neither can it cause a reinterpretation of the whole text (2001, p. 82–83). The concepts of visual and musical jabs were introduced by Balirano (2007) and Balirano and Corduas (2008) with the aim of analysing non-verbal humorous resources which, just like a jab line, can trigger a humorous line within a text in a non-final position.
 4. According to the information provided at http://en.wikipedia.org/wiki/List_of_The_Big_Bang_Theory_episodes
 5. It was the strong negative reaction from the fansubbers, who had already watched the series in its original language and partly translated it, that brought the Italian company *Post in Europe* to appoint Leslie James La Penna as new dubbing director, while Anton Giulio Castagna was hired as the new dialogue adaptor. Consequently, most of the geek in-jokes have been successfully re-proposed within the dialogues with precise references to the community of nerds represented.

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