Cultus

THE JOURNAL OF INTERCULTURAL
MEDIATION AND COMMUNICATION

METAPHORS IN FOCUS:

METHODS, CROSS-CULTURAL AND
TRANSLATIONAL INSIGHTS

Guest edited by

Stefania Maci
and
Maryam Nezaratizadeh

ICONESOFT EDIZIONI - GRUPPO RADIVO HOLDING
BOLOGNA - ITALY

Registrazione al Tribunale di Terni
n. 11 del 24.09.2007

Direttore Responsabile Agostino Quero
Editore Iconesoft Edizioni – Radivo Holding
Anno 2024 Special Issue 17(1)
ISSN 2035-3111
2035-2948

Policy: double-blind peer review

CULTUS

the Journal of Intercultural Mediation and Communication

ICONESOFT EDIZIONI – RADIVO HOLDING
BOLOGNA

CULTUS

the Journal of Intercultural Mediation and Communication

Scientific Committee

TABLE OF CONTENTS

Introduction

Stefania Maci
Maryam Nezaratizadeh

It is now widely recognised that metaphors are an essential part of human language. As such, they play a crucial role in language, mind and culture (Lakoff and Johnson 1980/2003). By serving as bridges that facilitate understanding across different cultural contexts, metaphors become indispensable tools in cross-cultural communication. The connection between culture and metaphor is profound: "the most fundamental values in a culture will be coherent with the metaphorical structure of the most fundamental concepts in the culture" (Lakoff and Johnson, 1980/2003: 22).

Globalisation has intensified the interaction between cultures and with it the need for effective communication across linguistic and cultural boundaries. This has increased the importance of translation not only as a linguistic exercise, but also as a cultural act. Metaphors that are rooted in specific cultural and cognitive contexts pose particular challenges for translators. A metaphor that has great resonance in one culture may be completely obscure or even offensive in another. The translation of metaphors therefore requires not only linguistic skills, but also cultural sensitivity, adaptability and creativity.

Metaphors also play an important role in influencing discussions of global issues like migration, international relations, and climate change. These subjects frequently have metaphorical frames that are ingrained in their culture and own the power to either strengthen barriers or foster understanding. Environmental metaphors like "Mother Earth" or "carbon footprint" have cultural connotations that might be difficult to translate. Fostering international cooperation and communication requires an understanding of these symbolic landscapes.

With the growth of the new media, digital communication, and artificial intelligence in language processing, there is also growing interest in the relationship between metaphors, translation studies, and cross-cultural communication. Metaphors' reach has been expanded by the global digital environment, as memes, slogans, and stories have quickly crossed linguistic boundaries. However, despite their advancements, machine translation tools frequently fail to capture the intricacy and cultural specificity of metaphor, underscoring the need for more in-depth theoretical and applied research on the subject.

The study of metaphor in translation and cross-cultural communication is not only relevant but essential at a time when cross-cultural interaction is not only common but also indispensable. By exploring the dynamics of metaphor in a cross-cultural setting and highlighting its advantages and disadvantages, this collection contributes to the ongoing debate. This issue, therefore, brings together perspectives from linguistics, translation studies, cognitive science, and intercultural communication to explore the role of metaphors in cross-cultural settings. It examines methods, functions of metaphors, how they are translated and adapted, and how they influence cross-cultural understanding.

The issue opens up with a methodological contribution by **Maria Olalla Luque Colmenero** who stresses the importance of metaphor in audio description for people who are blind or partially sighted, with a focus on modern art museums. The author investigates how metaphors facilitate the conversion of visual components into understandable spoken narratives using the Conceptual Metaphor Theory. She suggests a three-dimensional approach to metaphor analysis: communicative intent (novelty, directness, and deliberateness); grammatical nature (objects, actions, modifiers, and qualifiers); and textual type (painting, sculpture, and installation). The article reinforces the role of metaphors in helping vulnerable people to connect verbal descriptions with visual art through a comprehensive and well-structured methodology.

Focusing on speeches by three political leaders from the UK, the US and Italy, **Dario Del Fante** examines the use of metaphors in Covid-19-related political discourse. The study explores how perceptions of the pandemic are shaped by metaphors that serve as linguistic and cognitive tools. Results show that the use of metaphors is similar across cultures, especially in the way politicians portrayed Covid-19 as a group effort. Together with other frames such as DANGEROUS LIQUIDITY, BEHAVIOUR and OBJECT, the metaphor WAR is the most frequently used metaphor by all three leaders. Less frequent conceptual mappings with fewer lexicalisations and occurrences show the greatest differences. These parallels suggest that there is a global discourse about the virus, which could indicate that people, regardless of language or cultural background, have universal cognitive processes that are triggered when they encounter dangerous circumstances.

Visual metaphors in educational videos about the climate crisis are investigated by **Augé** and **Liu** across Chinese-Mandarin and English. The two authors aim to explore how different levels of metaphor are visually realised in child-friendly educational videos in the two languages. With a

specific focus on the two metaphors "carbon footprint" and "greenhouse effect" in both languages, the authors observe that the Chinese-Mandarin videos rely on a variety of different source concepts to represent and explain different features of the two metaphors. On the contrary, in English verbal source concepts of the metaphors are transformed into visual source concepts. Discussing the translational perspective, the authors suggest that converting visual metaphors into visual similes could be one of the tactics to get around cultural filters and perhaps enable translators to explain the conceptual mapping involved.

Also, within the scope of environmental discourse, the following article written by **Cinzia Spinzi** examines metaphors in eco-friendly travel guides from a cross-cultural standpoint. The main rationale for the study is that metaphors are crucial to how people view travel destinations and experiences in the tourism industry. They facilitate tourists' ability to empathise with the environment and help close the gap between the unknown parts of a place and their personal experiences. However, when examining metaphors across cultural boundaries, it becomes clear that figurative language is defined by cultural connotations in addition to linguistic structures. The Logical Levels model (Dilts 1983) is used to break metaphors into various levels of human experience. By revealing the more profound cultural and ideological components in metaphorical language, the model enables a more comprehensive and nuanced approach to its study. This will improve comprehension of the methods employed in translation to express pragmatic and emotional meanings.

Alessandra Rizzo's paper concludes the issue by addressing the role of metaphors as translation, and translation as metaphor, in the rendering of body language in audio description practices. She concentrates on facial expressions in the Korean Netflix series *Squid Game* to show that these expressions should be incorporated into intersemiotic translated scripts since they disclose the psychological dimension of the characters, i.e., their emotional states. More specifically, the author notes that facial expressions are visually conveyed by means of metaphorical devices that serve as translational operations. Besides, the support of technological experience such as virtual platforms for digital emotion recognition can offer valuable contributions to the understanding of the emotional frames recorded in the fictional characters' facial parts.

These studies shed light on dynamic function of metaphors in bridging languages, cognition, and culture, providing insightful viewpoints for enhancing linguistic and cross-cultural appreciation.

Metaphors to see: A methodology to analyse the use of metaphorical expressions in museum audio description

M Olalla Luque Colmenero

University of Granada

Abstract

This article explores the significant role of metaphor in audio description (AD) for blind and partially sighted (BPS) individuals, particularly within contemporary art museums. Using the Conceptual Metaphor Theory (CMT), we examine how metaphors enable the translation of visual elements into accessible verbal narratives. We propose a methodology for analysing metaphors based on three dimensions: textual type (painting, sculpture, and installation), grammatical nature (objects, actions, modifiers, and qualifiers), and communicative intent (novelty, directness, and deliberateness). This approach highlights the essential role of metaphors in bridging the gap between visual art and verbal descriptions for BPS people. Furthermore, we introduce a classification of recurrent metaphorical cases, such as personification, synaesthesia, cultural reference, form, technique, participation, optionality, opposition, double marker, and vocal emphasis. Our findings emphasise the importance of metaphors as cognitive tools that not only enhance comprehension but also enrich the aesthetic experience for BPS individuals, making art more accessible and engaging. This research provides a robust framework for future AD practices and advocates for creative yet clear descriptions that respect and engage diverse audiences.

Keywords: metaphor analysis, museum audio description, deliberate metaphors

1. Introduction

Metaphor, as defined by Lakoff and Johnson (1980/2003), involves comparing a target domain with a different conceptual domain, the source domain. This cognitive understanding of metaphor is central to Conceptual Metaphor Theory (CMT), which sees metaphor not merely as decorative language but as a tool for shaping reality (Kövecses, 2017). In the context of audio descriptions (AD) for blind and partially sighted (BPS) individuals, metaphor serves as a means to translate visual elements of artworks.

Metaphors are integral to AD research and practice, profoundly influencing how descriptions are crafted and perceived. Originating from Aristotle's theory, metaphors have been pivotal in communication studies, providing a framework for understanding human experiences (Belinchón, 1999). Early research by Walczak and Fryer (2017) underscored this importance by comparing two AD styles for a film: one neutral and factual, and the other rich in vivid and emotive language. Their findings showed that participants overwhelmingly preferred the latter, aligning more closely with the visual elements and enhancing their engagement. This preference supports the work of Fryer and Freeman (2012) and Fryer et al. (2013), who highlight the critical role of user experience in evaluating AD.

Further extending the benefits of metaphors, Walczak and Rubaj (2014) demonstrated how metaphorical language in AD can aid visually impaired students in comprehending and retaining educational content. Similarly, Zabrocka (2019) explored the impact of metaphors in AD on children, revealing that such language not only enhances their understanding and enjoyment but also supports their linguistic development through a combination of visual and aural stimuli.

Szarkowska (2013) proposes a unique approach known as 'auteur description' for artistic films, which integrates the director's creative vision into the AD script and uses metaphors to immerse visually impaired viewers more deeply into the cinematic world. This method allows the AD to reflect the artistic intent of the director, making the viewing experience more authentic and engaging.

In the realm of museum AD, Edo (2018) demonstrates how metaphors and similes can make abstract art more accessible. By relating abstract concepts to familiar objects, these techniques increase understanding and engagement for visually impaired visitors. García Vizcaíno (2023) takes this further by analysing AD for multimedia video installations in art museums. Using a functionalist approach to intersemiotic translation, García Vizcaíno

finds that metaphors, particularly those involving synaesthesia and vocal emphasis, are effective in describing abstract art. This research highlights the delicate balance between creativity and fidelity to the original artwork, and emphasises the importance of aligning the AD with the aesthetic purpose of the work. Spinzi (2019) also explores its importance as a creative strategy of intersemiotic translation in museums.

However, the use of metaphors in AD is not unproblematic. Ramos (2016) notes that while metaphors can enhance descriptions, they must avoid subjective interpretations that could be condescending to the audience. Remael (2005) also warns against overuse and advocates for clear, objective descriptions that allow the audience to interpret the visual content for themselves. Taken together, these studies highlight the crucial role of metaphor in AD. They argue for flexible guidelines that encourage creative, user-centred descriptions while maintaining clarity and respect for the audience. Metaphors not only enrich the descriptive narrative, but also bridge the gap between the visual and the verbal, making them a powerful tool for enhancing understanding and engagement in different contexts.

Metaphors can be categorised according to their novelty, directness and intentionality. Novel metaphors are not conventionalised and require comparison for meaning transfer. Direct metaphors, similar to similes, explicitly compare both domains (Steen, 2011). Deliberate metaphors, often marked with markers such as 'like' or 'in the form of' also, like similes, are consciously used for communicative purposes (Steen, 2014). Our research and the method that follows are based on texts from audio-descriptive guides to for contemporary art museums in an Anglophone context. From the perspective of translation studies, the corpus on which our research is based consists of 35,000 real words, i.e., words that have been studied and are verbal translations of the image, from four museums (Tate Modern in the UK and MoMA, Whitney and Brooklyn in the USA). It is monolingual, monomodal and consists of texts that translate visual information into verbal information in an intersemiotic way and oralised. This specificity makes it a particular type of corpus in which audiovisual texts have been isolated - in our case, the works that are part of the permanent collection of the four museums, together with their intersemiotic translations, i.e., the AD. As a first step in identifying metaphorical units, we followed a methodology based on the MIPVU developed by the PRAGGLEJAZ group (see Steen et al. 2010 for a detailed explanation of the method). In this method, expressions whose basic meaning is different from what they have in the analysed text are identified as potential metaphorical units, with

one or more words. The phases of this analysis can be summarised as follows: (a) reading and understanding the whole text; (b) identifying potentially metaphorical lexical units; (c) identifying a more basic meaning than the one they have in the text; and (d) identifying the contextual meaning and checking whether it contradicts the basic meaning. If this is the case, but the relationship between the two can be understood by comparison, the unit is marked as metaphorical.

The detailed analysis of the results, both quantitative and qualitative, on the role of metaphor in the museum environment for BSP people was carried out taking into account several variables (Luque, 2019). These include the nature of the original text and text types (sculpture, painting, installation), the type of lexical unit (object, action, qualifier, modifier), the communicative nature of the metaphor (novelty, directionality, deliberateness), the visual nature of the metaphor (text and context) and the type of recurrent case in the corpus (personification, synaesthesia, contraposition, among others). These variables form the basis of our method.

One of the most important findings was the high appearance of metaphor in AD. The general appearance of direct and deliberate metaphor in academic genres is only 0.1%, in fiction 0.4%, in conversation less than 0.1%, and in press 0.4% (Herrmann 2013: 101). According to our analysis, more than 5.14% of the language used in the corpus consists of metaphors of this kind. The analysis also showed that higher levels of abstraction and conceptuality in the source text seem to be associated with a higher percentage of intentional metaphors in the target text. This means that the more abstract the artworks are, the higher percentage of metaphors appears in the AD.

Our previous study highlighted the relationship between the abstraction and conceptuality of contemporary art and the lexical choice of metaphors used in AD for BPS individuals (Luque, 2019). In more abstract art, objects and nouns play an important role in translating visual meaning from the source to the target domain. This tendency is more pronounced in complex artistic genres that require comparisons with familiar elements for comprehension.

Abstract and conceptual genres of contemporary art make extensive use of metaphorical objects and events, requiring more metaphorical mapping than figurative genres. For BPS people, this means navigating a double abstraction: the inherent artistic abstraction and the inability to see the

artwork directly. AD therefore relies on familiar objects and events to describe the artwork.

The research suggests that there is a high incidence of deliberate metaphor in AD, especially in abstract texts, due to their deliberate use for communication. These intentional metaphors require cues to indicate their metaphorical intent, which is different from conventional metaphors used in everyday language. Deliberate and direct metaphors, often novel, help to translate visual images and historical information. At this point, before going into the methodology for analysing metaphor in audio-descriptive texts, it is important to recall the definition of the concept of metaphor that guides our research. This definition includes its grammatical, communicative, textual and visual nature, as well as the typologies of recurrent instances related to metaphor present in the corpus and framed within the textual genre of museum audio description. These characteristics are fundamental to our study as a tool for accessing knowledge and form the basis of the methodology we present. In this article we will discuss the five levels of classification that allow us to understand and illustrate the mechanism of the AD metaphor. These levels of classification are based on the nature of the source text and text types, the grammatical nature of the lexical unit, the communicative nature of the metaphor, the visual nature of the metaphor and the types of recurrent cases in the corpus.

2. The methodology: Five levels of abstraction

Inside the classification of metaphor, we can find five subclassifications that allowed us to establish specific results for each one and to analyse the relationships between them quantitatively and qualitatively. This chart shows the subclassification we are going to present in the next sections:

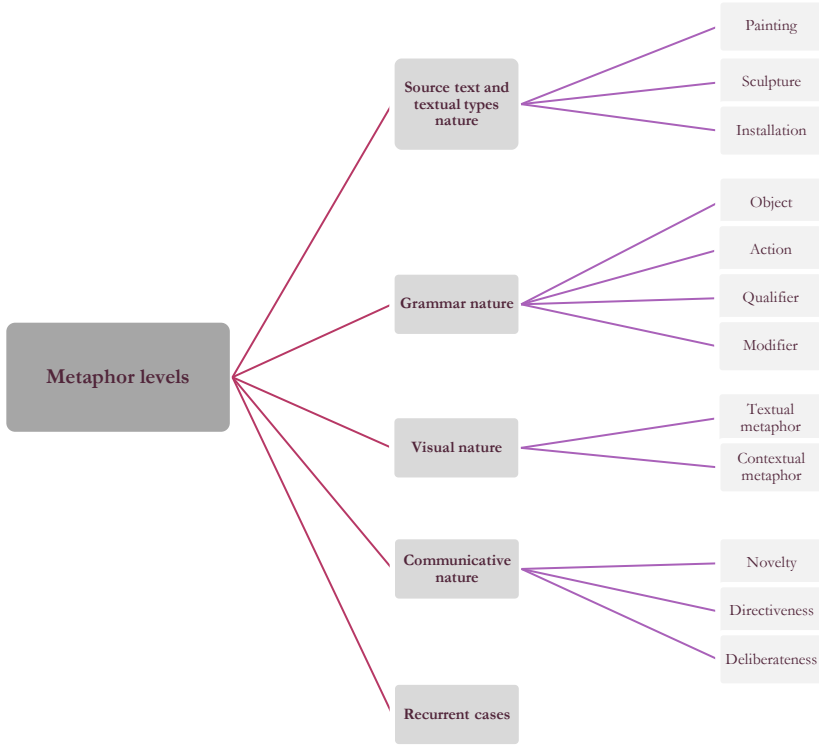


Figure 1: Metaphor levels

2.1 Textual types

Our analysis focuses primarily on the linguistic aspect, involving intersemiotic translations of visual information from two- and three-dimensional artworks in Anglo-Saxon contemporary art museums. This feature makes our corpus unique, as it isolates audiovisual texts and their respective AD. However, a significant challenge arises from the different modes of presentation, which make it difficult to automatically align the original texts with their translations. Despite the references to the visual texts in the AD guides, their morphologies are very different.

It is essential to distinguish between different typologies of works in our classification in order to observe their specific characteristics. The study of visual texts such as paintings, sculptures and installations, is crucial, as each has unique characteristics that are reflected in the intersemiotic translation that results in AD. Therefore, it is essential to include all three types of visual texts in our classification. This inclusion allows us to contrast their

characteristics and compare the use of metaphorical expressions across them.

> A) Painting: Painting involves the application of paint, pigment or other media to a solid surface. It can be naturalistic, photographic, abstract, narrative, symbolic, emotive or political, among others. Painting may include a variety of materials and objects.
> B) Sculpture: Sculpture is developed in three dimensions and can be made by carving, modelling or other methods in stone, metal, ceramics, wood and other materials. Stone sculpture is common in ancient cultures because of its durability.
> C) Installation: Installation art consists of three-dimensional works created specifically for a site with the aim of transforming the perception of space. It can be temporary or permanent, and takes place in public or private exhibition spaces, and seeks to create a broad sensory experience. Grammatical level

2.2 Grammatical nature

In order to describe in detail the linguistic features (Biber and Conrad, 2009) and the phenomenon that occurs in the metaphorical lexical units of the corpus, that is, in each of the units that we identify as metaphor, we propose to use a taxonomy based on the work of Simone and Masini (2014) on lexical and semantic typology. This allows us to classify the source domain, that is, the linguistic expressions that translate the image of the target domain. This taxonomy includes what we can call four supercategories, including others that we exclude from the analysis for the sake of clarity, such as determiners (articles, possessives, demonstratives, etc.) and prepositions; the latter do not refer to the visual level of the work, but correspond to spatial and temporal conceptual maps that serve to organise our thinking (Lakoff and Johnson, 1980; Lakoff, 1987; Deignan, 2009; Ursini, 2014). Thus, the four supercategories into which we divide the linguistic level are object (1), action (2), qualifier (3) and modifier (4). This taxonomy corresponds to Lakoff and Kövecses's ontological categories (1987) and encompasses all the lexical uses through which the metaphors in the corpus are represented. As we can see in the examples from the corpus below, the visual image is conveyed by a verbal comparison that falls within the cognitive domain of the supercategories we have enumerated, i.e., an object, an action, a property, or a modifier, which can consist of one or

more words. This comparison is a direct translation of an image, which may be a complex expression. This is the case in example 1 below, along with other examples for each of the supercategories:

> Example 1:
> …*like a beached whale*… (*Persistence of Memory*, Dalí, MoMA)
> Example 2:
> *It's dominated by the figure of a young man*…*(The Bather*, Picasso, MoMA)
> Example 3*:*
> …*his bare arms and torso are unmuscled*… (*The Bather*, Picasso, MoMA)
> Example 4*:*
> *The lower half hangs limply over the edge*… (*Persistence of Memory*, Dalí, MoMA)

All the cases presented here are metaphors used as a communication strategy in the intersemiotic translation of the visual works, so they all allude to an image of the works. In example 1, there is a metaphorical comparison between the central figure in Dalí's work, an amorphous figure described by the audio describer, and a whale stranded on the beach. As we can see, the lexical unit of the object that is pointed out is the complete expression: the source domain is the amorphous figure in the painting and the target domain is 'beached whale'. The adjective 'beached' is also part of the expression, but in this case, it qualifies the metaphorically used object. As mentioned above, this example serves to illustrate that the way in which the four supercategories are indicated in the text can involve several words at the same time. This set of words refers to an image or movement in the work. However, in the following three cases (2, 3 and 4) the metaphorical unit is simple, i.e., it consists of a single word. In example 2, the verb has been used metaphorically to translate the action performed by the figure of the young man, i.e., the action of being or appearing in Picasso's painting. The unit is classified as an action and is, in fact, one of the most common metaphorical actions in the corpus. Similarly, example 3, 'his bare arms and torso are unmuscled' is classified as a feature, an adjective that qualifies the object: 'bare arms' and 'torso' are opposed to 'muscled' to be understood by contraposition, one of the recurrent strategies or cases. The source domain of the metaphor, 'muscled', is projected onto the body of the sculpture to be rejected by the particle 'un' and to translate the target domain, the thin and unexpected body of the sculpture.

Finally, example 4 shows us a comparison between the way the inanimate figure in the work falls and the way human limbs fall or stumble, using the adverb 'limply'. We call this supracategory modifier in the sense that it modifies something temporally, spatially or formally.

In the following section we will look at each of the supercategories in more detail, in order to examine their characteristics and to observe the different typologies that appear in the corpus by means of further examples. This classification of lexical categories is based on the theories associated with cognitive grammar, which in the last fifty years have been opposed to the theories of objectivist semantics based on logical deduction. Cognitive Grammar takes a conceptualist approach to semantics, based on human experience, the ability to interpret situations in alternative ways, and mental constructs. Cognitive Grammar assumes that word classes function as descriptors or specific manifestations of language and that they emerge as semiotic resources with a purpose (Simone and Masini, 2014: 6), for example, to designate something similar to a noun and, if we want to predicate, something similar to a verb.

Thus, the idea emerges that these basic requirements can be fulfilled by tools of different nature: rigid word classes or more flexible entities. This is very important for our research because we are dealing with linguistic expressions and lexical units that serve as translations of the visual, experiential and conceptual situations, i.e., we are working with the result of the intersemiotic translation from image to word, so the resulting linguistic expressions cannot be rigid in that they allude to a visual entity created in a completely different semiotic mode. Therefore, this object-like thing can be composed of several words that make up the visual nature of the source text, called the target domain in the metaphor.

In order to facilitate the understanding of the cognitive approach to language, we will illustrate these cognitive processes using lexical examples from our corpus.

2.2.1 Objects

Objects, also referred as 'things' according to Simone and Masini's (2014) classification, are of crucial importance in our research as they form the basis for translating the visual into linguistic terms. They refer to visual entities in artworks that find their equivalent in linguistic nouns.

The conceptual autonomy of objects, defined in relation to a broader conceptual domain, is closely related to metaphor and metonymy, as they

establish connections between different elements within the same conceptual domain. Intersemiotic translation from image to word is based on this relationship between visual objects and their linguistic counterparts. In our examples we see two types of comparisons used in descriptions:

> Example 1:
> *these gouges too have an anonymous feel* (*Cage*, Richter, Tate Modern)
> Example 2:
> *Eye-shaped areas of dark blue and mauve*, (*Water lilies*, Monet, Tate Modern)

The first example translates the impersonality of tools in a sculptural work through an abstract concept, anonymous feel. Here the adjective 'anonymous' suggests a lack of personal identity, while 'feel' adds a subjective dimension to the description. In contrast, the second example uses the image of an eye to describe a specific form in Monet's work.

2.2.2 Actions

Communication is based on situations, and these are mainly expressed through actions in discourse. These actions, which are related to the processes taking place in the artworks, are described in our corpus using verbs that reflect ongoing activities in the work, such as the techniques of applying paint or the movements of the characters. In our examples we can see how actions are used to describe different aspects of the works:

> Example 1:
> *black and grey lines taking up the canvas* (*Summertime no. 9A*, Pollock, Tate Modern)
> Example 2:
> *the man who anchors the family is rock solid* (*The Brass Family*, Calder, Whitney Museum)
> Example 3:
> *Rayonism explored the forms created when rays of light reflected from different objects intersect* (*Linen*, Goncharova, Tate Modern)

The first example describes the technique used to apply the paint to the work, while the second relates to the position of the figures in the sculpture.

The third example introduces contextual information about the art movement and how it manifests itself in the work.

2.2.3 Qualifiers

Descriptive qualifiers are necessary to establish the uniqueness of a referent. They can be expressed by adjectives or prepositional phrases that specify distinctive features of the object. In our examples, we see how qualifiers are used to describe objects and instances of objects in artworks:

Example 1:
sweeping swathes of colorful paint (*Woman I*, Willen de Kooning, MoMa)
Example 2:
The look of it is very much of something in progress, *Woman I*, Willen de Kooning, MoMa
Example 3:
This tarp is not stuck flat (*First Landing jump*, Rauschenberg, MoMa)

Qualifiers are used to specify the form, appearance or state of objects in the works. In these examples, adjectives and prepositional phrases are used to convey specific characteristics of the artworks.

2.2.4 Modifiers

Situations are characterised, among other things, by their temporal or formal structure, and situation types interact with actions and objects change their appearance (Simone and Masini, 2014: 13). Aspect is a grammatical form used by a speaker to take a particular view of a situation, to modify it. Other modifiers such as circumstance, cause, reason or purpose are added to these structures. They tend to be expressed by prepositional phrases whose prepositions mainly indicate spatial relationships. This type of modifier is also often expressed by adverbs. In the following examples we can see the type of modifiers that appear in the corpus:

Example 1:
in the 9 o'clock position (*Dance (I)*, Matisse, MoMa)
Example 2:

his deeply personal and totally uncompromising commitment (*Number 27*, Pollock,
Brooklyn)
Example 3:
a horizontal line balancing defiantly (*Trip-Hammer*, Serra, Tate)

In the above examples, we can see that in most cases, where there is a temporal or situational modification or specification of a situation, the translation is conceptualised by adverbs or adverbial expressions, as in example 1, where the position of a figure in the central left margin of Matisse's work is translated by the display of hours on the clock. Example 2 uses the metaphorical sense of 'deeply' to express the author's great commitment, and example 3 plays with the sense of 'defiantly' and the very line of Serra's work, with its swinging hard forms, translated metaphorically.

After identifying the four supercategories related to the grammatical nature of the metaphors used in the ADs of contemporary art museums, which will help us to carry out the analysis of the lexical units and relate their use, we shall now present the next of the five classifications, that which corresponds to the visual nature of the metaphors in our corpus.

2.3 Visual level

In addition to the grammatical classification, based on our own previous studies (Luque, 2016) in which we reviewed the nature of the metaphors in our corpus, at this stage we add a category that serves to identify the metaphors according to the referent to which they allude and their visual nature, as we have called it. Therefore, we distinguish between two types of metaphors appearing in AD according to their visual nature: metaphors of the visual text and metaphors of the visual context.

2.3.1 Metaphors of the visual text

The first refers to the analogy between two real elements: one of the elements appears in the work itself and is compared with a real and known element of the world outside the work. The visual element present in the work is translated by means of a linguistic expression; the target domain, which is the domain that the users of AD ultimately have to imagine, is translated by means of a simpler source domain conceptualised by means

of a linguistic expression. Thus, example 1 uses the image and linguistic expression of a teepee, a type of tent used as a dwelling by the indigenous peoples of North America, to translate in a vivid, lucid, clear and concrete way an element that appears in Beauys' installation. Such an element is not a complex one, but nothing more than a dark, conical metal tube. The problem is that until the moment of listening to the AD, the element is completely unknown, because it has never been seen or heard of before - it is unknown because it did not exist until that moment, so we can call it 'abstract'. However, a tepee, which may seem too specific an element, is part of the users' imaginary, their knowledge of the world, at least in the US context we are talking about. In short, the visual is translated by a known and less abstract concept, because unlike the metal pipe that appears in the work, it is not known and has not been seen.

> Example 1:
> …*a triangle like the poles of a teepee* (*Eurasia Siberian Symphony*, Beauys, MoMa)

It is crucial that we reflect again on the distinction between source and target domains in our research. To clarify, the source domain (linguistic expression) is more concrete, referring to real, tangible objects that exist in the physical world, whereas the target domain (element or movement of the visual work) is more abstract. Although the comparison involves familiar objects, sensations, actions, movements, and places, it allows individuals to connect an unfamiliar artwork with their known linguistic and conceptual world. These are called visual text metaphors because they refer to specific elements within the visual text of the artwork.

2.3.2 Metaphors of the visual context

Metaphors of the visual context are used in AD to discuss the historical and artistic context of an artwork. These metaphors are developed during the documentation phase about the work, the genre, the style, or the artist. They often include excerpts from conversations, statements from artists or scholars, and are not always separate from the main audio descriptive text but are sometimes integrated into the AD. In this way, the historical text interacts with the AD and contributes to the mental image that users form. This deliberate use of contextual metaphors within the descriptive part of the work is interesting, because of its rare use.

Example 1:
…turn one of the sketches into a painting (*Dempsey and Firpo*, Bellows, Whitney)

This example shows how, after starting the AD of Bellows' work, the audio describer inserts a comment about the history of the work through a conceptual metaphor: the idea that turning a sketch transforms it into a painting. In this traditional way, turning is becoming. Rather than describing a specific part of the visual work, this refers to the metaphorical action of turning, which symbolises change. These metaphors, although integrated into the AD, are part of the contextual explanation and do not visually translate any specific element of the artwork. By examining the metaphors of the visual context as opposed to the metaphors of the visual text, relationships can be established with other classifications of metaphor. One of the five important classifications is that which defines the metaphor according to its communicative nature, which is fundamental to our analysis as it relates to the intention of the audio describer.

2.3.3 Communicative level

The classification of metaphors is based on three dimensions: linguistic, communicative, and conceptual (Steen, 2011). These dimensions are fundamental for identifying lexical units or metaphorical expressions using the MIPVU method. We examine three key characteristics of metaphors: novelty (whether they are new or conventional in English), directness (whether they are direct or indirect in their expression), and deliberateness (whether they are deliberate or not in their communicative conception). These processes reflect different stages of metaphor evolution: in thought (conventional and novel metaphors), in language (direct and indirect metaphors), and in communication (deliberate and non-deliberate metaphors) (Steen, 2011). This classification guided us in analysing the metaphors in our corpus.
The following classification addresses metaphors in terms of their linguistic, communicative, and conceptual dimensions.

2.3.4 Novelty

The novelty of a metaphor refers to whether it is conventional or novel. Conventional metaphors are those commonly used that structure our conceptual system (Lakoff ,1980; Steen, 2008), while novel metaphors create new connections not integrated into the language. According to Vázquez Recio (2007), conventional meaning is that which is part of our conceptual system and is recorded in the dictionary.
To determine novelty, we use dictionaries. For example, in Example 1, we analyse the meaning of 'explore' in the McMillan dictionary recommended by MIPVU.

Example 1:
In her art she explored ways of expressing (*Shooting Picture*, Saint Phalle, Tate Modern)

The McMillan dictionary presents two meanings for 'explore':

1. To travel to a place to learn about it or search for something valuable.
2. To examine or discuss a topic in depth.

The appropriate meaning for our text is the second, which implies cognitive exploration. This more abstract use of 'explore' is a conventionalised metaphor, not novel.
If we consult other dictionaries such as Cambridge and Oxford, we find similar definitions, confirming that 'explore' in the context of ideas is a conventionalised metaphor. The figurative sense in these dictionaries reinforces the idea that it is not novel.

Example 2:
the whole thing is like a diving board (*Trip-Hammer*, Serra, Tate Modern)

Here, 'diving board' is used in a novel way to describe a structure of iron in Serra's installation. Although it is not an actual diving board, it shares characteristics with one, allowing it to be described to people without visual access to the artwork. This use is a novel metaphor because it introduces a new comparison not conventional in the language.

2.3. 5 Directness

In the linguistic domain we distinguish between direct and indirect metaphors, depending on how the comparison between domains is expressed. This distinction is related to the use of similes and metaphors, although some metaphors can be direct without being similes because of other markers or structures. Both metaphors and similes activate similar conceptual maps. A direct metaphor involves an explicit comparison between two domains, using the conceptual structure of one domain to characterise another. According to Steen et al. (2010b), this means that the conceptual structure of one domain is used to directly characterise another domain.

> Example 1:
> *Thin lines representing more tubes* (*The Bride Stripped Bare by her Bachelors, Even (The Large Glass)*, Duchamp and Hamilton, Tate Modern)
> Example 2:
> *Russian letters – abbreviations or word fragments sloping like banners or commercial signs* (*Linen*, Goncharova, Tate Modern)
> Example 3:
> *The sweeping arcs give a real sense of Pollock's arm swinging just above the canvas* (*Summertime no. 9A*, Pollock, Tate Modern)

In these examples, different markers are used to express the comparison. In the first, 'represent' is used; in the second, 'like'; and in the third, 'give a real sense'. In the case of example 3, the metaphor extends throughout the AD, describing how Pollock might have worked on the piece. This conceptualisation is achieved through metaphorical markers, extended metaphors or implicit contrasts between domains.

2.3.6 Deliberateness

Researchers such as Gibbs (2011) suggest that some metaphors are deliberately created for specific rhetorical purposes, such as in academic or educational contexts (Cameron, 2003). Deliberate metaphors differ from conventional metaphors, which are produced automatically. To analyse deliberate metaphors in discourse, we follow similar guidelines to those for direct and indirect metaphors, as metaphorical markers indicate deliberateness.

Deliberate metaphors are particularly useful in art AD for BPS individuals. These invite the listener to adopt a different point of view and reconsider the subject from that perspective (Steen 2011a). Audio describers can use deliberate metaphors to convey abstract and novel concepts through more concrete and familiar ones.

> Example 1:
> *Sheet of glass divided in two horizontally like a sash window* (*The Bride Stripped Bare by her Bachelors, Even (The Large Glass)* Duchamp and Hamilton, Tate Modern)
> Example 2:
> *Ghostly pale blue circles floating across the whole work slightly distorting what's behind them suggest transparent soap bubbles* (*Linen*, Goncharova, Tate Modern)

In these examples, the markers 'like' and 'suggest' indicate the listener's intention to make the comparison between domains. In the first example, a pane of glass is compared to a window sash; in the second, pale circles are compared to soap bubbles. These concrete and familiar domains make it easier to understand the abstract concepts present in the artworks.

2.4 Classification of recurrent cases

In the following section, as a final level of metaphor classification, we will look at recurrent cases that occur in the corpus. It is important to note that many of these strategies also occur in non-metaphorical language, but we will focus exclusively on cases where a metaphor is used to translate an image in AD.

One of the most important and innovative parts of our methodological research is the identification of special cases of recurrent metaphors in the corpus of museum AD. We refer to cases of deliberate and direct metaphors that were not studied in detail in conceptual metaphor studies (Lakoff and Johnson 1980) due to their low inclusion in a language, being considered isolated cases. In recent years, researchers such as Dorst (2015) have argued that cases of direct and elaborate metaphors appear more frequently in certain types of texts, such as fiction (Dorst, 2015), which is closely related to one of the hypotheses of this work: AD from contemporary art museums contain a high number of direct and deliberate metaphors.

In the first five categories (personification, synaesthesia, cultural reference, form, and technique), the classification criterion is the type of conceptual domain to which the work is compared, while in the remaining five (participation, optionality, opposition, double marker, and vocal emphasis), the criterion is the linguistic strategy used to convey the metaphor.
The rest of this section is dedicated to introducing these categories with examples from the corpus analysed in the previous study.

1. **Personification**

Personification attributes human characteristics to inanimate objects, animals, deities, or natural forces. These characteristics can include action verbs associated with humans, adjectives describing human conditions, situations exclusive to humans, or emotions and feelings given to objects incapable of thought. This type of metaphor has been studied within cognitive or conceptual approaches, especially in relation to body parts and nature (Steen et al., 2010: 101-103). In the following example, the verb 'celebrate' is assigned to a painting, giving it an anthropomorphic and dignified character:

> Example 1:
> *His paintings celebrated the dignity of skilled manual labor* (*Louisiana Rice Fields*, Thomas Hart Benton, Brooklyn Museum)

2. **Synaesthesia**

Synaesthesia refers to the 'confusion' or 'exchange' between bodily senses. Synaesthetic metaphors recreate a sensation through a sense that, although unrelated, helps to understand it through bodily experience (Steen et al., 2010: 175). In the example, the adjective 'fluid', related to both tactile and visual experiences, is used to describe the physical appearance of the figures and the technique, which are clearly visual in nature:

> Example 1:
> *The figures in his paintings appear fluid... not drawn with hard edged lines* (*Louisiana Rice Fields*, Benton, Brooklyn Museum)

3. **Cultural reference**

The translation of cultural references has been extensively investigated in Translation Studies and, to a lesser extent, in the audio description of films (Maszerowska and Mangiron, 2014). In this category, known characters, objects, places, etc., are introduced to compare them with an iconic component of the artwork, such as a character depicted in it. In the example, the AD begins by comparing Cézanne's work to a traditional painting from an early era that may typically be in the minds of the recipients:

> Example 1:
> ...just imagine in your mind a traditional painting from an earlier century (*The Bather*, Paul Cézanne, MoMA)

4. **Form**

Form, or shape, is one of the basic elements of visual communication and is defined as a two-dimensional or three-dimensional area within a composition with boundaries that make it distinct (Fichner-Rathus, 2015). This type of metaphor is created by comparing the shape of a visual component of the artwork with the shape of another known element. The metaphor does not directly allude to an element that is similar but rather to one that has some formal characteristic serving as a link to understand a complex image. In the example, the size of a five-year-old child's body is used to clarify the size and general shape of a sculpture:

> Example 1:
> *The sculpture itself is smaller than adult life-size—nearer the form of a five-year-old child* (*Unique forms of continuity in space*, Boccioni, MoMA)

5. **Technique**

Techniques are the methods for handling, controlling, and applying a medium, understood as the material and tools used to create a visual composition (Fichner-Rathus, 2015: 19). Audio describers use comparisons with techniques to explain how an artwork or visual component was or may have been created. In other words, they illustrate brush movements, canvas placement, or the artist's position to understand the final result before us. In the example, the arc drawn on the canvas is compared to Pollock's arm and the likely movement he made to achieve it:

Example 1:
...the sweeping arcs give a real sense of Pollock's arm swinging just above the canvas (*Number 27*, Pollock, Brooklyn Museum).

6. **Participation**

Participation metaphors are deeply tied to learning and communication in museums, reflecting the philosophy of the New Museology (Marstine 2006; Hooper-Greenhill 2007), which sees the museum as a space for encounter and growth, as well as Visual Thinking strategies (Ferrara et al., 2017), which have shown significant communicative impact on museum visitors, especially students. These strategies seek to engage participants in the museum experience to increase their involvement and, consequently, enhance learning. This type of metaphor is realised primarily through three modes:

- **Participation through questions:** Questions suggest comparisons but leave interpretation open, creating a dialogue with visitors.
-

Example 1:
Is she a nice, well-brought-up child from a bourgeois society? (*Street Dresden*, Kirchner, MoMA)

- **Participation through movement:** Visitors are guided through the artwork as if they could walk through it or travel across it with their eyes and mind to better understand its complexity and abstraction.
-

Example 2:
If you follow its path through the painting... (*Number 27*, Jackson Pollock, Brooklyn Museum).

- **Participation through experience:** Directly referring to the visitors' experience, making them participants by using 'you' and offering several possibilities and a negation, reinforcing the idea that the AD is a subjective perception of the audio describer.
-

Example 3:

> *...you realize that you're not in some kind of specific place that can be identified, but rather some kind of ideal place in the mind's eye* (*Dance (I)*, Matisse, MoMA).

These metaphors promote active visitor engagement, facilitating a greater understanding and interpretation of the artworks through personal and emotional participation. In the context of museum education, these techniques have proven effective in fostering critical thinking and artistic appreciation, providing visitors with tools to construct their own interpretations and connect more deeply with art.

7. **Optionality**

This strategy, whose goal is to introduce two or more comparisons with the same visual, offers options to the receivers and tries to make their experience as individual and selective as possible. This way, the audio describer separates themself from subjective judgments related to images that do not have a clear translation. It is related to "mixed metaphors," i.e., metaphors that occur in textual adjacency and do not (for the most part) share any imagistic ontology (Kimmel, 2010 98). In the example, an abstract and cubist form that can be interpreted in many ways is translated using various new and subjective comparisons that result in a novel, more open and unique mental image. Three possible source domains are offered to the receiver: a boomerang, a hand and a melon.

> Example 1:
> *a large ambiguous form recalling a boomerang—it might be her hand, or a piece of melon she is eating* (*Les demoiselles d'Avignon*, Picasso, MoMA)

8. **Opposition**

If we look back at Saussure's theory of opposition (Susen, 2018), we see how in some units of language meaning is born out of a binary opposition: each unit is defined in reciprocal determination with another unit. It is not a contradictory relation but a structural, complementary one. Instead of translating the visual image into a linguistic expression, a reference to an element outside the work is made and this element is denied or opposed. The description explains that it is not like it, but the opposite of it. An opposition is created by contrasting an element that appears in the work, which may be unknown, complex or simply alien to the image, with an element that is easier to process. It is usually created through expressions

such as 'less ... than', 'nothing at all', 'in no way', and 'is not'. In the example, the human form contains an alien element.

> Example 1:
> *its face is not human, but similar to an African mask. Her nose... suggesting less the face of a human... than an African Mask* (*Les demoiselles d'Avignon*, Picasso, MoMA)

9. **Double marker**

This case serves to emphasise that the interpretation of the work is subjective. The audio describer does not intend to give indications of what to imagine or see, but to open options or paths to imagine or see. The same way mixed metaphors are related to a stronger incongruity and are thus interpreted as deliberate (Nacey, 2013: 172), a double marker reinforces the audio describer's subjectivity. In addition, the use of two markers facilitates metaphor understanding by providing more than one cue to the receiver: they are witnessing a description that is related to an interpretation, that is, to the more subjective character of the AD. In the example, two markers ('I feel' and 'gives you the sense') are used, thus emphasising the idea that it is a hand-crafted work, according to its interpretation.

> Example 1:
> *But I feel that it gives you the sense that this is a very homemade work of art* (*Quarantania*, Bourgeois, MoMA)

10. **Vocal Emphasis**

These are deliberate metaphors where the marker is paralinguistic and, more specifically, vocal. Voice modulation can range from expressions of amazement to expressions of humor through changes in tone or pitch. Additionally, dramatic pauses or voice breaks support the idea of "subjectivity" by allowing the listener to process the information freely. This type of marker has not been studied in relation to metaphor. However, tone of voice has been analyzed as a prosodic signal for another type of figurative language, namely irony (Kreuz, 2014: 42). In the analysed AD scripts, vocal emphasis is indicated with quotation marks or underlining, clarified in an interview with the audio describer or by analysing the audio file.

Example 1:
The deeper the 'pit' the greater the variety of contrasting color (*Cage*, Richter, Tate Modern).

This classification of recurrent cases is added to the levels of metaphor conceptualisation in the analysis methodology we propose. This structured approach allows for a detailed examination of how metaphors function in AD, providing insights into their role in making abstract art accessible and engaging. By systematically categorising metaphors, we can better understand their impact on the listener's experience and refine AD practices to enhance communication and inclusivity.

3. Conclusions

The analysis of metaphors in AD is crucial for several reasons. First, ADs provide essential visual information for people with BPS. Metaphors in AD can convey complex visual ideas more effectively, increasing comprehension and engagement. When carefully selected and consistently used, metaphors enrich the descriptive language, making it more vivid and relatable to the audience. This ultimately leads to a better viewing experience for people with ASD, who are able to grasp intricate visual details through well-chosen language and relate them to their previous experiences.

In addition, a robust metaphor analysis methodology ensures the high quality and consistency of these linguistic tools across different descriptions. This methodological approach enhances the overall quality of AD by ensuring that the metaphors used are not only appropriate, but also clear and understandable. Consistency in the use of metaphor avoids confusion and helps to build a coherent and enjoyable narrative experience for the listener. Thus, a well-defined metaphor analysis methodology contributes significantly to the reliability and effectiveness of AD.

This comprehensive methodology for studying metaphor in AD benefits from multiple perspectives. Linguistic analysis examines the language and structure of metaphors used in AD, providing insights into how these metaphors function within the descriptions. From a cognitive perspective, it is important to understand how metaphors are processed by the brain and how they affect understanding.

This methodology can be used by a variety of stakeholders. Researchers in fields such as linguistics, cognitive science, disability studies and media

studies can use this methodology to conduct in-depth analyses of AD, contributing to academic knowledge and practical applications. AD scriptwriters can use these findings to create more effective and engaging AD, ensuring that their work resonates well with BPS audiences.

The implications of this research and development for AD are profound. Systematic analysis of metaphor can deepen our understanding of how AD can effectively convey visual information through language. This enhanced understanding can lead to improved practices, with researchers and practitioners developing best practices for using metaphors in AD.

Furthermore, findings from such research can inform the development of standards and guidelines for AD, ensuring they are based on empirical evidence and best practices. This can lead to the creation of more reliable and effective AD. Understanding how different audiences perceive and process metaphors allows AD to be tailored to better meet the needs of different users, ultimately improving overall accessibility and user satisfaction. In summary, a methodology for analysing metaphor in AD is essential to improve the quality and effectiveness of AD, to support interdisciplinary research, and to contribute to the development and refinement of AD practices for the benefit of all.

References

Belinchón, M. (1999). Lenguaje no literal y aspectos pragmáticos de la comprensión. In Cuetos, F., and de Veja, M. (Eds.), *Psicolingüística del español*. Madrid: Editorial Trotta, 307-373.

Biber, D., and Conrad, S. (2009). *Register, Genre, and Style*. Cambridge: Cambridge University Press.

Cameron, L. (2003). *Metaphor in Educational Discourse*. London: Bloomsbury.

Deignan, A. (2009). Searching for Metaphorical Patterns in Corpora. In Baker, M. (Ed.), *Contemporary corpus linguistics*. London: Continuum, 9-31.

Dorst, L. (2015). More or Different Metaphors in Fiction? A Quantitative Cross Register Comparison. *Language and Literature,* 24(1), 3-22.

Edo, M. (2018). Hermenéutica de la audiodescripción museística ante las vanguardias históricas: Reticencias hacia el antifigurativismo y potenciación de la polisemia. *Arte, Individuo y Sociedad*, 30(2), 415-430.

Ferrara, V. et al. (2017). L'Arte dell'osservazione, dall'opera artistica alla diagnosi Le prime esperienze in Sapienza. *Quaderni di Medicina e Chirurgia*, 72(2016), 3269-3273.

Fichner-Rathus, L. (2015). *Foundations of Art and Design* (2nd ed.). Stamford, CT: Cengage Learning.

Fryer, L. et al. (2013). Audio Drama and the Imagination: The Influence of Sound Effects on Presence in People with and without Sight. *Journal of Media Psychology: Theories, Methods, and Applications*, 25(2), 65-71.

García Vizcaíno, M. J. (2023). Audio Description in Abstract Art: Using Metaphors from a Functional Perspective. *Journal of Audiovisual Translation*, 6(1), 189-208.

Gibbs, R. W. (2011). Are Deliberate Metaphors Really Deliberate? A Question of Human Consciousness and Action. *Metaphor and the Social World*, 1(1), 26-52.

Hermann, B. (2013). *Metaphor in Academic Discourse*. (LOT Dissertation Series, 333). Utrecht: LOT.

Hooper-Greenhill, E. (2007). *Museums and Education: Purpose, Pedagogy, Performance*. London: Routledge.

Kimmel, M. (2010). Why We Mix Metaphors (and Mix Them Well): Discourse Coherence, Conceptual metaphor, and Beyond. *Journal of Pragmatics*, 42, 97-115.

Kövecses, Z. (2017). Conceptual Metaphor Theory. In Semino, E., and Demjén, Z. (Eds.), *The Routledge Handbook of Metaphor and Language*. Abingdon, New York: Routledge, 13-27.

Kreuz, R. (2014). The Use of Verbal Irony: Cues and Constraints. In Mio, J. S., and Katz, A. N. (Eds.), *Metaphor: Implications and Applications*. New York, London: Psychology Press, 37-52.

Lakoff, G., and Johnson, M. (1980). *Metaphors we Live By*. Chicago: University of Chicago Press.

Lakoff, G. (1987). *Women, Fire, and Dangerous Things*. Chicago: University of Chicago Press.

Lakoff, G., and Kövecses, Z. (1987). Case Study 1: Anger. In Lakoff, G. (Ed.), *Women, Fire, and Dangerous Things: What Categories Reveal about the Mind*. Chicago: University of Chicago Press, 380-415.

Luque, M. O. (2016). The Embodiment of Metaphor: An Analysis of the Metaphors Used to Convey the Human Body in Audio Descriptive Guides of Museums for People with Visual Functional Diversity. *Revista EAESLA: Actas del XXXIII Congreso Internacional de AESLA*, 326-334.

Luque, M. O. (2019). *La metáfora como herramienta de acceso al conocimiento en las guías audiodescriptivas de museos de arte contemporáneo para personas con discapacidad visual* (Unpublished doctoral dissertation). Universidad de Granada, Granada.

Maszerowska, A., and Mangiron, C. (2014). Strategies for Dealing with Cultural References in Audio Description. In Maszerowska, A. et. (Eds.), *Audio Description: New Perspectives illustrated*. Amsterdam: John Benjamins, 159-178.

Nacey, S. (2013). *Metaphors in Learner English*. Amsterdam: John Benjamins.

Ramos, M. (2016). Testing Audio Narration: The Emotional Impact of Language in Audio Description. *Perspectives: Studies in Translation Theory and Practice*, 24(1), 1-29.

Remael, A. (2005). *Audio Description for Recorded TV, Cinema and DVD: An Experimental Stylesheet for Teaching Purposes*. Antwerp: Artesis University College. [Unpublished manuscript].

Simone, R., and Masini, F. (2014). New Approaches to Old Word Class Issues. In Simone, R., and Masini, F. (Eds.), *Word Classes: Nature, Typology and Representations*. Amsterdam: John Benjamins, 1-14.

Spinzi, C. (2019). A Cross-cultural Study of Figurative Language in Museum Audio Descriptions: Implications for Translation. *Lingue e Linguaggi*, 33, 303-316.

Steen, G., et. al. (2010). *A Method for Linguistic Metaphor Identification*. Amsterdam: John Benjamins.

Steen, G. (2008). The Paradox of Metaphor: Why We Need a Three-dimensional Model of Metaphor. *Metaphor and Symbol*, 23(4), 213-241.

Steen, G. (2011). From Three Dimensions to Five Steps: The Value of Deliberate Metaphor. *Metaphorik.de*, 21, 83-110.

Steen, G. (2014). Attention to Metaphor. Paper presented at the 10th Researching and Applying Metaphor Conference, Cagliari, Italy.

Susen, S. (2018). Saussure, Ferdinand de. In Turner, B. S. et al. (Eds.), *The Wiley Blackwell Encyclopedia of Social Theory*. Chichester, UK: John Wiley and Sons, 2001-2006.

Szarkowska, A. (2013). Auteur Description: From the Director's Creative Vision to Audio Description. *Journal of Visual Impairment and Blindness*, 107, 383-387.

Ursini, F. A. (2014). The Morphology of Spatial P: Is a Unitary Perspective Possible? In Augendre, S. et al. (Eds.), *Actas de Les Decembrettes 8 (=Carnets du Grammaire 22)*. Bordeaux: Presse Universitaire de Vincennes, 371-398.

Vázquez, R. (2007). Las metáforas: Una vía posible para comprender y explicar las organizaciones escolares y la dirección de centros. *REICE. Revista Iberoamericana sobre Calidad, Eficacia y Cambio en Educación*, 5(3). https://www.redalyc.org/pdf/551/55130511.pdf

Walczak, A., and Fryer, L. (2017). Creative Description: The Impact of Audio Description Style on Presence in Visually Impaired Audiences. *British Journal of Visual Impairment*, 35(1), 6-17.

Walczak, A., and Rubaj, M. (2014). Audiodeskrypcja na lekcji historii, biologii i fizyki w klasie uczniów z dysfunkcją wzroku. *Przekładaniec*, 28, 63-79.

Zabrocka, M. (2019). Speaking Metaphor in Audio Description for Children. *Cultura, Lenguaje Y Representación*, 22, 153-169.

Figures of coronavirus:

Conceptual and linguistic metaphors in British, U.S. and Italian political discourse

Dario Del Fante

Università degli Studi di Ferrara

Abstract

This paper examines the use of metaphors in political discourse related to COVID-19, focusing on speeches by political leaders from the UK, USA, and Italy. It investigates how metaphors function as both linguistic and cognitive tools, shaping public perceptions of the pandemic. The study analyzes the rhetorical and communicative strategies employed in English and Italian political speeches, with particular attention to figurative language. The analysis centers on how metaphors differ across the speeches of three political leaders—Boris Johnson (UK), Donald Trump (USA), and Giuseppe Conte (Italy)—within their respective socio-political contexts. The findings reveal cross-cultural similarities in metaphor use, particularly in how these leaders framed COVID-19 as a collective struggle. All three leaders predominantly used the WAR metaphor, along with other frames such as DANGEROUS LIQUID, CONTAINER, and OBJECT. The key differences appeared in less common conceptual mappings with fewer lexicalizations and occurrences. These similarities suggest the presence of a global rhetoric surrounding the virus, possibly pointing to universal cognitive structures that are activated when humanity confronts dangerous situations, regardless of cultural or linguistic context.

Keywords: Cross-linguistic Corpus Assisted Discourse Studies, Conceptual Metaphors Analysis, Pandemic Discourse, Political Communication

1. Introduction

Linguistic and Conceptual Metaphors (Lakoff and Johnson, 1980) are the object of study in this paper, which examines them as purely linguistic and cognitive phenomena. I am interested in studying metaphors in language, specifically in political discourse, to understand whether the use of specific linguistic constructions by particular kinds of politicians, namely prime ministers, influence public opinion and perceptions. This work has been conducted along two lines of investigation, each corresponding to a distinct research interest.

Firstly, I am interested in studying discourse, understood as a system of signs structured to create meaning. More specifically, I aim to study language to understand the reasons behind certain rhetorical and linguistic strategies, how these impact discursive formations, and how different cultures react to such a globally shared event as COVID-19. Since its beginning and the lockdown that followed in several European countries, figurative language has been widely used with reference to the virus and the pandemic (Semino, 2021; Charteris-Black, 2021; Panzeri et al., 2021; Musolff et al., 2022). Particularly, the use of figurative language to represent COVID-19 has been typical of speeches and communication by several western political leaders during the pandemic: Giuseppe Conte, Boris Johnson, Donal Trump, Emmanuel Macron, Pedro Sánchez all referred to COVID-19 by using metaphors. Political leaders play a fundamental role in maintaining political stability, managing an emergency like a pandemic, adopting effective measures against the spread of the virus, and avoiding the collapse of national economic and health systems. As national representatives, prime ministers and presidents are responsible for informing citizens about the virus and the rules to be followed. Considering the explosive growth of disinformation and misinformation, including fake news, the role of political leaders during official political speeches is essential for gathering and filtering information (Guo and Vargo, 2020; Shu et al., 2020). Political speeches, in fact, are a distinct type of political discourse because their purpose is to offer an idealized vision of the social world—a version of reality (Charteris-Black, 2004: 87). This implies that by using certain rhetorical strategies and figurative language to describe and inform people about such an emotionally involving phenomenon, politicians might decisively affect how people understand, experience, and ultimately react to the virus. Secondly, I had a purely cross-cultural and cross-linguistic interest in metaphor (see Spinzi, 2019), which refers to the

interest in comparing how different cultural and semiotic systems convey and transform meaning through figures of speech, focusing on their differences and similarities. In this sense, culture is understood as the production and exchange of meanings (Hall, 1997: 2). Therefore, by studying how language is used to convey meaning, particularly through metaphors, we can gain insight into how a culture interprets reality.

The pandemic has certainly represented an epochal event that might have deeply changed humanity. Moreover, in addition to this dramatic aspect, the pandemic represented a valuable common factor across the world since everyone experienced the same phenomenon. This common factor added value to a cross-cultural approach, allowing us to focus on how different cultures experience, react to, and represent the same event, which serves as a fixed variable.

Therefore, this project investigated the rhetorical and communicative strategies adopted in English and Italian political speeches concerning COVID-19, with special reference to figurative language. The focus was on how metaphors varied between the two languages and three socio-political contexts. I analysed the official speeches of three political leaders: Boris Johnson (UK), Donald Trump (USA), and Giuseppe Conte (Italy). These leaders are valuable subjects for a case study due to the style they adopted to manage the pandemic. By frequently using social media and live streaming videos, they have polarized media interest on their political personas and engaged in a personal-like challenge with the virus itself. Three research questions have thus been addressed:

- Which conceptual frames are used to discursively represent the coronavirus by each politician?
- Which conceptual frames are present in the three contexts, and which frames are unique to one context?
- Are there differences across the three politicians?

This paper is organized as follows: previous work will be described in Section 2; Section 3 will explain the methodology and the dataset compilation focus; Section 4 will report on the investigation, and conclusions will be drawn in the last section.

2. Previous work: Linguistic metaphors and conceptual metaphors

Metaphors in language involve a connection between the thing we are talking about, also defined the target term, and the thing we are likening it,

also described as the source term (Lakoff and Johnson, 1980; Semino, 2008). A linguistic metaphor is using a term in a different context than the one where is likely to be used. For example, as we will see later in section 4, the use of the noun "fight" to describe the "management of the virus COVID-19" creates a contrast with the basic meaning of fight, namely "a situation in which two people or groups hit, push at each other" (Longman 2024). Any word or term is part of a wider a conceptual frame (or mental representation), namely a structured pack of information evoked by the term and related to a specific area of experience: e.g., the pandemic can be referred to the conceptual frame of ILLNESS or refugees to the conceptual frame of MIGRATION. A conceptual metaphor is the process whereby the TARGET conceptual domain is understood in terms of a SOURCE conceptual domain. In the example above, the thing we are speaking about, the management of COVID-19, is understood in terms of a war following the conceptual metaphor COVID-19 IS AN ENEMY. The analysis relates to this theoretical framework.

3. Metaphors and politics

In *Leviathan* (1651), Tomas Hobbes described the figures of speech as *ignes fatui* arguing that they are dangerous in communication[1], because they lead human mind to confusion. However, in the last thirty years, the role of figurative expressions in political communication has been particularly rehabilitated (Lakoff, 1996). Figures of speech, e.g., hyperboles, metonyms (Goatly, 1996; Philip, 2011), and particularly metaphors, are considered communicative resources to enhance the effectiveness and expressiveness of political message through the most economical means available (Charteris-Black, 2004; Musolff, 2004). Furthermore, metaphors are not only a linguistic, but primarily a cognitive phenomenon through which we categorize our experiences (cf. Lakoff and Johnson, 1980; Gibbs, 1994): the use of figurative language affects the way reality is conceived and perceived and determine the way it is conceptualized (Thibodeau *et al.*, 2017; 2019). Considering that metaphors define sets of correspondences between two words and consequently between two conceptual frames, namely a source-frame and a target-frame, "properties and relations that hold within the

[1] "And on the contrary, metaphors, and senseless and ambiguous words, are like *ignes fatui*; and reasoning upon them is wandering amongst innumerable absurdities; and their end, contention and sedition, or contempt." (I.v, p. 26).

source frame are then used to feel and reason about elements in the target frame. As such, metaphors play a pivotal role in the construction of social realities" (Hart, 2021: 231).

The impact of figurative language on the social representation of illness and disease has been widely investigated over time, with reference to different pandemics: Ebola in the 1990s (Ungar, 1998; Joffe, 2002), mad cow disease (Washer, 2006), SARS (Washer, 2004; Wallis and Nerlich, 2005), Spanish Flu (Del Fante, 2022), avian/bird flu (Nerlich and Halliday, 2007; Ungar 2008; Brown et al., 2009), Zika (Ribeiro et al., 2018). Particularly, metaphors of COVID-19 have also received much space if we consider the short time since the virus outbreak (Aqromi, 2020; Wicke and Bolognesi, 2020; Semino, 2020; 2021; Charteris-Black, 2021; Döring and Nerlich, 2022; Nerlich, 2022; Del Fante, 2022). As noted by Del Fante, most of these studies "emphasise the prominence of military rhetoric and specifically WAR metaphors" (2022: 153). This is also confirmed by Gillis (2020), Islentyeva (2020), Panzeri et al. (2020). Doquin de Saint Preux and Masid Blanco (2021) and Charteris-Black (2021) investigated the influence of such frame on citizens. Doquin de Saint Preux and Masid Blanco (2021) confirmed the roles of metaphors beyond the linguistic level. They discovered that the levels of emotions and fears varied significantly depending on the metaphor used to frame the COVID-19 pandemic. Participants who read that the COVID-19 pandemic is a WAR were more likely to experience negative emotions and higher levels of fear and worry about the pandemic. Similarly, Charteris-Black (2021) conducted an empirical analysis on the impact of WAR metaphors on people. He showed that despite framing the pandemic as war might have been useful since it "may have actively heightened the awareness of the danger presented coronavirus" (Charteris-Black, 2021: 51); on the other hand, this awareness activated the emotion of fear which facilitated the acceptance of a heavy quarantine by people. Mohammadi (2023) conducts a corpus-based discourse analysis of COVID-19 metaphorical framing in American political discourse, revealing that the virus is primarily portrayed as an enemy in a war rather than a public health crisis. They situate this militaristic framing within the framework of moral panic, highlighting how White House briefings link the pandemic to other perceived threats like Communists, Islamic radicals, and Latin gangs and cartels within the US political debates.

The relevance of figurative language in political communication has been acknowledged by many scholars from linguistics and communication

studies (Schäffner, 1996; Semino and Masci, 1996; Semino, 2008; Charteris-Black, 2004; 2011; Spinzi and Manca, 2017). Two fundamental tenets could be identified among these works. First, figurative expressions pertain not only the linguistic, but also the cognitive level, because the words we use reflect the ways we think (Burgers et al., 2016). Second, figurative language has a significant role in persuading and changing people's opinions and beliefs (Ottati et al., 1999; Lakoff, 1996; 2009; Musolff, 2004; Semino, 2008; Dancygier and Sweetser, 2014). Research generally focused on how figurative language helps political agents in achieving their rhetorical goals, promoting specific concepts, presenting their policies, or taking a stand on specific issues. Particularly, Lakoff (1996) adapted his ground-breaking cognitive theory on conceptual metaphor (Lakoff and Johnson, 1980) to analyse the world-views underlying the United States political stance, showing that some figurative expressions have consequences at both a linguistic and cognitive level, e.g. the use of at the FAMILY conceptual metaphor to refer to the US nation affects the system of conceptualization of society in US society. If the NATION is a FAMILY, it follows that the Government is a parent, and the Citizens are the children (Lakoff, 1996). Depending on the politicians' rhetorical choices, the Government can be conceived as a STRICT PARENT or a NURTURANT PARENT, who apply different forms of punishment and care towards their children/citizens. These two models trigger two different moral belief systems and world-views, i.e., conservative and liberal. Whilst the two conceptual metaphors are linguistically equal, the impact and intensity of their applications at a political level greatly differ. More recently, Musolff (2004) looked at how Europe has been metaphorically conceptualized in a corpus of German and British political debates. Also, Charteris-Black analysed figurative language in political discourse, focusing on different politicians in different time periods, i.e., Bush (2004) and Obama, Reagan, and Churchill (2011). Particularly, Charteris-Black (2004) showed that expressions like "crusade against terror" or "Jewish-Christian crusader in Pakistan" by Bush revealed the presence of the underlying conceptual mappings of POLITICS IS RELIGION or CONFLICT IS RELIGION, which justified the idea that war and politics are equivalent and can be 'enacted' even by means of religion. Demata (2019a) compared the metaphors used by Clinton, Bush, Obama, and Trump in the State of the Union (SOTU) address, which is a message delivered every year by the President of the USA to the whole nation. Demata revealed that, despite belonging to different political leanings, the conceptual metaphors NATION IS A BUILDING and NATION IS A PERSON

were used consistently by all four presidents as key elements in the ideological discursive construction of the US nation. These metaphors induced a simplification of the complex social and political notion of a nation: by promoting a homogeneous image of the nation, the metaphorical image obscured any marginal or dissenting voices at the level of discursive practices. Several studies also analysed Italian political communication (see also Campus, 2004; Baldi and Savoia, 2009; Borrello, 2017). Cortellazzo and Tuzzi (2008) focused on the rhetorical strategies of Italian presidents to represent and address Italians; and Spina (2012) studied Italian political communication on Twitter.

The figurative language of the three politicians under investigation in this paper have been studied to different extent in literature. Whilst Trump's language as well as Johnson' s language have been extensively researched, the former Italian prime minister's style of communication has received less attention. These differences might be explained as depending on the one hand on to the fact that English language is likely to receive more interest, on the other hand, it might be due to the specific characteristics of the three politician and their respective rhetoric styles: whilst Trump and Johnson make use of a stronger and more coloured language which is likely to use metaphors, Conte's rhetoric is characterized by a plainer language.

Despite Donal Trump served as president for only one term (as of the publication date of this work), there is a vast array of works on his rhetoric and discourses, in different moments of his presidency (Degani, 2016; Demata, 2018; 2019b, 2021; 2023; Mena García, 2018; Hodges, 2019; Lockhart, 2019; Knoblock, 2020). Generally, research presents Trump as using strong language, with the aim of capturing the audience's attention as much as possible, attempting to engage them emotionally rather than through reasoning. Within these studies, there is a considerable body of work with a special focus on Trump's use of metaphors. Pilyarchuk and Onysko (2018) investigated the occurrence of conceptual metaphors in three speeches: the acceptance of the nomination, the victory speech, and the inaugural address as the 45th president of the USA. They highlighted an uncreative and divisive use of language in his speeches, with extensive use of conventional conceptual metaphors. Trump presents himself as an ordinary person (part of an in-group), opposed to the elite, to which his election opponent Hillary Clinton belongs. Migrants are depicted as ANIMALS or DANGEROUS WATER needing immediate resolution, and he portrays himself as the saviour. Both Olimat (2020) and Bates (2020) studied the conceptual metaphors used by Trump (mainly public briefings and

tweets) during the initial stages of the COVID-19 pandemic (March – June 2020) to describe the management of the virus. In both cases, they identified a significant presence of the WAR conceptual frame. Musolff (2022b) adopted a discourse-analytical perspective to analyse the influencing aspects of the communicative success of Trump's 'theory' about the pandemic being as caused by a Chinese state conspiracy. He proved how Trump, by positioning himself as the war-leader against the 'attack' of the virus, made use of the 'COVID-19 AS WAR' scenario "to make up for the lack of factual evidence for his anti-Chinese conspiracy theory about the COVID-19 pandemic" (Musolff, 2022a: 134). This study fundamentally demonstrated the role played by the WAR metaphorical scenario[2] within the context of conspiracy theories. This scenario permeated his speeches and then, consequently, was adopted by his supporters and by the US media, making to reformulate the problem of 'missing factual evidence', typical for conspiracy theories, as one of 'missing evidence to complete the figurative (metaphorical/narrative) scenario. So, the presumed reader would start to doubt about the epistemological validity of the narrative only in the case it would not fit the WAR scenario.

As pertains Boris Johnson, Charteris-Black argued that he can entertain readers "by stylish use of metaphor" (2019: 161). Expectedly, the politician mainly aroused researchers' interest with his eccentric and colourful style. However, the work on Johnson' discourses can be divided into those focused on the BREXIT campaign and those on the COVID-19 pandemic. As for the former group, Charteris-Black (2019:161-196) studied Johnson's strategic use of metaphors to support the 'leave' campaign before the Brexit referendum, so before his election as Prime Minister. He showed how Johnson as politician made use of frames of TRUST, WAR and NATION AS BODY/HOUSE/FAMILY through slogans such as 'Distrust and Betrayal', 'War and Invasion' to criticize the British membership in Europe as an unjust entrapment in which an alien force, disguised as an ally, had illegally occupied their country. The conceptual metaphors used by Johnson promoted the idea of constraint and entrapment of United Kingdom as a member of the EU and, as a result, the idea that the release from confinement would have been represented by a UK leave from EU.

Politicians' speeches during BREXIT have been also studied by Jamet and Rodet (2022), who specifically focused on the BREXIT IS A JOURNEY

[2] As argued in Semino (2008), Scenario, along with alternatives like "frame" 'schema', 'domain' or 'scene' refer to organized packs of information in relation to a specific topic. However, here the term 'scenario' is used to maintain consistency with Musolff's work.

metaphor scenario in Cameron's, May's and Johnson's speeches. In line with Charteris-Black (2019), they expectedly confirm that Boris Johnson's perception of Brexit is represented as the necessary JOURNEY since the EU is going towards the wrong direction, and Britain has to pursue its own journey to put the country back on track, in the right direction. As already discussed for Trump, Jamet and Rodet found Johnson's presenting himself as a saviour who liberates Britain from its burdens by finalizing Brexit. As regards COVID-19, the use of WAR and NATURAL DISASTER frames have been consistently found in Johnson speeches. Neagu (2022) investigated how the pandemic was depicted in Romanian and British official press statements made by the Romanian president Klaus Iohannis and Boris Johnson from in the time span from March to June 2020 and how such discourses may have influenced public opinion. Her results illustrated that both prime ministers tend to portray the pandemic as an external factor that puts the wellbeing of the nation in danger, using WAR (an enemy that needs military action to be taken) and NATURAL DISASTER metaphors (floods and wildfire). Similarly, Heaney and Riboni (2023) analysed the COVID-19 announcements made by Boris Johnson from the beginning of March 2020 to December 2020. The results surprisingly showed that Boris Johnson sparingly used metaphorical language and, when he did, he made use of highly conventional metaphors such as the WAR and the NATURAL DISASTER metaphors.

As regards the former Italian prime minister, there are papers focused on his communicative style (e.g., Amoretti et al., 2021; Rullo and Nunziata, 2021) or that compare Conte with other Italian or foreign politicians (e.g. Giardiello, 2021; Rullo and Nunziata, 2021; Ventura, 2021; Venturini, 2022; Forciniti and Paolillo, 2022). Interestingly, all these works were focused on the pandemic period. However, there is a scarcity of works specifically on his use of figurative language, and the only examples compare Conte with other European politicians. Tornero et al. (2021) studied the communication strategies that are aimed at reinforcing their leadership by three prime ministers: Macron (France), Sánchez (Spain) and Conte. In line with the literature, WAR frame is preponderant by also evoking related sub-frame such as heroism and patriotism. Interestingly, Tornero et al. found great similarities between the discourses produced by the politicians under study, notwithstanding the different socio-political linguistic contexts. Similarly, Rìos (2022) expand the analysis by comparing Sánchez (Spain) and Conte with also Boris Johnson and the Portuguese prime minister Antonio Costa. In line with Tornero et al. (2021), there is great similarities among

the countries, with a central use of the WAR frame and to the related concept of patriotism and social responsibility. Combei et al. (2022) also examined Conte along with Johnon and Sánchez. Corresponding to the previous studies, they identify a major use of the WAR metaphors, whose use was interpreted the as an effective tool capable of alerting citizens, building consensus, and legitimizing the measures adopted by the three governments to counter the emergency. On this line, moreover, they found that Conte was also consistent over time in suing the SPORT metaphor and the TRAVEL metaphor, and the management of COVID-19 was described as a journey or a football match (as in also Doquin de Saint Preux and Masid Blanco 2021).

Overall, much of the literature on the figurative language of Trump, Johnson and Conte has emphasised the importance of the use of the WAR/INVASION frame to discuss both political issues such as Brexit (for Johnson), migration (especially Trump) and then COVID-19. The frames involved and such figurative language serve as a discursive tool to present themselves as saviour during a danger situation (such as migrant invasion or a virus pandemic).

4. Methodology

This study adopted a Corpus-Assisted Discourse Studies (CADS) perspective (as discussed by Partington et al., 2013; Baker 2023). Several works show and discuss the benefits and drawbacks of using corpora to study figurative language (Deignan, 2005; Anderson and Corbett, 2009; Díaz-Vera, 2015, Lederer, 2016). Some studies have identified corpora as a remedy for the empirical weakness of the theoretically powerful conceptual metaphor theory (Cameron, 2003; Low, 2003); others have argued that linguistic data from corpora generally lack contextual information. Therefore, the methodology adopted integrated qualitative and quantitative approaches to compensate for the limited context of discourse through direct text-by-text analysis (Mautner, 2007) and to develop a sound empirical basis through quantitative analysis with computational software.

Within the CADS framework, I adopted a cross-linguistic perspective (e.g., Jaworska, 2021), as discussed in Vessey (2013) and in Taylor and Del Fante (2020). Specifically, this study falls within the type of contrastive study that is mainly interested in investigating the differences and similarities between English and Italian political discourse on COVID-19. Following

Del Fante's procedure (2022), which was adapted from Steen et al. (2010: 25–26) and Taylor (2021: 6), I identified the metaphorical representation of COVID-19 in the speeches by focusing on both the linguistic and the conceptual level. To do so, I adopted a six steps methodology which can be summarised as follows:

1) Definition of a list of nodes (representing the target domain) to be searched for each corpus - 'Corona Virus', 'Coronavirus', 'Covid', 'Covid-19', 'Pandemic'.
2) Analyse the context for each of the nodes in the list by calculating collocations within the corpus by using Lancsbox X software (Brezina and Platt, 2024).
3) For each node, Log ratio (Log_R) and Mutual Information (MI) statistical measure and a ten-word left/right span were used[3].
4) Select all the collocates that can be plausible candidates for metaphors on the basis of intuition (Willems, 2012), and triangulate those results with data from previous research, contemporary thesauruses and reading sample concordance lines.
5) Categorisation of each linguistic metaphor, assigning it under the corresponding source conceptual frame.
6) Calculate for each source frame the number of lexicalisations, namely the number of linguistic metaphors assigned to it. Related words like 'to fight' and 'the fight' have been counted as one lexicalisation.

5. The dataset

As far as this work is concerned, it focuses on the first stages of the COVID-19 pandemic, particularly between the first and the second waves (Swain et al., 2021), when the three politicians have acted as prime minister during the sanitary emergency. I collected three datasets containing a large

[3] I used two statistical measures to examine both conventional and unconventional metaphors. Following Brezina (2018: 74) on the different types of statistical measures behind collocation analysis, Log Ratio was selected to indicate frequent associations between words, representing conventional metaphors. Conversely, Mutual Information was used to retrieve infrequent associations, representing unconventional metaphors.

number of speeches. The idea was that by enlarging the corpus sample, it might be likely to find additional metaphors.
The three corpora are:

a) Conte_Covid_Corpus
b) Trump_Covid_Corpus
c) Johnson_Covid_Corpus

Each corpus represents a collection of different speeches and presentations given by Conte, Johnson or Trump during the period in which they acted as Prime Minister during the COVID-19pandemic. The reason is because I was interested in studying their political communication as prime minister during a pandemic, which is an important variable to take into account. There are various sources of information. As for Trump, I downloaded the script from two main sources: the REV transcript archive and from the database of Miller Center of Public Affairs. As regards Boris Johnson, I also used the REV transcripts archive and the United Kingdom official government site. As for Conte, an easy-accessible source of transcripts was not present. Therefore, I manually downloaded all the videos from the official YouTube channel of the Italian Government - Presidency of the Council of Ministers. Then, I automatically converted the audio into text by using the Artificial Intelligence model Whisper (OpenAI, 2023). The following Table 1 summarizes the most important information of the corpora.

Corpus	Tokens	Types	No. of Speeches
Conte_Covid_Corpus	365.080	22.117	146
Trump_Covid_Corpus	871.164	21.202	87
Johnson_Covid_Corpus	330.967	13.224	55

Table 1. The Overview on the three corpora

6. Analysis and Discussion

6.1 Johnson: Metaphors of COVID-19

In line with the expectations, I found the language used by Borish Johnson to be highly metaphorical: COVID-19 has been represented through seven conceptual frames[4] mapped onto the COVID-19 target domain (Table 2).

[4] The conceptual frame will be formatted as small capital

Table 3 presents the linguistic metaphors for each conceptual frame. I reported the lemma and also the grammatical category.

Johnson		
Source Frame	**No. of Lexicalisations**	**No. Occurrences of Linguistic Metaphors**
WAR	8	39
OBJECT	4	6
CONTAINER	3	6
DANGEROUS LIQUID	3	10
FIRE	1	3
ANIMAL	1	1
TRAVEL	1	1

Table 2. Boris Johnson's Conceptual Frames of Covid

WAR	CONTAINER	DANGEROUS LIQUID	OBJECT	FIRE	TRAVEL	ANIMAL
Fight (v.)/fightback (n.) boom (n.) battle (v.)/battle (n.) combat (v.) defeat (v.)/defense (n.) to tackle (v.) to win/win Enemy (n.) Fire power (n.)	outbreak (n.) out of control (phraseological unit) contain (v.)	surge (n.) wave (n.) tide (n.)	Eradicate (v.) Kick (v.) hit (v.) beat (v.)	Flare up (v.)	Route out (n.)	Beast (n.)

Table 3. Boris Johnson's – Metaphors of Coronavirus

Expectedly, WAR frame is the one used most, with 8 lexicalisations which occur 39 times. The linguistic metaphors are mainly verbs which are used as to describe the management of the virus, like in the following example (1), or the virus itself, like in (2).

(1) 24 hours a day, for every second of every hour, there are hundreds of thousands of NHS staff who are acting with the same care and thought and precision as Jenny and Luis. **That is why we will defeat this coronavirus and defeat** it together. **We will win** because our NHS is the beating heart of this country. It is the best of this country. **It is unconquerable**. It is powered by love. (Boris Johnson, 12/04/2020)

(2) What we are proposing is still just a fraction of the social interaction each of us would normally enjoy. I know many of you will find this frustrating and I am sorry about that, but I am afraid that is unavoidable given the nature **of the invisible enemy that we are fighting**. (Boris Johnson, 28/05/2020)

In (1), Johnson appeals for the unity of the nation, which is the subject of the dispute between the virus and British citizens, as indicated by the use of the adjective "unconquerable". In this case the conceptual metaphor THE MANAGEMENT OF THE VIRUS IS WAR then implies two other related conceptual metaphors namely, THE VIRUS IS AN ENEMY and THE NATION IS A FORTRESS. So, Johnson's rhetoric is built up on the idea of presenting an emergency situation where the nation is under siege from the virus.

The OBJECT, CONTAINER and DANGEROUS LIQUID frames present a similar number of lexicalisations and occurrences (respectively between 4 and 3 for lexicalisation, and 10 and 6 for occurrences). The OBJECT metaphors are used to represent the virus as having a concrete, visible and physical consistency. The use of this metaphor might be linked to the fact that the virus is not visible (as also described in 2), so the function of this metaphor is to make it visible and touchable. Looking at the Table 3, we notice that all the verbs in this category are used to describe actions aimed at his management or resolution. In (3), for example, the verb "to eradicate" is used to refer about the action of removal of the virus that, in the example, is possible only with vaccination. Interestingly, the OBJECT frame here is related to the PLANT frame, specifically to the sub-frame of WEEDS.

(3) Even if we sustain the lockdown indefinitely, which would itself cost lives and do immeasurable harm to our children, we would not be able **to eradicate this**

disease. And that's why it's right, gradually, to replace the protection afforded by the lockdown with the protection of the vaccines. (Boris Johnson, 22/01/2021)

Moreover, I found many cases where there are not only two frames in action, but there are simultaneously more frames used to describe the virus, namely a mixed metaphor (Sullivan, 2019). For example, in (4), the pandemic arrives as a "wave" that "hit" the care home system, namely the pandemic here is as an OBJECT as a DANGEROUS LIQUID.

(4) And I know it's been a very, very tough time for those in care homes. We remember how hard our care homes were **hit by that first wave of the pandemic**. We have had to do everything we can possibly to protect them. (Boris Johnson, 05/04/2021)

As regards the CONTAINER metaphor, it is strongly linked to the idea of CONTROL. As discussed in Chilton (2004) and Charteris-Black (2006), when this metaphor is used in relation to immigration discourse, it generally presents the NATION as a container and what is inside is closed to the writer'/speaker' perspective, what is outside is distant and dangerous. In this case, however, the CONTAINER indicates a specific space where the virus can be restricted and thus "controlled." When the virus is active, it becomes out of the nation's control. Additionally, I found a mixed metaphor where the virus is presented both as a DANGEROUS LIQUID which needs to be in the CONTAINER.

(5) I want to update you on the progress we are making on three fronts to prevent a second **wave of infections** that could overwhelm the NHS. First, we have set up NHS Test and Trace in order to **identify, contain**, and **control** the virus in the UK, thereby reducing its spread.

The less used frames are FIRE, ANIMAL and TRAVEL, with only one lexicalisation each, and very few examples. FIRE and ANIMAL are used to present the virus itself as a FIRE, as in (6) and as a dangerous 'beast', as in (7).

(6) Now that the rate of transmission in the UK has fallen significantly from its peak, we need to take steps to manage **the flare ups** and stop the virus from re-emerging. (Borsi Johnon, 03/06/2020)

(7) But what we want to avoid is relaxing now too much, **taking our foot off the throat of the beast** now when we have got it pretty much in a much, much better

place than it was before the autumn measures came in. (Boris Johnson, 26/11/2020)

Johnson used the TRAVEL metaphor (example 8) to describe the pandemic as a "trail": by arguing that there is a "route out", Johnson deviates from the military or danger rhetoric seen in most metaphors, and he gives a more relaxed depiction of the pandemic.

(8) For the first time since this wretched virus took hold, we **can see a route out** of the pandemic. The breakthroughs in treatment and testing and vaccines mean that the scientific Calvary is now in sight, and we know in our hearts that next year we will succeed. (Boris Johnson, 23/11/2020)

6.2 Trump: Metaphors of COVID-19

As regards the analysis of Donald Trump' speeches, COVID-19 has been represented through five conceptual frames (Table 4). Table 5 contains the linguistic metaphors for each conceptual frame. As Table 4 indicates, Trump was particularly inclined to the use of military rhetoric, with the WAR frame being the most used (98 occurrences) and the lexically richest with eight different words.

Trump		
WAR	8	98
OBJECT	3	15
CONTAINER	2	18
DANGEROUS LIQUID	2	4
EARTHQUAKE	1	2

Table 4. Trump's Conceptual Frames of Covid

WAR	CONTAINER	OBJECT	EARTHQUAKE	DANGEROUS LIQUID
arsenal (n.) battle(v.)/battle (n.) Combat (v.) Defeat (v.) Enemy(n.) expansion (n.) fight(v.)/fight (n.) forefront (n.)	Outbreak (n.) Contain (v.)	Penetrance(n.) Curtail (n.) Hit (v.)	Epicenter (n.)	Wave (n.) Resurgence (n.)

Table 5. Donald Trump's – Metaphors of Coronavirus – reported as lemma

In line with Boris Johnson, military metaphors were used to describe the management of the virus as a conflict (9), where there are "forefronts" (10), and the government is using all is "arsenal" (11).

(9) But with the vaccine, you'll see numbers going down within a matter of months and they'll go down very rapidly. **As we continue to combat the virus**, our economy is rebounding far beyond any expectations. I see the stock market's up almost 400 points today again and it's ready to break the all time record. (Donald Trump, 13/11/2020)

(10) I spoke to Governor Phil Murphy of New Jersey. New Jersey is very much in **the forefront of the coronavirus in America today**. We want to commend the governor for his extraordinary leadership in the state. (Donald Trump, 06/04/2020)

(11) We're **unleashing every tool in our nation's vast arsenal**, **economic, if you look, medical and scientific, military**. Homeland Security is a working very, very hard with all of them in order to vanquish the virus (Donald Trump, 30/03/2020)

Trump also used the CONTAINER metaphors to represent the virus appearance and management. His use of CONTAINER metaphors transmitted the idea of the virus as something that, after the rupture of its CONTAINER, expressed by the noun "outbreak", is out of control (see 13). Thus, being the virus outside "its space", it becomes necessary to put it again under control by containing it, as the verb "contain" indicates (see 14)

(12) I had all my data with me and he was able to answer every county and what the issue was. And I think when you look at Houston, when you look at Dallas and you see the ability to really **contain and mitigate**

(13) Our experts standing beside us told us that if every American, regardless of whether you're in an area that's impacted **by an outbreak of the coronavirus or not**, if every American would embrace these guidelines, that we could significantly reduce the number of Americans that would contract the coronavirus, and protect the most vulnerable. (Donal Trump, 24/03/2020)

(14) those epidemics, but **the same time contain epidemics and not allow them to spread in the community**, this is what we've been asking governors to do with the test and using focus testing to really find asymptomatic cases and protect the vulnerable. (Donald Trump, 08/05/2020)

The ideas of CONTROL and CONTAINER are thus connected to the notion of a limit or border, which should be understood here as the line dividing two spaces and, thus, defining them, as clearly illustrated by (15). In this case, the actual wall built by Trump became a concrete measure to contain "a very big outbreak of the coronavirus" or "a tremendous outbreak" in Mexico. This extract represents a highly illustrative example of metaphoric blending or conceptual blending (Hart, 2014: 138; Sullivan, 2019: 106), where two conceptual mappings are projected onto a third blended space. Here, the mappings CONTAINER - ILLNESS and the CONTAINER – MIGRATION, with both COVID-19 and migrants from Mexico conceptualized as entities that exceed their container, are projected on the blended space CONTAINER - ILLNESS - MIGRATION. Therefore, a literal and metaphorical wall acts as the CONTAINER to control these two entities and prevent them from spreading.

(15) One of the other accomplishments we have is in Arizona and a lot of other states, we're building a wall and you're finally getting what you need. And interestingly, California's calling because in bordering towns, as you know, in Mexico they have a **very big outbreak of the coronavirus**, and California's calling saying, "You got to help us." Those are not calls that the media knows about, but that's the facts. And in Tijuana, right along the border, they have **a tremendous outbreak** and we have just completed **172 miles of wall**, and it's real wall, not the kind you were having built over the years that were scoffed at, right? (Donal Trump, 05/05/2020)

The idea of rupture of the CONTAINER resonated with the OBJECT metaphors expressed into ways. On the one hand, Tramp's use of the verb "to penetrate" presented the virus becomes an invading object that passes through the "borders" of a community, as in (16). On the other hand, the verb "hit" was used, mainly in the past participle form, to describe the appearance of the virus as an object that quickly and hardly impacted generally an area following an explosion, or an "outbreak" (see 17).

(16) To have a test that is efficient, to let people know who's been positive for immunity. That's critical to epidemiologists and public health officials, to know what **the penetrance of a virus was into a community** when all you're seeing are the serious cases and testing the most symptomatic. (Donald Trump, 10/04/2020)

(17) We have, through some very good early decisions, decisions that were actually ridiculed at the beginning, we closed up our borders to flights coming in from certain areas. Areas that **were hit by the** coronavirus and hit pretty hard, and we did it very early.

The perception of the ILLNESS as an entity to be controlled thus corresponds to its perception as threatening the national stability, as also stressed confirmed by the presence of the DANGEROUS WATERS frame (two lexicalisations and four occurrences) as in (18) or, even more clearly, the EARTHQUAKE (1 metaphorical instance) as in (19) with "epicentre", both of which fall under the category of NATURAL DISASTER.

(18) If we do see a second wave, because I've heard Dr. Fauci answer this question. If we do we're going to be, I think, very well-prepared, and the second wave won't be like the first wave, and with that I better let him give you a little bit more to that answer because I don't want to have him upset with me and say, "I wish you would have answered that question." (Donald Trump, 31/03/2020)

(19) I said to Dr. Fauci today, as we look at Europe now being **the epicentre of the coronavirus**, I asked him if we had not suspended all travel from China, what our circumstance would be, and he essentially said we'd be where Europe is today. (Donald Trump, 15/03/2020).

6.3 Conte: Metaphors of Covid

I found that Giuseppe Conte used five conceptual frames to represent COVID-19 in his speeches. As Table 6 indicates, Conte showed a strong preference for military rhetoric, with the WAR frame appearing most frequently (52 occurrences) and having the highest lexical variety, utilizing 9 distinct words. This outcome aligns precisely with the findings for Johnson and Trump. Table 7 presents the linguistic metaphors identified for each conceptual frame.

Conte		
WAR	9	52
CONTAINER	2	58
DANGEROUS LIQUID	3	8
OBJECT	1	21
FIRE	1	1

Table 6. Giuseppe Conte's Conceptual Frames of Covid

WAR	CONTAINER	DANGEROUS LIQUID	OBJECT	FIRE
avanposto (n.) Battaglia (n.) (battle) combattere (v.) (to combat) contrastare (v.) (to tackle) Difendere (v.) (to defend) lotta (n.) (fight) Nemico (n.) (enemy) Protezione (n.) (protection) Sconfiggere (v.) (to defeat) sfida (n.) (challenge)	contenere (v.) (to contain) Limitare (v.) (to limit)	ondata (wave) onda (wave) tsunami	Colpito (v.) (hit)	Fuoco (fire)

Table 7. Giuseppe Conte's – Metaphors of Coronavirus

As it has already been presented and discussed for Johnson and Trump, Conte used WAR frame to describe the management of the virus, as the excerpt (20), (21), (22) show.

(20) Il **nemico invisibile** dei nostri giorni **non è ancora stato sconfitto**, **continua a seminare vittime e incertezze**. (The invisible enemy of our times has not yet been defeated; it continues to sow victims and uncertainties[5]) (Giuseppe Conte, 26/03/2020)

(21) **Dopo la prima battaglia** contro il virus che abbiamo vissuto, quella che abbiamo di fronte è una sfida non meno insidiosa che nessuno può vincere da solo. (After the first battle against the virus that we experienced, the challenge we now face is

[5] The author is responsible for the translations.

no less treacherous and cannot be won by anyone alone.) (Giuseppe Conte, 18/11/2020)

(22) In Italia è stato elaborato questo sistema di monitoraggio nel corso di questi ultimi mesi che oggi ci pone nella condizione, una condizione anche diversa rispetto ad altri Paesi, anche del continente europeo che non lo possiedono, e di cambiare quindi strategia rispetto alla prima fase. **Quando invasi da un nemico sconosciuto e invisibile siamo stati costretti a proteggerci all'interno delle nostre case**, lo ricordiamo tutti, sospendendo anche integralmente la nostra vita lavorativa e di relazione. (In Italy, this monitoring system has been developed over the past few months, which today places us in a different position compared to other countries, including those in Europe that do not have it, allowing us to change our strategy compared to the first phase. When invaded by an unknown and invisible enemy, we were forced to protect ourselves inside our homes, as we all remember, completely suspending our work and social lives.) (Giuseppe Conte, 02/11/2020)

Conte represented the ILLNESS as an "invisible enemy" who invaded our nation forcing us to a refuge in our houses. In (21), the adjective "prima" suggested the presence of multiple battles, thus extending the duration of the virus's persistence over a longer period. Of interest here is the use of another conceptual blending in (20), where the mappings WAR-PLANTS and WAR-ILLNESS are projected into a conceptual space where the virus (ILLNESS) is an enemy (WAR) that sows (PLANTS) victims.

The CONTAINER frame is used by means of two lexicalizations but is highly frequent, with 58 occurrences. Conte particularly used the verbs "limitare" (to limit) and "contenere" (to contain) and the noun "containment" to describe the management of the virus, which is then implied as something losing control and being dangerous, obviously in sanitary terms (23), but also at a socio-economic level (24).

(23) Quindi di introdurre misure restrittive che siano limitate nel tempo quanto più possibile e siano ben dosate sulla base dell'effettivo livello di rischio dei territori a cui sono dirette. Ecco abbiamo adottato quindi queste misure per cercare **di limitare al massimo, di contenere** o come dicono gli scienziati anche limitare il contagio. (Therefore, to introduce restrictive measures that are limited in time as much as possible and are well-balanced based on the actual level of risk in the areas to which they are directed. So, we have adopted these measures to try to limit to the maximum, to contain, or as scientists say, to also limit the contagion.) (Giuseppe Conte, 18/11/2020)

(24) Ecco abbiamo adottato quindi queste misure **per cercare di limitare al massimo, di contenere o come dicono gli scienziati anche limitare il contagio**. (So, we have adopted these measures to try to limit to the maximum, to contain, or as scientists say, to limit the contagion.) (Giuseppe Conte, 26/03/2020)

Moreover, it is worth noting that in (24)[6], the use of verb "limitare" is opposed to the use of the verb "contenere", since the former is less "scientific" than the latter.

The OBJECT frame presents the only lexicalisation of "colpito", past participle of the verb "colpire" (to hit). This metaphor was used to present the virus was described as an heavy object impacting on the nation/country/sanitary system, as in (25) and (26).

(25) **L'Italia è stata uno dei primi paesi colpiti** dal coronavirus e ora è pronta a fornire alla comunità internazionale il suo contributo di riflessione sul mondo del lavoro, a beneficio delle imprese. (Italy was one of the first countries hit by the coronavirus and is now ready to offer the international community its insights on the world of work, for the benefit of businesses.) (Giuseppe Conte, 07/07/2020)

(26) I criteri di allocazione di Next Generation EU non devono essere stravolti, perché si assicurano l'effettivo e efficace sostegno **di paesi, regioni e settori più colpiti dalla crisi a Covid-19**. (The allocation criteria of Next Generation EU must not be distorted, as they ensure the effective and efficient support of the countries, regions, and sectors most affected by the COVID-19 crisis.) (Giuseppe Conte, 07/07/2020)

The idea of the virus as something difficult to control can also be identified in (27) where there is a conceptual blending of three source frames (FIRE, WAR, CONTAINER) with the target frame (ILLNESS): in the "war" against COVID-19, the city of Lodi becomes the outpost that first faced the explosion and the difficult-to-control fire of COVID-19.

(27) Qui abbiamo **l'avanposto**, in particolare qui al Lodi, l**'avanposto** diciamo sanitario, il presidio sanitario che si è confrontato per primo con **quest'esplosione dell'epidemia**, **con questo fuoco** che è risultato subito **difficilmente controllabile** e mi hanno raccontato con loro i momenti, li avevo già sentiti per telefono, per vero, alcuni di loro perché erano stati in contatto anche con alcuni sindaci, con alcune famiglie. (Here we have the outpost, specifically here in Lodi, the healthcare outpost, the healthcare facility that first confronted this outbreak of the epidemic, this fire that immediately proved to be difficult to control. They shared with me their experiences, which I had already heard about over the phone, from some of them who had been in contact with certain mayors and some families.) (Giuseppe Conte, 28/04/2020)

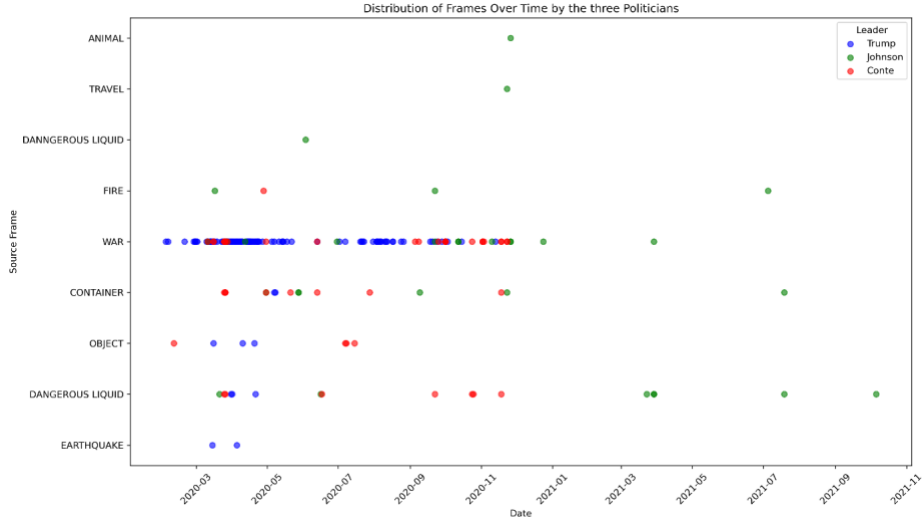
[6] We should also notice that there is a repetition made by Giuseppe Conte of the verb "limitare" (to limit), which is an expected phenomenon if we consider that he used to live stream. Secondly, there is a distinction between the politician and the scientists.

The use of the DANGEROUS LIQUID frame also promoted the idea if uncontrollability of the virus, as in (28) where the COVID-19 is a "tsunami".

(28) L'obiettivo di questa lettera che stamane abbiamo recapitato al presidente del Consiglio Europeo, Charles Michel, è quello di ribadire che l'epidemia causata dal coronavirus sta realizzando, sta provocando uno shock senza precedenti, **uno tsunami che può essere affrontato esclusivamente facendo ricorso a misure straordinarie, a misure eccezionali**. (Giuseppe Conte, 28/04/2020)

6.4 A comparative perspective

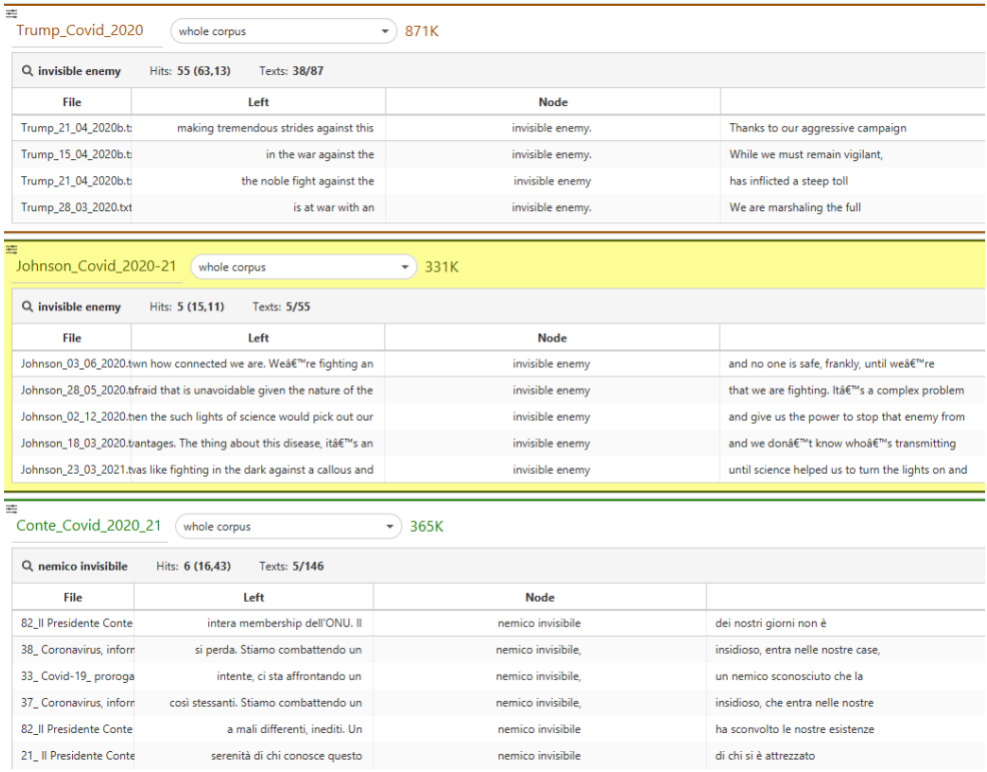
The final phase of the analysis involved comparing the frames and linguistic metaphors used by the three politicians. The focus was on both the conceptual and linguistic levels. Table 8 presents the four frames found across all three corpora. Johnson, Trump, and Conte all utilized the WAR, CONTAINER, DANGEROUS LIQUID, and OBJECT frames, which are also the most prevalent in each corpus. Additionally, similarities were observed at the linguistic level. Graph 1 illustrates the use of metaphors by the three politicians. It is evident which frames are shared by each politician and the frequency of occurrence. In Table 8, I have highlighted in bold all the linguistic metaphors used by the three politicians.



Graph 1 – Scatter Plot showing the distribution of frames over time by the three politicians

	WAR	CONTAINER	DANGEROUS LIQUID	OBJECT
JOHNSON	battle (v.)/battle (n.) combat (v.) defeat (v.) enemy (n.) fight (v.)/fightback (n.)	contain (v.)	wave (n.)	hit (v.)
TRUMP	battle(v.)/battle (n.) Combat (v.) Defeat (v.) Enemy (n.) fight(v.)/fight (n.)	Contain (v.)	Wave (n.)	hit(v.)
Conte	battaglia (battle) comattere (to combat) lotta (fight) Nemico (enemy) Sconfiggere (to defeat)	contenimento (containment) contenere (to contain)	ondata (wave) onda (wave)	colpito (hit)

Table 8 – Comparison of the linguistic metaphors of the shared frames across the three politicians



Trump_Covid_2020 | whole corpus | 871K

invisible enemy Hits: **55 (63,13)** Texts: **38/87**

File	Left	Node	
Trump_21_04_2020b.t	making tremendous strides against this	invisible enemy.	Thanks to our aggressive campaign
Trump_15_04_2020b.t	in the war against the	invisible enemy.	While we must remain vigilant,
Trump_21_04_2020b.t	the noble fight against the	invisible enemy	has inflicted a steep toll
Trump_28_03_2020.txt	is at war with an	invisible enemy.	We are marshaling the full

Johnson_Covid_2020-21 | whole corpus | 331K

invisible enemy Hits: **5 (15,11)** Texts: **5/55**

File	Left	Node	
Johnson_03_06_2020.twn how connected we are. Weâ€™re fighting an		invisible enemy	and no one is safe, frankly, until weâ€™re
Johnson_28_05_2020.tfraid that is unavoidable given the nature of the		invisible enemy	that we are fighting. Itâ€™s a complex problem
Johnson_02_12_2020.tnen the such lights of science would pick out our		invisible enemy	and give us the power to stop that enemy from
Johnson_18_03_2020.tvantages. The thing about this disease, itâ€™s an		invisible enemy	and we donâ€™t know whoâ€™s transmitting
Johnson_23_03_2021.tvas like fighting in the dark against a callous and		invisible enemy	until science helped us to turn the lights on and

Conte_Covid_2020_21 | whole corpus | 365K

nemico invisibile Hits: **6 (16,43)** Texts: **5/146**

File	Left	Node	
82_Il Presidente Conte	intera membership dell'ONU. Il	nemico invisibile	dei nostri giorni non è
38_ Coronavirus, inforr	si perda. Stiamo combattendo un	nemico invisibile,	insidioso, entra nelle nostre case,
33_ Covid-19_ proroga	intente, ci sta affrontando un	nemico invisibile,	un nemico sconosciuto che la
37_ Coronavirus, inforr	così stessanti. Stiamo combattendo un	nemico invisibile,	insidioso, che entra nelle nostre
82_Il Presidente Conte	a mali differenti, inediti. Un	nemico invisibile	ha sconvolto le nostre esistenze
21_ Il Presidente Conte	serenità di chi conosce questo	nemico invisibile	di chi si è attrezzato

Image 1: WAR metaphorical patterns across the three politicians

It is worth highlighting the significant resemblance between the Italian language and English as spoken in two socio-political systems, namely the USA and the United Kingdom. For example, in the WAR frame, I found "defeat/sconfiggere," "enemy/nemico," and "battle/battaglia"; for the CONTAINER frame, "contain/contenere", for the DANGEROUS LIQUID frame, "wave/ondata", and for the OBJECT frame, "hit/colpito". These are all translation equivalent, namely words which have the same meaning and the same role withing their langustic system. Moreover, Image 1 shows the concordances for the bi-gram "invisible enemy" for each politician, with Trump showing a particular preference at 63.13 occurrences per 1 million words, compared to 15.11 for Johnson and 16.43 for Conte.

7. Conclusions

This study aimed to examine the metaphorical representation of COVID-19 in English and Italian, in relation to three different cultural contexts: Boris Johnson for United Kingdom, Donald Trump for the U.S.A, and Giuseppe Conte for Italy. Generally, the emerging discursive image from the three politicians is characterized by a fearsome rhetoric. Each politician was trying to find a solution in an unexpected and threatening situation, as it indeed was at the beginning of the pandemic worldwide.

A remarkable outcome of the data comparison is that there are more similarities than differences in the conceptual and linguistic metaphors used to represent COVID-19 among the three cultures under study. The three politicians particularly rely on the use of the WAR frame, and to a lesser extent, to the DANGEROUS LIQUID, CONTAINER and OBJECT frames, with also translation equivalent linguistic metaphors. The differences regarded mainly minor conceptual mappings with low number of lexicalisations and occurrences. Given these similarities, the findings of this study suggest that a global rhetoric of the virus might have existed, and we can additionally hypothesize some universal kind of structures which are activated when humanity is dealing with dangerous things. In fact, the FRAMES activated here to react to COVID-19 pandemic are also present in other type of discourses which involve the present of a threatening factor as migration in the same cultural contexts (see Charteris-Black, 2006; Islentyeva, 2021; Taylor 2021; Del Fante, 2024). These results so might indicate that for some specific objects of experience, the conceptual and linguistic reaction is human-specific than cultural-specific. For this reason, I think that contrastive and cross-linguistic metaphor studies represent a fundamental line of research to understand the extent to which we can investigate the notion of universality within the conceptual metaphor theory.

Acknowledgments

This work was supported by the research grant "Fighting the Invisible Enemy: Figurative Language, Phraseology and the Spread of the Corona Virus. A Corpus Study of Political Discourse" (BIRD 2020) - CUP: C92F20001180005, funded by the Department of Linguistic and Literary Studies of the University of Padova.

References

Amoretti, F., et al. (2021). Poteri monocratici e comunicazione politica ai tempi della pandemia. Dal governo Conte II al governo Draghi. *Comunicazione politica*, 3, 333–356. https://doi.org/10.3270/102416

Anderson, W., and Corbett, J. 2009. *Exploring English with Online Corpora: An Introduction*. London: Palgrave Macmillan.

Aqromi, N. L. (2020). An Analysis of Metaphor for Corona on Headlines News. *PIONEER: Journal of Language and Literature*, *12*(2), 157-164. https://doi.org/10.36841/pioneer.v12i2.734

Augé, A. (2024). Situationally-triggered Metaphor as Political Argument: Public Responses and Argumentative Exploitation. *Journal of Argumentation in Context*, 13(1), 106–130. https://doi.org/10.1075/jaic.23002.aug

Baker, P. (2023). *Using Corpora in Discourse Analysis*. London: Bloomsbury.

Baldi, B., and Savoia, M. L. (2009) Metafora e ideologia nel linguaggio politico. *Lid'O: lingua italiana d'oggi VI*, 119-165.

Bates, B. R. (2020). The (In)Appropriateness of the WAR Metaphor in Response to SARS-CoV-2: A Rapid Analysis of Donald J. Trump's Rhetoric. *Frontiers in Communication*, *5*, 1-12. https://doi.org/10.3389/fcomm.2020.00050

Benzi, M., and Novarese, M. (2022). Metaphors We Lie by: Our 'War' against COVID-19. *History and Philosophy of the Life Sciences*, 44(18), 1-22. https://doi.org/10.1007/s40656-022-00501-2

Borrello, E. (2017). Linguaggio figurato e comunicazione politica. In Baldi, B. (Ed.) *La delegittimazione politica nell'età contemporanea: vol. 2: parole nemiche: teorie, pratiche e linguaggi*. Roma: Viella, 249-260.

Brezina, V. (2018). *Statistics in Corpus linguistics: A Practical Guide*. Cambridge University Press.

Brezina, V., and Platt, W. (2024). *#LancsBox X* (4.0.0) [Windows]. Lancaster University. https://lancsbox.lancs.ac.uk/

Brown, B. et al. (2009). Hygiene and Biosecurity: The Language and Politics of Risk in an Era of Emerging Infectious Diseases. *Sociology Compass*, 3(5), 811-823.

Burgers, C. et al. (2016). Figurative Framing: Shaping Public Discourse through Metaphor, Hyperbole, and Irony. *Communication Theory,* 26(4), 410-430.

Cameron, L. (2003). *Metaphor in Educational Discourse*. London: Continuum.

Campus, D. (2004) La comunicazione politica di Berlusconi. Percorsi di lettura. *Comunicazione politica 1*,179-190.

Charteris-Black, J. (2004). *Corpus Approaches to Critical Metaphor Analysis*. Basingstoke: Palgrave Macmillan.

Charteris-Black, J. (2006). Britain as a Container: Immigration Metaphors in the 2005 Election Campaign. *Discourse and Society*, 17(5), 563–581. https://doi.org/10.1177/0957926506066345

Charteris-Black, J. (2011). *Politicians and Rhetoric*. Basingstoke: Palgrave Macmillan. https://doi.org/10.1057/9780230319899

Charteris-Black, J. (2019). *Metaphors of Brexit: No Cherries on the Cake?* Basingstoke: Palgrave Macmillan. https://doi.org/10.1007/978-3-030-28768-9

Charteris-Black, J. (2021*). Metaphors of Coronavirus: Invisible Enemy or Zombie Apocalypse?* Basingstoke: Palgrave Macmillan.

Chilton, P. (2004). *Analysing Political Discourse: Theory and Practice*. London: Routledge.

Combei, C. et al. (2022). In Fusari, S. et al. (Eds.), *Diversità e inclusione: Quando le parole sono importanti*. Meltemi.

Cortellazzo, M. A., and Tuzzi, A. (Eds.). (2008). Messaggi dal colle: i discorsi di fine anno dei presidenti della repubblica. Venezia: Marsilio.

Degani, M. (2016). Endangered Intellect: A Case Study of Clinton Vs Trump Campaign Discourse. *Iperstoria*, 8, Article 8. https://doi.org/10.13136/2281-4582/2016.i8.392

Deignan, A. (2005) *Metaphor and Corpus Linguistics*. Amsterdam: John Benjamins Publishing.

Del Fante, D. (2022). *Metaphors and Pandemics: Spanish Flu and Coronavirus in US Newspapers. A Case-study*. https://sfera.unife.it/handle/11392/2497637

Del Fante, D. (2024). *Migrating across Times and Cultures. Metaphorical Images of Migration in the U.S. and Italian Newspaper Discourse between the 20th and 21st Centuries*. Berlin: Peter Lang. https://doi.org/10.3726/b21857.

Demata, M. (2018). *"I think That Maybe I Wouldn't Be Here if It Wasn't for Twitter". Donald Trump's Populist Style on Twitter*. https://doi.org/10.7370/89446

Demata, M. (2019a). *Political Communication and Multimodality: The Facebook Pages of Hillary Clinton and Donald Trump*, 25-46.

Demata, M. (2019b). The State of Our Union is Strong. Metaphors of the Nation in State of the Union addresses. In Šarić, L., and Stanojević,

M. M. (Eds.), *Metaphor, Nation and Discourse*. John Benjamins Publishing Company, 201-224. https://doi.org/10.1075/dapsac.82.09dem

Demata, M. (2021). Keeping the Threat Out Trump's Discourse, the Wall and the "Other". *Altre Modernità*, 25, Article 25. https://doi.org/10.13130/2035-7680/15601

Demata, M. (2023). *Discourses of Borders and the Nation in the USA: A Discourse-historical Analysis*. London: Routledge.

Díaz-Vera, J. E. (Ed.) (2015). *Metaphor and Metonymy across Time and Cultures: Perspectives on the Sociohistorical Linguistics of Figurative Language*. Berlin: Walter de Gruyter.

Döring, M., and Nerlich, B. (2022). Framing the 2020 Coronavirus Pandemic: Metaphors, Images and Symbols. *Metaphor and Symbol*, 37(2), 71-75. https://doi.org/10.1080/10926488.2021.2004378

Forciniti, A., and Paolillo, M. (2022). Da informativa ad ostile: Analisi e profilazione della comunicazione dei leader al tempo del Covid-19. *Mediascapes journal*, 19(1), Article 1.

Giardiello, M. (2021). Populismi digitali al tempo del Covid-19. *Rivista Di Digital Politics*, 2. https://doi.org/10.53227/101947

Gibbs, Jr, R. W. (1994). The Poetics of Mind: Figurative Thought, Language, and Understanding. Cambridge: Cambridge University Press.

Gillis, M. (2020). Ventilators, Missiles, Doctors, Troops … the Justification of Legislative Responses to COVID-19 through Military Metaphors. *Law and Humanities*, 14(2), 135–159. https://doi.org/10.1080/17521483.2020.1801950

Goatly, A. (1996). *The Language of Metaphors*. London: Routledge.

Guo, L., and Vargo, C. (2020). "Fake News" and Emerging Online Media Ecosystem: An Integrated Intermedia Agenda-setting Analysis of the 2016 US Presidential Election. *Communication Research*, 47(2), 178-200.

Hall, S. (1997). The Work of Representation. In Hall, S. (Ed.), Representation: Cultural Representations and Signifying Practices. Sage in association with the Open University, 1-75.

Hart, C. (2014). *Discourse, Grammar and Ideology: Functional and Cognitive Perspectives*. London: Bloomsbury Academic.

Hart, C. (2021). Animals vs. Armies: Resistance to Extreme Metaphors in Anti-immigration Discourse. *Journal of Language and Politics*, 20(2), 226-253. https://doi.org/10.1075/jlp.20032.har

Heaney, D., and Riboni, G. (2023). When a Liberal Use of Metaphor Is Really a Conservative One: The Case of Boris Johnson's Televised Press Releases. *Altre Modernità*, 29, Article 29. https://doi.org/10.54103/2035-7680/20064

Hobbes, T. (1651) *Leviathan*. London: Printed for Andrew Crooke at the Green Dragon in St. Pauls Churchyard. Freely available at https://www.gutenberg.org/files/3207/3207-h/3207-h.htm (Last accessed on 3rd June 2024).

Hodges, A. (2019). *When Words Trump Politics: Resisting a Hostile Regime of Language*. Stanford University Press.

Islentyeva, A. (2020). On the Front Line in the Fight against the Virus: Conceptual Framing and War Patterns in Political Discourse. *Yearbook of the German Cognitive Linguistics Association*, 8(1), 157–180. https://doi.org/10.1515/gcla-2020-0010

Islentyeva, A. (2021). *Corpus-based Analysis of Ideological Bias: Migration in the British Press*. London: Routledge.

Jamet, D., and Rodet, P. (2022). How is Brexit Linguistically Conceptualized? The Brexit is a Journey Metaphor Scenario in David Cameron's, Theresa May's and Boris Johnson's Speeches. *Observatoire de La Société Britannique*, 28, Article 28. https://doi.org/10.4000/osb.5658

Jaworska, S. (2021). Investigating Media Representations of the Coronavirus in the UK, USA and Germany: What Can a Comparative Corpus-based Discourse Analysis Contribute to our Understanding of the Covid-19 Pandemic? In Jones, R. H. (Ed.), *Viral Discourse. Elements in Applied Linguistics*. Cambridge: Cambridge University Press, 26-37.

Joffe, H., and Haarhoff, G. (2002). Representations of Far-flung Illnesses: The Case of Ebola in Britain. *Social Science and Medicine*, 54(6), 955-969.

Knoblock, N. (2020). Trump's Text Appeal: Vague Language in Post-Truth Politics. In Kranert, M. (Ed.), *Discursive Approaches to Populism Across Disciplines: The Return of Populists and the People*. Springer International Publishing, 119-144. https://doi.org/10.1007/978-3-030-55038-7_5

Lakoff, G., and Johnson, M. (1980). *Metaphors We Live by*. Chicago: Chicago University Press.

Lakoff, G. (1996). *Moral Politics: How Liberals and Conservatives Think*. Chicago and London: Chicago University Press.

Lederer, J. (2016). Finding Source Domain Triggers. *International Journal of Corpus Linguistics*, 21(4), 527-558.

Lockhart, M. (Ed.). (2019). *President Donald Trump and His Political Discourse: Ramifications of Rhetoric via Twitter*. London: Routledge.

Low, G. (2003). Validating Metaphoric Models in Applied Linguistics. *Metaphor and Symbol*, 18(4), 239-254.

Mautner, G. (2007). Mining Large Corpora for Social Information: The Case of Elderly. *Language in Society*, 36(01), 51-72.

Mena García, T. (2018). Donald J. Trump: A Critical Discourse Analysis. *Revista Estudios Institucionales: Revista Internacional de Investigación En Instituciones, Ceremonial y Protocolo*, 5(8), 47–73.

Mohammadi, A. N. (2023). Political Framing of Covid-19: From Metaphor to Moral Panic. *International Journal of Corpus Linguistics*, 29(2), 189–212. https://doi.org/10.1075/ijcl.22087.moh

Musolff, A. (2004). Metaphor and Political Discourse. Analogical Reasoning in Debates about Europe. Basingstoke: Palgrave MacMillan.

Musolff, A. (2021). Hyperbole and Emotionalisation: Escalation of Pragmatic Effects of Proverb and Metaphor in the "Brexit" Debate. *Russian Journal of Linguistics*, 25(3), 628-644. https://doi.org/10.22363/2687-0088-2021-25-3-628-644

Musolff, A. (2022a). Fake Conspiracy: Trump's Anti-Chinese 'COVID-19-as-war' Scenario. In Demata, M. et al. (Eds.), *Discourse Approaches to Politics, Society and Culture*. Amsterdam: John Benjamins Publishing Company, 121-140. https://doi.org/10.1075/dapsac.98.06mus

Musolff, A. (2022b). "World-beating" Pandemic Responses: Ironical, Sarcastic, and Satirical Use of War and Competition Metaphors in the Context of COVID-19 Pandemic. *Metaphor and Symbol*, 37(2), 76–87. https://doi.org/10.1080/10926488.2021.1932505

Musolff, A., et al. (Eds.). (2022). *Pandemic and Crisis Discourse: Communicating COVID-19 and Public Health Strategy*. London: Bloomsbury Publishing Company. https://doi.org/10.5040/9781350232730

Neagu, M. (2022). Metaphoric Framings of Fighting Covid-19 in Romanian and English Public Speeches. In Musolff, A. et al. (Eds.), *Pandemic and Crisis Discourse: Communicating COVID-19 and Public Health Strategy*. Bloomsbury Publishing, 255-270. https://doi.org/10.5040/9781350232730

Nerlich, B. (2022). Metaphors in Times of a Global Pandemic. In Wuppuluri, S., and Grayling, A. C. (Eds.), *Metaphors and Analogies in*

Sciences and Humanities, 453. Springer International Publishing, 421-446. https://doi.org/10.1007/978-3-030-90688-7_21

Nerlich, B., and Halliday, C. (2007). Avian Flu: The Creation of Expectations in the Interplay between Science and the Media. *Sociology of Health and Illness*, 29(1), 46-65.

Olimat, S. N. (2020). Words as Powerful Weapons: Dysphemism in Trump's Covid-19 Speeches. *3L: Language, Linguistics, Literature® The Southeast Asian Journal*, 26(3), 17-29. https://doi.org/10.17576/3L-2020-2603-02

Ottati, V. et al. (1999). The Effect of Metaphor on Processing Style in a Persuasion Task: A Motivational Resonance Model. *Journal of Personality and Social Psychology*, 77, 688-697.

Panzeri, F. et al. (2021). Does the COVID-19 War Metaphor Influence Reasoning? *PLOS ONE*, 16(4), e0250651. https://doi.org/10.1371/journal.pone.0250651

Partington, A., et al. (2013). Patterns and Meanings in Discourse: Theory and Practice in Corpus-assisted Discourse Studies. *CADS,* 55. Amsterdam: John Benjamins Publishing.

Philip, G. (2011). *Colouring Meaning: Collocation and Connotation in Figurative Language*. Amsterdam: John Benjamins Publishing.

Pilyarchuk, K., and Onysko, A. (2018). Conceptual Metaphors in Donald Trump's Political Speeches: Framing his Topics and (Self-) Constructing his Persona. *Colloquium: New Philologies*, 98-156. https://doi.org/10.23963/cnp.2018.3.2.5

Ribeiro, B., et al. (2018). Media Coverage of the Zika Crisis in Brazil: The Construction of a 'War' Frame that Masked Social and Gender Inequalities. *Social Science and Medicine*, 200, 137-144.

Ríos, A. M. (2022). El poder del lenguaje en la comunicación política en tiempos de COVID: Análisis contrastivo multilingüe de los discursos de Pedro Sánchez, Boris Johnson, Giuseppe Conte y António Costa en los inicios de la pandemia. *Altre Modernità*, 28, 37-53. https://doi.org/10.54103/2035-7680/19111

Rullo, L., and Nunziata, F. (2021). «Sometimes the Crisis Makes the Leader»? A Comparison of Giuseppe Conte Digital Communication Before and During the Covid-19 Pandemic. *Comunicazione politica*, 3, 309-332. https://doi.org/10.3270/102415

Schäffner, C. (1996). Building a European House? Or at Two Speeds into a Dead End? Metaphors in the Debate on the United Europe. In

Musolff A. et al. (Eds.), *Conceiving of Europe: Diversity in Unity*. Aldershot: Dartmouth, 31-59.

Semino, E. (2008). *Metaphor in Discourse*. Cambridge: Cambridge University Press.

Semino, E. (2020). 'A Fire Raging': Why Fire Metaphors Work well for Covid-19. *Blog Post-ESRC Centre for Corpus Approaches to Social Science (CASS)*. https://cass.lancs.ac.uk/a-fire-raging-why-fire-metaphors-work-well-for-covid-19/

Semino, E. (2021). "Not Soldiers but Fire-fighters" – Metaphors and Covid-19. *Health Communication*, 36(1), 50-58. https://doi.org/10.1080/10410236.2020.1844989

Semino, E., and Masci, M. (1996). Politics is Football: Metaphor in the Discourse of Silvio Berlusconi in Italy. *Discourse and Society*, 7(2), 243-269. https://doi.org/10.1177/0957926596007002005

Shu, K. et al. (2020). Mining Disinformation and Fake News: Concepts, Methods, and Recent Advancements. In Shu, K. et al. (Eds.), *Disinformation, Misinformation, and Fake News in Social Media. Emerging Research Challenges and Opportunities*. Berlin: Springer International Publishing, 1-19.

Spina, S. (2012). *Openpolitica. Il discorso dei politici italiani nell'era di Twitter*. Milano: Franco Angeli.

Spinzi, C., and Manca, E. (2017). Reading Figurative Images in the Political Discourse of the British Press. *Textus*, 1, 241-256.

Spinzi, C. G. (2019). A Cross-cultural Study of Figurative Language in Museum Audio Descriptions. Implications for Translation. *Lingue and Linguaggi,* 33, 303-316.

Sullivan, K. (2019). *Mixed Metaphors: Their Use and Abuse*. Bloomsbury Academic/Bloomsbury Publishing Plc.

Taylor, C., and Del Fante, D. (2020). Comparing across Languages in Corpus and Discourse Analysis: Some Issues and Approaches. *Meta: Journal des traducteurs*, 65(1), 29. https://doi.org/10.7202/1073635ar

Taylor, C. (2021). Metaphors of Migration over Time. *Discourse and Society*, 095792652199215. https://doi.org/10.1177/0957926521992156

Thibodeau, P. H. et al. (2017). How Linguistic Metaphor Scaffolds Reasoning. *Trends in Cognitive Sciences*, 21(11), 852-863.

Thibodeau, P. H., et al. (2019). The Role of Metaphor in Communication and Thought. *Language and Linguistics Compass*, 13(5), e12327. https://doi.org/10.1111/lnc3.12327

Tornero, J. M. P. et al. (2021). Pandemia y guerra: Narrativas de crisis y liderazgo. Análisis de las estrategias discursivas presidenciales en el inicio de la pandemia del COVID-19. *Revista Latina de Comunicación Social*, 79, 1-21. https://doi.org/10.4185/RLCS-2021-1500

Ungar, S. (1998). Hot Crises and Media Reassurance: A Comparison of Emerging Diseases and Ebola Zaire. *British Journal of Sociology*, 36-56.

Ungar, S. (2008). Global Bird Flu Communication: Hot Crisis and Media Reassurance. *Science Communication*, 29(4), 472-497.

Ventura, S. (2021). La gestione della crisi e il meaning-making. Narrazione e manipolazione nelle conferenze stampa di Giuseppe Conte durante la pandemia del coronavirus. *Comunicazione Politica*, 1/2021. 19-46. https://doi.org/10.3270/100309

Venturini, P. (2022). *La parabola del consenso: L'evoluzione politica e mediatica di Giuseppe Conte*. Edizioni Epoké. https://www.torrossa.com/it/resources/an/5126940

Vessey, R. (2013). Challenges in Cross-linguistic Corpus-assisted Discourse Studies. *Corpora*, 8(1), 1–26. https://doi.org/10.3366/cor.2013.0032

Wallis, P., and Nerlich, B. (2005). Disease Metaphors in New Epidemics: the UK Media Framing of the 2003 SARS Epidemic. *Social Science and Medicine*, 60(11), 2629-2639.

Washer, P. (2004). Representations of SARS in the British Newspapers. *Social Science and Medicine*, 59(12), 2561-2571.

Washer, P. (2006). Representations of Mad Cow Disease. *Social Science and Medicine*, 62(2), 457-466.

Wicke, P., and Bolognesi, M. M. (2020). Framing COVID-19: How We Conceptualise and Discuss the Pandemic on Twitter. *PLOS ONE*, 15(9), e0240010. https://doi.org/10.1371/journal.pone.0240010

Willems, K. (2012). Intuition, Introspection and Observation in Linguistic Inquiry. *Language Sciences*, 34(6), 665-681. https://doi.org/10.1016/j.langsci.2012.04.008

Dataset

Miller Center of Public Affairs, University of Virginia. (2024) "Presidential Speeches: Downloadable Data". Accessed June 17, 2024. data.millercenter.org.

Rev. (2024). Rev Transcripts Archive. Retrieved from https://www.rev.com/blog/transcripts

The United Kingdom Government. (n.d.). "News and Communication". Accessed June 17, 2024. https://www.gov.uk/search/news-and-communications

Palazzo Chigi. (n.d.). Videos. Accessed June 17, 2024. https://www.youtube.com/@palazzochigi/videos

Visual metaphoricity across languages:

The greenhouse effect and the carbon footprint in educational videos

Anaïs Augé,
UCLouvain (Belgium)

Yuxin Liu,
Shanghai University of Political Science and Law and Fudan University (China)

Abstract

This paper proposes a comparative approach to visual metaphors in Chinese-Mandarin and British-English educational videos about the climate crisis. In the English language, many theoretical concepts are described metaphorically: this is especially true for the "greenhouse" effect and the carbon "footprint". However, in Chinese-Mandarin, the metaphorical meaning of these two expressions seems to differ ("the amount of emitted carbon").

The existing literature has shown that metaphors are prevalent in educational discourse about the climate crisis (Manca and Spinzi 2022) as they can fulfil a pedagogical function (Augé, 2022a; Deignan, et al., 2019). We therefore ask how different degrees of metaphoricity are realised visually, in educational videos aimed at children.

To address this question, we compiled a dataset of 43 educational videos explaining the concepts of the "greenhouse effect" and the "carbon footprint" in English and Mandarin languages. Our analysis sheds light on the different educational uses of visual metaphors in both languages. This paper aims to illustrate such differences through the qualitative analysis of 9 visual occurrences extracted from our dataset, which all use metaphors following different educational strategies. For instance, English videos transform the verbal source concepts of the "greenhouse effect" and "carbon footprint" metaphors into visual source concepts (visual representations of a literal "greenhouse" and a literal "footprint"). In contrast, Chinese-Mandarin videos rely on a plurality of different source concepts to represent and explain different features of the "greenhouse effect" and "carbon footprint".

We conclude that the visual source concepts represented in Chinese videos not only explain climate science to children (like in English videos), but they also alert children to the danger of environmental inaction.

Keywords: Climate crisis; greenhouse effect; carbon footprint; educational videos; metaphoricity

1. Introduction

This paper proposes an investigation into the use of visual metaphors in educational videos about the climate crisis. Existing research has long identified cultural and linguistic variations in the realisation of metaphors across countries (Augé, 2019; 2022a; 2023; Kövecses, 2005). Such variations are particularly prevalent in the discourse of climate crisis: the climate crisis represents a global phenomenon, which yet affects different parts of the world in different ways (Gattey, 2021; Sachs 1993). As metaphors are attached to people's experiences and subjectivity (Musolff, 2016), different experiences of the climate crisis ultimately result in different metaphorical realisations employed to conceptualise such complex and subjective experiences (Augé, 2023). Thus, the United Nations Framework Convention on Climate Change (2019) established a distinction between experiences in Global North countries and Global South countries. Our aim is therefore to examine the impacts of such different experiences in the metaphorical discourse produced within the Global North and the Global South.

In particular, this paper focuses on the impact of these different environmental experiences on the use of metaphors as an educational strategy. Indeed, metaphor scholars documented the pedagogical function of climate crisis metaphor (Deignan et al., 2019; Nerlich and Hellsten, 2014). Accordingly, the complexity of the climate crisis (the target concept) is downplayed through the use of a more concrete source concept (Kövecses, 2010). Notably, metaphor scholars identified two prevalent pedagogical metaphors: the "greenhouse effect" (Augé, 2022b; Deignan et al., 2019) and the "carbon footprint" (Augé, 2022a; Koteyko, 2010; Nerlich and Hellsten, 2014). Interestingly, our preliminary research on the electronic corpora British National Corpus and Chinese OPUS (accessed through SketchEngine, Kilgarriff, 2014; see Augé, 2022a) demonstrates that the EARTH AS A GREENHOUSE metaphor occurs both in the (British) English and (Mandarin) Chinese languages (**温室效应** wēn shì xiào yìng). In contrast, the IMPACT OF CARBON EMISSIONS AS A FOOTPRINT metaphor prevails in the English language. However, the Chinese electronic corpus represents the target concept through a non-figurative expression: **二氧化碳排放量** èr yǎng huà tàn pái fàng liàng, "the amount of emitted carbon".

This preliminary finding leads us to investigate the educational functions of these expressions. The English language requires a concrete source

concept to represent the target, yet the Chinese language does not seem to concretise this target through metaphor. We thus ask how these different degrees of metaphoricity are realised visually, in educational videos aimed at children.

This research question draws on previous findings showing that visual realisations of climate crisis metaphors further disambiguate the conceptual mappings at play in verbal metaphors (Augé, 2022a; 2023; see section 2.3.). This paper thus proposes to investigate how this disambiguation occurs in visual realisations of a non-metaphorical verbal expression ("the amount of emitted carbon") compared with the visual realisations of a metaphorical expression ("the greenhouse effect") in Chinese educational videos.

In the following section, we review existing findings related to climate crisis metaphors across modes and languages. We then thoroughly explain the different methodological steps undertaken to answer our research question. This leads us to analyse the visual realisations of the metaphorical expression **温室效应** wēn shì xiào yìng ("the greenhouse effect") and the non-metaphorical expression **二氧化碳排放量** èr yǎng huà tàn pái fàng liàng ("the amount of emitted carbon") in our dataset. We end this paper with a discussion of the different visual features observed in Chinese and English educational videos about the climate crisis.

2. Climate crisis metaphors across modes and languages

2.1 The educational function of climate crisis metaphors

Metaphors prevail in climate crisis discourse. They can make the topic less complex (e.g., quantifying one's "carbon footprint", Augé, 2022a; Nerlich and Hellsten, 2014), they can promote issues related to climate change mitigation and policies (e.g., the "war" against climate change, Atanasova and Koteyko, 2017), they can persuade recipients of the urgency to tackle the problem (Flusberg et al., 2017), and they can attract public attention to the issue (Augé, 2023).

In specialist discourse, metaphors are "ordinary scientific concepts" used to hypothesise and explain scientific claims (Knudsen, 2003: 1255). Comparatively, in non-specialist discourse, these metaphors are explicated to support the explanation of scientific observations (Knudsen, 2003: 1260). Nerlich and Hellsten (2014) draw on this distinction and demonstrate that the metaphor EARTH AS A GREENHOUSE may be seen as a specialist

metaphor, coined by climate scientists to name a concept that was just discovered. In contrast, their study shows that the metaphor IMPACT OF CARBON EMISSIONS AS A FOOTPRINT is a non-specialist metaphor that appears in public discourse to enable climate scientists to interact with "lay" people (Nerlich and Hellsten, 2014).

Deignan, et al. (2019) compare the use of climate change metaphors in scientific papers, in educational texts, and in students' talks. Their results show that the meaning of metaphors has been adapted to fit a particular context, interest, or experience. For instance, the metaphor EARTH AS A GREENHOUSE appears in all investigated genres and registers. Yet, educational texts and students' talks seem to significantly rely on this particular metaphor (2019: 385-388). However, the scholars' analysis shows that the metaphor may lead to misunderstanding. The interviewed students referred to the "greenhouse effect" as a thin layer around the planet which does not let heat out, while greenhouse gases are rather "dispersed" in the atmosphere, according to the linguists' academic corpus (Deignan et al., 2019: 394).

Existing research has shown that the metaphor THE IMPACT OF CARBON EMISSIONS AS A FOOTPRINT can be ideologically exploited. The metaphor favours people's understanding of management policies to protect the environment (Koteyko, 2010: 664; Koteyko et al., 2009: 30-9). Its adaptation in online communication demonstrates that exploitations of the source concept FOOTPRINT emphasise the link between pollution and humans' daily activities (e.g., "carbon diet"; Koteyko, et al., 2009: 40). Additionally, the source concept has been exploited to convey a strong criticism addressed to polluters: the metaphorical expression "carbon Bigfoot" (2009: 43) echoes the mapping at play in the metaphorical expression "carbon footprint", but it focuses on the OWNER OF THE FOOTPRINT rather than on the FOOTPRINT itself.

Indeed, the educational function of climate crisis metaphors may shift into a more ideological function in argumentative discourses (Augé, 2023). Such arguments may insist on the need for urgent actions to avert the climate crisis, but they may also promote sceptical views on the topic (Augé 2022b). Notably, Critical Metaphor Analysis (Charteris-Black, 2004) demonstrates that metaphors rely on a shared system of values and emotive force, favouring ideological exploitations (Charteris-Black, 2004: 12).

It follows that this "shared system of values" (Charteris-Black, 2004: 12) only prevails among a particular community who acknowledges such values (Sharifian, 2017). For instance, Kövecses (2005; 2010) compares the metaphors HAPPINESS IS FLOWERS IN THE HEART in Chinese with BEING HAPPY IS BEING OFF THE GROUND in American English. The different mappings are explained in terms of the "introverted-extroverted" characters of the metaphor users (2005: 70-71). Kövecses highlights that, despite these different mappings, metaphorical production respects the similar characteristics shared by the source and target concepts (2010: 77-79). Such a similarity promotes the recurrence of particular metaphorical expressions across cultures. This cross-cultural aspect was documented by Musolff (2016). He analysed the metaphorical expression "body politic" in responses to a survey involving participants from various countries. His results showed culture-specific exploitations: Chinese participants focused on the geographical features involved in the mapping (e.g., geographical shapes related to anatomy), whereas European, Israeli, and American participants focused on body politic as a functional whole (2016: 123-124).

In climate crisis discourse, such a distinction between languages and cultures has also been discussed by Augé (2019; 2023). The metaphorical expression "Mother Earth-Mother Nature" in English, French, and Spanish media discourses demonstrate nationalistic features. These features convey different personalities to the MOTHER which vary depending on the language of production: the MOTHER may be "strict", "sick", or "righteous" (Augé, 2019). In a corpus of 11,967 texts produced during international political meetings about the climate crisis (e.g., Conferences of the Parties), Augé (2023) further considers the impact of different environmental experiences in the Global South and in the Global North on the exploitation of metaphors. By following the procedures established in Critical Metaphor Analysis (Charteris-Black, 2004), she identifies three main strategies adopted by activists and politicians from the Global South. Such strategies aim at transforming prevalent conceptualisations of the climate crisis into conceptualisations that fit the environmental experiences of Global South communities. For instance, discourse producers exploit political metaphors to promote counter-arguments (e.g., CLIMATE MIGRATION AS A DISEASE versus CLIMATE MIGRATION AS A CURE), they insist on the traditional values attributed to source and target

concepts (e.g., EXTRACTION OF RESOURCES AS EXTRACTION OF HUMANITY), and they draw a causal link between historical and modern mischiefs (POLLUTION AS COLONISATION). Such strategies shed light on the argumentative strength of metaphors used by Global South communities, which involve conceptualisations of people's extensive experiences of the climate crisis (Augé, 2023, 124-143). Therefore, climate crisis metaphors may not only differ following different cultural conceptualisations (Kövecses, 2005), but also different experiences of the climate crisis.

2.3 Climate crisis metaphors across modes

Forceville (1994, 1996) defines visual metaphor as a replacement of an expected visual element by an unexpected one. He notes that there must be no pre-existent or conventional connection between these two elements (Forceville, 1994).

Visual metaphors have been documented in environmental discourse (Hidalgo-Downing and O'Dowd, 2023). Existing literature has demonstrated that visual metaphors increase people's concerns and make the environmental problem more tangible (Meijers et al., 2019, 999). Notably, Doyle (2007) identifies a wide range of "alarming" metaphors observed in the posters produced by the environmental organisation Greenpeace (e.g., THE CLIMATE CRISIS AS A TIME BOMB). Pérez-Sobrino (2013) investigates the advertisement of environmentally-friendly marketed products and notices the prevalence of the colour green to represent the products as desirable items (i.e., GREEN AS DESIRABLE). Indeed, visual realisations of climate crisis metaphors have been mainly documented for their ideological functions. Deignan (2017) adopts a different approach: she analyses scientific graphs and diagrams and establishes that associated verbal metaphors guide the readers to interpret these visual representations.

The present study draws on these existing findings, particularly in relation to the educational function of climate crisis metaphors (section 2.1.) realised visually (section 2.3.) in two different regions of the world (Global South-Global North, section 2.2.). Notably, this study relies on previous findings regarding the disambiguation enabled by visual realisations of climate crisis metaphors in educational videos produced in English (Augé, 2022a). In this context, metaphors can act as a major "popularisation technique" (Manca and Spinzi, 2022). Such findings emerge from the

analysis of verbal occurrences of the metaphorical expressions "the greenhouse effect" and "carbon footprint" in a corpus of 742 newspaper articles published in the UK. This corpus analysis of verbal metaphors casted light on conceptual ambiguity regarding the characteristics of the source concepts (e.g., the "greenhouse" as "glass layer" or as a "trap"; the "footprint" as a "(in)visible" or "deep" imprint). This corpus analysis was thus supplemented by the analysis of visual realisations of such metaphors in 27 educational videos: it was established that the educational scope of such videos would limit ambiguous representations of the source concepts (Augé, 2022a). Manca and Spinzi (2022: 20) also demonstrated that the urgent need for positive change was particularly visible in educational videos aimed at young children, which prompts the audience to adopt sustainable attitudes. Results show that educational videos effectively disambiguate the metaphorical conceptualisations: visuals insist on the heat provided by the GREENHOUSE, whose glass walls eventually increase temperatures. They also insist on the human origins of the FOOTPRINT (notably, through cartoonish representations of Western male figures; see Augé, 2022a; 2023). Therefore, the present study aims to uncover whether such a disambiguation process is also at play in Chinese educational videos representing metaphorical and non-metaphorical environmental concepts.

3 Methodology

Our research started on the Chinese (Mandarin) electronic corpus Chinese OPUS (Traditional and Simplified), accessed through SketchEngine (Kilgarriff, 2014). This research aimed at testing the metaphoricity of the Chinese expressions related to the English metaphorical expressions "greenhouse effect" and "carbon footprint". Accordingly, we relied on the search terms **温室效应** wēn shì xiào yìng ("greenhouse effect"), **二氧化碳** èr yǎng huà tàn ("carbon") and **脚印** jiǎo yìn ("footprint"). However, the concordance of "carbon" and "footprint" yielded no result. The electronic corpus displayed a total of 10.391 occurrences of "**温室效应**" ("greenhouse effect"), showing the relevance of the metaphorical expression in the Chinese corpus. In addition, the electronic corpus displayed a total of 2,564 occurrences of the expression "**二氧化碳排放量**" ("the amount of emitted carbon") within a total of 6,257 occurrences of "**二氧化碳**" ("carbon"). The lack of results showing concordances of "carbon" and "footprint",

supplemented by the repetitive concordance of "carbon" and "amount of emissions", led us to conclude that the English metaphorical expression "carbon footprint" had no metaphorical equivalent in Chinese Mandarin (see Katan, 2004). We thus relied on the search terms "**温室效应**" ("greenhouse effect") and "**二氧化碳排放量**" ("the amount of emitted carbon") in the remainder of our research. The relevance of these two expressions in Chinese climate crisis discourse has also been informally discussed with Chinese native speakers at the University of Shanghai (China) and at the Catholic University of Louvain (Belgium).

The exploitation of a similar metaphor ("greenhouse effect") in English and Chinese languages highlights a need to de-complexify the target concept in both languages. However, the Chinese language relies on a non-metaphorical expression to describe the concept "carbon footprint", exploited metaphorically in English texts. We can thus speculate that Chinese (Mandarin) communities are familiar enough with the target concept (i.e., the impact of carbon pollution) to describe it through literal expressions. This led us to wonder about the visual realisations of such a non-metaphorical concept in educational videos: the targeted audience of such videos (i.e., children) may not be familiar with climate concepts in the same way Chinese adults may be. Because of this lack of familiarity, video producers may rely on visual metaphors to explain this non-metaphorical concept. In addition, these different degrees of metaphoricity observed in English and Chinese expressions also led us to analyse the visual realisations of the metaphorical expression "greenhouse effect". This analysis aims to possibly establish different educational strategies (see Manca and Spinzi 2022) in the use of visual metaphors in English and Chinese videos.

The analysis of educational videos is favoured over other visual realisations (e.g., cartoons). Particular attention has been paid to the semantic interrelation existing between visual and verbal realisations of the environmental concepts: educational videos can display explicit (verbal) explications of the concept that is being represented visually. In other words, the metaphorical conceptualisation of the visual concept may be "flagged" (Šorm and Steen, 2018) visually and-or verbally in videos. We rely on the video platform Youtube[1] to select these videos: this platform is favoured because it warrants longer access to the selected videos[2]. In

[1] The URLs of the selected videos are provided at the end of this paper,

[2] As part of this research was conducted outside China, exclusive reliance on Chinese, national platforms would have eventually prevented us from finalising the research.

addition, this research is part of a large-scale project (ongoing) that aims at comparing visual metaphors of the climate crisis in different languages. The international relevance of Youtube thus helps to provide enough ground for comparison with visual metaphors realised in other languages. We rely on the search terms "温室效应" ("greenhouse effect") and "二氧化碳排放量" ("the amount of emitted carbon") to access educational videos.

During the selection process, we pay particular attention to the audience targeted by these videos: such indications may be found in the descriptions of the videos and-or in the content, with visual representations of cartoonish child figures or verbal indications of a child's voice. The average time of the selected videos is 3:51 minutes (shortest video: 1:23 minutes; longest video: 6:47 minutes). Overall, 16 educative videos have been selected for the purpose of this research.

The visual and verbal representations associated with the two expressions are analysed following the procedures established by VISMIP (Šorm and Steen, 2018). VISMIP is a procedure to identify visual metaphors, its steps can be summarised as follows:

1. look at the entire image, including visual and verbal elements, to establish a general understanding of the meaning;
2. structure descriptive phrase(s);
3. find incongruous visual units;
4. test whether the incongruous units are to be integrated within the overall topical framework by means of some form of comparison;
5. test whether the comparison(s) is-are cross-domain;
6. test whether the comparison(s) can be seen as some form of indirect discourse about the topic (Šorm and Steen, 2018).

This procedure leads us to identify a large range of visual source concepts (discussed in the following sections), which are exploited by video producers to represent the metaphorical ("greenhouse effect") and non-metaphorical ("the amount of emitted carbon") expressions. Considering this variety of visual source concepts, we aim at analysing the educational strategies at play in the realisation of such visual metaphors. The videos have then been analysed following the methodology established in Critical Metaphor Analysis (Charteris-Black, 2004) 1. Identification, 2. Interpretation, 3. Explanation. In the identification phase, we conduct the VISMIP procedure. In the interpretation phase, we consider how the source concepts are represented in relation to the target concepts. In the explanation phase, we focus on the context to analyse how the visual metaphors can guide the audience's understanding of the climate crisis.

We thus propose a qualitative analysis of the visual metaphors identified in educational videos. The nine videos discussed below illustrate the variety of visual source concepts along with the variety of educational strategies performed through the use of visual metaphors.

4 The "greenhouse effect" in Chinese educational videos

Our first observation from the educational videos included in our dataset concerns the reliance on the source domain GREENHOUSE presented through its "literal" features that is, a plant container. Indeed, three videos rely on pictures or drawings representing a "literal" greenhouse with glass walls. Rather, these visuals function as similes (or direct metaphors, Steen et al., 2010) that clearly compare the two CONTAINERS (the greenhouse and the Earth). These similes indicate that the video producers avoid the production of an "indirect" metaphor (Steen et al., 2010). Indeed, a simile or direct metaphor involves a "tuning device" (Cameron and Deignan, 2003) such as "like", "as" or "equivalent to" to emphasise the figurative meaning of an expression. In contrast, an indirect metaphor guides the audience to perceive the target domain in terms of the source domain (i.e., the target domain *is* the source domain). In visual realisations of a metaphor, a direct metaphor is perceived through pictures of the source domain (i.e., a literal greenhouse) and pictures of the target domain (i.e., the Earth) subsequently represented through their respective identifying features (i.e., a plant container and the Earth). Alternatively, an indirect metaphor in visual representations is perceived through pictures presenting some aspects of the source and some aspects of the target domains (Forceville, 1996; see below). Therefore, in the three videos that represent a "literal" greenhouse, the production of a visual simile might be justified by the video producers' aim at preventing the audience from misunderstanding the metaphorical mapping at play. The videos are addressed to viewers who may not have enough experiential knowledge of the referents of the source and target domains (i.e., children). Alternatively, the indirect realisation of the metaphor (i.e., the target domain *is* the source domain) may not be considered explicit enough to help children understand the environmental concept. To overcome such a conceptual complexity, the video producers thus choose to rely on visuals which explicitly represent the ground of the metaphorical mapping.

Another category of visual representations provides more indications regarding the educational strategies at play in the use of visual metaphors. Indeed, in two videos included in our dataset, drawings of the planet can be observed: the planet is represented surrounded by a circle identified (verbally) as the atmosphere. The visual source concept provides concrete and visible characteristics to the ATMOSPHERE AS A SURROUNDING CIRCLE. These characteristics are supplemented by the visual realisations of different types of ARROWS, representing the gases (verbal indications). These ARROWS can either emerge from the background and are prevented from ENTERING THE CIRCLE (Figure 1), or they can arise from within the CIRCLE and are prevented from EXITING THE CIRCLE (Figure 2).

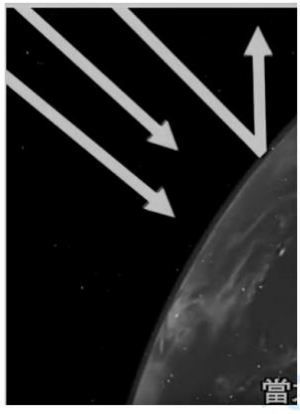


Figure 1. GREENHOUSE EFFECT AS CIRCLE-ARROWS
Source【暖化戰爭首部曲】溫室效應原理 https://www.youtube.com/watch?v=-R5fsnZKNIE

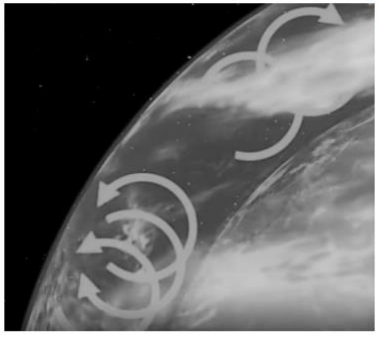


Figure 2. GREENHOUSE EFFECT AS CIRCLE-ARROWS - Source【暖化戰爭首部曲】溫室效應原理 https://www.youtube.com/watch?v=-R5fsnZKNIE

The visual metaphors convey different representations of the "greenhouse effect": in Figure 1, the video producers focus on ARROWS oriented outward, which insists on the human-made origin of the gases (GREENHOUSE GAS EMISSIONS AS A MOVEMENT FROM THE EARTH TO THE ATMOSPHERE). In Figure 2, the video producers focus on the ARROWS oriented inward, showing the impact of greenhouse gas emissions (THE GREENHOUSE EFFECT AS A TRAP FOR THE EARTH). Therefore, in Figure 1, the scope remains educational because the visual metaphor is exploited to make the direction of gas emissions visible. In contrast, in Figure 2, the educational scope may be associated with an argumentative scope (Augé, 2023) because the visual metaphor highlights the impossibility for the gases to EXIT THE CIRCLE. This impossibility to EXIT may thus lead children to recall possible experiences of being trapped. The visual source concept TRAP implied in the video may thus emphasise the negative characteristics of the greenhouse effect. Such visual realisations of the metaphorical expression "greenhouse effect" still rely on the characteristics at play in the verbal metaphor: they visually represent the concrete, visible, and solid features of the "greenhouse" represented as a CIRCLE, while the ARROWS serve to represent the (LACK OF) MOVEMENTS of the gases once they are emitted from the Earth.

In one of the videos, the gases are represented as YELLOW AND RED DOTS emerging from animated pictures of cars and factories. The animation illustrates how the GASES AS DOTS remain around the urban area, metonymically represented through cars and factories (Figure 3).

Figure 3. GREENHOUSE EFFECT AS CONVERGING DOTS - Source 监测大气以减少城市温室气体排 **放** https://www.youtube.com/watch?v=1VROhSgtS7k

This video shows that the DOTS progressively converge on top of the illustrated buildings and their animated movements demonstrate the impossibility for the DOTS to "fly away". Hence, this visual metaphor represents the atmosphere or the sky as a physical barrier preventing the DOTS from leaving the urban area. Like in Figure 2, the educational scope of the video merges with an argumentative scope: the urban area transforms into a CONTAINER OF DOTS, leading to presuppositions regarding the interrelation between continuous emissions of GASES-DOTS and the CONTAINING CAPACITY OF THE CONTAINER. In this video (Figure 3), the video producer thus focuses on the representation of the greenhouse effect as a long-term threat, by showing to children how a large number of DOTS may eventually lead the CONTAINER to overflow. In addition, the visible characteristics attributed metaphorically to the gases reinforce this visual representation of the danger: as the number of COLOURED DOTS increases, the pictures of cars and factories (which may represent a familiar environment to children) fade away. Ultimately, the continuous emissions of DOTS result in the disappearance of the urban area. Therefore, while the colours applied to the DOTS may seem appealing to young children, the video insists on the danger of excessive emissions. It is to be noted that this visual metaphor also resonates with the verbal metaphor, as both representations involve the conceptualisation of the atmosphere as a CONTAINER.

Another metaphorical realisation identified in the educational videos relies on a different, yet related, source concept to illustrate the greenhouse effect. In one video, a drawing of the planet can be observed. This video places the representation of the planet within a GLASS BOTTLE closed by a WOODEN LID (Figure 4).

Figure 4. GREENHOUSE EFFECT AS A GLASS BOTTLE-WOODEN LID - Source 104-9-2 **溫室效應** https://www.youtube.com/watch?v=HtvX17cn__c

The GLASS BOTTLE attributes transparent and solid characteristics to the atmosphere. Like in the videos previously discussed, the greenhouse effect is represented as a CLOSED CONTAINER TRAPPING the planet. In particular, the WOODEN LID visually insists on the "trapping" characteristics of the greenhouse effect. On the one hand, the source concept GREENHOUSE transforms into the visual source concept GLASS BOTTLE, as children may have more experiences with the latter than the former source concepts. Such experiences may lead them to better understand the containing and trapping characteristics of the greenhouse effect. On the other hand, this visual metaphor serves an argumentative function because it relies on the unmatching features of the source and target concepts: a BOTTLE is too small to contain the EARTH. These unmatching features are visually exploited to further characterise the greenhouse effect as a SMALL CONTAINER in which the Earth is trapped. Therefore, the BOTTLE may not only echo children's experiences, but also visually represents the incongruity: just like a greenhouse is to contain plants and not humans (Augé, 2022b), the BOTTLE is to contain liquids and not the planet. The educational purpose of the video thus leads the video producer to exaggerate, visually, the arguments derived from the verbal metaphor. In addition, the representation of the WOODEN LID may be analysed from an argumentative scope. It presupposes that REMOVING THE LID would help humans (inhabiting the planet) to access fresh air (outside the BOTTLE-GASES). This presupposition relies on the audience's experiential knowledge to implicitly refer to a typical action that individuals can take to solve this incongruity. This metaphor may thus also visually represent the solution to avert the greenhouse effect: climate actions. Although the danger is visually emphasised, the WOODEN LID represents climate actions as an easy task. This contrast between danger and simple solutions may ultimately encourage children to engage, in the future, in a more sustainable lifestyle.

Interestingly, the visual metaphors related to the "greenhouse effect" in the selected educational videos all seem to insist on the TRAPPING characteristics of the gases. Such visual characteristics help video producers to represent the greenhouse effect as a danger associated with excessive emissions. Therefore, the focus is on the cause (e.g., OUTWARD MOVEMENT OF THE ARROWS) and consequences (e.g., OVERFLOWING CONTAINER) of the greenhouse effect. Accordingly, the metaphorical meaning has been adapted to the topic of discourse (the climate crisis) to visually convey dangerous (trapping) characteristics to the

source concept GREENHOUSE. Indeed, this danger may not be perceptible in visual representations of a direct metaphor such as THE EARTH IS LIKE A GREENHOUSE. Educational videos thus adapt the representations of the source concept to inform children that the greenhouse effect needs to be controlled and averted. Another surprising finding is related to the lack of visual representation of the warmth contained in the GREENHOUSE. This lack of representation may be explained by the educational function of the videos: children may better understand the danger in terms of being trapped, while they do not have sufficient experience of temperature increase to perceive such temperatures as a danger.

In the following section, we investigate the metaphorical representations of the non-metaphorical concept **二氧化碳排放量** ("the amount of emitted carbon") in Chinese educational videos.

5 The "amount of emitted carbon" in Chinese educational videos

Considering the non-metaphorical meaning of the expression **二氧化碳排放量** ("the amount of emitted carbon"), our search for visual metaphors representing this concept leads us to observe instances where the concept is not metaphorically represented. For instance, in eight videos, the "amount of emitted carbon" is illustrated through geographical maps with colour codes (green and red) which establish the different amounts of carbon emissions in different countries. We can speculate that the use of colour codes on maps is a conventional strategy to illustrate national differences. We might also perceive the metaphorical meaning of such colour codes in the context of the climate crisis. Accordingly, GREEN represents LOW AMOUNT OF EMITTED CARBON while RED represents HIGH AMOUNT OF EMITTED CARBON. Yet this metaphorical meaning may not be grasped by children as this colour code echoes the discourse history (Zinken, 2007) associated with the metaphor GREEN AS DESIRABLE (Pérez-Sobrino, 2013). Children may still perceive the metonymical meaning of the green colour, which is a colour that can be displayed by environmental resources. Such colour codes might thus help children to distinguish "environmentally-friendly" countries from "non-environmentally-friendly" countries. Consequently, such videos do not offer metaphorical representations of the concept "amount of emitted carbon", but they focus on the reason why such an amount needs to be

calculated. However, Chinese children may also perceive the red colour positively, considering the prevalent ideological use of red in Chinese politics (Priestland, 2009). Eventually, such videos lead children to reflect on the distinction made by the United Nations between Global South and Global North countries, but they do not convey any explanation regarding the characteristics of carbon emissions.

Despite the non-metaphorical conceptualisation of "the amount of emitted carbon", our dataset includes three videos which rely on visual metaphors to represent the concept.

For instance, one educational video explicitly refers to the English metaphorical expression "carbon footprint". This video displays a "literal" footprint to illustrate the amount of carbon emissions. The reference to English sources is mentioned by the Chinese speaker who relies on the visual source concept FOOTPRINT to explain the content of a scientific report produced in English. This visual metaphor is thus conceived as a case of metaphorical translation rather than a metaphorical adaptation in the Chinese visual language. This reliance on a foreign source concept may be ideologically oriented: the video producer informs children that the findings produced in this report are not applicable to the Chinese context. Therefore, the visual metaphor represents the "amount of emitted carbon" through a national lens. The lack of visual representation of the concept to describe the Chinese context may ultimately lead children to believe that such a "carbon footprint" only concerns English individuals.

In one of the videos, "the amount of emitted carbon" is pictured as ANGRY BLACK CLOUDS emerging from pictorial representations of factories (Figure 5).

Figure 5. CARBON EMISSIONS AS AN ANGRY CLOUD - Source 麥兜低碳動畫系列 - 個人可以做什麼 URL: https://www.youtube.com/watch?v=xfxAzVNLVhs

This visual metaphor first conveys a visible feature to the target concept (i.e., carbon). Accordingly, the video producer insists on the fact that the emitted carbon remains in the atmosphere or in the sky (i.e., a CLOUD). This conceptualisation is reinforced by the personification of CARBON as an ANGRY INDIVIDUAL, which suggests that the CLOUDS appear to achieve mischievous actions. This ANGRY FACE also attributes human characteristics to the target concept, which can metaphorically insist on the human origins of carbon emissions. Therefore, this visual metaphor combines educational and argumentative functions: on the one hand, it explains the impact of (invisible) carbon emissions which, when excessed, transform into an accumulation of BLACK CLOUDS. This resonates with children's experiential knowledge as they may associated black clouds with forthcoming rain or even storms. The source concept thus enables the video producer to represent the disadvantageous consequences of carbon emissions which may ultimately lead to "bad weather". This representation of excessive carbon emissions as BLACK CLOUDS may yet lead children to believe that the impact of carbon pollution remains punctual, just like bad weather. It can be inferred that this characteristic of the source concept is accounted for in the visual metaphorical mapping: the video producer may visually encourage children to aim for sunnier weather (which may follow rain and storms). It can thus be perceived as a way for the video producer to promote hope for better environmental conditions. Yet this visual metaphor may not teach children about humans' responsibility to act upon the climate crisis, as children may not perceive the human influence on the weather. As a result, children may consider that the CARBON-BLACK CLOUDS will disappear on its own, reflecting on their experiential knowledge of weather conditions. On the other hand, this video also fulfils argumentative purposes. This argumentative function is mainly observed through the ANGRY FACE OF THE CLOUD, which assigns mischievous intentions to the visual figure. Accordingly, this human facial expression helps children to perceive the underlying negative emotions of the humanised CARBON-CLOUD. The visual metaphor relies on an effective metonymical (i.e., PART FOR THE WHOLE) representation: FACE FOR (NEGATIVE) EMOTIONS. These negative characteristics are emphasised through the colour black (Forceville, 1996). Eventually, this visual personification transforms the emitted carbon into a MONSTER. The carbon is thus represented as a typical mischievous figure which children are used to fear (e.g., like the monsters in fairy tales).

The target concept is thus metaphorically represented to insist on the need to control emissions, through adapted references to the audience's experiences and knowledge. Such a visual metaphor provides persuasive arguments that may lead children to limit carbon emissions in the future. However, the human-made origin of the MONSTER is not explained and its mischievous impacts on the planet are not represented. Therefore, this visual personification mainly aims at representing the danger of carbon emissions, but it does not address the risks and responsibility involved in carbon pollution.

Another visual metaphor that has been identified in the educational videos included in our dataset represents the amount of emitted carbon through the visual source concept HOURGLASS (Figure 6).

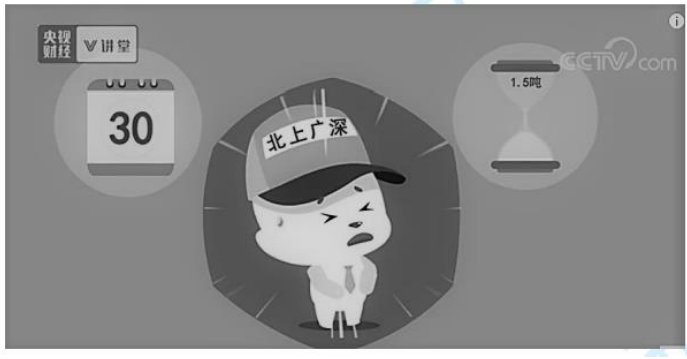


Figure 6. CARBON EMISSIONS AS AN HOURGLASS-ANGRY CHILD - Source 《央视财经V讲堂》今天 你的碳排放量超标了吗？20190706 | CCTV财经 https://www.youtube.com/watch?v=K2D2Auk3KIs

This metaphorical HOURGLASS is filled with sand whose amount within the UPPER and LOWER PARTS OF THE HOURGLASS is established with reference to different numbers indicating the increase of "the amount of emitted carbon". The visual metaphor thus also combines educational and argumentative strategies. The materialisation of carbon emissions as SAND IN AN HOURGLASS represents the accumulation of carbon emissions through a concrete source concept: like in Figure 5, carbon does not disappear, but it adds up to past carbon emissions. The HOURGLASS also suggests limited time. Accordingly, time is measured in terms of the amount of emitted carbon. This visual metaphor of TIME and CARBON EMISSIONS, along with the visual representation of the accumulated

carbon emissions as SAND, implicitly alerts children to the effects of pollution on humans' time on the Earth. The danger of emitted carbon is not represented through visual source concepts which may typically be related to children's conceptualisation of danger (like in Figure 5). Instead, the visual metaphor represents the urgency to control and limit emissions. It follows that the actual danger comprised in excessive carbon emissions is only implied: human extinction. The video producer thus relied on this visual metaphor to incite children to control pollution, while carefully avoiding showing children the ultimate consequences of a lack of control. Although children may not be faced with the consequences of this time limit in the educational video, this visual metaphor may help them to understand that adding too much SAND within the HOURGLASS will lead to stricter time limit until the HOURGLASS-CONTAINER overflows. This educational video thus involves major environmental arguments. For instance, the HOURGLASS is represented next to a child, whose face looks gradually angrier as the SAND flows. The evolution of the child's face creates a causal link between the time limit, the amount of emitted carbon, and the child's negative emotions. This visual metaphor thus also involves representations of the impact of pollution on the audience's feelings.

Additionally, the argumentative scope of the video resides in the implications conveyed through the visual metaphor: children are left to imagine the consequences of this time limit (represented by the HOURGLASS). This audience may not have the knowledge required to imagine solutions or large-scale environmental impacts. This implicit characteristic of the visual metaphor may ultimately aim at warning children of the risks of inaction: this educational video relies on a visual metaphor that draws on the prospective consequences of continuous emissions.

Overall, the educational videos that metaphorically represent the "amount of emitted carbon" focus on particular characteristics of the concept. Such characteristics are emphasised to teach children about the danger represented by the concept. Accordingly, the visual metaphors discussed in this section do not aim at explaining or illustrating carbon emissions. These videos include the concept within the broader topic of the climate crisis, which ultimately lead video producers to represent carbon emissions as the cause of the crisis. Therefore, in our dataset, the visual metaphors associated with this concept are argumentatively exploited to help children to characterise carbon emissions as bad. Carbon emissions are exclusively represented in terms of their consequences on the planet.

6 Discussion and concluding remarks

6.1 Summary

Our research has demonstrated that Chinese educational videos rely on a variety of source concepts to metaphorically represent the expression "greenhouse effect" (**温室效应** wēn shì xiào yìng) and the non-metaphorical expression "the amount of emitted carbon" (**二氧化碳排放量** èr yǎng huà tàn pái fàng liàng).

With attention paid to the particularities of the Chinese visual representations of the two expressions, our research has demonstrated a focus on the urgency to solve the issue expressed through the use of visual source concepts. For instance, the "greenhouse effect" can be represented through the picture of a planet CONTAINED in a GLASS BOTTLE closed by a WOODEN LID (i.e., the greenhouse effect as a trap). Regarding the non-metaphorical Chinese expression "the amount of emitted carbon", its metaphorical representations in educational videos similarly emphasise the danger. For instance, the carbon can be personified as an ANGRY BLACK CLOUD threatening urban areas. Carbon emissions can also be represented through the source domain HOURGLASS which draws on presuppositions regarding the time limit and the amount of emitted carbon.

6.2 Contrastive views on English and Chinese metaphors in educational videos

In comparison with the English visual realisations of the metaphorical expressions "greenhouse effect" and "carbon footprint" (Augé, 2022a; 2022b; 2023), the Chinese visual metaphors rely on source domains which aim at warning children about the need to control the target concepts (i.e., greenhouse gases and carbon pollution, respectively). First, the English representations of the "greenhouse effect" demonstrate a focus on the heat provided by the greenhouse. Notably, English video producers represent a literal greenhouse gradually becoming red or orange. They rely on drawings of thermometers showing that temperatures increase as a result of the increase of emitted gases (represented as arrows or grey smoke). They also represent the plants contained within the greenhouse, with comparative images of flourishing plants and dying plants. Therefore, in English educational videos, the visual representations of the "greenhouse effect" insist on the temperature increase. This conceptualisation is altogether

missing in the Chinese educational videos included in our dataset. In contrast, these videos represent the greenhouse effect as a trap. It has been argued that, considering the audience targeted by these educational videos, the representation of the danger as a TRAP may effectively draw on children's experiential knowledge. The representation of the danger in terms of temperature increase may still be more accurate, but children may not have the experiential knowledge required to conceptualise heat as a danger.

Second, with regards to the metaphorical representations of the concept "carbon footprint" in English videos, findings (Augé, 2022a; 2023) show that educational videos rely on the source concept FOOTPRINT to visually insist on the human origin of carbon emissions. However, only one educational video produced in English insists on the negative characteristics of the concept. Such a video included the visual concept FOOTPRINT within a detective storyline. In contrast, the analysis of Chinese educational videos related to the non-metaphorical concept "the amount of emitted carbon" demonstrates that visual metaphors are exploited to insist on the identification of carbon emissions as a danger. Video producers reflected on children's experiential knowledge to represent carbon emissions as a MONSTER. However, it has been argued that such videos may not reflect the human responsibility to control the MONSTER. For instance, one visual metaphor associates the amount of emitted carbon with time limit, through the visual concept HOURGLASS. Such a visual metaphor effectively draws on presuppositions regarding the impact of this time limit.

However, children are never presented with visual metaphor depicting the impact of decreasing amount of emitted carbon. One the one hand, English videos can effectively teach children about human responsibilities, although carbon emissions are not explicitly represented as a threat. On the other hand, Chinese videos emphasise the threatening characteristics of this amount of emitted carbon, but they do not focus on preventive actions.

Third, in English and Chinese educational videos, visual metaphors both serve educational and argumentative functions. On the one hand, visual metaphors materialise invisible concepts (gases) into visible, concrete source concepts (arrows, clouds, colour codes). This materialisation eventually shows that, despite the invisible characteristics of the gases, the gases remain in the atmosphere and affect the population in different ways (i.e., heating or trapping the planet). On the other hand, the educational videos included in our dataset can focus on the representation of prospective consequences of excessive pollution (e.g., the HOURGLASS). Such representations of the future damaging consequences of the climate

crisis aim at inciting children to conceive the gases as dangerous for the planet. The materialisation of this danger in the videos provides effective environmental arguments, but it also limits the explanation of the causal links existing between industries and pollution.

The Chinese reliance on argumentative visual metaphors can be justified by the population's particular experience of the phenomenon in this country (United Nations Framework Convention on Climate Change, 2019). Indeed, China has been particularly affected by pollution and by warming temperatures (Chinese Academy of Sciences, 2019). Chinese video producers may have had more concrete experiences of the danger in comparison with English video producers. Therefore, Chinese video producers may also aim at preparing the younger generation for such extensive environmental impacts. This varying environmental impact across countries effectively leads to varying conceptualisation of the climate crisis.

6.3 Implications for translation studies

Metaphor scholars have documented the complexities involved in the translation of metaphorical expressions (He et al., 2022; Meyers, 2019), since metaphors inherently involve conceptualisations that are particular to a specified lingua-culture (Sharifian, 2017). Yet, in the global context of the climate crisis, not only metaphors are required to support public understanding of the phenomenon (Deignan et al., 2017), but their translation *between* cultures (Katan, 2004) is also needed to support international dialogues about the crisis (Augé, 2023).

The contrastive views on the climate crisis observed in the metaphors used in English and Chinese educational videos exemplify the scale of the challenge that needs to be addressed by translators. The need for international dialogues between the Global South and the Global North notably involves translation techniques that take into account different linguistic models and traditions, different values, and different conceptualisations (Katan, 2004). This consideration is even more relevant in the context of the global climate crisis where the topic of discourse presents different characteristics in each lingua-culture: the Global South may attribute much more concrete characteristics to the climate crisis (because of the communities' extensive experiences of the phenomenon), compared with the characteristics attributed by the Global North (which has more limited experiences of the phenomenon; United Nations Framework Convention on Climate Change, 2019).

Such distinctions may still need to be emphasised in translation so as to prevent recipients of target texts from believing that the climate crisis has comparable effects in different regions of the world. Katan (2020) addresses this challenge by suggesting that translators need to "highlight differences" (2020: 4) to avoid reinterpreting voices through limiting cultural filters. This argument is particularly relevant for the representation of the Global South, whose voices have been silenced in climate crisis communication (Greenpeace and the Runnymede Trust, 2022). In order to alert the Global North to the environmental threats suffered by the Global South, international dialogues may rely on Venuti's approach to "resistance translation" (2008). Resistance translation is designed to upset the receiving culture's point of view by preserving some "discontinuities at the level of syntax, diction, or discourse which allow the translation to be read as a translation" (2008: 21). With a focus on metaphors, resistance translation may thus involve a reliance on conceptual mappings that are unfamiliar to the target audience.

Drawing on this assumption, one can wonder whether the metaphor would still fulfil its educational function. Katan (2020: 5) warns that resistance translation would lead to less accessible texts. For instance, in section 5, we discussed the lingo-cultural relevance of the colour red (Priestland, 2009) observed in visual metaphors occurring in Chinese videos. Katan (2020: 2) claims that colours and graphics are often modified to meet local cultural norms. In such cases, this modification would effectively downplay the discontinuities characterising resistance translation. Another possible strategy to avoid such cultural filters may involve the transformation of visual metaphors into visual similes (section 4), that would possibly allow translators to explicate the conceptual mapping at play.

However, such considerations significantly overlook the particularities of the target audience addressed in educational videos (young children). Educational videos may still favour accessible messages and metaphors (Manca and Spinzi, 2022) and may not systematically address lingo-cultural differences. It is yet argued that the combination of different modes of realisation (visual, verbal, audial, gestural) may represent major tools that can support accessible translation and representation of communities' voices.

7. Concluding remarks

The analysis of metaphors in educational videos that represent the "greenhouse effect", the "carbon footprint", and the "amount of emitted carbon" in Chinese and English videos leads us to reflect on the international relevance of the climate crisis as a topic of discourse. Our findings effectively show that conceptual variations in the production of metaphors may not be limited to linguistic or cultural differences (Kövecses, 2005), or political ideologies (Musolff, 2016), but they also echo major differences in experiential knowledge. The particularities of the visual metaphors observed in the Chinese educational videos emphasise the population's concrete experiences of the climate crisis. Such videos also demonstrate the population's anxiety regarding the evolution of the climate crisis. In addition, this study establishes the conceptual disambiguation permitted by the analysis of visual metaphors (Deignan, 2017; Forceville, 1994; 1996; Šorm and Steen, 2018). Accordingly, visual metaphors may insist on the ground of the conceptual mapping and its relevance within a particular context of discourse. In contrast, verbal metaphors which are "constitutive" (Nerlich and Hellsten, 2014) of such discourse may not be systematically exploited to guide recipients' understanding.

We conclude that more research is needed to compare the metaphors produced in different languages and cultures. The identification of conceptual differences may eventually impact international dialogues. These international dialogues are particularly significant as they help to reach international agreements regarding the global climate crisis.

Acknowledgement
This research is part of an academic project funded by Les Fonds Spéciaux de Recherche and conducted at the Catholic University of Louvain, Institute of Political Sciences Louvain-Europe.

The authors reported no conflict of interest.

Data availability
Educational videos (last accessed December 13, 2022)

Greenhouse effect (温室效应)

GREENHOUSE simile:
https://www.youtube.com/watch?v=QpAoa4Wcfts
CIRCLE AND ARROWS:

https://www.youtube.com/watch?v=-R5fsnZKNIE
https://www.youtube.com/watch?v=NhusuZFn-MM
COLOURED DOTS:
https://www.youtube.com/watch?v=1VROhSgtS7k
GLASS BOTTLE AND WOODEN LID:
https://www.youtube.com/watch?v=HtvX17cn__c

Amount of emitted carbon (二氧化碳排放量)
COLOUR CODES:
https://www.youtube.com/watch?v=-HCDV3Wn3v4
FOOTPRINT:
https://www.youtube.com/watch?v=Pdv2XcA2HF4
ANGRY BLACK CLOUD:
https://www.youtube.com/watch?v=xfxAzVNLVhs
HOURGLASS:
https://www.youtube.com/watch?v=K2D2Auk3KIs

References

Atanasova, D., and Koteyko, N. 2017. Metaphors in The Guardian Online and The Mail Online Opinion-page Content on Climate Change: War, Religion, and Politics. *Environmental Communication* 11(4), 452-469.

Augé, A. 2019. How Metaphor Scenarios Can Reveal Socio-cultural and Linguistic Variations of Meaning: A Cross-linguistic Perspective on the "NURTURING PARENT" and the "STRICT FATHER" Frames. *Metaphor and Symbol*, 34 (4), 209-228.

Augé, A. 2022a. How Visual Metaphors Can Contradict Verbal Metaphors: A Crosslinguistic and Multimodal Analysis of the IMPRINT of Climate change. *Metaphor and the Social World* 12(1), 1-22.

Augé, A. 2022b. From Scientific Arguments to Scepticism: Humans' Place in the GREENHOUSE. *Public Understanding of Science* 31(2), 179-194.

Augé, A. 2023. *Metaphor and Argumentation in Climate Crisis Discourse*. Routledge.

Cameron, L., and Deignan, A. 2003. Combining Large and Small Corpora to Investigate Tuning Devices around Metaphor in Spoken Discourse. *Metaphor and Symbol* 18(3), 149-160.

Charteris-Black, J. 2004. *Corpus Approaches to Critical Metaphor Analysis*. Palgrave Macmillan.

Chinese Academy of Sciences. 2019. The State of China's Climate in 2018. https://phys.org/news/2019-09-state-china-climate-extreme-events.html

Deignan, A. 2017. Metaphors in Texts about Climate Change. *Ibérica*, 34, 45-66.

Deignan, A., et al. 2019. Metaphors of Climate Science in Three Genres: Research Articles, Educational Texts, and Secondary School Student Talk. *Applied Linguistics*, 40(2), 379-403.

Doyle, J. 2007. Picturing the Clima(c)tic: Greenpeace and the Representational Politics of Climate Change Communication. *Science as Culture*, 16(2), 129-150.

Flusberg, S.-J., et al. 2017. Metaphors for the War (or Race) against Climate Change. *Environmental Communication* 11(6), 769-783.

Forceville, C. 1994. Pictorial metaphor in advertisements. *Metaphor and Symbolic Activity* 9(1), 1-29.

Forceville, C. 1996. *Pictorial Metaphor in Advertising*. Routledge.

Gattey, E. 2021. Global Histories of Empire and Climate in the Anthropocene. *History Compass* 19(8), 12683.

Greenpeace and the Runnymede Trust. 2022. Confronting Injustice: Racism and the Environmental Emergency. www.greenpeace.org.uk/

He, S., et al. 2022. Translating Cognitive and Linguistic Metaphors in Popular Science: A Case Study of Scientific Discoveries. *transLogos*, 5(2), 1-26.

Hidalgo-Downing, L., and O'Dowd, N. 2023. Code Red for Humanity: Multimodal Metaphor and Metonymy in Noncommercial Advertisements on Environmental Awareness and Activism. *Metaphor and Symbol*, 38(3), 231-253.

Katan, D. 2004. *Translating Cultures: An Introduction for Translators, Interpreters and Mediators*. London: Routledge.

Katan, D. 2020. Cultural Approaches to Translation. In Chapelle, C. (Ed.). *The Encyclopedia of Applied linguistics*. Wiley-Blackwell.

Kilgarriff, A. 2014. SketchEngine. www.sketchengine.eu.

Knudsen, S. 2003. Scientific Metaphors Going Public. *Journal of Pragmatics*, 35, 1247–1263.

Koteyko N. 2010. Mining the Internet for Linguistic and Social Data: An Analysis of "Carbon Compounds" in Web Feeds. *Discourse and Society* 21(6), 655–674.

Koteyko, N., et al. 2009. From Carbon Markets to Carbon Morality: Creative Compounds as Framing Devices in Online Discourses on Climate Change Mitigation. *Science Communication*, 32(1), 25-54.

Kövecses, Z. 2005. *Metaphor in Culture: Universality and Variation*. Cambridge: Cambridge University Press.

Kövecses, Z. 2010. *Metaphor: A Practical Introduction*. Oxford: Oxford University Press.

Manca, E., and Spinzi, C. 2022. A Cross-cultural Study of the Popularisation of Environmental Issues for a Young Audience in Digital Spaces. *Token: A Journal of English Linguistics*, 15, 19-46.

Meijers, M. et al. 2019. Using Visual Impact Metaphors to Stimulate Environmentally Friendly Behavior: The roles of Responses Efficacy and Evaluative Persuasion Knowledge. *Environmental Communication* 13(8), 995-1008.

Meyers, C. 2019. Difficulties in Identifying and Translating Linguistic Metaphors: A Survey and Experiment among Translation Students. *English Studies at NBU*, 5(2), 308-322.

Musolff, A. 2016. *Political Metaphor Analysis: Discourse and Scenarios*. Bloomsbury Academic.

Nerlich, B., and Hellsten, I. 2014. The Greenhouse Metaphor and the Footprint Metaphor: Climate Change Risk Assessment and Risk Management Seen through the Lens of Two Prominent Metaphors. *Technikfolgenabschatzung: Theorie und Praxis*, 23(2), 27-33.

Pérez-Sobrino, P. 2013. Metaphor Use in Advertising: Analysis of the Interaction between Multimodal Metaphor and Metonymy in a Greenwashing Advertisement. In Gola E., and Ervas, F. (Eds.), *Metaphor is Focus: Philosophical Perspectives on Metaphor Use*. Cambridge Scholar Publishing, 67-82.

Priestland, D. 2009. *The Red Flag: Communism and the Making of the Modern World*. Allen Lane.

Sachs, W. 1993. *Global Ecology: A New Arena of Political Conflict*. Fernwood Publishing.

Sharifian, F. 2017. *Cultural Linguistics: Cultural Conceptualisations and Language*. John Benjamins.

Šorm, E., and Steen, G. 2018. VISMIP: Towards a Method for Visual Metaphor Identification, in Steen, G. (Ed.), *Visual Metaphor: Structure and Process*. John Benjamins, 47-88.

Steen, G.-J. et al. 2010. *A Method for Linguistic Metaphor Identification*. John Benjamins.

United Nations Framework Convention on Climate Change. 2019. Communicating climate change: A practitioner's guide. https://unfccc.int/sites/default/files/resource/Communicating%20climate%20change_Insights%20from%20CDKNs%20experience.pdf

Venuti, L. 2008. *The translator's invisibility: A history of translation*. Routledge.

Zinken, J. 2007. Discourse metaphors: the link between figurative language and habitual analogies. *Cognitive Linguistics* 18(3), 445–466.

Bridging worlds:

Translating metaphors for sustainable destination experiences

Cinzia Spinzi

Univeristy of Bergamo

Abstract

The aim of this article is to analyse metaphor in sustainable tourism guides from a cross-cultural perspective. In the field of tourism, metaphors play an important role in the perception of destinations and experiences. Metaphors are a verbal technique used to make a holiday seem less alien to potential tourists (Dann 1996: 171). They help to bridge the gap between the unfamiliar aspects of a destination and the tourists' own experiences and make it easier for them to empathise with the surroundings. However, when looking at metaphors in different cultures, figurative language is not only characterised by linguistic structures, but also by cultural connotations and experiences.

The Logical Levels model (Dilts, 1983), originally developed in the context of Neuro-Linguistic Programming (NLP), is used to break down metaphors into multiple levels of human experience, from concrete behaviours to abstract beliefs and values. In this way, the model allows for a more nuanced and thorough approach by uncovering the deeper cultural and ideological elements contained within metaphorical language. This will contribute to a better understanding of the procedures used in the target text to convey emotional and pragmatic meanings.

Keywords: metaphor, translation, Logical Levels, sustainability, procedures

1. Introduction

Metaphor is one of the linguistic devices that provides "a conceptual framework for a systematic ideology that is expressed in many texts" (Chilton and Schäffner, 2002: 29) and serves as a guide for examining the way in which a particular community interprets reality (Deignan, 2005: 24), by expressing its social beliefs and values. Particularly, in the context of promotional tourism discourse, a number of studies have highlighted the "attention-grabbing" (Semino, 2008) function of metaphors (Mattiello, 2012; Manca, 2013; Spinzi, 2013; Iritspukhova, 2023), drawing on the principle that metaphors shape the way we engage with the world around us (Lakoff and Johnson, 1980). In the context of tourism, metaphors

influence the way destinations and experiences are communicated to different audiences. As tourism increasingly embraces sustainability, the way this concept is framed linguistically is also crucial to its impact on tourist behaviour. As a result of neoliberal tourism, a growing movement of academics and activists seem to be pushing for a redefinition of tourism. This includes the search for new opportunities that align with degrowth and post-capitalist perspectives that prioritise social justice, environmental sustainability, and community inclusion (Kosmas and Vatikioti, 2024).

Despite the ever-growing interest in analysing patterns of discourse, especially in the field of promotional tourism, there is still little systematic research on how language and images legitimise the framing of nature in sustainable and regenerative forms of tourism, and how such framings are rendered in other languages. Indeed, scholars working on conceptual metaphors have neglected translation, largely due to the traditional attitude of viewing metaphors as a matter of "similarities rather than perceived similarities based on cross-domain correlations with our experience" (Massey, 2017: 176). Cultural contexts are the fundamental source of metaphorical patterns. Hence, what is effective in one language or culture might not be in another. Metaphors need to be carefully translated to maintain their intended meaning and emotional impact when promoting or describing sustainable tourism in different cultural and linguistic contexts as they fulfil an ideological function (Spinzi, 2010; 2013). A poorly translated metaphor could mislead or, worse, alienate the audience by failing to convey the meaning of sustainability. Metaphors that emphasise the benefits of sustainable practices, such as protecting the environment for future generations or fostering closer relationships with local communities, can encourage more conscientious travel decisions. However, metaphors can make it difficult for people to adopt sustainable behaviours if they do not resonate, or if they evoke the wrong associations. For this reason, a more systematic study of metaphors in sustainable tourism is essential to bridge cultural differences and promote a more sustainable and inclusive tourism industry worldwide.

The aim of this study is twofold: first, to investigate which conceptual metaphors characterise the description and promotion of sustainable tourism experiences in written travel guides; second, to examine the main procedures used to render metaphors from Italian into English. A further attempt is made to investigate how the different levels of meaning influence the translator's approach by applying the Logical Levels model (Dilts, 1983; see also Katan and Taibi, 2021) to the analysis of metaphors. This

framework allows us to methodically dissect the deeper cognitive levels that metaphors often convey, such as abstract concepts or cultural idiosyncrasies. In this way, we can learn how the meanings of metaphors change in different languages and cultures, which then helps us to translate more accurately and in a culturally sensitive way.

To answer these research questions, data in Italian come from two Italian travel guides entitled "weBeach – Wild eco beach", which describe unexplored rivers and streams in northern Italy, and their translations into English. In addition, an *ad hoc* comparable corpus of tourism language (see Spinzi 2004) was used to check whether or not the reproduced metaphors are used in naturally occurring English language.

The article is structured as follows: after an introduction to the theoretical approach and to sustainable tourism discourse, the methods and materials are described, followed by the model of Logical Levels. The results of the analysis are then explained on the basis of quantitative distributions and qualitative observations.

2. Metaphors, translation and tourism discourse

2.1 Metaphors

Placed within the tradition of Conceptual Metaphor Theory (CMT) (Lakoff and Johnson, 1980), this study considers metaphor as a process and a product. The cognitive process is the mapping from a more concrete and physical source domain to a more abstract target domain; the product is the resulting conceptual pattern. A number of axioms can be derived from this theory: linguistic knowledge is fundamentally conceptual, i.e., metaphors structure thought and knowledge; metaphors are central to abstract language; and finally, metaphor is rooted in physical experience. The latter idea is better known as embodiment (Gibbs, 2006), meaning metaphors arise from sensorimotor experiences and are often used to understand abstract concepts.

In the discourse of promotional tourism, more than in other discourses, metaphors rely on bodily experiences to evoke physical, emotional, and sensory responses that correspond to the potential tourist's physical interaction with the environment. For example, a common embodied metaphor in tourism discourse is that of the "heart", a conventional metaphor that stands for the centrality of a destination. The figurative use

of this organ helps convey the "importance of a place making it possibly more attractive to potential tourists" (Jaworska, 2017: 170).

Apart from embodiment, another issue relevant to the main purpose of this article and addressed by CMT concerns the relationship between metaphor and culture. An important influence in this area stems from Kövecses' research (2005: 67-87) on universality and variation in the use of metaphor. If the former is due to the cognitive source of metaphors, variation is due to the different metaphors that vary across cultures. His research raises the question of whether, and to what extent, metaphorical thinking can contribute to the understanding of culture and society, and whether CMT can explain both the universality and the cultural specificity of metaphorical conceptualisation. His studies, and those of other researchers (Grady, 1997; Yu, 1995; 1998), show that primary metaphors tend to be general and universal by nature, while metaphors vary on a more specific level from language to language. According to Kövecses (2008: 58), metaphors are not only cross-cultural, but also vary within cultures at different levels, including social, regional, ethnic, stylistic, diachronic, and individual. Different experiences and different cognitive preferences or styles are the main causes of metaphor variation. In other words, the variation of metaphors can take many different forms. One of them is congruence, i.e., the relationship between several specific metaphors and one general metaphor. Another form is the use of different source domains for different targets, or the same source domain for multiple targets within a culture. Although different cultures favour different metaphors, they occasionally have comparable sets of metaphors for a target domain. Furthermore, certain metaphors may only exist in a particular language or culture. In short, metaphorical conceptualisation is governed by two main streams: Embodiment and Context. This is due to our desire to be in tune with both the body and the culture.

Finally, when discussing the benefits of metaphor in promotional tourism, Djafarova and Anderson (2008) emphasise the "compact" nature of metaphors as they are able to convey multiple meanings in just a few words. This is particularly important for web tourism discourse where language tends to be concise as Manca (2012) and Sulaiman and Wilson (2019) show.

2.2 The discourse of sustainable tourism

In an effort to lessen the effects of mass tourism over the past four decades, the idea of sustainable tourism development has come into being. The Rio+20 Outcome document[1] is the first significant document to introduce sustainable tourism (ST). The 2030 Agenda for ST, which was adopted by the UN in 2015, is another significant step towards furthering socio-economic and environmental development, which is also crucial for promoting sustainable tourism. According to Bramwell and Lane (1993), the founders of the term, sustainable tourism was coined to respond, at least conceptually, to the problems caused by mass tourism, such as environmental damage, poverty alleviation, and negative impacts on traditional cultures. It refers to those forms of tourism (e.g., ecotourism, responsible tourism, nature tourism, alternative tourism with appropriate differentiation) that meet the needs of travelers while reducing the negative impact on the environment, the economy, and host communities. In other words, sustainable tourism aims to strike a balance between preserving the environment, cultural integrity, social equity, and promoting economic benefits, while improving the living standards of host communities. With the aim of clarifying the different terms, Mihalic (2016) examines forms of responsible and sustainable tourism and emphasises that sustainability is a theoretical concept, while responsibility is more practical and refers to appropriate measures. Blackstock et al. (2008) have also shown that responsible tourism occurs primarily when moral and ethical considerations are taken into account. Similarly, albeit within Linguistics studies and from a contrastive perspective, Lazzeretti (2020) examines the discursive strategies used by a group of travel agents, organisations, bloggers, and other industry professionals involved in web communication in ST sector. She notes that in her data, the English texts are characterised by the absence of a dichotomy between good and bad tourism which implies that there is no overt criticism of mainstream tourism. On the contrary, the evaluation of ST in the Italian texts is based on a coherent comparison with the antithesis of mass tourism. She notes that the Italian expression "turismo di massa" typically takes on a negative semantic prosody, underlined by colloquial expressions that criticise unsustainable practices. Metaphors are

[1] United Nations. Rio+20. Report on the UN Conference on Sustainable Development. Available online: http://www.uncsd2012.org/content/documents/814UNCSD%20REPORT%20final%20revs.pdf (Last accessed on 21 January 2024).

rare in the corpus analysed by Lazzeretti, suggesting that the texts are primarily informative and not obviously critical. Although tourism discourse often contains a positive evaluation, the authors of the texts included in Lazzeretti's corpus emphasise the potential of sustainable tourism practises by citing concrete, effective examples rather than praising them unconditionally.

In her attempt to distinguish some popular tactics used to promote the discourse of sustainable tourism, Malavasi (2017) uses corpus linguistics techniques to investigate common phrases in responsible travel destinations in Europe. She notes that despite the presence of patterns typical of traditional tourism promotion, sustainability-related tools (e.g., expressions describing commitment and dedication to the environment, local communities, and visitors) are also visible in her data.

These few studies on the language of ST highlight the importance of a critical and context-aware discourse in ST that seeks not only to inform but also to inspire meaningful change in travel behaviors and industry practices.

2.3 Metaphors in Tourism translation

As a global phenomenon, tourism involves not only the movement of people across national borders, but also the linguistic transmission of cultural narratives, experiences, and identities. Given that both translation and tourism studies are concerned with the exchange and mediation of meaning, language and culture, their overlap is a rich field for academic research (Katan, 2018; Agorni and Spinzi, 2019). However, despite the extensive research on translation in tourism discourse, whether in terms of cultural mediation (Katan, 2012; 2016; Agorni, 2012; Diadori, 2022; Maci and Spinzi, forthcoming) or cultural adaptation (Manca, 2008; 2016), there is little research on the translation of tourism metaphors. This is partly due to the diverse and dramatic language used in promotional tourism (Calvi, 2001), and partly due to the complexity and ambiguity of meaning typically associated with the interpretation of figurative representations (Djafarova and Anderson, 2008). Most studies dealing with the translation of metaphors in tourism have focussed on the identification of metaphors from a cross-cultural perspective (Spinzi, 2010; 2013; Manca, 2013; Mattiello, 2012). For example, Mattiello (2012) offers an analysis of web-based promotional tourism that draws on the framework of relevance-oriented lexical pragmatics theory (Sperber and Wilson 2008). She claims that metaphors are frequently employed in chains of metaphorical

expressions and combined with hyperbole, which increase their persuasive power. In her extensive research on translation of tourism discourse, Manca (2009) compares the languages of tourism in Italy and the UK, and the language used by translators when translating farmhouse holiday websites into English. Drawing upon Sinclair's phraseological approach, the author looks at collocational mistranslations and emphasises the importance of researching cross-cultural collocations and the close relationship between language, culture, and marketing tactics. Keeping her contrastive perspective, Manca (2013) has also examined certain metaphorical conceptualisations of nature showing how they are filtered through the cultural orientations that determine the communicative style of languages. Her findings, resulting from the analysis of a comparable corpus of promotional tourism destinations, show that Italian portrayals of these destinations appear to rely more on metaphorical descriptions and abstract nouns. Recurring elements from the five senses are used in an effort to evoke strong emotions in potential customers. On the other hand, abstract nouns and objects referring to sight, hearing, smell, taste, and touch are absent from the English descriptions, which are more concrete. English source texts' primary goal is to present information through factual descriptions.

In a similar vein, by comparing promotional websites in the field of ecotourism in British-English, American-English and Italian languages, Spinzi (2010) notices that English promotions in the ecotourism sector encourage tourists to explore the region at a slower pace, emphasising the importance of protecting the environment, which is conceptualised as a "fragile container". Although ecotourism discourse presents metaphors similar to other types of tourism, it is characterised by its own figurative patterns. One of them is the metaphor of "treading lightly" which is used to convey the idea of minimising the environmental impact (Spinzi, 2013). The metaphorical expressions seem to be largely conventionalised across the three languages and cultures investigated by the author with some exceptions. Unlike the British and American language varieties, the Italian language describes ecotourism holiday in terms of a journey into the traditions, history, and customs of a living territory, metaphorically described as a textbook to be read. Physical, intellectual, and sensorial activities are highly involved and interlinked. The two lemmas "natura" (nature) and "territorio" (territory) are more frequently used and the relations between them and the ecotourist are mainly centred on the demand for an embodied experience, or an experience of being that relies

on all the senses. To understand this experience, the notion of the tourist gaze needs to be expanded to include other embodied aspects such as touch, movement, hearing, and taste, in both real and imagined terms. Despite the relevance of these studies in identifying metaphors and describing their function and purposes, a gap remains in the systematic consideration of the translation strategies most commonly used in tourism discourse.

The importance of balancing the original metaphorical cultural context with the target language conventions is also emphasised by Shuttleworth (2017). Although his research applies to scientific discourse, it is still valuable for its combination of insights from translation studies and metaphor research. Pointing out the drawbacks of earlier methods which may have ignored linguistic diversity when translating metaphors, Shuttleworth maintains that translators must strike a balance between retaining the meaning of the original metaphor and adapting it to the linguistic and conceptual framework of the target culture.

Moving from the metaphorical tourism patterns identified in the literature to the problem of transferring them from one language to another, a number of procedures from both prescriptive and descriptive perspectives have been proposed. For example, from a prescriptive standpoint, Newmark (1981: 85) categorises metaphors into five groups: dead, cliché, stock, recent, and original. He then presents eight procedures for the translation of metaphors (ibid.: 88-91):

1. Reproducing the same image in the target language (TL), 'provided the image has comparable
frequency and currency in the appropriate register'
2. Replacing the image in the source language (SL) 'with a standard TL image which does not
clash with the TL culture'
3. Translating the metaphor by a simile, 'retaining the image'
4. 'Translation of metaphor (or simile) by simile plus sense (Mozart method)' (i.e., the addition of explanatory material: for Mozart, a piano concerto had to please 'both the connoisseur and the less learned')
5. Conversion of the metaphor to sense
6. Modification of the metaphor
7. Deletion
8. Using the same metaphor combined with the sense (1985: 304-11).

By contrast to Newmark's (1981) source-text-oriented approach, other scholars take a goal-oriented approach by adding further possibilities to the translation methods. Toury (1995: 83), for example, adds the possibility of including metaphors in the target text (TT), even if there is no linguistic motivation in the source text (ST). Schäffner (2004; 2012) goes one step further and questions the translatability of metaphors. She claims that metaphors serve a cognitive purpose and that their conceptual nature should be taken into account when assessing their translatability. Influenced by discourse analysis and functionalist theories of translation, Schäffner (2004) emphasises the role of metaphors as elements embedded in broader cultural, ideological, and communicative contexts, and considers metaphors as contributing to the overall communicative purpose of the text. By analysing political documents in English and German, she compares the functions of the texts, the addressees, the languages and the cultures involved in order to find translation solutions. In her words, the translation of a metaphor "is no longer a question of the individual metaphorical expression, as identified in the ST, but it becomes linked to the level of conceptual systems in source and target culture" (Schäffner, 2004: 1258).

In a similar vein, by applying the cognitive approach to the translation of metaphors in popular technology discourse, Papadoudi (2015: 39) offers a set of translation patterns for conceptual metaphors in order to recognise the existence of conceptual metaphors in popular magazines translated from English into Greek. Papadoudi finds seven translation procedures for metaphors in her data, which are as follows:

1. Same conceptual metaphor and equivalent linguistic expression.
2. Same conceptual metaphor but different linguistic expression. The following special cases are also included:
    a) Target language linguistic expressions make entailments explicit;
    b) Target language linguistic expressions make the metaphor more elaborate; and
    c) Target language linguistic expressions reflect a different aspect of the metaphor.
3. Different conceptual metaphor preferred, although similar conceptualisation exists between source and target languages.
4. Different conceptual metaphor used but cognitive equivalence is achieved.
5. Literal rendition producing similarity-creating metaphors.
6. Literal rendition because of culture-bound source language metaphors.

7. Conceptual metaphor is omitted in the TT.

These procedures expand the range of translation options and the potential for translation variation. For the purposes of this study, we will rely on this cognitive approach to the translation of metaphors in tourism discourse, as it places (un)translatability in terms of "cognitive equivalence" (Al-Zoubi et al., 2007: 232-233) rather than grammatical variation or linguistic uniqueness. In other words, the concept of cognitive equivalence in translation theory states that a word, phrase, or metaphor in the source language should evoke a similar mental image or concept in the target language. As Papadoudi (2010) convincingly argues, the degree of integration between the conceptual systems of the source and target cultures, as well as the degree of overall similarity of experience between the two different languages, determine whether a metaphor is translatable or untranslatable. Furthermore, the examination of metaphor translation from a cognitive perspective in the aforementioned studies shows that the ST metaphor can be translated into the same conceptual and linguistic TT metaphor, a different conceptual TT metaphor, or the same conceptual TT metaphor with a different metaphorical expression. Furthermore, in the wake of these latest studies, the term "procedure" or alternatively "solution" (Pym, 2016) will be used at the place of "strategy", in that "It is with translation procedures – which bring about the precise shifts that metaphorical expressions undergo during the translation process – that the research concerns itself" (Shuttleworth, 2017: 55).

3. Data and methodology

The data for the analysis come from a parallel and a comparable corpus. The parallel corpus comprises two written guidebooks in Italian and their translation into English. The guidebooks "weBeach – Trebbia e Aveto" were published by Filippo Tuccimei in 2020. The comparable corpus is composed of original Italian texts and original English texts on ecotourism, responsible tourism, and green tourism whose compilation started in 2004. The idea of using a third corpus, called TOURISC (TOURism Integrated Sustainable Corpus) is supported by Munday (2012: 185) who argues that some triangulation of findings may help avoid jumping to conclusions based on a single isolated study. In this case, since the corpus is a collection of

original data, it is used only to verify certain collocations, much like an echo chamber.

The function of the texts which constitute the parallel corpus is descriptive and expressive in that the guides narrate sustainable travel to rivers and streams from the author's perspective. The main idea behind these guides is to support the growing conscious community's interest in protecting those areas by offering holidays to unspoilt destinations. These guides also propose cultural and culinary itineraries outside of mass tourism, to promote the Italian province and support local economies. The extensive literature on the approaches used to trace and interpret metaphors in texts has emphasised the importance of co-text and context (Ortony, 1993). This means that the use of linguistic devices as signals in the linguistic context of the metaphor can help the reader to recognise and interpret a metaphor. In this study, a multidimensional perspective was adopted and quantitative and qualitative approaches were combined to answer the questions formulated below:

1. What are the main conventional metaphors used in English and Italian sustainable tourism discourse?
2. What are the most frequent and adequate translation procedures to convey the same meaning and function when translating metaphors from Italian into English?

These research questions were essentially addressed through a multi-step method as follows:
1. Manual search for metaphors through an extensive reading of the data;
2. Search for source domains;
3. Manually assigning a key domain name to each metaphor;
4. Quantitative comparisons of the conventional metaphors across the two languages; and
5. Qualitative interpretation of the results from a cross-cultural perspective relying on the Logical Levels theory (Dilts, 1983).

The first step of the analysis, i.e., identifying and finding metaphors in the data, was carried out following the Metaphor Identification Procedure (MIP) (Pragglejaz Group, 2007). The problem of subjectivity or indeterminacy highlighted in the literature (see Geeraerts, 2010, among others), which affects the determination of the metaphoricity of an expression, was overcome by using dictionaries and compendia. In this phase, all expressions that sounded incongruent on the semantic and

pragmatic level in relation to the discourse under investigation were then selected. Thus, the primary meaning in the dictionary was checked and compared with the contextual meaning. It is worth noting that the etymology of the word was sometimes useful in determining the primary meaning. Thematic labels were then assigned to the semantic and functional categories in an iterative bottom-up process. Instead of using predetermined themes, we allowed them to emerge from the analysis of the words in context. The frequency of metaphors is important to identify both the differences between the two languages and the most frequently used semantic source domains for promotional and information purposes. Indeed, since metaphors are used to conceptualise attitudes and values, the systematicity is important to find information about beliefs in different cultures, as previous studies have shown (Cameron et al., 2009). Conventional and unconventional metaphors were interpreted using the theory of Logical Levels, which is explained in more detail in the following sub-section. In the fourth step, the frequency of metaphors is relevant not only to identify the most frequent source domains used for both promotional and information purposes, but also to identify differences between the two languages.

3.1 Issues of culture and the Logical Levels

The idea of a hierarchy of Logical Levels that determines human behaviour was proposed by many scholars and popularised in the 20th century. It was above all Robert Dilts (1983) who summarised earlier ideas in a theory of Logical Levels. The theory is situated in the discipline of neuro-linguistic programming, which assumes that actions are linked to inner states and inner thought processes, and that learners understand these in order to change their behaviour (Hedayat et al., 2020). These ideas underlie the neurological levels, which reflect the tenet that the mental structure, language, and social systems in which we live form many natural hierarchies or process levels (see Figure 1). Any change at a higher level inevitably leads to changes at the lower levels. One contribution to the understanding of the theory of Logical Levels comes from E.T. Hall (1959) and his triad of cultures, which has since been aptly named the 'iceberg theory'. According to Hall's framework, culture has three levels of visibility: the technical or visible level; the tangible or semi-submerged formal level; and the third, completely hidden informal level, or the level of values and beliefs that lies outside of consciousness (see the visual representation in Figure 1).

From a translation perspective, and following the metaphor of the iceberg, what is at the tip of the iceberg is easier to achieve through technical learning and teaching, while what is more hidden is much more influenced by the translator's own personality or characteristics, and innate predisposition for that particular competence.

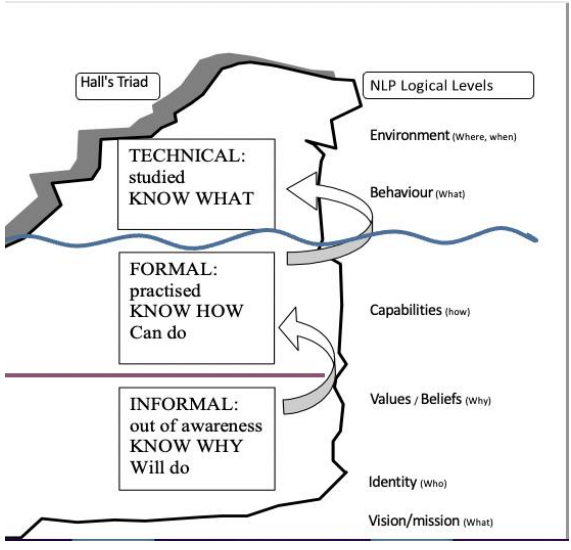


Figure 1: The NLP Logical Levels and Hall's triad of culture (adapted from Katan and Taibi, 2021)

As shown in Figure 1, Environment and Behaviour are the two levels that relate to everything outside of ourselves. The Environment level provides information about *where* and *when* actions take place. The reactions to these are shown in the form of verbal and non-verbal behaviours, which express the *what*, i.e., what people do in response to the environment. Capabilities is the level of *how*, i.e., the mental maps, strategies, and abilities that groups or individuals use to control the steps they take in their environment. This is the level that is less visible than those already mentioned above and it is the first level that determines our interpretation of reality. The next level, Values and Beliefs, refers to *why* a certain step is taken. This level includes all the orientations, beliefs, and criteria that move us to act in response to

our environment. These values determine our identity (the further level), which corresponds to the role we play in society. Values/Beliefs level is the motivational level and is completely submerged together with Identity. Higher levels (e.g., Vision/Mission level) usually have a greater influence on lower levels than vice versa. For this specific function of bringing to light what is hidden, the logical level theory is thus applicable in translation, even though, as highlighted, it can only "point towards what is actually happening between speaker and hearer (or writer and reader)" (Katan and Taibi, 2021: 151).

When it comes to metaphors, we can observe how they function on all these levels, revealing their cognitive, social, and cultural effects in addition to their linguistic function. According to the Logical Levels theory, thanks to metaphor, it is possible to go beyond the limits of logical language and place ourselves at a meta-level. When applied to metaphorical language, the theory allows discussion about *what* is metaphorically described, *how* it is described and *why* that concerns the cultural-based motivations for both the product and the process. This means that we can understand what metaphors are used, how they have been constructed, which is the meta-cognitive level, and what beliefs or values are hidden behind them. For the sake of explanation, the metaphor found in the language of ecotourism, "the environment is fragile" (Spinzi, 2010) may help clarify the use and applicability of the Logical Levels model. "The environment is fragile" refers to the physical world – ecosystems and natural resources – and depicts nature as fragile and susceptible to damage (Environment). The metaphor encourages protective and caring actions and promotes behaviours such as conservation, sustainable practices, and eco-friendly lifestyles (Behaviour). Furthermore, it shapes problem-solving strategies that focus on caution, prevention, and restoration, and calls for careful stewardship of natural resources (Capabilities). It reflects cultural values of responsibility and interdependence and implies that people must protect the environment because of its vulnerability (Vision/Beliefs). Finally, at the level of Identity, individuals may see themselves as stewards or guardians of the planet, fostering a sense of duty and ethical responsibility to preserve nature. Different cultures may interpret this metaphor in different ways. Some may emphasise care for the environment and responsible stewardship, while others may prioritise resource exploitation depending on their worldview of nature's resilience.

After the quantitative observations which open up the next section, this theory will be applied to the main metaphors found in the data.

4. Analysis

4.1 Quantitative analysis

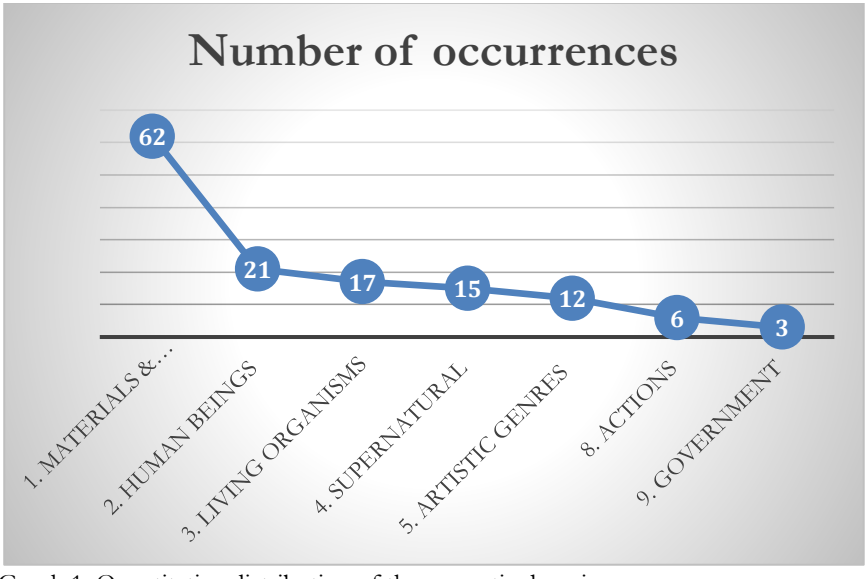
From the quantitative analysis of the 136 Italian metaphorical expressions, seven main broad categories and 15 sub-categories were identified, as shown in Table 1.

Main source semantic fields	**Secondary source domains**	**Examples from the ST**
1. Materials, object and substances	1.1 Natural elements 1.2 Precious materials 1.3 Objects	-immerso nella natura (immersed in nature) -acque crystalline (crystal clear waters)
2. Human beings	2.1 Emotions 2.2 Body 2.3. Health/illness	-Il guado descritto non è pericolo (The described ford is not dangerous) -ai piedi del monte (at the foot of the mountain) -il fiume è piagato (the river is plagued)
3. Living organisms	3.1 Animals 3.2 Plants	-Il tornante è appollaiato sulla rupe (The hairpin turn is perched on the cliff.) -permettendo l'affiorare di un isolotto di ghiaia (Allowing a gravel islet to emerge.)
4. Supernatural	4.1 Religion 4.2 Magic	-le spiagge di questo tratto…veri paradisi selvaggi (The beaches along this stretch, true wild paradises) -Rigeneratevi…prima di un magico tuffo (Recharge …. before taking a magical dip)
5. Artistic genres	5.1 Drawing 5.2 Theatre	-il fiume disegna spettacolari e consecutive curve vorticose (The river draws spectacular, successive swirling bends) -teatro di grandi eventi (stage for major events)
6. Actions	6.1 Escape 6.2 Exploration	-una fuga dalla città (an escape from the city) -con un pizzico di creatività e senso della scoperta (With a touch of creativity and a sense of discovery)

7. Government	7.1 Royal and monarchy	- Si tratta di scenari dove regna incontaminata la natura (These are landscapes where unspoiled nature reigns supreme)

Table 1. Categorisation of the semantic fields in the data

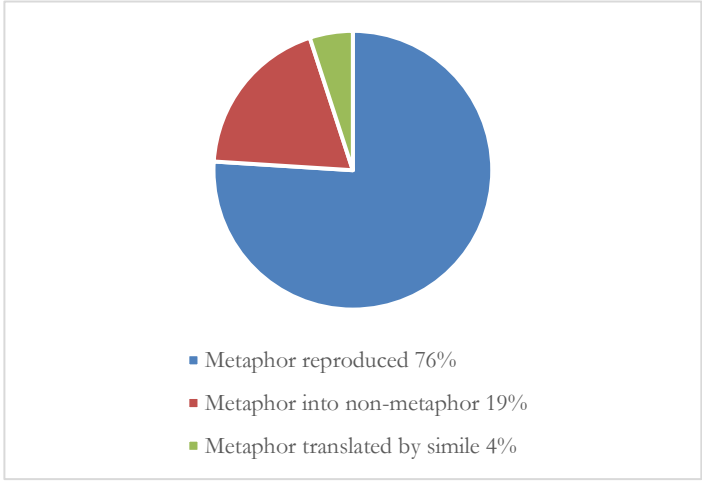
The seven semantic categories displayed in Table 1 were found in both the ST and the TT and were translated either at a micro level or at a macro level, meaning that in some cases the rendition matched both linguistically and conceptually, while in other cases only conceptually (Schäffner, 2004). Out of 136 occurrences of metaphorical expressions only two may be considered as being original metaphors in the ST with a different linguistic and conceptual rendition in the TT. On the contrary, in the TT no original metaphors were added.



Graph 1. Quantitative distribution of the semantic domains

Graph 1 illustrates that the category "Materials and Substances" dominates, suggesting that this domain provides a rich source of metaphorical language and may reflect how frequently physical resources and materials are discussed in the context of sustainability. Other domains such as "Human Beings" and "Living Organisms" are also prominent, indicating the centrality of life, both human and non-human. The following semantic

domains the "Supernatural" and "Artistic Genres" show that the more abstract or imaginative areas also contribute to the way sustainable tourism is conceptualised. Lower frequencies in categories such as "Government" and "Actions" indicate that governance and specific actions are less frequently framed by metaphors in this corpus, although they remain relevant. In other words, the quantitative findings of semantic domains show a clear focus on tangible, material elements and ways of life, which are likely to be central to communicating sustainable tourism in an understandable way.



Graph 2: Results of metaphor translation general procedures

In order to get a sense of translation trends throughout the data three general procedures have been used, as shown in Graph 2. The quantitative analysis shows that most of the conventional metaphors (103) are reproduced in the TT, seven metaphors were changed into similes and 26 metaphors were translated non-figuratively. This indicates a strong tendency to retain the original metaphorical structure in the translated text, at least conceptually. If on the one hand, translators are likely to see these metaphors as generally understandable or culturally significant and therefore choose to retain them, on the other hand, the reduction of the number of metaphors in the TT seems to be an obvious finding, as put forward by Schmidt (2015). The decision to transform some metaphors into similes may indicate an endeavour to improve clarity or accessibility for the

target audience. It may reflect a realisation that those metaphorical expressions do not resonate in the same way across English and Italian cultures.

In line with Papadoudi's (2015) research approach, the following procedures were identified through the examination of the 136 metaphors in both the ST and the TT:

1. Metaphors shared conceptually and linguistically by both the TT and the ST (66%)
2. Sub-category change in the TT (7%)
3. Category change in the TT (3%)
4. Metaphors translated by similes (5%)
5. Non-figurative rendition of the metaphors in the TT (19%)

A considerable proportion of the metaphors (66%) remain consistent both conceptually and linguistically between the ST and the TT. This indicates that a large proportion of the Italian metaphors can be transferred into English without major adaptations, which is probably due to common cultural or linguistic conventions between the two languages. In contrast, 19% of the metaphors in the TT are rendered in non-figurative terms, suggesting that in these cases the translators have simplified or neutralised the figurative language, possibly to ensure clarity or accessibility for the English-speaking audience.

4.2 Qualitative analysis

The most frequent procedure of rendering a metaphor both conceptually and linguistically is illustrated by the most pervasive metaphor – i.e., *natura incontaminata*, as in the following example:

> Example 1.
> ST: Val Trebbia è una delle valli meno costruite, più **incontaminate,** belle e naturalisticamente rilevanti di tutto l'appennino.
> [BT: *Val Trebbia is one of the least built, most uncontaminated, beautiful and naturalistically relevant valleys in the entire Apennines*.]
> TT: Val Trebbia is one of the least built on, most **uncontaminated** and beautiful valleys in the entire Apennines.

The image schema of this metaphor is known as NATURE IS A CONTAINER, a typical cognitive structure which implies that the container is pure and free of any foreign or external contaminants.
Reading it through the lens of the Logical Levels, the metaphor stands for unspoilt landscapes, clean air and biodiversity (Environment) and encourages environmentally-friendly behaviour, as well as skills and strategies that focus on sustainable practises and environmental management. In both languages, cultural attitudes reflect values such as purity, harmony, and balance between humans and nature. Individuals may see themselves as protectors of nature, reinforcing a personal and collective identity associated with environmental activism and responsibility. This metaphor represents a case of perfect equivalence both conceptually and linguistically.

However, the metaphor also refers to the underlying ontological metaphor NATURE IS HUMAN which reframes people's relationship with the natural world, encouraging deeper empathy, ethical responsibility, and a long-term commitment to preserving the environment for future generations. Since nature is depicted as a human being, it can also be sick, contaminated. Although the un/contamination metaphor also characterises other types of tourism (i.e., ecotourism, Spinzi, 2010), it is pervasive in sustainable tourism because it arouses important ideals and values that coincide with the objectives of sustainable travel such as preservation. Out of the 15 occurrences of *incontaminata/uncontaminated*, two instantiations were rendered with *raw nature*. This metaphor rendition illustrates the second procedure of sub-category change. Indeed, a shift from the sub-category of object (e.g., nature as a container) in the ST to that of natural elements (i.e., raw materials) in the TT is visible. No instantiation of *raw nature* is found in the TOURISC where only the expression "unspoilt nature" is present. A scan of the collocates of "raw" in the CoCa corpus[2], confirms that this word is typically associated with materials and data and not with nature. This might imply that in the translated texts it has been employed incongruently to describe nature in a way that emphasises its untamed, powerful, and pure state. In other words, in the "deliberate" metaphor (Steen, 2017) *raw nature,* the image schema can be interpreted as originating from the material or substance schema, where "raw" reflects a human perspective on the natural world and creates a contrast between raw and refined, i.e., wild, untouched and refined, or managed and influenced

[2] The corpus is available at: https://www.english-corpora.org/coca/.

by humans. Furthermore, translating *natura incontaminata* with *raw nature* helps to bridge the gap between the Italian cultural appreciation of unspoilt natural beauty and an English-speaking audience's expectations of a more dynamic, adventurous encounter with an untamed nature.

The third procedure implies a shift from one semantic domain to another which is illustrated by Example 2.

> Example 2.
> ST: Il sito attrae nelle giornate estive un discreto flusso di bagnanti che, tuttavia, **ammortizza** molto bene anche grazie alle diverse opportunità balneari che offre.
> [BT: *The site attracts a fair flow of bathers on summer days which, however, also amortises very well thanks to the various bathing opportunities it offers*.]
> TT: In the summer, this site attracts a fair amount of beach goers, but it **absorbs** the numbers fairly well offering different opportunities for swimming and sunbathing

In this example, the word *ammortizzare/amortise* pertains to the economic and financial sphere and originally means to gradually reduce or offset a burden or expense. In common usage, however, it has a metaphorical meaning: to absorb, mitigate, or cushion an impact. In the data, it alludes to the way the beach (Environment) facility disperses or controls the crowd, reducing (Behaviour) the potential stress caused by the onslaught of tourists. Just as paying off a debt over time reduces the immediate financial burden, it suggests easy management or a reduction in pressure. From the semantic category of specialised disciplines, more specifically from Economics, the translator has shifted into the category of substances (liquid). The literal meaning of the English verb "absorb" refers to the absorption of energy or liquid whereas the metaphorical meaning refers to the ability of the site to accommodate or control a significant number of beachgoers without becoming overloaded. This usage suggests that the beach can control the crowd so that any potential crowding is dispersed or dissipated**.** At this level, the metaphor highlights the capability of managing beachgoers. In Italian, the metaphor "ammortizza" hints at a cultural belief in balance and adaptation – the idea that a location should actively manage and offset any pressure from tourism. The English metaphor "absorbs" might reflect a slightly different belief, one that emphasises resilience – that places can 'soak up' pressure without needing active intervention. It aligns with a more passive, natural capability. Again, at this level, the metaphor communicates *why* the destination handles tourists in this way: because it values a well-managed, enjoyable experience in line with the principles of sustainable tourism.

The following procedure of reducing the metaphor to a simile is elucidated by the following example which represents a case of novel metaphor:

> Example 3.
> ST: Il guado viene normalmente praticato dalla gente ma, nelle giornate più affollate, può garantire una solitudine da "**atollo**".
> [BT: *The ford is normally practised by people but, on busy days, it can provide 'atoll-like' solitude.*]
> TT: The ford is used quite often, and on crowded days it can get you to a **deserted-island like place of solitude.**

In Italian, the metaphor *una solitudine da atollo/atoll-like solitude* evokes a specific image of isolation, with the term *atollo* (atoll) referring to a remote, often tropical island. It suggests the experience of seclusion and peace, even if surrounded by others. The use of the simile in the English translation with the description of the atoll also evokes the image of a remote island, but the term "desert island" could suggest a barren, inhospitable place. This image could influence the behaviour of people who visit the ford (Environment) to enjoy moments of solitude in nature, even in busier times. Both versions can include the experience of crowds as well as solitude (Capabilities). The difference lies at the level of communication style, which tends to be clearer and more explicit in English. In addition, the English metaphor of a "deserted island" evokes slightly different cultural values, often associated with stories of survival and individualism (e.g., the story of "Robinson Crusoe"). While it still emphasises aloneness, it has a less idyllic connotation and focuses more on sheer isolation and escape from civilisation. On a more abstract level, then, the metaphor in Italian implies an identity associated with spiritual refreshment through nature, whereas in English the term "deserted-island like place of solitude" similarly appeals to those wishing to escape society, but is possibly more associated with a desire for complete seclusion or isolation, reflecting a tourist's identity of independence and self-sufficiency in the wilderness.

The procedure of non-metaphorical rendition is best represented when the concept of immersion comes into play. In the Italian data, the concept *immerso nella natura* (immersed in nature; see Tognini-Bonelli and Manca, 2004) alludes to the semantic realm of water and implies a seamless and harmonised merging with the environment. This metaphor, whose image schemata is again NATURE IS A CONTAINER refers to the close relationship that humans have with natural features such as rivers, mountains, forests, etc. Indeed, immersion suggests a comprehensive sensory experience by implying a fusion with the surrounding natural

environment (Capabilities) and it conjures up the image of a tourist fully immersed in the sights, sounds, smells, and tactile sensations of the natural world. In terms of translation procedures, out of 23 occurrences in the ST, 16 were rendered verbatim in the TT. The remaining seven occurrences were rendered non figuratively either with *set* or with *surrounded*, as in the following example:

> Example 4.
> ST: Il luogo è completamente circondato dalla natura, **immerso nelle bellezze della natura**
> [BT: *The place is completely surrounded by nature, immersed in the beauties of nature.*]
> TT: The site is completely **surrounded by** nature; it is **set in** the beautiful nature.

Both texts present the place (Environment) as embedded within nature. However, the Italian *immerso* implies a fuller, more active integration into the landscape (Behaviour), creating a behavior of coalescence with the surroundings, while the TT presents a more neutral formulation which matches perfectly with those found in the TOURISC, where no occurrences of immersion metaphor appear. Only "set" is found, as in the example *that was a really positive experience set in beautiful woodlands*. While *set in* may not fully capture the depth of *immerso* nevertheless it highlights the site's capacity to position tourists close to nature. What can be noticed here is that the translation of this metaphorical sub-category is not consistent throughout the TT as either translators opt for a linguistic variation or because they want to achieve a less metaphorical cumulative effect in the translated text in line with the English communication style. A further reason might be at the level of values conveyed: where the ST emphasises a belief in the value of an immersive, integrated experience, the TT reflects an appreciation of nature that leans slightly more toward visual enjoyment. The identity expressed in the ST is that of a place that is almost merged with nature and loses its boundaries in order to become part of the landscape. The TT, on the other hand, presents the place as having its own identity in a beautiful natural setting, while still retaining a sense of remoteness.

Other metaphors affected by this procedure, and that are very frequently used in tourism discourse, are illustrated in the following example:

> Example 5.
> ST: Si tratta della spiaggia che si sviluppa nella prima ansa della spettacolosa doppia curva che il fiume intraprende andando ad **infrangersi** sulla rupe in cui è **incastonato** l'abitato di San Salvatore.

> [BT: *This is the beach that unfolds in the first bend of the spectacular double curve the river takes as it crashes against the cliff where the town of San Salvatore is nestled.*]
> TT: This is the beach that faces the first of the spectacular double bends in the river. It **comes up against** the cliff on which the town San Salvatore **is built**.

Indeed, Example 5 contains two metaphorical images in Italian versus no rendition in English. The river (Environment) is depicted as dynamic, forceful, and alive as it breaks against the cliff. At the behavioural level, this implies a strong natural force meeting an immovable object, creating a vivid contrast between the fluidity of the river and the stability of the cliff. At the capability level, the ST portrays the river as a force capable of shaping and interacting with the landscape, whereas the TT presents it as simply part of the setting. The town is "embedded" in the cliff, suggesting harmony (Value/Beliefs) between human habitation and nature, almost as if the town were a natural part of the landscape. In the translation, the river "comes up against" the cliff, which neutralizes the metaphor's sense of power and drama. The more literal description of the town built on the cliff, loses the imagery of it being embedded, which in the ST implies a more intricate, natural connection between the town and the landscape. Moreover, the verb "infrangersi" (breaking or crashing) suggests vigorous action – the river is portrayed as a force of nature that interacts violently with the cliff. The town being "incastonato" (embedded) suggests that it has been crafted carefully into the landscape, implying a delicate but enduring relationship between human and natural elements. The translation shifts this action to something more passive –the river simply "comes up against" the cliff, implying less force and dynamism. The translation suggests less of this interaction between forces. The Italian metaphor conveys a sense of awe and respect for nature, portraying the landscape as both powerful and harmonious (the town carefully embedded into the cliff). In the translation, the emphasis is on the physical creation of the city rather than the sense of harmonious integration suggested by "incastonato". Therefore, the sense of connection between identity and place is strongly reduced.

In the following example (6), the Italian phrase *piagato da un eccesso di costruzione* (*blighted by overbuilding its coastline)* uses the metaphor of the sea being *piagato,* which literally means "wounded" or "scarred" by over-construction. This is a strong metaphor suggesting that the coastline (environment) has been damaged by human activity, as if it were a living entity suffering from the impact of development.

Example 6.
ST: Abbiamo sposato la filosofia del turismo verde, ricordando come troppo spesso il nostro mare sia stato **piagato** da un eccesso di costruzione delle sue coste.
[BT: *We espoused the philosophy of green tourism, remembering how too often our sea has been blighted by overbuilding its coastline.*]
TT: We embraced the concept of totally green tourism by giving priority to the parts of rivers located in scarcely-inhabited and unpolluted valleys dominated by **raw nature,** and to the beaches **without man-made elements or architectural structures.**

The English translation avoids the metaphor of wounding and makes the sense of the metaphor explicit. Indeed, it presents a more descriptive, neutral tone, emphasising the absence of development rather than the damage caused by it. The English translation prioritises untouched spaces but without the urgency or the emotional weight conveyed by the Italian metaphor, which implies a need for repair or restoration of the environment (Behaviour). At the level of capabilities, the use of the word in the Italian text emphasises the severity of the problem, suggesting that urgent action is necessary. In the English translation, the problem-solving approach is more preventative – keeping certain areas untouched – rather than addressing areas that have already been harmed.

Culturally speaking, the Italian metaphor "piagato" evokes a deep respect for nature, implying that the coastline is a precious and living entity that has suffered at the hands of human activity. This reflects a belief in the need to protect and nurture natural environments and to undo the damage caused by careless development. The English translation reflects a cultural value of preserving nature by focusing on untouched environments. It aligns with the belief that nature should be left intact, but it does not carry the same sense of regret or responsibility for the damage done, as in the original metaphor. In addition to this, the word "piagato" has got religious connotations in that it may refer to the biblical tradition of the plague, seen as divine punishment (such as the plagues of Egypt in the Bible), linking the term to concepts of divine wrath, catastrophe, and moral justice. By metaphorical extension, 'plague' can refer to social or moral problems perceived as devastating, such as a 'social plague' (such as poverty, corruption, or violence), indicating something that afflicts and corrupts society, just as a disease afflicts the body. In the Italian ST, the metaphor suggests an identity tied to environmental responsibility. By referring to the sea as "our sea", the text fosters a sense of collective ownership and accountability. The metaphor personalises the relationship with nature,

emphasising the role of humans as both the cause of harm and the potential agents of healing. On the contrary, the English translation does not directly connect the identity of the speaker or the audience to the harm already done, as the Italian metaphor does. The focus is more on preserving that which remains untouched.

Similarly, the metaphor of the corruption of nature (Example 7) can be associated with images of disease or biological decay, such as the poisoning of watercourses, soil erosion, or the death of ecosystems. This ties in with the semantic field of disease, in which nature, like a living organism, is 'infected' or 'sickened' by human activities.

> Example 7.
> ST: insediamenti urbani o altre manifestazioni architettoniche dell'uomo che possano in qualche misura **corrompere** la pura vista sulla natura.
> [BT: *urban settlements or other man-made architectural manifestations that may to some extent corrupt the pure view of nature*.]
> TT: This describes how hidden the site is from the view of roads, urban settlements, and other man-made buildings that can **ruin** the feeling of being in nature.

In the Italian example, the destination is described as being set apart from crowded places where man-made constructions affect, or even corrupt, the enjoyment of nature. In the TT, despite the existence of the lemma 'corrupt', the verb 'ruin' has been used to convey the meaning of destruction of the natural environment. In this case, the phenomenon of corruption is used in the Italian text and not in the English one, as it is an endemic factor in Italian society in the face of which there is a feeling of social impotence (Pezzi 2017: 8). The TT lacks the metaphorical expression and relies on a non-figurative rendition of the concept given that corruption is not perceived in British society as it is in the Italian one.

5. Further observations and concluding remarks

The main assumption behind this research was based on the consideration of metaphor as a powerful indicator of significant ideological mappings within sustainable tourism discourse. The main aim of this study was to explore the most pervasive metaphors and their source domains in the discourse of sustainable tourism starting from the Italian language. A

further aim was to study the procedures adopted in the English TT to convey the same metaphorical images. The analysis has shown that the most dominant metaphors (e.g., uncontaminated nature; immersed in nature) set up a contrast between the serene, untouched natural sites (described as paradises) and urban stress. Beaches are represented as places of purity and relaxation, in contrast with busy, artificial beach settings. The destinations also metaphorically represent a "solitary escape" a kind of retreat from urban congestion. Nature is also a living entity: it is depicted with almost human qualities – described as "cradling" or "nestling" visitors, suggesting a nurturing role. As it has been stated "In applying this stewardship metaphor, one recognizes that humans hold multiple values and concerns for nature, which derive from their affective and cognitive interactions with other species and ecosystems" (Raymond et al., 2013: 540). This metaphor frames nature as a living, breathing entity with which people are in a kind of reciprocal relationship. It emphasises the need to protect nature's vitality and allow it to "breathe". In the Italian text, the metaphor "piagato" (wounded or scarred) powerfully evokes the image of the sea as a living entity that has been harmed by the excessive construction on the coastline. This metaphor creates a strong emotional response, suggesting that the coastline is not just a passive space but a suffering being that requires healing. It also implies a deep sense of regret and the need for corrective action to restore balance between human activity and the natural world.

These main metaphors have been conceptually rendered in English and sometimes also linguistically. The differences emerged at the micro-level of the text highlight some cultural differences but also stylistic choices made by the translator. Indeed, the English translation adopts a more neutral, descriptive approach, which is a cultural feature of communication in English (Katan and Taibi, 2021). The metaphor of wounding is replaced with a focus on undeveloped areas, highlighting beaches and rivers without man-made structures. While this reflects a commitment to preservation, it lacks the emotional and metaphorical weight of the Italian original.

From a methodological perspective, and qualitatively speaking, Logical Levels theory provides an organised framework for examining and understanding how metaphors function at different levels of meaning. By breaking down metaphors into different levels of human experience, from concrete behaviours to abstract beliefs and values, and by uncovering the deeper cultural and ideological components inherent in metaphorical language, it enables a more nuanced and comprehensive approach to metaphor translation. By the use of Logical Levels theory, metaphors have

been analysed at multiple levels and the results have helped demonstrate the Italian cultural perspective that views the natural world as interconnected with human existence. The use of the metaphor "piagato" indicates a belief that humans are responsible for the environment's well-being and that the damage caused by development is not just physical but also moral**.** The English text, while promoting green tourism, does not carry the same moral weight**.** The focus is on preservation**,** particularly of untouched areas, but there is no direct acknowledgment of past harm. The translation's emphasis is on prevention, with less of a focus on corrective measures. Furthermore, in the Italian text, phrases such as "nostro mare" (our sea) create a strong sense of collective identity and personal connection to the natural world. The sea is seen as part of the shared heritage of the people, and the metaphor of wounding makes the environmental damage feel personal and intimate. This fosters a sense of ownership and accountability, encouraging people to take an active role in protecting and restoring their environment. The English translation does not evoke the same personal connection. By avoiding the metaphor of wounding, it presents nature in a more detached way, focusing on its pristine qualities rather than its role as part of the community's identity. The absence of emotional language distances the reader from the harm caused and instead emphasises the conservation of natural beauty, rather than a personal or spiritual obligation to nature. As a result, the English version feels more focused on prevention than on addressing the past or fostering a personal sense of responsibility for environmental damage.

The quantitative analysis has demonstrated that translation trends regarding metaphor use indicates a complex interplay between preservation and adaptation strategies. While the majority of conventional metaphors are retained, the decisions to change some to similes or translate them non-figuratively illustrate the translators' efforts to balance fidelity to the source text with cultural relevance and accessibility for the target audience.

Even though the underlying conceptualisation is the same in both cultures, nevertheless metaphorical expressions do vary across English and Italian, reflecting different cultural attitudes toward environmental issues. The language emphasises maintaining natural spaces as they are, with less direct emotional involvement or implication of human-caused harm. English metaphors reflect a more pragmatic approach to environmental issues, focusing on sustainability and conservation in practical terms.

Finally, we can conclude this study by highlighting how the translation of metaphors constitutes a complex area in which the translation is generally

faithful to the conceptual metaphors of the ST, adhering to the TT with those cultural adaptations that are necessary "to function optimally in the target culture to achieve the intended purpose, and this […] requires translators to address the cultural context of the target audience" (Sulaiman and Wilson, 2017: 42).

References

Agorni, M. (2012). Tourism Communication: the translator's responsibility in the translation of cultural difference. *Pasos*, 10 (4), 5-11.

Agorni, M,. and Spinzi, C. (Eds.) (2019). Mind the gap in tourism discourse: traduzione, mediazione, inclusione. *Altre Modernità*, 21.

Al-Zoubi, M., et al.(2007). Cogno-Cultural Issues in Translating Metaphors. *Perspectives,* 14(3), 230-239.

Blackstock, K. L. et. al. (2008). Measuring Responsibility: An Appraisal of a Scottish National Park's Sustainable Tourism Indicators. *Journal of Sustainable Tourism*, 16(3), 276–297. https://doi.org/10.1080/09669580802154090

Bramwell, B., and Lane, B. (1993). Sustainable Tourism: An Evolving Global Approach. *Journal of Sustainable Tourism*, 1(1), 1-5. https://doi.org/10.1080/09669589309450696

Calvi, M.V. (2001). El léxico del turismo, in Angel M. Felices Lago (Eds.) Ele para contextos profesionales. Cultura y intercultura en la enseñanza del español a extranjeros. *Cuaderno Cervantes.* https://www.cuadernoscervantes.com/ultimo_culturaeinterc.html

Cameron, L. et al. (2009). The Discourse Dynamics Approach to Metaphor and Metaphor-led Discourse Analysis. *Metaphor and Symbol,* 24(2), 63-89.

Chilton, P., and Schäffner, C. (2002). *Politics as Text and Talk: Analytic Approaches to Political Discourse.* Amsterdam: John Benjamins.

Dann, G. (1996). *The Language of Tourism: A Sociolinguistic Perspective***.** Wallingford: Cabi Publishing.

Deignan, A. (2005). *Metaphor and Corpus Linguistics.* Amsterdam: John Benjamins.

Diadori, P. (2022). *Tradurre per il Turismo.* Firenze: Franco Cesati Editore.

Dilts, R. (1983). *Applications of Neuro-Linguistic Programming. Copertino,* CA: Meta Publication.

Djafarova, E., and Andersen, H. (2008). The Contribution of Figurative Devices to Representation of Tourism Images. *Journal of Vacation Marketing,* 4(4), 291-303.

Gibbs, R. W., Jr. (1994). Figurative Thought and Figurative Language. In Gernsbacher, M. A. (Ed.), *Handbook of Psycholinguistics*. New York: Academic Press, 411-446.

Gibbs, R. W., Jr. (2006). *Embodiment and Cognitive Science.* Cambridge: Cambridge University Press.

Hall, E. T. (1990 [1959]). *The Silent Language.* New York: Doubleday.

Hedayat, N. et al. (2020). Neuro-linguistic Programming and Its Implications for English Language Learners and Teachers. *Theory and Practice in Language Studies*, 10.

Iritspukhova, N. (2023). Metaphor and English Promotional Tourism Discourse: Systematic-narrative Hybrid Literature Review and Future Research Areas. *Anglica. An International Journal of English Studies*, (32), 93-113.

Jaworska, S. (2017). "Metaphors We Travel by: A corpus-assisted Study of Metaphors in Promotional Tourism Discourse". *Metaphor and Symbol,* Volume 32, 161-177.

Katan, D. (2018). Translatere or transcreare: In theory and in practice, and by whom? In Spinzi, C. et al. (Eds.). *Translation or Transcreation? Discourses, Texts, and Visuals*. Newcastle upon Tyne: Cambridge Scholars Publishing, 15-38.

Katan, D., and Taibi, M. (2021). *Translating Cultures: An Introduction for Translators, Interpreters and Mediators* (3rd ed.). London and New York: Routledge.

Kosmas, P., and Vatikioti, A. (2024). "Beyond Neoliberal Tourism: A Critical Review". *Managing Natural and Cultural Heritage for a Durable Tourism*, 85-97.

Kövecses, Z. (2005). *Metaphor in Culture: Universality and Variation.* Cambridge: Cambridge University Press.

Lakoff, G., and Johnson, M. (1980/2003). *Metaphors We Live by*. Chicago: Chicago University Press.

Lazzeretti, C. (2020). Communicating Sustainable Tourism in English. *Linguae &,* 19(2), 133-154.

Maci, S., and Spinzi, C. (forthcoming). *Translating Tourism Discourse.* London and New York: Routledge.

Malavasi, D. (2017). 'No One Can Be the Invisible Tourist – but we Like that you are Trying': An Analysis of the Language of Sustainable

Tourism. In Gotti, M. et al. (Eds.) *Ways of Seeing, Ways of Being: Representing the Voices of Tourism*. Bern: Peter Lang, 363-77.

Manca, E. (2008). "'Immerse Yourself in the Traditions of the Simply Way of Life': Analysing English Translations of Italian agriturismi Websites". *RITT. Journal Rivista Internazionale di Tecnica della Traduzione*, 10. Università di Trieste.

Manca, E. (2009). Aspetti culturali a confronto. La promozione turistica in Italia e Gran Bretagna. *Lingue Policentriche a confronto: quando la periferia diventa centro*. Monza: Polimetrica, 153-164.

Manca, E. (2010). "From Phraseology to Culture: Qualifying Adjectives in the Language of Tourism". In *Patterns, Meaningful Units and Specialised Discourses. Benjamins Current Topics Series.* Amsterdam: Benjamins, 368-385.

http://sibaese.unisalento.it/index.php/tourismandtourist/article/view/13606/12024

Manca, E. (2012). Translating the Language of Tourism across Cultures: from Functionally Complete Units of Meaning to Cultural Equivalence. *Textus*, 1, L. Fodde and G. Van Den Abeele (Eds.), special issue, "Tourism and Tourists in Language and Linguistics", 51-68.

Manca, E. (2013). Describing through the Five Senses. A Contrastive Socio-cultural and Linguistic Analysis of Italian and British Tourist websites**.** *Tourism and Tourist Promotion around the World: A Linguistic and Socio-cultural Perspective*. Lecce: Salento University Publishing, 109-124.

Manca, E. (2016). *Persuasion in Tourism Discourse. Methodologies and Models*. Newcastle upon Tyne: Cambridge Scholars Publishing, 15-38.

Massey, G., and Ehrensberger-Dow, M. (2017). Translating Conceptual Metaphor: The Processes of Managing Interlingual Asymmetry. *Research in Language*, 15(2), 173-189.

Mattiello, E. (2012). Metaphor in Tourism Discourse: Imagined Worlds in English Tourist Texts on the Web. *Textus*, 1, L. Fodde and G. Van Den Abeele (Eds.), special issue, "Tourism and Tourists in Language and Linguistics", 69-84.

Mihalic, T. (2016). Sustainable-responsible Tourism Discourse – Towards 'Responsustable' Tourism. *Journal of Cleaner Production* 111, 461-470.

Musolff, A. (2004). *Metaphor and Political Discourse: Analogical Reasoning in Debates about Europe*. Basingstoke, Hants: Palgrave Macmillan.

Newmark, P. P. A. (1981). *Approaches to Translation*. London: Prentice Hall.

Ortony, A. (1993). Metaphor, language, and thought. In Ortony, A. (Ed.), *Metaphor and Thought* (2nd edn.). Cambridge: Cambridge University Press, 1-18.

Papadoudi, D. (2014). Translation of Metaphor in Popular Technology Discourse. In Musolff, A. et al. (Eds.) *Metaphor and Intercultural Communication*. London: Bloomsbury., 35-51.

Pezzi, M. G. (2017). *La corruzione come "malattia": implicazioni sociali e culturali del considerare la corruzione come una patologia dello Stato italiano*. Social Sciences Unit, Gran Sasso Science Institute, L'Aquila.

Pragglejaz Group (2007). MIP: A Method for Identifying Metaphorically Used Words in Discourse. *Metaphor and Symbol*, 22, 1-39. [The letters stand for the first names of the ten co-authors.]

Pym, A. (2016). *Translation Solutions for Many Languages: Histories of a Flawed Dream,* London: Bloomsbury Academic.

Raymond, C. M. et al. (2013). Ecosystem Services and Beyond: Using Multiple Metaphors to Understand Human-Environment Relationships. *BioScience*, 63(7), 536-546.

Semino, E. (2008). *Metaphor in Discourse*. Cambridge: Cambridge University Press.

Schmidt, G. (2015). Applying Conceptual Metaphor Theory in Crosslinguistic and Translation Research. *Dimenzije znacênja. Zagreb: Filozofski fakultet sveucilista u Zagrebu*, 243-265.

Shuttleworth, M. (2017). *Studying Scientific Metaphor in Translation*. London and New York: Routledge.

Sperber, D. and Wilson, D. (2008). A Deflationary Account of Metaphors. *The Cambridge Handbook of Metaphor in Language and Thought*, 84-105.

Spinzi, C. (2004). "Travelling Without a Trace: A Corpus Study of the Communicative Process of 'Eco-speaking'. *ESP Across Cultures*, (1), Bari: Graphis, Laterza, 79-92.

Spinzi, C. (2010). "'How This Holiday Makes a Difference"': The Language of Environment and the Environment of Nature in a Cross-cultural Study of Ecotourism. *Quaderni Ceslic*, D. Miller (General Editor) Università di Bologna. http://amsacta.cib.unibo.it/view/series/Quaderni_del_CeSLiC._Occasional_papers.html

Spinzi, C. (2013). Treading Lightly on the Earth: Framing Metaphorical Meanings in the Language of Ecotourism". In Bianchi, F., e Manca, E.

(Eds.) *Turismo e Promozione Turistica nel Mondo: una prospettiva linguistica e socio-culturale*, Università del Salento, 81-93.

Steen, G. (2008). The Paradox of Metaphor: Why We Need a Three-dimensional Model of Metaphor. *Metaphor and Symbol*, 23: 213-241.

Steen, G. (2017). Deliberate Metaphor Theory: Basic Assumptions, Main Tenets, Urgent Issues. *Intercultural Pragmatics*, 14(1), 1-24.

Sulaiman, Z., and Wilson, R. P. (2019). *Translation and Tourism: Strategies for Effective Cross-cultural Promotion*. Singapore: Springer.

Tognini-Bonelli E., and Manca, E. (2004). Welcoming Children, Pets and Guests: Towards Functional Equivalence in the Langues of 'Agriturismo' and 'Farmhouse Holidays'. In Aijmer K., and Altenberg, B. (Eds.), *Advances in Corpus Linguistics. Papers from the 23rd International Conference on English Language Research on Computerized Corpora (ICAME 23)*. Goeteborg 22-26 May 2002. Amsterdam/New York: Rodopi, 371-385.

Translation as metaphor, metaphor as translation: Emotions in *Squid Game*'s facial expressions

Alessandra Rizzo

University of Palermo

The unprecedented growth of access services in the media and visual arts has boosted the role of audio description which has taken centre stage on numerous debates in the academic field and in the context of audiovisual translation. The present study addresses the function of audio description in virtual platforms as a means of cross-cultural mediation and as an instrument of human communication, both of which give access to audiovisual products by offering engaging forms of participation. In line with the belief that human facial expressions in media products, together with the plot, facts, settings, among others, are essential features for the engagement of the audience (the blind and visually impaired people) to media contents, it is claimed that facial expressions in particular are vital elements which necessarily need to be integrated within audio described scripts since they reveal the psychological dimension of the characters, that is, their emotional states. By investigating the Netflix Korean series, Squid Game*, where silenced scenes are crucial to the whole narration of facts and events, the research aims to investigate to what extent facial expressions as metaphorical depositaries of emotions deserve more attention in audio description practices, as well as to prove the fact that facial expressions are transferred by means of metaphorical language that acts as a translational operation when dealing with audio description. Metaphor is thus claimed to be crucial to facial expressions themselves as the instrument for their visual representation on screen, as well as to their rendering to the world of blind people in terms of intersemiotic translation practices.*

Keywords: Facial expressions, metaphor translation, emotion recognition AI, audio-description, Appraisal System Model

1. Introduction

Apart from the dissolution of cultural and linguistic confines, globalisation is also about the merging of different disciplines creating new interdisciplinary fields on the frontier of the humanities and natural

sciences. In this hybrid climate, translation has become a general metaphor for transfer and transformation and, even more, the metaphor of our globalised lives. Cross-disciplinary movements have redesigned the significance of translation within metaphor theory, in which new theoretical approaches, among which cognitive linguistics, have emphasised the fundamental significance of translation as metaphor in everyday life, as well as the complementary role of translation studies in metaphors, and of metaphors for translation.

The present study is set in the field of audio description (AD) which, as a type of intersemiotic translation that is based on the transfer of visual elements to oral verbal descriptions (i.e., images, scenes, emotions, and people's physical appearance are rendered through words), is practised in the visual arts and the media for the benefit of the blind and visually impaired people. When it comes to the descriptions of the characters in media products (i.e., films, TV series, documentaries, talk shows, and the like), AD as a procedure of translation can also involve the translation of the characters' facial expressions (FEs). FEs are conceived as physical signs that, while navigating themselves within the context of metaphorical translation, communicate the emotional and psychological traits of the fictional characters to the external world (the audience as interlocutor). In this sense, AD, which is a potential form of interpretation of facts, emotions, and actions, is here claimed to be a metaphorical procedure entailing translation as an act devoted to the rendering of human emotions, and to the transfer of the characters' inner dimension to the public.

The translation of FEs in AD is thus as important as the description of facts and actions since the revelation of the psychological world of characters is so engaging to the extent of fortifying the relationship between the audience and the characters' states of mind. For people who have no sight, or who are partially sighted, emotions are in fact stimuli that increase and improve their involvement with the reality they have no visual access to, that is, emotions are vehicles that facilitate their understanding of individuals in relation to communities, masses, and peoples with distinct linguistic and cultural backgrounds – especially if AD involves the translation of non-domestic audiovisual products. The externalisation of human emotions in AD depends on how these are interpreted, that is, translated in "words" or in "facts", in any case in "signs" (Petrilli and Ji, 2022), according to intercultural competence skills.

Particular attention is paid to the investigation relating to what extent (and if) the metaphorical side of FEs as mirrors of emotive states of mind

is caught in AD practices, and whether contrasting portrayals that interpret and narrate on-screen human faces (i.e., the face and its different components) exist when intersemiotic transfer occurs in different languages and cultures. The detection of FEs is applied to the TV series, *Squid Game* (*SQ*), and is complementary to the identification of the linguistic formulations which, within the selected AD scripts, refer to the spotted FEs. Focus is on the level of visual information provided by FEs on screen, as well as on the qualitative survey of the linguistic formulations produced to transfer emotional load as meaning-making process, which is maintained to be a revelatory instrument of emotional knowledge for blind people. The analysis of the linguistic formulations contained within the AD scripts for *SQ* is construed in terms of contrastive analysis.

This involves the comparison between the two sets of Netflix AD scripts produced in English and Italian, where attention is paid to the identification of the linguistic formulations (and the relative differences or similarities in English and Italian) as devices that provide the public with the translation of the emotions recorded in the selected FEs. Emotions displayed on human faces are in fact iconic signs of "affordance and comportment" (Lanigan, 2022: 280). In short, what the face looks like sets the meaning frame for what the describer, first, and the listener, next, elaborate in terms of metaphorical translation acts that can potentially display transformation of perception, deletion of expressions, or new shared expressions. Roman Jakobson in fact reflects upon the potential semiotic variations stemming from the function of intersemiotic translation or transmutation chiefly as the interpretation of verbal signs by means of signs of nonverbal sign systems, where "the change is fixed as the trope of chiasm, i.e., the poetic function of discourse" (Lanigan, 2022: 280).

Results show that the English corpus of ADs is significantly distant from the Italian one, not only because the tactics of AD scripting/writing process vary substantially, but chiefly because variation depends on the detection or non-detection of certain FEs viewed as necessary or unnecessary according to the different system of linguistic and cultural decoding (English and Italian) that embeds the audio describers' background. The Appraisal System Model, which is concerned with the linguistic resources by which texts/speakers come to express, negotiate, and naturalise intersubjective and interpersonal emotional propositions, is used as the methodological instrument that contributes to the qualitative investigation of the linguistic formulations in the English and Italian ADs as metaphorical translations of onscreen FEs. The scrutiny is further supported by MorphCast

(https://www.morphcast.com/), a technological device that digitally and virtually interrogates the detected FEs while verbally offering explanatory statements of the transferred emotions in human faces, thus strengthening the primary end of this research, that is, raising awareness of the need to prioritise the psychological state of characters in AD by means of metaphorical translation.

By relying on metaphors as important elements in human communication, often conveying and evoking sentiments (Zhang et al., 2018; 2021), and in line with the numerous theories of sentiment analysis of metaphors, the linguistic expressions synchronised with facial images are viewed as metaphors of translation, and translation of metaphors, since FEs are themselves defined as visual metaphors of human emotions.

The above mentioned practical section of this work is preceded by a theoretical overview of studies on metaphor as a tool of human communication involving translation not only as a figure of speech but as a fundamental way for human beings to perceive the world, as well as a basic cognitive visual non-verbal structure that contributes to the comprehension of abstract concepts (i.e., emotional frames of mind translated through face, eyes, and mouth/lips). Human body parts are commonly metaphorically used to understand other things in the world, and face and eyes are among the most frequently used body parts to map onto other concepts to perceive them. The special characteristics of face and eye – where the eye is the visual organ of the human body that can be perceived as a hole in physical structure – make these two human body parts the metaphorical containers of human emotions. The eyes, the mouth, the lips, the eyeballs are special landmarks where abstract concepts are located, that is, the body parts where feelings of excitement, truths, sorrows, fear, and regrets, are located. If the type of movement of facial components affects FEs, at the same time, the type of FEs that embody human psychological states affects the linguistic formulations in AD. In a word, FEs become conceptual metaphors that allow the blind audience to penetrate the characters' emotional states and to overcome the mere telling of the action itself while increasing the listeners' empathy in relation to the sentiments of the characters. It goes without saying that the translation of FEs externalises what is already implicitly metaphorical onscreen and gives voice to the representation of human emotions through verbal productions.

2. Metaphor as translation, translation as metaphor

Before the 1990s, metaphor translation was mainly an issue addressed by linguistic approaches (Nida, 1964; Newmark, 1981) and textual approaches (Mason, 1982; Snell-Hornby, 1995; Menacere, 1992; Toury, 2012). In traditional approaches, metaphor is conceived as an exceptional use of language in opposition to cognitive approaches which, instead, discuss metaphor not as matter of language but as a conceptual device that allows one to understand and reflect upon abstract concepts and emotional experiences (i.e., in the case in point, sensorial and perceptive emotions) (Lakoff and Johnson, 1980/2003). The past two decades have witnessed a dramatic growth of research interest in metaphor translation from a cognitive perspective (Schäffner, 2004; Schäffner and Shuttleworth, 2013; Kövecses, 2014; Hanić Pavlović and Jahić, 2017). In contrast to its role as an ornament of language in rhetorical studies (Richards, 1936), metaphor has gained momentum and attracted translation scholars who have recognised it as a translation problem that requires special attention rather than being simply equated with a figure of speech.

Focus on the association of metaphor and translation has grown exponentially to the extent that translation itself has been regarded as a metaphorical procedure where translation can act as metaphor, and metaphor can act as translation, a binomial combination that sees the two terms as interchangeable. Against this backdrop, the translation of FEs in the context of AD can be recognised as a metaphorical procedure, mainly culture-bound, since metaphor as translation, and translation as metaphor – which is used in the intersemiotic process of translation of FEs – are culture-specific concepts connected with a particular cultural community.

Having claimed that FEs are conceived as metaphors of emotions, metaphor translation – most prominently when the transfer entails strategies of face translation into words that are required to render human sensory perception– poses the problem of switching between two different cultural references and contexts, as well as between two diverse conceptual and linguistic perspectives. Dealing with metaphors in translation is in fact not merely a matter of identifying the linguistic correspondences in two languages but that of catching parallelisms between the conceptual systems corresponding to the different cultural models of the languages involved. Even more challenging is the process of metaphorical translation that involves the transfer of metaphorical conceptualisations rooted in Korean FEs to English and Italian cultural settings.

As stated at the beginning of this section, metaphor translation has always been an issue in Translation Studies (Hong and Rossi, 2021), since interlingual transfer can be impeded by cross-cultural and crosslinguistic differences. Since the inception of Conceptual Metaphor Theory (CMT), which focuses on the conceptual structure of metaphorical language, a range of studies have emerged to investigate metaphor translation from a cognitive perspective, pointing out that metaphor is an essential cognitive meaning-making device, as well as translation is a cognitive activity. From the cognitive approach perspective, metaphors appear cross-cultural communication tools, not just "decorative elements, but rather, basic resources for thought processes in human society" (Schäffner, 2004: 1258).

Metaphors are thus a means of understanding one domain of experience (a target domain) in terms of another (a source domain): "the source domain is mapped onto the target domain, whereby the structural components of the base schema are transferred to the target domain (ontological correspondences), thus also allowing for knowledge-based inferences and entailments (epistemic correspondences)" (ibidem). Besides, since metaphor entails a complex interplay of a variety of linguistic and extra-linguistic elements, it appears to be an ideal research ground for translation to venture into by the construction of models that are largely represented and understood in linguistic terms, while referring to a system of conceptual mapping, where metaphorical expressions describe an "individual linguistic expression that is based on a conceptualisation and thus sanctioned by a mapping" (ibidem).

When linguistic expressions such as *with dark somber eyes* (in *SQ*) are used to translate the FEs of characters on screen for the benefit of blind audiences, the linguistic expression not only contains metaphorical connotations but also owns a translating effect. Indeed, the linguistic expression used to describe the on-screen eyes translates a series of meanings embodied in the visual metaphor that is rendered through the adjective *somber* (whose meaning is not referring to the colour or shape of eyes); instead, the adjective *somber* as a part of speech metaphorically associated with the noun *eyes* has the purpose of translating a visual attitude which is externalised through the eyes by remarking the character's feelings of deep seriousness and sadness. The two adjectives, *somber* and *dark*, dramatically reinforce not physical connotations belonging to the body part (the eyes), instead, transfer a sense of unhappiness, unpleasantness, and deep pessimism, semantically aiming at the reinforcement of the concept of darkness and negativity ("little or no light"), which is in that specific

moment in time perceived by the character onscreen. The translation of FEs therefore depends on establishing the conceptualisation of the metaphorical meaning that face expressions intend to reveal, and on choosing which more suitable metaphorical expression can be relevant to translation procedures within the same language and/or in different languages. Translatability is thus no longer a question of the individual metaphorical expression, but an issue linked to the level of conceptual systems in source and target culture.

In the context of this study, the association of metaphor as translation, and translation as metaphor, relies on the fact that both metaphorisation and translating are chiefly meaning-making processes. If metaphor, which "through resemblance makes things clear" (Kittay, 1987: 2), provides the viewer (the audio describer) and the listener (the blind audience) with a way of learning something new or invisible about the world, or about how the world may be perceived and caught, similarly, translation is not a transparent representation of the original in that it rewrites and recreates its source text. AD scripts that include the linguistic transfer of FEs as metaphorical translations add something to the original which would remain unknow and unsaid if the emotional dimension of characters was left out of the AD process. In this sense metaphor as translation, and translation as metaphor, can be said to act in AD as "the afterlife of the original" (the blind audience's acquired meaning), to quote Benjamin (1968/1992), and to represent "a moment in the growth of the original" (Derrida, 1985: 188), where translation (AD) offers new meanings to the original (the characters' FEs) by adding references and allusions that act in terms of "interpretative transformation" (Venuti, 1992: 2).

In brief, AD scripts evoke not the idea of mirroring and copying of an original but what Lefevere introduces with the concept of the "refracted text" (Lefevere, 1992), where "refraction" involves changes of perception. Indeed, silenced FEs turn to verbalised metaphorical linguistic expressions, where the passage from one sign system to another is implied, as well as changes of perspectives which depend on the interpretation and evaluation of FEs. The rendering of FEs as visual metaphors implies that metaphor – which plays an important role in human communication – is a device that conveys and evokes feelings and emotions, which means that human beings are constantly embedded in a process of metaphorical translation of emotions and everyday life, and that the very way we think, speak and act, is fundamentally metaphorical in nature.

Metaphor and translation are associated in a variety of ways that include translation and metaphor, metaphors of translation, and translation of metaphors, translation as metaphor, and metaphor as translation. In recent studies (Guldin, 2016), translation and metaphor have been depicted as deeply connected, since the two terms share a common etymological origin and a parallel history, which means that translation can be a metaphor for metaphor and, conversely, metaphor can appear as a metaphor for translation. Both the Greek word *metaphora* and the Latin word *translation,* referring to acts of metaphorisation and translating, involve the transfer of meaning. Metaphor as process rather than as figure revolves around a mechanism of discovery and support to understanding the original, what is also possible for translation. From Nigro's perspective (2003), metaphor and translation crucially involve a process of interpretation, whereas metaphor as a cognitive process implies an act of seeing, but also an act of translation itself. Metaphor as a cognitive process can thus be itself a model, or a way of setting the translated text (the created verbal description) in relation to the source text (images, faces, actions on screen). Both translation and metaphor present a new and different view of the source (object or text). As remarked in cognitive theories of metaphor, translation and metaphor represent two ways of seeing one thing in terms of another, considering the link between the two processes (Lakoff and Johnson, 1980/2003). The most useful relationship between translation and metaphor in this study lies in the concept of translation as metaphor, and vice versa, where translation can itself be a metaphor, and metaphor an act of translation.

In Nigro's study (2003), translation serves as a metaphor for all acts of writing. Therefore, the visual images onscreen transfer thought processes, and metaphors translate the characters' FEs into language. Lakoff and Turner's ideas (1989) on metaphor, and Torop's philosophy (1995) on translation, claim that metaphor and translation refer to thought and human actions. In line with what Lakoff and Turner maintain, metaphors do not have merely a linguistic nature, and are not a sequence of words. Instead, metaphors concern thoughts, and not just language. To put it in terms of Allbritton, metaphors are able to create schemas for understanding abstract domains of experience (1995: 33), which is what happens in audiovisual texts when FEs act as metaphorical containers which translate human thoughts and, in AD, when the description acts as a metaphorical tool that translates FEs. This concept is in line with Torop's notion of total

translation (1995), which implies that everything is translation, and each mental activity implying the search for meaning is translational activity. FEs (emotions represented onscreen) are external manifestations that are converted to conceptual knowledge. As a matter of fact, cognitive force is what connects translation and metaphor, to mention Aristotle in his *Poetics*. FEs are metaphors of emotions, as well as containers of translation, and metaphor is translation when the transfer of meaning involves the physical dimension whose emotions are orally transferred to the blind audience. The same can be said in translation when it gives new further meaning to the original, thus enriching the source text (i.e., FEs) with new interpretative and comprehensive paradigms. FEs are not only metaphorical devices but also translated spaces, that is, the location where the transmutation of a sign system (the visual one) occurs into some further, alternative sign systems. Thus, a process of subjective interpretation on the part of the audio describer takes place considering that translation is always interpretation.

All metaphor is fundamentally a translational operation, as well as translation is a primarily metaphorical act in the bringing together of difference (Cronin, 2006). Translation as metaphor culminates in the perspective according to which translation, by moving away from a target-domain context, places itself within a source-domain setting. The source-domain environment is the AD script setting which is required to transfer the audiovisual context not only by considering scenes and events that place each character within a certain space but also to project the characters' psychological dimension on to the external world of the visual product. The source-domain context therefore also involves all the elements that give rise to the attitudes and emotions of the characters.

3. FEs as emotional metaphors and translational operations

FEs have been studied for many centuries and from a variety of perspectives within different research areas ranging from the Visual and Media Studies (television, dance, theatre, and cinema) to Medicine and Psychology and Anthropology, among others (Vercauteren and Orero, 2013). The so-called Facial Action Coding System (FACS in Ekman and Friesen, 1978), a system that allows for a modular construction of emotions based on the combination of Action Units (AUs) and developed in Psychology thanks to the studies carried by Ekman and Friesen (1971), is among the most remarkable studies on the universal classification of human expression

through which emotions are classified and conveyed. Facial Action Coding (FAC) moves from the belief that human facial emotions function as a medium for interpersonal and social communication, therefore it is fundamental to examine and understand the nature of human facial information for effectively interacting and connecting with people in various social contexts (Russell, 2003). The universality of some human facial expressions conveying the six basic emotions (i.e., happiness, sadness, anger, fear, surprise, and disgust) has been proposed by Ekman and Friesen (1978), and their research has pioneered and contributed to further scrutiny of emotional human facial expressions, and to their coding systems, assuming that some basic emotions are universal and innate across cultures.

However, recent studies have put emphasis on the fact that there can be some disparities across cultures in the mental representations of the six basic emotions if we consider easterners vs. westerners (Jack et al., 2012), since sociocultural and ethnic differences can modulate the expression and perception of the six basic emotions. The main concern in intersemiotic translation (AD) is to show not the emotion itself in its abstract relevance (i.e., fear, anger, sadness, joy, etc.) but to highlight what physical signs are activated in human bodies (in particular, in human faces for the purpose of this study) when emotions are experienced in one person's amygdala, which is that grey matter in the cerebral hemisphere that stimulates emotional states. Emotions produce FEs as a combination of elementary components which correspond to the AUs, that is, individual face muscles or muscle groups identified by numbers in FACS such as AU61, which stands for "eyes turn left".

In recent descriptive applied studies led by the research group for the creation of the iMotions Biometric Research Platform (iMotions, 2017), FEs have been defined as the "movements of the numerous muscles supplied by the facial nerve that are attached to and move the facial skin" (ibid.: 4). Our face is seen as one of the most complex signal systems available to humans which includes over 40 structurally and functionally autonomous muscles, each of which can be set in motion independently of each other. The facial muscular system is the only place in our body where "muscles are either attached to a bone and facial tissue […] or to facial tissue only such as the muscle surrounding the eyes or lips" (ibidem), which implies that emotions expressed through eyes rely on this muscle. From a clinical perspective, facial muscle activity is what provides human beings with expression, thus encouraging them to share social information in a process of verbal and non-verbal communication. Almost all facial muscles

are innervated by a single nerve referred to as facial nerve which grows from deep within the brainstem which controls involuntary and unconscious expressions that occur spontaneously, whereas the motor cortex is involved in consciously controlled and intentional FEs. FEs are thus the result of nerve impulses which have physical manifestation stemming from emotional states that are essential for the identification of attitudes, human behavior, and the temperament of individuals.

It goes without saying that the verbalisation of FEs in AD is a strategic procedure to stimulate the participation of the blind audience in the characters' psychological inputs sent via FEs, "since the body reflects our dealing with the emotion" (Vercauteren and Orero, 2013: 193). The emotional states transferred through the verbalisation of FEs allow the blind audience to catch the characters' feelings, which are conceived as subjective perceptions of emotional actions, being driven by conscious thoughts and reflections, which implies that "we can have emotions without having feelings, but we simply cannot have feelings without having emotions" (iMotions, 2017: 8). Verbalisation and lexicalisation are thus highly intensifying processes when it comes to the AD of FEs, as explained by Prince (1993) in relation to Birdwhistell's study (1970), in which FEs are the instruments activated in daily communication, culturally dependent reactions moved by the desire to express meaning. In this sense, as remarked by Vercauteren and Orero (2013), "the audio describer should bridge the gap between the iconic and the symbolic meanings of an image. That is, he should go beyond the principle of mere photographic enumeration by description towards the level of metaphor and metonymy (ibid.: 197). In other words, "the information we gather from top-down mental processes, that is beyond physiological perception, is organised in clusters of knowledge: schemata" (ibidem).

By moving towards the level of metaphorisation construed against a mere photographic list, and in line with the theoretical framework of translation as metaphor, and metaphor as translation illustrated in the previous section, as well as against the backdrop of cognitive linguistics where metaphor studies are embedded, the translation of FEs is here claimed to be a sample of metaphor translation, since FEs themselves are conceived as metaphors of human emotions (i.e., fear, sadness, love, hate, regret, etc.) which, in clinical and psychological terms, means that emotions are physical stimuli that are registered in the human face as a metaphor container in order to express human feelings to the external world. Thus, the act of translating FEs for AD purposes produces metaphorical

expressions for the verbalisation of body language. These metaphorical linguistic associations used to describe human body parts (i.e., face, eyes, hands, head, among others) are employed by audio describers to externalise the characters' psychological sides in a way that is less direct and more implicit. For instance, the expressions *a faint smile* (in *SQ*) is metaphorically presenting a character lacking conviction or enthusiasm, or being extremely feeble, which, in terms of translational operations, gives the blind people mental access to the character's states of mind by exploiting the same metaphorical activity used in the transfer of emotions to human faces. In the English and Italian ADs of *SG*, which is a series rooted in the Korean culture, where indirect communication places a significant social and cultural role, the face of characters is therefore extremely important from a cultural point of view, which, indeed, strengthens the role of faces as powerful containers of emotions, sensations, and reactions, bad or good as they are. Koreans, in fact, more than other ethnical groups, tend to rely less on words and are attentive to speakers' postures, tones of voice, and expression, to draw meaning. Silence is in fact an important and purposeful tool used in Asian communication, where pauses are signs of appropriate thought and reflection, as well as of politeness and respect.

The belief that the translation of FEs for AD purposes is a metaphorical practice is rooted in the spread of Translation Studies within interdisciplinary fields such as sociolinguistics, communication studies, pragmatics, cultural studies and, recently, semiotics. Indeed, the translation of FEs involving the shift of meaning from one sign system (visual non-verbal) to another sign system (auditory verbal) is very much connected with semiotics. It is not surprising that from such an intersemiotic perspective of translation, translation is being more and more perceived as a creative attempt to create meaning. In this process, transformation is inevitable and, most importantly, intersemitotic translation in different languages presents differences due to the diverse perspectives belonging to the cultural framework of each language.

It goes without saying that translation is no longer limited to the transposition of "meaning" contained in a language sign and that, instead, it "demands a combination of "extra-linguistic" values and norms determined by cultural system" (Jabarouti, 2016: online), what in cultural semiotics is referred to as "language habits" (Sapir, 1956), meaning that translators' competence of extra-linguistic aspects of any text are not less significant than linguistic competence. The transposition of FEs into metaphorical expressions – entailing different cultural systems – is therefore

claimed to be a process of semiotic transformation as the replacement of the signs encoding a message by signs of another code, where "invariant information" is preserved with respect to a given system of reference (Ludskanov, 1975).

As part of semiotic transformation procedures, metaphor is viewed as having a twofold entity which involves a) non-verbal elements as metaphors, that is, FEs as metaphors of emotions embodying human beings' states of mind; b) translation as metaphor, that is, human emotions are transferred from images to words. It is at the theoretical juncture that considers intersemiotic translation (i.e., the rendering of emotions in a verbal form) as metaphor, and metaphor as the non-verbal translation of human emotions (i.e., FEs) that this study positions itself. Indeed, in AD theory and practice, the depiction of FEs has been recognised as crucial to the description of characters for the benefit of blind people (Vercauteren 2014). In relation to this, Vercauteren (2022) mentions three accounts to scrutinise narrative characters and determine priorities. Particularly interesting to this study is Margolin's account (2007) that testifies to the unique identity of every character in any narrative work and to the elements that deserve attention to depict each character in a satisfactory way. Among these elements are

> a) *physical* properties such as age, sex, posture, and so on – any exterior characteristic that allows the audience to identify and recognise a character based on his/her external appearance; b) *communicative and behavioural* properties, in other words, all the verbal utterances and physical (inter)actions that define a character and c) *mental* properties, which can further be subdivided into *perceptual*, *emotive*, *cognitive* and *volitional* properties -– everything a character sees or hears, feels, thinks or wants, or the characteristics that define a character's inner life. (Vercauteren, 2022: 82, italics in the original).

According to the elements above mentioned, mental properties, which are rooted in human perception (feeling, hearing, wanting, thinking), spread through face description in AD and are those that affect FEs. In this sense the projection of what is recognised as "mental frames" on to the external world is necessary to make blind people familiar with the characters' attitudes, gestures, and ways of life. Mazur (2014) remarks that gestures and FEs are indeed the reflection of the characters' mental dimension. More specifically, she classifies gestures and FEs as "discourse supporting",

"discourse-filling" or "discourse-conflicting". In this context, metaphors and similes are useful tools for the visualisation of onscreen human faces (and their different components). The mental perception of how the characters feel and what they are become essential to being totally immersed in the film and to sharing the same emotions as the characters. Nevertheless, the existing AD literature has highlighted the difficulties in catching and communicating the characters' mental states through purely denotative descriptions, particularly when it comes to FEs (Mazur, 2014). Alternative ADs consider the fact that gestures are not universal and may not always be straightforward. In this case ADs provide the users with the narrative meaning of the images (Vercauteren and Orero 2013; Walczak and Fryer 2017), and traces of narrativity and subjective interpretation can help users evoke the depicted story, as well as mental imagery. In some ADs, the mental dimension is transferred mainly by FEs and gestures, which may explain why psychological aspects involving heterogenous states of mind are very much described in Asian media such as in Korean audiovisual settings.

Nevertheless, one element that so far has got marginal attention in AD is precisely the description of emotions and their existence through FEs, not only because FEs in film and other visual media constitute a very complex problem, but also because of the implicit nature of visual communication which does not allow the determination of emotions unambiguously. The level of interpretation is thus a central issue to the translation of FEs, in which there will always be room for ambiguity, thus including a personal component.

According to clinical research (Kang et al., 2019), FEs of emotions serve as externally perceivable signs that are communicated between individuals in a variety of interpersonal interactions. When individuals (senders) display emotional FEs, they provide others (receivers) with information about their emotional states and behavioral intentions. Such information elicits and reinforces the receivers' emotional and behavioral responses expected by the senders. On the other hand, the receivers automatically and quickly recognise the senders' emotions from the senders' FEs. Emotions through body language are therefore vital to communication, thus encouraging receivers to infer the senders' thoughts and the situational (psychological) cues for their socially appropriate actions. Since the emotions expressed in the senders' faces can facilitate interpersonal interactions, it becomes crucial in the context of AD to transfer each character's FEs as much as possible in order to allow the target audience (the blind audience) to perceive the

psychological dimension of the characters, that is, to be aware of the characters' emotional states which would be transparent rather than obscure if the receivers were regular viewers in a common socio-interactive setting of audiovisual communication. It is possible to state that the FEs recorded in the media and AD scripts are the metaphorical deposit of emotions, where metaphor acts as the instrument to let them speak out.

In line with Kövecses's perspective (2002: 16) where the human body and especially human faces are included to illustrate metaphorical constructions as human mapping within a linguistic frame, the translation of the emotions and psychological states of each character in AD can be thus confirmed to be a culture-bound system of metaphorical expressions applied to human face. Metaphors adopted to translate the states of mind of characters (FEs) (Source Visual Language, SVL-Korean, in the case under scrutiny) are mainly metaphors that photograph people's faces, since the face stands for the person. Besides, metaphorical expressions in AD represent that vocabulary or those linguistic expressions that are employed to transfer any SVL to Target Aural Languages (in the present study there are two TALs, precisely, TAL1-English, and TAL2-Italian). These metaphorical expressions "are tied to metaphorical concepts in a systematic way" (Lakoff and Johnson, 1980/2003: 7) and are commonly accepted to be devices that help understand other things in the world, in particular when they refer to human body and, most importantly, to "face" and "eye", which are, probably, among "the most frequently used body parts to map onto other concepts in order to perceive them" (Wang Fangfang, 2009: 15, online). Non-verbal language is in fact a kind of metaphorical colouring of verbal language in that it can give language a rich emotional substance and convey information that functions of speech cannot. In this sense, metaphor is reflected not only in language but also in thought and action.

The determination of gesture as the first metaphor is fundamental to the meaning and role of non-verbal language in cultural settings and self-knowledge. In other words, the predestination of the metaphor expressed through the eyes or mouth, and its role as translation, consist in the passage from the hidden (implicit) mental content of information to the external (explicit) shared physical signs (FEs) and then verbal content (AD). Metaphorical gestures (within which FEs are placed) as the most important signs of somatic language acquire central value to communication and enable the understanding of the inner spiritual world of the sender.

Human faces are therefore the central zones of the analysis that will follow in the next section, where the eyes, especially, are depositaries of

emotions as "spontaneous reports of embodied feeling" (Lanigan, 2002: 32). Face is indeed where "embodied feeling" is "both primarily displayed and perceived" (ibidem). According to Lanigan's representation of the emotion cycle of face, which displays the six basic emotions known as Happiness > Surprise > Fear > Anger > Disgust > Sadness >, as Figure 1 displays, the cycle of affective expression contains two sides that range from very positive and positive to negative and very negative dimensions. The emotions represented in *SG* only cover the lower part of Lanigan's kineographic notation for the depiction of the facial emotion cycle, which refers to the part involving sentiments of anger, disgust and mainly fear, where suffering also emerges in terms of sadness and surprise.

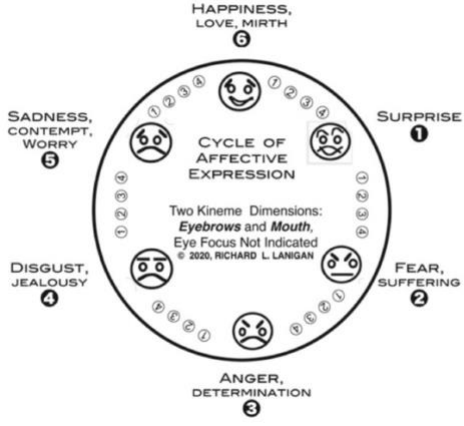


Figure 1: Lanigan's cycle of affective expression

4. *Squid Game*: Data and methodology

Netflix survival thriller TV series, *SG*, dramatises the horrors of modern societal inequality and exploitation in South Korea. The series is "a dystopian South Korean series that discloses the true, conflicted history of South Korean indebtedness, a phenomenon so deeply rooted and persistent that it is almost the norm" (Rizzo and Spinzi, 2022). The Korean audiovisual product opens with the depiction of the debt situation of the protagonist, Seong Gi-hun, whose life reflects directly and allegorically the grim realities of life under capitalism in Korea, and the long-standing dichotomy between the rich and the poor, which is epitomised by the presence of a group of ultrawealthy global elites delighting in the players' miserable attempts to win

the prize money while, at the same time, gambling on their lives. The creative illustration of how society under capitalism operates by two sets of rules, one for the rich and another for the poor, has in the background the power represented by the chaebols, the industrial conglomerates protected by the banking system and the government.

The 456 participants fight for money which they desperately need by fiercely competing against each other. They are in a sense forced into a kind of regression that cannot but increase their state of anxiety, fear and desperation which clearly emerges from the FEs, silences and gestures of the characters in the series. *SG* is composed of 1 season containing 9 episodes. Created by Hwang Dong-hyuk for Netflix, the series was released for the first time in 2021. Today the series has been translated and dubbed into a multitude of languages, and audio described in Korean, English, Italian, French, German, Brazilian Portuguese, European Spanish, Hindi, Indonesian, Spanish, Japanese, Polish, Thai, Russian and Turkish. The ADs of the series under scrutiny for the purpose of this study are those produced in English and Italian, which means that the ADs taken as cases in point address non-domestic audiences, since the original series is produced in Korean.

For the purpose of this study, the methodology applied to the analysis consists of two different phases: (a) the **identification** of onscreen images where FEs play a significant role in terms of emotion transfer to the external world; b) the **transcription** of the English and Italian ADs as intersemiotic translations, whose process runs parallel to the identification of FEs; c) the **selection** of the extracts from the English and Italian ADs; d) the **upload** of the selected FEs to MorphCast Emotion Recognition. The contrastive analysis between the English and Italian ADs is rarely based on the parallelism between the English and Italian versions, since the two AD corpora present significantly different elements in style and in relation to the choice of the FEs to describe.

The level of analysis is twofold and involves two different methodologies: a) the qualitative analysis of the extracts of the English and Italian ADs as descriptive narrations of the selected onscreen FEs is carried out by means of Appraisal System Model; b) the interrogation of the FEs (i.e., onscreen faces) is led by means of facial emotion recognition application (i.e., MorphCast, Advanced Facial Emotion AI), a digital tool that is able to photograph the basic emotional facial expressions by exploiting the general scientifically recognised method of FACS. In this specific context of study, MorphCast allows end-users to connect with the

characters' faces, and to shorten the distance between the audience (the blind people) and producers (the audio describers) through the evaluation of the emotional states of the characters in the series.

The first methodological approach relies on the Appraisal System Model, which is applied to detect the attitudinal lexis and relative lexical choices which are used to express and negotiate emotions, judgments, and evaluations within specific lexico-grammar resources with the purpose of understanding the linguistic formulations that translate the FEs in the series. These formulations are specifically evaluated through the Appraisal System of Attitude which functions to unveil what and how the characters feel, and the value they place on the various phenomena of their experiences. The Appraisal System of Attitude is broken down into Judgment, Affect, and Appreciation. The Affect Appraisal System represents the resource for construing human emotions (happiness, sadness, fear, frustration, dissatisfaction, loneliness, etc.), and the physical expressions that are evidence of such emotions (i.e., FEs). Together with the Affect System, also the Appreciation System occupies a fundamental role, since it shows how emotional experiences are conceived from the perspective of audio describers in the translation of FEs aiming at transferring human visual emotions to words.

The second methodological approach involves the use of MorphCast Emotion AI, the artificial intelligence software (already introduced above) capable of processing images, which allows people to establish the emotional state of the framed subject and some other apparent characteristics such as, for example, the cut or colour of the hair, the apparent age and gender, but also FEs. MorphCast is in fact able to elucidate the nuanced realm of human emotions through advanced AI technology by exploring the depths of emotional insights and finding its applications in various real-world scenarios. Indeed, AI uses deep learning and computer vision to detect and classify FEs in real-time. It can identify a range of emotions such as happiness, surprise, anger, and many more. The so called top five affect pie chart, as shown in Figure 2, which contributes to the classification of the images attached to the platform by relying on Ekman's theory of the basic human emotions, represents a seminal development in the field of emotion studies, which adds significantly to our understanding of FEs and their link to emotional states.

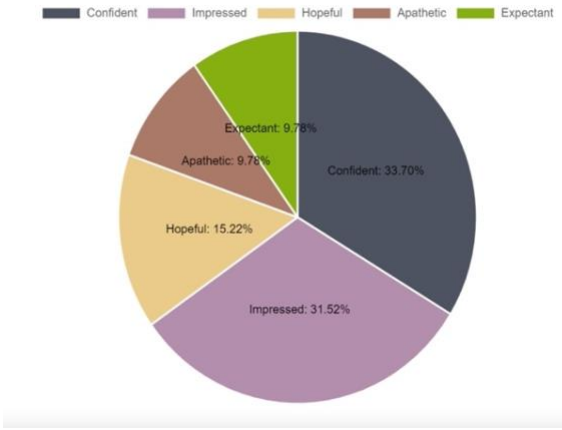


Figure 2: Top Affect Pie Chart adapted from MorphCast Emotion Platform testing

As already briefly aforementioned theorised, on a methodological level, the analysis consists in the detection of the most significant FEs (as emotionally relevant to characters' identification) and in the observation of how and if the spotted FEs have been audio described, and what aspects have made the difference between the English and Italian AD scripts. More analytically, the selection of FEs takes place a) by **observing** the silenced parts of the audiovisual product (where body language is crucial to the understanding of the emotional component of each character); b) by **transcribing** the AD script/s (in English and Italian) with particular attention to the FEs that have been selected as samples of emotion transfer; c) by **carrying out** the qualitative investigation of the selected corpus – where visual silence is more significant than words – by means of Affect Appraisal System as linguistic model to elicit emotions and MorphCast as detector of facial images. As already said, MorphCast can provide highly precise and accurate emotion analysis of facial expressions in videos (frame-by-frame) and pictures, as well as produce meaningful annotations (comments and explanations) on a dashboard in PDF format.

Faces in pictures are meticulously interrogated with revolutionary technology that empowers data analysis with accurate emotional insights. Subsequently to the selection and upload of the image, emotion AI analysis provides accurate investigation of the main face/s in the image, whose annotations are supposed to be equivalent to the linguistic formulations produced for the same image in the ADs in English and Italian.

5. Qualitative analysis and facial emotion recognition

Metaphor plays a central role in conceptual knowledge and has sentiment or emotional connotations. In metaphorical language, humans use physical and concrete concepts to express typically abstract and vague ones. For example, in the clause, *She killed my fear*, the feeling of fear is described as a living thing which is somehow killed (materially). If this feeling of fear is accompanied by FEs, the metaphorical expression of "killing the fear" is even further metaphorically rendered and reinforced by visual features, that is, FEs, in the context of which two domains are mapped, where one domain (target) is conceptualised in terms of another (source). The target domain is sentiment itself. The combination of visual and linguistic elements characterises the translation (AD script) of FEs from a metaphorical perspective for the benefit of the blind and visually impaired people. Sentiment or emotion as a widely used abstract conception is frequently communicated and conceptualised by metaphors. As already stated, FEs are containers of emotions or sentiments. It is therefore important to verbalise them for AD purposes.

The Affect Appraisal System investigates the English and Italian AD scripts (the metaphorical formulations), whereas emotion recognition AI interrogates faces for sentiment analysis. To validate both approaches, the metaphorical renderings, as previously remarked, are needed to correspond to the annotations of sentiment or emotion provided by the software after uploading the facial images of characters. The selected corpus chosen for this study contains linguistic formulations chiefly referring to the semantic field of sight and smiling, thus including terms such as "eyes", "mouth", "smile", "lips", and "face". Nevertheless, in this analysis, attention is mainly paid to sight and human eyes ("occhi", in Italian) as body parts that totally embody human emotions, as well as to human mouths in relation to the character's smile (i.e., "sorriso", in Italian) as the physical element which externalises emotions of happiness but also of fear and surprise.

The first level of analysis is carried out by interrogating Martin and White's Appraisal System Model as far as the linguistic formulations that translate the FEs are concerned. What firstly emerges, as previously anticipated, is that the ADs in English and Italian do not share parallel descriptions, which means that they can be chiefly recognised as comparable corpora in so far as they often but not always refer to the same FEs. However, the English and Italian descriptions substantially vary in terms of

lexical choices (abstract vs. concrete load of meaning) and focus (generalisation vs. particularisation).

The cases shown here explore *SQ* Episode 1, entitled "Red Light, Green Light" (in Korean the game is known as *mugunghwa*, which refers to the hibiscus, the national flower of South Korea), which represents the pilot episode in that it introduces the emotional state of the protagonist of the story, Gi-hun, as well as of the other characters who share the same feelings of fear, anxiety and desolation as the protagonist. The episode takes place in different settings which range from domestic environments and public centres to markets, central urban areas, and the mysterious location where the whole series occurs. Focus is on the FEs of the characters in all contexts where the events happen. What becomes immediately visible is that each character desperately tries to communicate through the eyes, and the face in general, in a variety of ways which, in fact, signals the fact that sight and eye contact occupy a central role in the fictional narration, and that the eyes are the most important depositaries of human emotions. These emotions are transferred through linguistic realisations that act as metaphors (adjectives or nominal predicates, and verbs, metaphorically describing the meaning recorded in the eyes), thus suggesting ideas or feelings in addition to the literal or primary meaning of the body part itself (e.g., the eyes).

The numerous settings of Episode 1 include the following contexts and locations: the school playground, the apartment of Gi-hun's mum, public places (i.e., betting shops, tube stations, streets, markets, and fast-food areas), and the mysterious location where people play the dangerous games to win the final prize. Selected samples (embedded in the settings above mentioned) containing the metaphorical expressions and phrases included in the English and Italian ADs are reported in Table 1.

School playground	*Public places: betting shop; fast food area; tube station*	*Gi-hun's mum flat*
He looks up, wearing a serious expression. / Alza gli occhi e sorride. [He raises his eyes and smiles.]	Gi-hun squeezes his eyes shut. / Concentrato il quarantenne socchiude gli occhi. [Concentrated, the 40-year-old squeezes his eyes.]	He stares at the door, then turns away with a grin. / Accenna un sorriso furbo. [He hints at a cunning smile.]

He grins. / Rivolge un sorrisetto tirato. [He gives a tugged grin.]	His eyes go wide. / Gi-hun lo scruta ammirato. [He scrutinises him in admiration.]	He …, wearing a wide smile. / (…) con ghigno soddisfatto. / […, with satisfied grin.]
	Ga-yeong, stares at his bruised cheek with dark somber eyes. / Una bambina di 10 anni scruta Gi-hun con aria seria. [A 10-year-old girl scrutinises Gi-hun with a serious air.]	He stares down. / Scoraggiato il quarantenne si china in avanti. / [Discouraged, the 40-year-old leans forward.]
	Gi-hun looks down. / Gi-hun si fa cupo. [He becomes somber.]	
	_____ / Emozionata Ga-yeong apre il pacchetto. [Excited Ga-yeong opens the package.]	
	She picks it up, wearing a faint smile. / Perplessa, la bambina l'afferra. [Puzzled, the girl grabs it.]	
	She forces a grin. / _____	
	She glares up at him, sneering. / _____	

Table 1: The locations of *SQ* with cases of FEs in the English and Italian ADs

Table 1 shows cases in which the words "eyes" and "smile" (or terms associated with the mouth such as the word "expression") are used to communicate feelings of sorrow, sadness, fear, and preoccupation. These expressions have been encapsulated in Table 1 because their scrutiny is also accompanied by the investigation of the FEs (images) through Emotion Recognition AI. Furthermore, these expressions, associated with MorphCast emotional annotations, own metaphorical value both in linguistic terms and from a translating perspective.

Since the Affect sub-system in the Appraisal model, as shown in Figure 3, refers to the sphere of sentiments and emotions, precisely, "the semantic region of emotions" (Martin and White, 2005: 1), which construes emotional reactions, the Affect sub-system represents the basis for the construction of human emotions (happiness, sadness, fear, frustration,

security/insecurity, satisfaction/unsatisfaction), as well as the physical manifestations that bear witness to these emotions (crying, or laughing). From the Appraisal System perspective, FEs are in fact part of an authentically interpersonal dimension that also aims to provoke the audience to a sympathetic reaction to the character's emotional state.

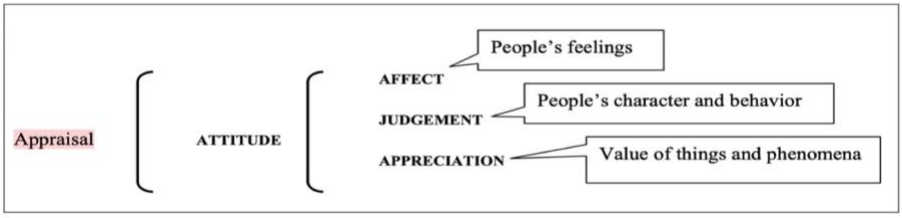


Figure 3: The Affect sub-system in the Appraisal System adapted from Martin and White (2005)

The metaphorical expressions in Table 1 combined with the relative facial expressions onscreen are classified according to the two fundamental ways of evaluating statements within the Appraisal model: the inscribing and evoked appraisal types. The inscribing type makes the position(s) explicit through evaluative vocabulary or syntax. It intrudes directly into the text through attitudinal epithets such as the expressions *con degli occhi sorpresi, con volto indurito, con sguardo ostile, con un volto sbalordito, con un'espressione confusa, abbassò lo sguardo inscurito, con un'espressone triste ma risoluta* ("with surprised eyes", "with a hardened face", "with a hostile look", "with a stunned countenance", "with a confused expression", "lowered his inscrutable gaze", "with a sad but resolute expression"). The evoked type is expressed through lexical enrichments and figurative language such as the cases of *rimane senza parole*, *arriccia le labbra*, *inarca le sopracciglia*, *l'espressione si indurisce, singhiozza col nodo alla gola, fa roteare gli occhi con volto dubbioso, si oscura, le sue palpebre tremano leggermente, una bambola dalle fattezze di una bambina, gli occhi della bambola si muovono frenetici* ("he remains speechless", "he curls his lips", "he arches his eyebrows", "his expression hardens", "he sobs with a lump in his throat", "he rolls his eyes with a doubtful face", "he darkens", "his eyelids tremble slightly", "a doll with the features of a little girl", "the doll's eyes move frantically in search of movement").

The relational attributes in the non-finite verbal groups transcribed in Table 1, precisely, *wearing a serious expression, wearing a faint smile, wearing a wide*

smile, provide emotional answers through mainly negative epithets [appreciation-negative/Reaction]. The first meanings of the epithets "serious", "faint" and "wide" change substantially if we look at them from a metaphorical perspective. The adjective "serious" means "demanding or characterised by careful consideration or application", although the meaning expressed by the FE translates someone who is "solemn or thoughtful in character or manner" (e.g., *her face grew serious*)*;* the adjective "faint" does not contain the denotative meaning of "sight, smell, or sound, barely perceptible", or "slight", but owns negative connotations referring to someone "lacking conviction or enthusiasm" and, therefore, the metaphorical expression *wearing a faint smile* is a collocation that means being feeble, almost turning pale and melancholic for something happened; the adjective "wide", which can collocate with the verb "wear" (as "faint" and "expression" can also do), as well as with the noun "smile", does not render, in the case in point, the idea of greatness but stands for the concept of "open to the full extent", thus also implying either fear or surprise such as in the expression *his eyes were wide with fear*. The expressions *grin*, *glare up* and *sneering*, which collocate with terms referring to sight and smiling, have specific meanings in the AD in English. In fact, "grin" depicts a very broad smile that can have both positive and negative connotations. What emerges in the English ADs is that "grin" (as a verb and noun) appears in more restricted linguistic cases and in contexts of concreteness. This seems to be in contrast with the Italian trend, where the semantic area revolving around the expression "grin" expands its collocational use such as in the Italian cases of *ghigno soddisfatto*, *sorrisetto tirato*, *sorriso furbo* ("satisfied grin", "tight/forced/sheepish grin"; "sly grin").

It also, and most importantly, happens that the AD in Italian puts emphasis on the character himself/herself by the employ of relational attributes (mainly expressing negative feelings) instead of focusing on the body part which epitomises the specific FE. Cases as such are *scoraggiato il quarantenne si china in avanti, concentrato il quarantenne socchiude gli occhi, Gi-hun lo scruta ammirato, perplessa, la bambina l'afferra, pensierioso Gi-hun fissa la madre, avvilito, Gi-Hun spegne il telefono, un'occhiata timida* ("despondent the forty-year-old leans forward", "concentrated", "the forty-year-old squints his eyes", "Gi-hun scrutinises him admiringly", "perplexed", "the little girl grasps her", "thoughtful", "Gi-hun stares at his mother", "despondent", "Gi-hun switches off the phone", "a shy glance"), all embodying types of [Appreciation-negative/Reaction].

These expressions in Italian are reactions to negative experiences which, however, do not specifically translate FEs metaphorically but signal the state of mind of the characters, that is, Gi-hun appears to be disheartened, despondent, and thoughtful. This perspective acquires levels of abstractness strengthened by the concrete absence of facial parts marked through FEs.

The emotional characterisation of the protagonist is revealed in Italian although the accuracy of the emotional signs transmitted through FEs is omitted. Clear cases of abstraction and less directness to FEs in Italian ADs are metaphorical expressions that semantically speaking correspond to the English ones such as *lo scruta ammirato* ("he scrutinises him in admiration"), an expression which does not directly describe the eyes – which in English would be instead "go wide", or *con aria seria* ("with a serious air"), a metaphorical expression which does not depict the "eyes" as "dark" and "somber" as the English AD does, or *perplessa la bambina* lo *afferra* ("puzzled, the little girl graps it"), which however does not render the FE of "faint smile" occurring in the English AD through collocational intervention.

There are also numerous cases of Italian generalisations such as *alza gli occhi e sorride* ("He raises his eyes and smiles") in contrast to *he looks up, wearing a serious expression*, or omissions of significant terms which are instead present in the English AD such as *glare up*, or *sneering*, which precisely indicate FEs when someone stares in an angry or fierce way, or express (a feeling) by staring fiercely, as well as assuming a contemptuous or mocking smile, remark, or tone stemming from a face reaction.

Two paragraphs which describe Gi-hun's emotional reaction by means of FEs entailing the sphere of sight (the eyes), as well as the mouth, are reported in Table 2 and represent an example of approximate contrastive (parallel) analysis between the English and Italian ADs in relation to the revelation of emotions of fear and surprise.

At the tube station – English AD	*At the tube station – Italian AD*
The stranger cocks an eyebrow and turns to Gi-hun with a bland smile. Gi-hun slides away from him. The stranger eyes the flame. Gi-hun stares, wide-eyed. Gi-hun's eyes drift. Gi-hun presses his lips together. The stranger gives a small, placid smile. Gi-hun blinks. He looks at the stranger with the corners of his mouth turned down. Gi-hun's eyes bulge. Gi-hun turns to the stranger with	Sconsolato china il capo. L'uomo scruta Gi-hun. L'uomo scruta la fiamma. Gi-hun lo scruta incredulo, lancia un'occhiata ai soldi. Gi-hun appare incerto. Il quarantenne annuisce. Soddisfatto l'uomo scruta Gi-hun. Con aria di sfida Gi-hun raccoglie il suo cartoncino. Alcuni scrutano i due uomini giocare. Gi-hun appare rassegnato. Il quarantenne ha un ghigno sul volto. Questi gli rivolge un sorrisetto tirato. Gi-

a wide open-mouthed grin. The stranger stands still wearing a calm smile. Gi-hun sits wearing a smile. Gi-hun stands, keeping his eyes fixed on the stranger. The stranger gives a blank smile. Gi-hun's eyes move from the stranger's face to the cash in his hand.	hun osserva il denaro. Felice, conta i soldi. Il quarantenne lo scruta dall'alto. Gi-hun abbassa gli occhi sul biglietto, vi sono impressi un cerchio, un triangolo e un quadrato. Il quarantenne gli fa un gesto di incoraggiamento. Gi-hun appare turbato.

Table 2: Contrastive analysis of a *SG* case study in the English and Italian ADs

The expressions "drift", "blink", "bulge", as well as the collocation made of verb + adjective + noun such as *wear a small, placid smile*, a *calm smile*, *a smile*, or *give a blank smile*, are not only describing a specific body part placed in the face (eyes and mouth/smile), but have all metaphorical connotations that translate the emotions of the characters in terms of fear, preoccupation, and surprise. The Italian terms – although metaphorically representative – are not always describing body parts (as already maintained above) but focus on the characterisation of the protagonist and the characters revolving around him. So Gi-hun is disconsolate ("sconsolato"), incredulous ("incredulo"), upset ("turbato"), only implicitly signalling that his eyes and mouth reveal these emotions.

The second level of the analysis interrogates the Emotion Recognition AI platform which photographs and comments on the expressions mentioned in Table 1. The scrutiny testifies to the crucial role of FEs as necessary elements in AD being FEs emotional containers of fear, sadness, anger, and desolation projected on to the external world of the blind audience via metaphorical translation. The images collected one by one have been uploaded to the Emotion Recognition AI platform and, accompanied by the metaphorical expressions contained in the ADs, have been tested to verify what kind emotion prevails in the selected FEs, and if the AD scripts go hand in hand with the evaluation provided by software application.

The set of visual images that have been extracted from the series contains the faces of Gi-hun when he was a child, Gi-hun as a man before entering the mysterious location and Gi-hun after entering the mysterious location. The face of Gi-hun's daughter is also included in the list of images that have been photographed by Emotion Recognition AI for sentiment analysis. A range of emotional metrics, including arousal, valence, 98 affects, 6 emotions based on the Ekman model are the basis of MorphCast application which scrutinises faces by offering detailed and accurate emotional information. Results concerning the level of sufferance, fear, sorrow, and desperation in Gi-hun's life, but also in the life of his daughter,

show that Gi-hun's emotional deterioration grows increasingly worse starting from the age in which he was a child to the period in which he is locked and exploited in the unknown site of physical and moral perversion.

Since he was a child, Gi-hun's FE translates a person with a high degree of anger, enormously suspicious of the others, as Figure 4 shows.

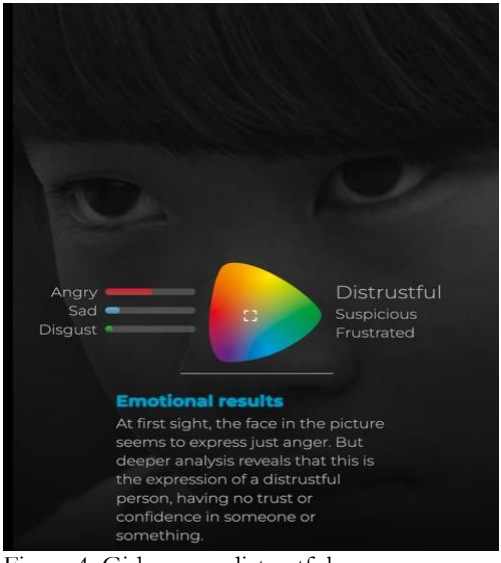


Figure 4: Gi-hun as a distrustful person

The English and Italian ADs which describe the FE of Gi-hun as a child are *He looks up, wearing a serious expression*, and *Alza gli occhi e sorride* ("He raises his eyes and smiles"). The metaphorical expression *wearing a serious expression* renders the lack of confidence in someone or something and the level of anger which the FE expresses. When Gi-hun becomes a man, his disastrous financial situation makes him a desperate person who wastes the little money he receives from his old mother. Figures 5 and 6 show two different moments, temporally close, in Gi-hun's life as an adult. The FEs illustrate the progression of Gi-hun's psychological state, reflecting his transition from a person deeply ashamed and aware of his mistakes (as Figure 5 shows) to an individual who is concerned for the life he is conducting, as depicted in Figure 6.

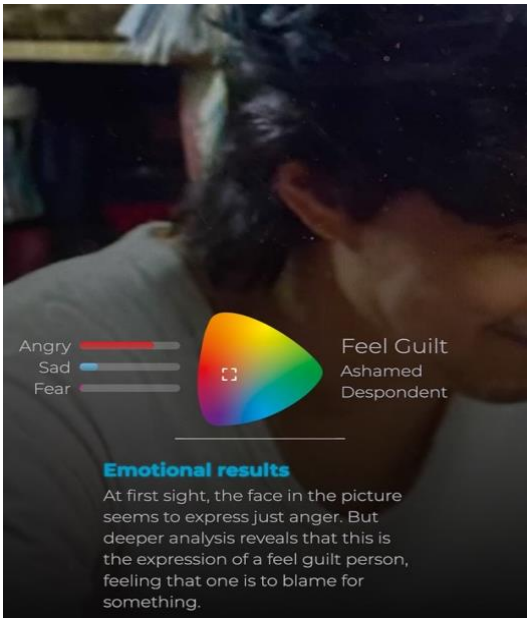


Figure 5: Gi-hun is ashamed at his mum's place

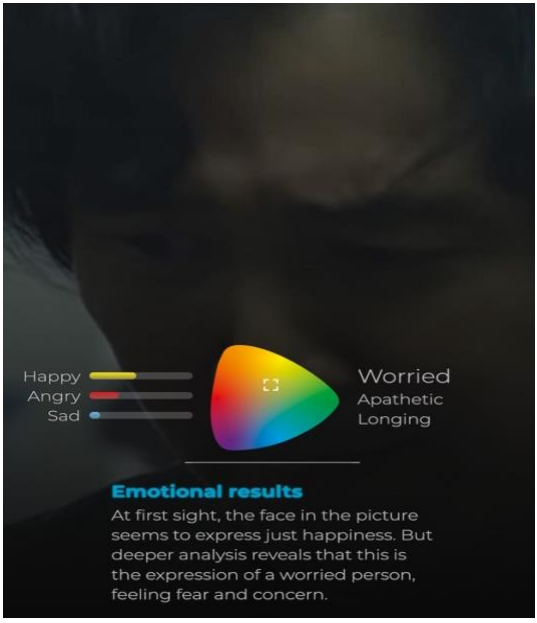


Figure 6: Gi-hun is frustrated at his mum's place

A central role in Gi-hun's life is occupied by his daughter, Ga-yeong, who badly reacts to his father's present (a toy gun) for her birthday according to what her FEs declare, and in relation to the results provided by the ADs and MorphCast. The ADs recite, *Ga-yeong, stares at his bruised cheek with dark somber eyes*, *Una bambina di 10 anni scruta Gi-hun con aria seria* ("A 10-year-old girl scrutinises Gi-hun with a serious air"), followed by *Emozionata Ga-yeong apre il pacchetto* ("Excited Ga-yeong opens the package"). The English AD for Figure 8 is missing. Figures 7 and 8 confirm Ga-yeong's emotional reactions which portray her in an attitude of surprise (Figure 7) but, at the same time, interested in what is happening (Figure 7). She then appears friendly and a bit embarrassed (Figure 8) but, at the same time, contemplative and compassionate (Figure 8). The final MorphCast face emotion recognition, as shown in Figure 9, introduces a girl who is essentially sad and shocked, as the ADs also demonstrate by stating *She picks it up, wearing* a *faint smile*, *Perplessa, la bambina l'afferra* ("Puzzled, the girl grabs it").

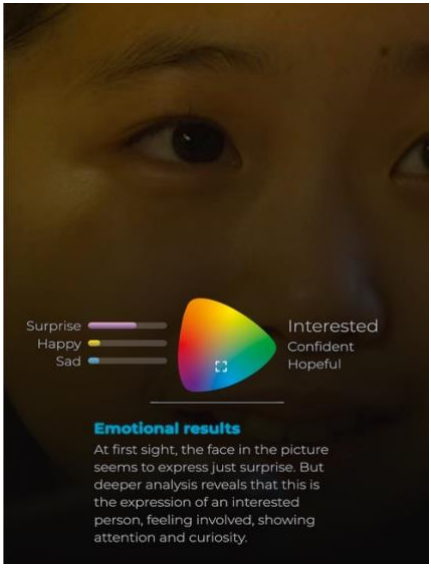


Figure 7: Surprise in Ga-yeong

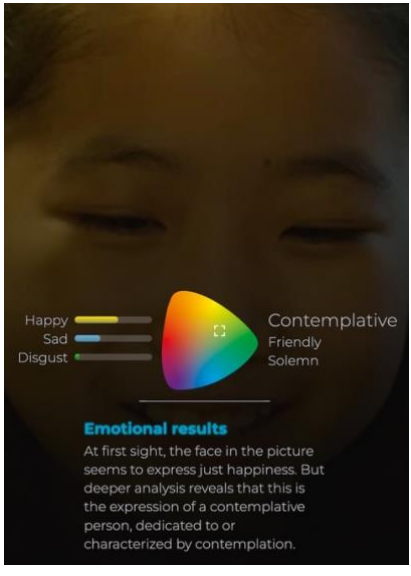


Figure 8: Contemplation in Ga-yeong

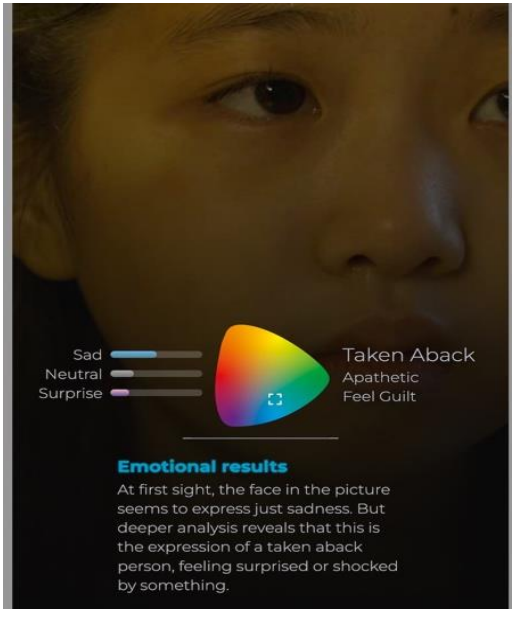


Figure 9: Shock in Ga-yeong

The last set of FEs depicts Gi-hun at the tube station. The ADs in English and Italian translate Gi-hun's emotional reactions to sorrow, sadness, and danger through the linguistic formulations *Gi-hun squeezes his eyes shut* and *Concentrato il quarantenne socchiude gli occhi* ("Concentrated, the 40-year-old squints his eyes"), as Figure 10 shows. The Italian expression "socchiudere gli occhi" does not appropriately translate the concept of "squinting the eyes", which in Italian corresponds to the expression "strizzare gli occhi", an involuntary facial movement activated when facial nerves are triggered by human stress, nervousness, and anxiety. In the same context, the Italian AD for Figure 11 translates the FE as follows: *Gi-hun lo scruta ammirato* ("He scrutinises him in admiration"), in opposition to the English AD, *His eyes go wide*. The Italian AD does not portray the emotional state of horror and fear expressed through the eyes of Gi-hun, as portrayed in Figure 11. The sentiment of terror in Gi-hun's eyes wide shut is not transferred from the visual to the verbal dimension in the Italian AD, and a process of misinterpretation of the FE takes place, since Gi-hun is not experiencing admiration or contemplation.

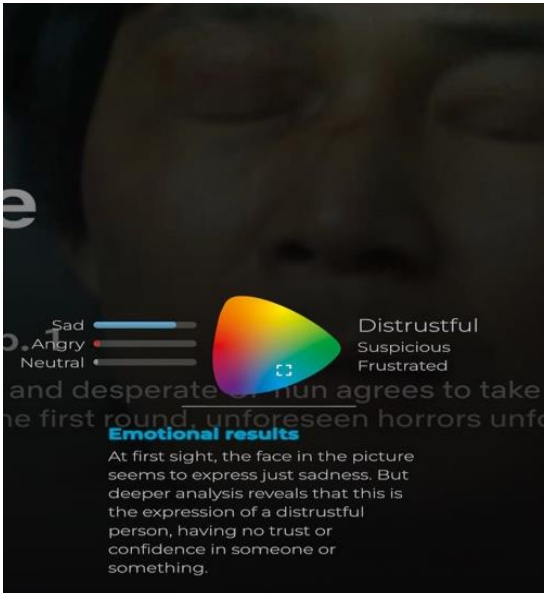


Figure 10. Gi-hun is sad and frustrated

Figure 11. Gi-hun looks upset

6. Concluding remarks

The audio description of FEs represents an intricate and complex metaphorical, semiotic, and translational process that goes beyond guidelines and choices between objectivity and subjectivity. The emotional dimension that lies behind FEs cannot be overlooked in AD and requires specific skills in intercultural communication, sociology, psychology, and semiotics, as well as in translation and metaphor studies. It has been demonstrated that the translation of FEs in AD is not only an issue of AD practices – as the verbalisation of an action can be – since FEs can be ambiguous, representing the inner (emotional and perceptive) world of the characters, and could easily remain unnoticed by audio describers because of internal factors (such as the inherent ambiguity of visual images and the myriad of other signals conveyed by the face), or because of external factors (such as the way FEs are shown on screen).

Training could certainly improve and encourage audio describers to pay more attention to FEs on screen, as well as stimulate the development of cognitive skills that would help the experts recognise and understand FEs correctly, including the fact that "there is much more to facial expressions than meets the eye" (Vercauteren and Orero, 2013), as well as develop verbalisation skills which prioritise language as vivid, fresh, and eloquent. Prioritising the description of FEs in AD implies, first of all, recognising that FEs are metaphorical depositaries of human emotions and feelings, secondly, raising awareness of the fact that metaphor as translation, and translation as metaphor, can be a good compromise to overcome the unemotional description of facts and actions in AD. In this regard, the contrastive analysis between the English and Italian ADs has proved that metaphorical expressions are usually the most suitable and natural solutions when the scope is that of communicating human emotions and states of mind. However, differences in terms of attitudinal lexical choices and interpretation of visual images with respect to the results provided by MorphCast testify to the existence of diverse approaches used in AD for the rendering of FEs, which primarily depend on the linguistic and cultural systems in which AD is embedded (and on each audio describer's intercultural competence).

Indeed, focus in English AD, compared to focus in Italian AD, is on concreteness and directness, where the main interest is always that part of the face that communicates human emotions, thus the eye or the lips or the

mouth, through the use of metaphorical language as a form of intersemiotic translation. Conversely, Italian AD chiefly focuses on the description of the character, and his/her emotions are conveyed without necessarily involving the body parts in the descriptive act that entails metaphorisation as translation, and vice versa. Thus, although still valid, ADs in Italian are more abstract and sometimes generic than ADs in English which, on the contrary, are metaphorical and concretely tied to the facial expressions and emotions that the characters' faces convey in the series, *SQ*, a series where facial expressions dominate the screen.

References

Allbritton, D.W. (1995). When Metaphors Function as Schemas: Some Cognitive Effects of Conceptual Metaphors. *Metaphor and Symbolic Activity*, 10, 33-46.

Benjamin, W. (1968/1992). The Task of the Translator. In Arendt, H. (Ed.) (trans. by H. Zohn), *Illuminations*. Harcourt: Brace and Jovanoch, 69-82.

Birdwhistell, R. (1970). *Kinetics and Context*. Philadelphia: University of Pennsilvania Press.

Cronin, M. (2006). *Translation and Identity*. London and New York: Routledge.

Derrida, J. (1985). Des Tours de Babel. In Graham, J. F. (Ed.). *Difference in Translation*. Ithaca New York: Cornell University Press, 165-248.

Dong-hyuk, H. Director. (2021). *Squid Game*. TV series, 9 Episodes (Netflix).

Ekman, P., and Friesen, W.V. (1971). Constants Across Cultures in the Face and Emotion. *Journal of Personality and Social Psychology*, 17, 124-129.

Ekman, P., and Friesen, W.V. (1978). *Facial Action Coding System (FACS)*.

Fangfang, W. The Metaphorical and Metonymical Expressions including Face and Eye in Everyday Language. https://www.diva-portal.org/smash/get/diva2:292843/FULLTEXT01.pdf

Guldin, R. (2016). *Translation as Metaphor*. London and New York: Routledge.

Hanić, J. et al. (2017). Translating Emotion-Related Metaphors: A Cognitive Approach. *ExELL*, 4(2), 87-101.

Hong, W., and Rossi, C. (2021). The Cognitive Turn in Metaphor Translation Studies: A Critical Overview. *Journal of Translation Studies*, 5(2), 83-115.

Jabarouti, R. (2016). A Semiotic Framework for the Translation of Conceptual Metaphors. *Annals of Semiotics*, 85-106. https://journals.openedition.org/signata/1185

Jack R. et al. (2012). Facial Expressions of Emotion Are Not Culturally Universal. *Proc Natl Acad Sci U S A*, 109(19), 7241-4.

Kang, J. et al. (2019). Voluntary and Spontaneous Facial Mimicry toward Other's Emotional Expression in Patients with Parkinsons Disease. *PLoS*, 14(4). https://pubmed.ncbi.nlm.nih.gov/30973893/

Kittay, E.F. (1987). *Metaphor, its Cognitive Force and Linguistic Structure*. Oxford: Oxford University Press.

iMotions, 2017. *Facial Expression Analysis. The Complete Pocket Guide. iMotions. Biometric Research.* www.imotions.com

Kövecses, Z. (2002), *Metaphor: A Practical Introduction*, New York: Oxford University Press.

Kövecses, Z. (2014). Conceptual Metaphor Theory and the Nature of Difficulties in Metaphor Translation. In Miller, D. R., and Monti, E., *Tradurre Figure/Translating Figurative Languages*. Bologna: AMSActa, 25-40.

Lakoff, G., and Johnson, M. (1980/2003). *Metaphors We Live by*. Chicago: University of Chicago Press.

Lakoff, G., and Turner, M. (1989). *More Than Cool Reason: A Field Guide to Poetic Metaphor*. Chicago: University of Chicago Press.

Lanigan, R.L. (2022). Saving-Face: The Nonverbal Communicology of Basic Emotions. In Petrilli, S., and Ji, M. (Eds.). *Exploring the Translatability of Emotions Cross-cultural and Transdisciplinary Encounters*. Switzerland: Palgrave Macmillan, 279-322.

Lefevere, A. (1992). *Translation, Rewriting, and the Manipulation of Literary Fame*. London and New York: Routledge.

Ludskanov, A. (1975). A Semiotic Approach to the Theory of Translation. *Language Sciences*, 35, 5-8.

Margolin, U. (2007). Character. In Herman, D. (Ed.). *The Cambridge Companion to Narrative*. Cambridge: Cambridge University Press, 66-79.

Martin, J., and White, P.R. (2005). *The Language of Evaluation*. New York: Palgrave Macmillan.

Mason, K. (1982). Metaphor and Translation. *Babel*, 28(3), 140-149.

Mazur, I. (2014). Gestures and Facial Expressions in Audio Description. In Maszerowska A. et al. (Eds.). *Audio Description: New Perspectives Illustrated*. Amsterdam, Philadelphia: John Benjamins, 179-198.

Menacere, M. (1992). *Arabic Metaphor and Idiom in Translation*. *Meta*, 37(3), 567-572.

MorphCast. https://www.morphcast.com/
Newmark, P. (1981). *Approaches to Translation*. Pergamon Press: Oxford.
Nida, E. A. (1964). *Toward a Science of Translating*. Brill: Leiden.
Nigro, M.G. (2003). Metaphor and Translation: Ariadne's Thread in the Labyrinth of *Pilgrimage*. *Norwich Papers*, P. Gaudio et. al. (Eds.), special issue, "Translation and Metaphor", 96-109.
Petrilli, S., and Ji, M. (Eds.) (2022). *Exploring the Translatability of Emotions. Cross-cultural and Transdisciplinary Encounters*. Switzerland: Palgrave MacMillan, 279-318.
Prince, S. (1993). The Discourse of Pictures: Iconicity and Film Studies. *Film Quarterly*, 47(1), 16-28.
Richards, I.A. (1936). *The Philosophy of Rhetoric*. New York: Oxford University Press.
Rizzo, A., and Spinzi, C. (2023). Authorial (Audio) Description: Creativity in the Transfer of CSRs in *Squid Game*. *Translation and Translanguaging in Multilingual Contexts*, J. Díaz Cintas et al. (Eds.), special issue, "Audiovisual Translation in Context: Granting Access to Digital Mediascape", 419-449.
Russell, J.A. (2003). Core Affect and the Psychological Construction of Emotion. *Psychological Review, 110*(1), 145-72.
Sapir, E. (1956). *Culture, Language, and Personality*. Los Angeles: University of California Press.
Schäffner, C. (2004). Metaphor and Translation: Some Implications of a Cognitive Approach. *Journal of Pragmatics*, 36, 1253-1269.
Schäffner, C., and Shuttleworth, M. (2013). Metaphor in Translation: Possibilities for Process Research. *Target*, 25(1), 93-106.
Lykke Jakobsen, A. (Eds.). *The Routledge Handbook of Translation and Cognition*, London and New York: Routledge, 326-343.
Snell-Hornby, M. (1995). *Translation Studies: An Integrated Approach*. Revised ed. Amsterdam and Philadelphia: John Benjamins.
Torop, P. (1995). *Total nyj perevod*. Tartu: Tartu University Press. Italian translation, Osimo B., 2000, *Traduzione totale*. Modena Guaraldi Logos.
Toury G. (2012). *Descriptive Translation Studies and Beyond*. Revised ed. Amsterdam and Philadelphia: John Benjamins.
Venuti, L. (1992). *Rethinking Translation*. London and New York: Routledge.
Vercauteren, G., and Pilar, O. (2013). Describing Facial Expressions: Much More Than Meets the Eye" *Quaderns. Revista de Traducció*, 20, 187-199.
Vercauteren, G. (2014). A Translational and Narratological Approach to Audio Describing Narrative Characters. *TTR*, 27(2), 71-90.

Vercauteren, G. (2022). Narratology and/in audio description. In Taylor, C., and Perego, E. (Eds.) *The Routledge Handbook of Audio Description*. London and New York: Routledge, 78-92.

Walczak, A. and Fryer, L. (2017). Creative Description: The Impact of Audio Description Style on Presence in Visually Impaired Audiences. *British Journal of Visual Impairment*, 35(1), 6-17.

Zhang, D. et al. (Eds.). (2018). Construction of a Chinese Corpus for the Analysis of the Emotionality of Metaphorical Expressions. In *ACL: 56th Annual Meeting of the Association for Computational Linguistics*, 144-150.

Zhang, D. et al. (2021). In Your Face: Sentiment Analysis of Metaphor with Facial Expressive, *International Joint Conference on Neural Features Networks*. https://www.researchgate.net/publication/354721290_In_Your_Face_Sentiment_Analysis_of_Metaphor_with_Facial_Expressive_Features

NOTES ON CONTRIBUTORS

Dr. Anaïs Augé is a research fellow and a lecturer at the University of Louvain, in the Institute of political sciences and Institute of language and communication. She is the author of a monograph entitled *Metaphor and Argumentation in Climate Crisis Discourse*, and of several research articles published in international journals and edited volumes. Her fields of research include political discourse analysis, psycholinguistics, and pragmatics. She is interested in the public understanding of political discourse in intercultural contexts and the arguments derived from statements produced by politicians and activists in the context of the climate crisis.

Dario Del Fante is junior assistant professor at University of Ferrara, Italy. He teaches courses on discourse analysis and English language, translation and linguistics. His research has been published in journals such as *Metaphorik.de*, *Meta*, and *Umanistica Digitale*. His first monograph, published by Peter Lang, is titled *Migrating across times and cultures*.

Maria Olalla Luque Colmenero is professor of Translation and English Studies at the University of Granada. She holds a BA, MA and PhD in Translation and Interpreting Studies. Her PhD and subsequent research focus on the use of metaphor as a tool for helping blind and partially sighted people access art museums, as well as training and applied research in this field. She has researched in London and New York museums with different international grants. She is also a professional translator and audio describer and co-founder of Kaleidoscope, a non-for-profit organisation providing accessibility through translation in different museums across Spain.

Stefania Maci (PhD, Lancaster University, UK) is Full Professor of English at the University of Bergamo, where she is Coordinator of the MA in Digital Humanities, Director of CERLIS (Research Centre on Specialised Languages) and Scientific Coordinator of the ReDH (Research Group on Digital Humanities). She is also a member of AELFE (the European Association of ESP), AELINCO (Spanish Association of Applied Linguistics), AIA (Associazione Italiana di Anglistica), BAAL (British Association of Applied Linguistics), CLAVIER (The Corpus and Language Variation in English Research Group), DiscourseNet, I-LAND (Identity,

Language and Diversity), IPrA (International Pragmatics Association), RAaM (Researching and Applying Metaphor).
Her research focuses on the study of English in academic and professional contexts, with particular attention to the analysis of tourism and medical discourses. Her recent publications include: the monographs *Evidentiality in the genre of medical posters* (2022) and *English Tourism Discourse* (2020); the co-edited volumes *The Routledge Handbook of Discourse and Disinformation* (2023), *Corpus Linguistics and Translation Tools for Digital Humanities* (2022), *The Routledge Handbook of Scientific Communication* (2022); *Metadiscourse in Digital Communication* (2021); "stop . mansplaining . my . rights . to . me ." *#mansplaining* on Twitter. A pilot study (2024); Communicating (about) Covid-19 Lessons from Corpus Linguistics and Critical Discourse Analysis (2024).

Maryam Nezaratizadeh holds a degree in foreign languages. She is a Persian freelance translator. She has been translating and interpreting in the business and art sectors. She has been working as English trainer since 2006.

Alessandra Rizzo is Associate Professor at the University of Palermo, where she teaches English Linguistics and Translation, and Audiovisual Translation. She holds a PhD and a Master of Arts in Translation from the University of Essex (UK). Her research interests focus on transcreation in the creative industries, audiovisual translation and accessibility, the aesthetics of migration and (sub)titling as counter discourse. She has recently edited the special issues "Audiovisual translation in context: Granting access to digital mediascapes" (with Jorge Díaz Cintas and Cinzia Spinzi) for *Translation and Translanguaging in Multilingual Contexts* (John Benjamins Publishing, 2023). She is currently working on the monograph *New Perspectives on Audiovisual Translation. Aesthetics of migration in Documentaries and for the Stage* (Peter Lang). She is the Director of the postgraduate and advanced course in "Subtilling for the Deaf and Hard of Hearing and Audio Description for the Blind and Visually Impaired" (University of Palermo).

Cinzia Spinzi is Associate Professor at the University of Bergamo where she is Coordinator of the MA in Planning and Management of Tourism Systems. She holds a PhD in *English for Specific Purposes*, a Master's in *Translation Studies* from the University of Birmingham, and a Research Fellowship from the City University of London. Her research activity and major publications lie in Language Mediation, Cross-cultural

communication and Translation, with a particular focus on the translation of tourism, accessibility and metaphors. She is member of the Research Centre on Languages for Specific Purposes (Cerlis) and of the EU funded Project TTRAILs on teaching and training in the field of Language for Specific Purposes. She is a member of the Scientific Committee of Imago Mundi Unibg.

Dr. Yuxin Liu is a lecturer in journalism at Shanghai University of Political Science and Law and a postdoctoral research fellow at Fudan University. Her academic interests relate to transcultural communication and online celebrity studies, journalism and communication studies, and digital media studies.