

Should Green Always Get the Green Light? Translation of Figurative Technical Terms in View of Conceptual Integration Theory

ABSTRACT

The paper is a case study analysing the process of secondary term formation by looking into the introduction of figurative terms in the field of economics from English, as the current lingua franca in the field, into Croatian. Although the primary focus is on the terminological gap-filling function of figurative terms, the paper also explores what happens in translation when a term conveys more functions (e.g., ideology constitutive function). Our approach is usage-based in that our conclusions are founded on the observations of how the analysed figurative terms behave in real communication (official documents, research papers, magazines, newspapers, blogs, etc.). The paper also argues for the applicability of the Conceptual Integration Theory as a framework able to account for the meaning construal in the process of translation and for translators' choices. The translational process is thus seen as discourse-pragmatic phenomenon involving the transfer of cognitive categories, crucially determined by both intercultural and interlingual factors.

Keywords: figurative terms, translation, conceptual integration theory, terminological gap-filling function, ideology constitutive function of terms

Ali mora zelena barva vedno dobiti zeleno luč? Prevajanje figurativnih strokovnih izrazov z vidika teorije pojmovne integracije

IZVLEČEK

Prispevek je študija primera, ki analizira proces oblikovanja sekundarnih izrazov, in sicer z uvajanjem figurativnih izrazov na področje ekonomije iz angleščine, trenutne lingue france na tem področju, v hrvaščino. Čeprav je v ospredju predvsem terminološko zapolnjevanje vrzeli s figurativnimi izrazi, članek raziskuje tudi, kaj se zgodi v prevodu, ko termin izraža več funkcij (npr. funkcijo konstituiranja ideologije). Naš pristop temelji na rabi, naše ugotovitve pa na opazovanju, kako se analizirani figurativni izrazi obnašajo v resničnem sporazumevanju (uradni dokumenti, raziskovalni članki, revije, časopisi, blogi itd.). Članek zagovarja tudi uporabnost teorije pojmovne integracije kot okvirja, s katerim je mogoče pojasniti pomen-sko konstrukcijo v procesu prevajanja in prevajalčeve odločitve. Prevajalski proces je tako obravnavan kot diskurzivno-pragmatični pojav, ki vključuje prenos kognitivnih kategorij in je ključno pogojen z medkulturnimi in medjezikovnimi dejavniki.

Ključne besede: figurativni izrazi, prevajanje, teorija pojmovne integracije, terminološko zapolnjevanje vrzeli, terminološko konstituiranje ideologije

1 Introduction

One of the fundamental claims of General Terminology Theory (henceforth: GTT) (Wüster 1979) was that general language words and specialized terms differ from one another because, unlike in general language, there is a monosemic reference between terms and concepts they designate. Accordingly, one of the primary goals of GTT was to eliminate ambiguity from specialized communication through standardization of terminology. However, such an approach was deemed too prescriptive and entirely inadequate to account for how terms are actually used in real communication. With the advent of cognitive-based terminology theories (Cabré 1999; 2000; 2003; Temmermann 1997; 2000; 2002; Faber Benítez, Márquez Linares and Vega Expósito 2005; Faber et al. 2006; Faber et al. 2007) the focus has shifted towards the study of meaning, actual use of terms in specialized discourse and conceptual structures underlying them (Faber Benítez 2009). It is argued that in specialized languages polysemy and synonymy occur frequently. Term variation, as a result of different verbal, situational and cognitive contexts in discourse (Temmerman, Kerremans and Vandervoort 2005), is a rule rather than exception, and figurative language is used routinely, not only for aesthetic purposes, but also to facilitate understanding of new concepts and theories, convey ideology and to fill terminological gaps.

As cognitive linguists with an inclination towards practical application, in the present paper we build on the abovementioned principles of cognitive-based terminology theories in our attempt to explore what Sager (1990) dubs *secondary term formation*, where a new term is created for a concept emerging “as a result of knowledge transfer to another linguistic community” (1990, 80). More precisely, we analyse the translational counterparts of technical terms from economics, introduced into Croatian from English as the current *lingua franca* in the field. Our main focus is on the field of economics, as we find it especially convenient for the study of figurative terminology due to its being very rich in figurative language in general, as testified by many discourse studies (e.g., Boers 1999; Charteris-Black 2004; Fukuda 2009) applying the conceptual metaphor theory (Lakoff and Johnson 1980). Of course, we do not claim that other fields of specialized language are less rich in figurative terminology as there are many studies amply testifying to the ubiquity of metaphors and figurative terminology in all sorts of specialized discourse (e.g., Faber 2012; Frezza and Gagliasso 2017; Rossi 2017a).

However, another reason for confining our attention to economics discourse is the fact that it is also equally suitable for the study of term variation as it spans different discourse situations, ranging from highly specialized journals, academic (text)books and popular economics discourse found in the media (cf. Herrera-Soler and White 2012).

The focus is put on figurative terminology, as it poses an enormous challenge for translators who, as mediators between two different cultures and linguistic systems, struggle to find a way to keep the same or similar metaphorical scenario in the target language, which would at the same time be able to convey other intended pragmatic and aesthetic functions of the specific term (cf. Fuertes Olivera and Pizarro Sánchez 2002).

In exploring the translation of technical terms, we also side with Bin (2003) who, building on Turner and Fauconnier (1995) and Fauconnier and Turner (2002), argues for understanding

translation as an emergent, integrated structure, resulting from a dynamic process of *conceptual integration (blending)*. In the present paper we therefore apply the Conceptual Integration Theory (henceforth: CIT) (Turner and Fauconnier 1995; Fauconnier and Turner 2002) to the process of interpretation in full support of “the return of sense on the scene of translation”, as aptly put by Fougner Rydning (2005). The translational process is thus seen as discourse-pragmatic phenomenon involving the transfer of cognitive categories, crucially determined by both intercultural and interlingual factors. Our starting point is therefore the idea that Conceptual Integration Theory “appears to offer translation theorists a general model of sense construction which enables them to account for the cognitive mechanisms underlying sense construction which are central in translation” (Fougner Rydning 2005, 402).

Our approach is also descriptive and *usage-based* (Langacker 2000), since our goal is to account for how the analysed terms are used in real communication by resorting to evidence obtained through the observation of real language data.

After a brief overview of the particular characteristics of figurative language and terminology in specialized discourse following this introduction, the basics of the CIT are presented in Section 3, with particular emphasis on its relation to the other staple theory of figurative language in cognitive linguistics, *viz.* the Conceptual Metaphor and Metonymy Theory (henceforth: CMMT). The central part of the paper features case studies of three English figurative terms from the discourse of economics, and their Croatian translational counterparts with particular reliance on the CIT, followed by the discussion of the findings and the conclusion.

2 Figurative Terminology in Theory and Practice

Figurative conceptualization has for some time now been recognized as a staple in specialized discourse (e.g., Schlanger 1995; Agorni 2014; Milić and Vidaković Erdeljić 2017; Rossi 2017b). Figurative language and its underlying cognitive mechanisms (conceptual metaphor, conceptual metonymy and blending) are indispensable mechanisms for understanding abstract thought as well as a basic technique for reasoning. As such, and as argued by Naciscione (2003), it plays a vital role in science and research (Taylor 1995; Mithen 1999) by not only enabling the construal “of new meanings and abstract concepts, but also sensible arguments and intelligent judgements”. As a fundamental part of human cognitive functioning, it may consequently be seen as *discourse-constitutive* (Agorni 2014, 87) or, as Schlanger (1995) puts it, *theory-constitutive* in that it both permeates the thinking within a discipline, as well as actively produces and perpetuates it by facilitating the grasping of new theories. In addition to its discourse-constitutive function, Agorni (2014) also distinguishes among the *communicative*, *pedagogical* and *terminological gap-filling functions* of figurative language. Its communicative function is linked to the traditional view of metaphor as an aesthetic device, but also one of influence and persuasion, instrumental in the building of ideology. By using a certain metaphor, we bring into the spotlight particular aspects of reality, while leaving others in the dark. This provides metaphors with their suggestive power which can be exploited to persuade and manipulate (Resche 2012). Rossi (2017b, 194) labels such metaphors *ideology-constitutive* as they are “specifically chosen in order to convey a message about a given society

and culture” and are “aimed at influencing a collective perception”. The pedagogical function is closely related to LSP (Language for Specific Purposes), as figurative language is used to explain technical concepts in addition to naming them, where it meets the terminological gap-filling function. The latter function of metaphors in LSP has been recognized as one of the most interesting aspects in the field of metaphor studies in that figurative uses often “grow into technical terms” (Agorni 2014, 8). Figurative language in the LSP is thus not a mere embellishment or a deviation, but rather performs a lexical-supplementary function (Goatly 2011, 154–77; Temmerman 2002). Figurative technical terms “help synthesise a notion or a conceptual area that could only be represented through a long description otherwise” (Agorni 2014, 88; Resche 2017). Agorni (ibid.) further observes that the terminological gap-filling function of metaphors is not independent from their other functions but interacts with them. Such *lexicalizations of metaphors* (Temmerman 2000) may, however, turn out problematic in areas such as translation, as they foreground both the complexities of the translation process, as well as the above-postulated strong link between language and culture(s) in lieu of the ubiquitous asymmetry and anisomorphism between the two that this process has to negotiate (Lewandowska-Tomaszczyk 2010).

The issue of translators’ agency in the process is clearly in focus here, as producers of “mediated discourse”, situated between different linguistic and cultural systems – who are tasked with (first) establishing “priorities among the different functions that figurative language plays in the source text, and the associations that such images may activate in the mind of the reader” (Miller and Monti 2014, xi).

Previous research by Fuertes Olivera and others (1998; Fuertes Olivera and Velasco Sacristán 2001; Fuertes Olivera and Pizarro Sánchez 2002) suggests that the preferred move of translators of texts in economics is to look for an exact equivalent of the original metaphor, rather than try to find another metaphorical expression with a similar meaning, or replace the original figure with an approximate literal paraphrase. The run-of-the mill solution and view is to preserve a technical term in translation, possibly in the form of loan translations. The strategy is argued to be a deliberate way of satisfying the two basic functions of metaphors, the technical and stylistic/pragmatic, as it may result in metaphorical neologisms through the creation of new similarities between the source and target domains. Their additional benefit of reproducing the novelty and vividness of the original metaphor (Agorni 2014, 89) is an extra pragmatic effect suggested in specific specialized discourses such as popular business discourse, as readers can simultaneously activate both the literal and figurative meanings yet recognize their terminological function. The process may ultimately result in the introduction of new mappings into the TL.

The case studies presented below represent another step in a more detailed investigation of the potential ways of rendering terminology in translation. We are primarily interested in whether translators are able to convey all the functions figurative terms accommodate, what obstacles they encounter and what creative solutions they resort to. As we believe that the CIT is extremely potent in accounting for meaning construal in novel online conceptualizations, such as translation of figurative terminology, in the next section we briefly describe the most important ideas behind the CIT.

3 Conceptual Integration Theory in Meaning Construction: Basic Terms and Juxtaposition with CMMT (as Models of Translation)

Since there are many practical and concise overviews of the CIT (e.g., Kövecses 2002), we will focus on presenting the basics and its relation to the other key cognitive linguistic theory concerning figurative language – the Conceptual Metaphor and Metonymy Theory (henceforth: CMMT; Lakoff and Johnson 1980).

Also known as *the many-space model*, the CIT (Turner and Fauconnier 1997; Fauconnier and Turner 2003; Coulson and Oakley 2000; Coulson, Oakley and Grady 1999) contends that the construction of sense can be accounted for in terms of blending, i.e., setting up a conceptual integration network, which involves (prototypically four) mental spaces. The latter contain “representations of the entities and relationships in any given scenario as perceived, imagined, remembered, or otherwise understood by a speaker” (Coulson and Oakley 2003). In prototypical conceptual integration, the partial structure from two or more mental input spaces is selectively projected and compressed in(to) a *blend*, which often develops emergent structure of its own, often absent from the input spaces, as structures from different mental spaces are projected into it. It occurs in understanding of the full meaning of a message, and draws on both conventionalized conceptual mappings as postulated in CMMT, and immediate context(s), i.e., discourse. A fourth, generic space, contains a skeletal conceptual structure common to the input spaces and licenses the projection. An oft-quoted example, usually used to both illustrate meaning creation, i.e., emergence of new meaning, and

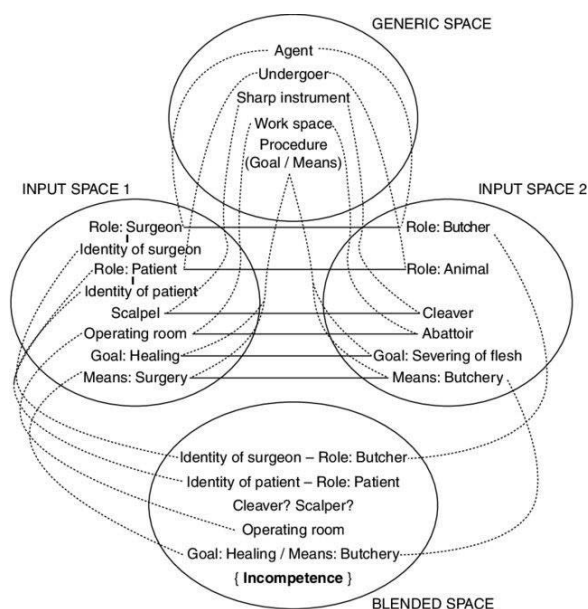


FIGURE 1. The conceptual integration network for *Surgeon as a butcher* blend (adapted from Grady, Oakley and Coulson 1999, 105).

represent the conceptual integration network graphically, is the analysis of Veale's (1996) *This surgeon is a butcher* (resulting in the emergent meaning of the surgeon's incompetence), which we reproduce here for convenience and illustration of the main components and mechanisms of the theory.

Although the CIT is a framework different from that of the CTMM, it is complementary to it. Blending goes beyond conceptual metaphor in several respects:

- a. Domains vs. mental spaces. Whereas metaphors are stable and systematic relationships between two *conceptual domains*, the basic unit of blending is a *mental space*, a temporary notion which speakers construct for immediate purposes, or when thinking or talking about perceived or imagined situations in the past and in the future.
- b. Two domains vs. four spaces. Metaphors involve mapping between two conceptual domains; blending, on the other hand, typically relies on a four-space model (two input spaces, plus a generic and a blend space).
- c. It is an emergent structure. Four-space models can account for phenomena hidden in two-domain models.
- d. Dynamism vs. stability as focus. The CMMT's focus primarily lies in the identification of regular, conventional patterns of conceptualization underlying (ultimately figurative) linguistic expressions, whereas blending often explicitly addresses novel and unique examples. Blending thus seems better equipped to account for the construction of emergent meaning, e.g., in translation, than conceptual metaphors.

In the course of translation, the process of meaning construal occurs twice, the first time when the original term is encountered by the translator in the SL and then the second time when the translator tries to reformulate the sense of the term in the TL (cf. Fougner Rydning 2005). Our model of conceptual integration in the process of translation is, however, a simplified one in which two meaning construals, namely interpretation of the SL term and its reformulation into TL, are, for the sake of convenience, compressed into one illustration. Our model features two input spaces, the SL input featuring the original term, and the

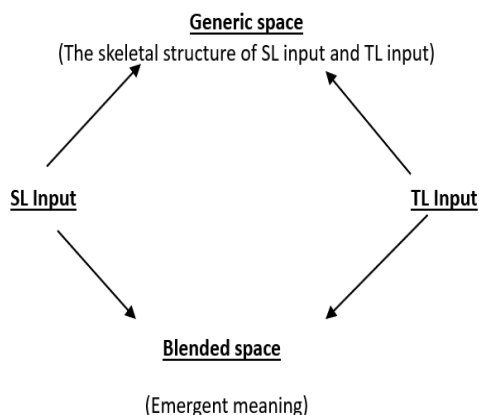


FIGURE 2. Simplified conceptual integration network in translation.

TL input with the TL term. The blended space in our model is populated by the meaning emerging in the process of its interpretation by the translator encountering the term in the SL, and ideally, if the translation is successful, this is also the meaning triggered by the TL term. The generic space, however, contains the skeletal structure of both input spaces, and therefore licences the TL term translation.

4 Methodology

Our aim is to establish what happens when a figurative term is first introduced from a source language into the target language. More precisely, we want to see if there are different term variants designating the same concept present in the discourse, and if there are, we want to determine if it is possible to observe any differences between different text types as regards their inclination towards the specific term variants. By analysing concrete translations which feature the terms under scrutiny, we also place particular focus on how translators deal with novel figurative terms and the challenges they encounter in the process of translation by discussing their solutions within the CIT as a framework well-equipped to address the links between the ST and TT and account for the (more or less) creative solutions translators come up with. Our analysis thus aims to answer the call for descriptive studies involving a shift from normativeness and prescriptivism toward an emphasis on description, explanation and prediction.

This study is also an example of a contextualized case study in which we try to provide an in-depth analysis of the process of secondary term formation when figurative terms conveying several functions are introduced from English into Croatian. Our interest is therefore in the “particular rather than the general” (Fuertes Olivera and Velasco Sacristán 2012, 160), which is why we have confined our analysis to only three figurative terms in the field of economics. However, in order to corroborate our findings, we will also draw on some more examples which reveal tendencies observable in the processes of translation of figurative terms from English into Croatian.

The three examples from the field of economics, analysed below – *green procurement*, *greenwashing* and *silver economy* – were therefore chosen for their figurative nature (the additional common denominator being their reliance on colour terms) and the fact that they were created relatively recently in English from where they spread to other languages. As illustrated in Figure 3, a graph created with Google Books Ngram Viewer (cf. Rossi 2017b), the spread of these terms in English started around the 1990s, and since then their frequency of use has been growing.¹ The relatively recent creation of these terms has therefore allowed us to establish how they were transposed into Croatian in different situational contexts and text types in the early stages of their introduction from English.

In our analysis we rely on four different corpora. The first corpus we consulted is EUR-lex, an official website of the European Union providing free access to EU legislation and other public documents in the 24 official EU languages, which has afforded us a look into how novel figurative terms are treated by professional translators. In our CIT networks modelling the translation of figurative terms which are the focus of our analyses, we will always present

¹ There are no available Google Books Ngram Viewer data for Croatian.

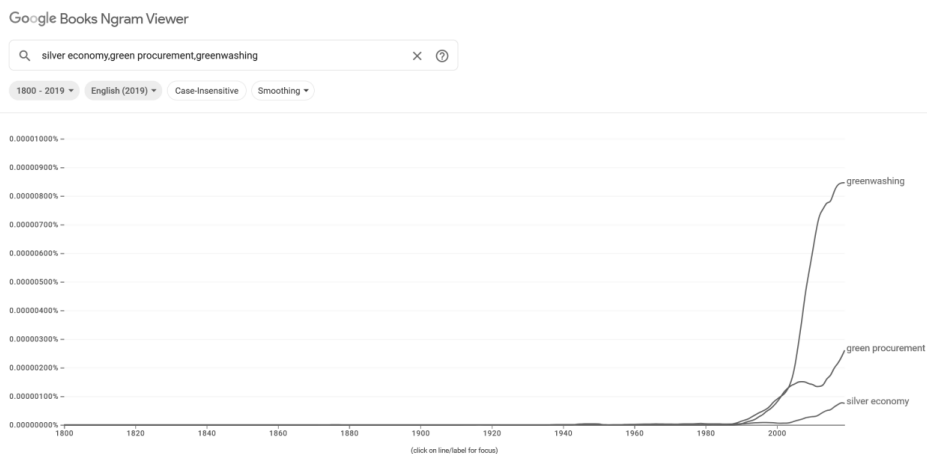


FIGURE 3. The spread of the figurative terms *silver economy*, *green procurement* and *greenwashing* in English.

those term variants which are provided by professional translators and which we were able to access through EUR-lex.

The second corpus we turn to is IATE, a database of EU-specific terminology entered by translators and terminologists working in the language services of the EU institutions. Since IATE often contains several term variants referring to a single concept, its input to our discussion is valuable as it enables us a look into the thought process of different translators and terminologists.

In our analysis we have also consulted the largest available general corpus of Croatian – hrWaC,² a web corpus collected from the .hr top level domain, as well as the results we have extracted through the Google search engine by focusing on Croatian websites in the period between 1 January 2000 and 19 June 2023. We included Internet sources in our analysis in an attempt to gain insight into what term variants are used by experts in specialized journals, but also what term variants are used by journalists and lay people in general in the specific processes of secondary term formation under scrutiny. As argued by Fuertes Olivera and Velasco Sacristán (2012), sometimes, even before the translators start dealing with novel figurative terms, these have already been introduced in the target culture by field experts who have encountered and understood them in the conceptual scenario within which the terms were created. We believe that our searches of hrWaC and our Google searches will allow us to see whether experts who have encountered the specific figurative terms in the source language texts tend to retain the original figurative scenario or resort to paraphrases.

The results of our corpus analyses indicate that the terms under scrutiny appear mostly in public administration documents, specialized journals, newspapers, magazines, and different blogs. In what follows we present the research results for each term in turn.

² The current version of the Croatian web corpus hrWaC – v2.0 – contains 1.9 billion tokens.

5 Analysis

5.1 Example 1: *green (public) procurement*

The first example we discuss is that of *green public procurement* for which IATE offers the following definition: *process whereby public authorities seek to procure goods, services and works with a reduced environmental impact throughout their life cycle when compared to goods, services and works with the same primary function that would otherwise be procured.*

The Croatian counterpart listed in IATE is a loan translation *zelena javna nabava*, which is also the only counterpart we come across in EUR-lex, where in only one out of five examples the term was used with quotation marks which, as metadiscursive markers, signal the novelty and presumably figurativeness of the term (cf. Delavigne 2017; Rossi 2017b).

Our search of hrWaC has returned 51 hits of the term *zelena javna nabava* (frequency of 0.036 per million tokens) with quotation marks being used only twice as metadiscursive markers. Our Google search for the period between 1 January 2000 and 19 June 2023 has thrown up 94 examples of *zelena javna nabava*. Again, quotation marks were used only once.

The searches across all our above-mentioned sources point to the fact that the term is mainly used in documents produced by different central and local government bodies and (European) institutions in the context of tendering procedures, and, less frequently, also in articles featured in newspapers and magazines. We found no other competing Croatian translations, and our Google search returned only a few examples where the meaning of the term was supported by the Croatian term *održiv* (sustainable). However, since terms are often introduced in TL as unadapted borrowings, we have also checked if the English original is used in Croatian websites. We came across 49 examples, but in all cases the term was used in websites offering content in English in one way or another, e.g., in abstracts of research papers written in English.

All this may suggest that the loan translation *zelena javna nabava* is deemed straightforward, unambiguous and clear, and that the translator(s) did not expect the addressees of the message to have any difficulties accessing the intended meaning behind the original English term, presumably due to the fact that it is grounded in universal human experience of nature.

The blending analysis for the term *green public procurement* illustrated in Figure 4 is a simplified version of the CIT network modelling the translation of a term from SL into the TL, and the order of steps is somewhat different than in monolingual online conceptualizations. Here, what translators are first faced with is the original SL term populating the Input 1 mental space, on the basis of which they are supposed to be able to construe the generic space, i.e., the core meaning shared between the mental spaces of two languages, as well as the emergent meaning occupying the blended space. In translation, therefore, the only unknown variable is the Input space 2, or the TL Input space, representing the TL term, which should be able to project into the blended space the partial structure which in ideal conditions should be equivalent to the one projected by the SL Input space.

In Figure 4, the generic space shared between the mental spaces of two languages may be schematized as “ecologically responsible procurement”. This specific type of procurement in the original English term is prompted through the adjective *green*, a highly polysemous word which in one of its meanings, as listed in the Merriam Webster dictionary, denotes the quality of: “*tending to preserve environmental quality (as by being recyclable, biodegradable, or nonpolluting)*”. The underlying motivation is clearly metonymic, as it involves the activation of a PART FOR WHOLE mapping SALIENT PROPERTY FOR CATEGORY in which the colour term *green*, experientially salient since being the colour of vegetation, stands for nature in general.³ The experience of nature is a universal one, as often are the conceptual metaphors and metonymies grounded in our interaction with nature. In order to keep the original image contained within the figurative term *green public procurement* and keep the intended meaning, translators into Croatian simply resorted to the adjective *zelen*, a cognate, i.e., metonymic equivalent of *green* (cf. Brdar and Brdar-Szabó 2014) which is readily available in Croatian and conveys the similar metonymically motivated meaning as the English *green*. This is also suggested by the definition we came across in a dictionary of neologisms:⁴ *koji slijedi ekološku politiku i ideologiju* (“in line with ecologically oriented policies and ideologies”). Both SL and TL input spaces are thus able to project into the blended space the emergent meaning of a positive bias towards this specific type of procurement. Therefore, several functions of the term are successfully reproduced in the TL, the original figure is thus kept and serves an aesthetic function and the ideological value of *green*, which is “aimed at influencing a collective perception” (Rossi 2017b, 194), is also preserved.

In view of the analysis presented above, it was interesting to observe that out of 34 terms listed in IATE,⁵ which featured the adjective *green* in the sense of “*beneficial to environment*” (e.g., *green AI*, *green growth*, *green payment*, *green product*, *green industry*, *green recovery*, etc.) as many as 27 of them were translated in Croatian with the adjective *zelen*, clearly signalling the heavy reliance of translators on the metonymic mapping GREEN FOR NATURE derived from the universal human experience.

5.2 Example 2: *greenwashing*

The term *greenwashing* involves similar components, but a presumably different story. The focus here is on a problem placed before the translator, stemming from the cultural specificity of certain ideas and concepts, or their being rendered with different linguistic resources (lexical and grammatical structures). The core meaning behind the term as provided by IATE is *disinformation disseminated by an organization, etc., so as to present an environmentally responsible public image; or a public image of environmental responsibility promulgated by or for an organization, etc., but perceived as being unfounded or intentionally misleading*.

The noun *greenwashing* itself however is a result of another process of conceptual integration in which the meaning of the noun *whitewashing* was derived from the verb *whitewash* whose

³ According to Berlin and Kay (1969) the colour *green* belongs to basic colour terms. Basic colour terms have prototype properties, which means that they are the best example of the colour term.

⁴ See <http://rjecnik.neologizam.ffzg.unizg.hr/2016/04/26/zeleni/>.

⁵ Accessed on 30 October 2023.

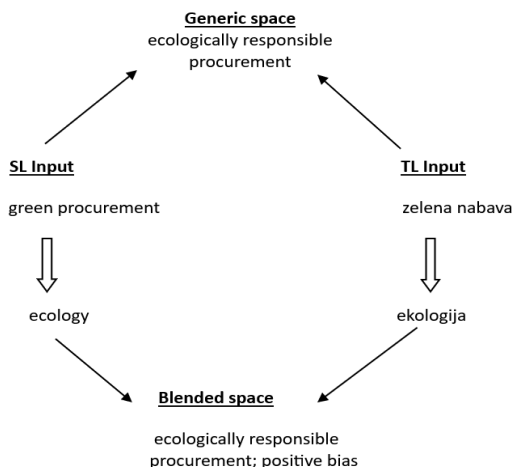


FIGURE 4. CIT model for the translation of the term *green (public) procurement*.

prototypical meaning as provided by Merriam Webster is: *to whiten with whitewash* (e.g., walls, cottages, fences). In the process of meaning extension, the verb got to mean *to gloss over or cover up (something, such as a record of criminal behaviour)*.⁶ The generic structure of the new blend is therefore *covering something unclean and disagreeable with paint to make it clean*, but the fact that the objects of *whitewashing* are no longer physical objects but abstract ones – words, acts, and the like – produces the new emergent meaning of covering an unpleasant truth.

By replacing the adjective *white* with the adjective *green*, the generic structure of the blend is kept intact (something unacceptable is covered with paint), but the fact that the paint is now *green*, which, again, metonymically stands for everything environmentally friendly, rather than *white* gives rise to a new, emergent meaning: *to cover an environmentally unfriendly truth and make it look environmentally friendly and green*.

When it comes to Croatian variants, there are only four occurrences of this term in EUR-lex, and in all instances the translation is *manipulativni zeleni marketing* (“manipulative green marketing”) always followed by metadiscursive markers (quotation marks, italics, reformulations, definitions and once with the English original enclosed in brackets).

In hrWaC, however, we did not come across the variant we found in EUR-lex, instead the unadapted borrowing *greenwashing* appears 27 times, always followed by metadiscursive markers such as quotation marks, italics, abbreviations such as *tzv.*, (“so-called”), definitions and several attempts at translation enclosed in brackets: *pozelenjivanje* (lit. greening), *eko-pranje* (lit. eco-washing), *zeleno umivanje* (lit. green face washing) and *zeleno pranje* (lit. green washing). With regard to the text type, the unadapted borrowing was found to be predominately featured in news portals, blogs, and webpages of nongovernmental organizations.

⁶ <https://www.merriam-webster.com/dictionary/whitewash>

Our Google search has also revealed that when it comes to Croatian counterparts the unadapted borrowing *greenwashing* is again the most frequent term variant, with 126 occurrences. It appeared on news portals, online fashion magazines and the webpages of different companies and nongovernmental organizations. It was almost always followed by metadiscursive markers of novelty and figurativeness, such as quotation marks, italics, expressions such as *odnosno* (“id est”) and *tzv.* (“so-called”), definitions and attempts at translations, e.g., *ekomanipulacija* (lit. ecomanipulation), *zeleno ispiranje* (lit. green rinsing), *zeleni šminka* (lit. green make-up), *zeleni marketing* (lit. green marketing), *lažni zeleni marketing* (lit. false green marketing), *obmanjivi marketing* (lit. misleading marketing), *ispiranje mozga zelenom politikom* (lit. brainwashing through green policies), *zlouporaba zelenog imidža* (lit. green image abuse), and so on.

The most frequent Croatian translations Google search has yielded are the loan translation *zeleno pranje* (greenwashing) with 41 search results, *ekomanipulacija* (ecomanipulation) with 38 results, and *manipulativni zeleni marketing* (manipulative green marketing) with 30 results. All three variants are in most cases followed by the usual metadiscursive markers. We have also noticed a difference between these variants with respect to the text types in which they commonly appear. The variant *manipulativni zeleni marketing* is most frequently used on the webpages of public administration bodies, companies, newspapers and magazines. The loan translation *zeleno pranje* is mostly used by experts as it appears in research papers, several thesis papers, blogs and news portals. The variant *ekomanipulacija* is also featured in blogs, thesis papers and news portals.

The sheer number and variety of translation solutions in Croatian bears witness to the fact that it was no easy feat to convey the intended meaning into the language. In what follows we will discuss only the three most frequent translation solutions: *zeleno pranje*, *ekomanipulacija* and *manipulativni zeleni marketing*. If translated literally with *zeleno pranje* – green washing – the intended meaning of manipulation inherent in the original term is not that easily accessible in Croatian, since the Croatian language/culture is unaware of the origin and history of the term in the English language.⁷ However, Croatian already contains the figurative collocation *pranje novca* (lit. money washing – Eng. money laundering) where the noun *pranje* (washing) is, contrary to its typical meaning, used to convey that something is made clean by manipulation and illegal activities. Therefore, it is somewhat possible that native speakers of Croatian might construe the meaning of manipulation when encountering the term *zeleno pranje*, as well as because the odd fact that something is washed with the colour green could invite the process of inferencing. However, due to the asymmetries between the two cultures in question, this specific TL term cannot trigger the same kind of meaning construal as the SL term. It is also interesting that this loan translation is mostly used by experts, who have probably encountered the SL term in original documents in English and who are familiar with its meaning and aware of its connotations, which makes this loan translation an obvious and easy choice for them.

Official documents and professional translators, however, prefer the other two translations *ekomanipulacija* and *manipulativni zeleni marketing*, which we also present in our CIT model in Figure 5. Both explicitly state in the TL input space the emergent meaning of

⁷ This word formation pathway seems to be quite productive in English, as suggested by at least three new terms containing the meaning of manipulation: *leanwashing*, *nutriwashing* and *wellbeing washing*.

manipulation which in the model of conceptual integration reads *to deliberately cover up environmentally harming practices*, and which in the SL input space is only being implied. It seems that translators of official documents are reluctant to keep the original figure for fear of its intended meaning not being clear to speakers of Croatian due to the cultural specificity of the original English term. Therefore, while the loan translation keeps the ideological value implied, although based on a different type of meaning construal than in the SL, the other two most frequent Croatian term variants state it explicitly. It is difficult to predict if any of these term variants will prevail or if they will all persevere, but in different genres.

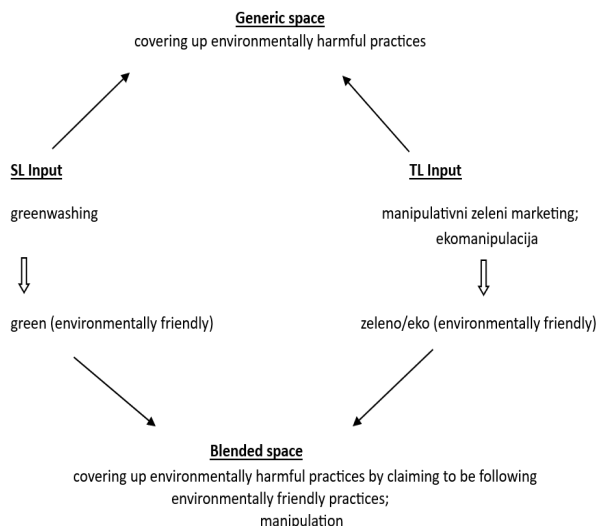


FIGURE 5. CIT model for the translation of the term *green (public) procurement*.

5.3 Example 3: *silver economy*

Our next example is the term *silver economy* which IATE defines as *the economic opportunities arising from public and consumer expenditure related to population ageing and the specific needs of older people*. The concept is gaining in importance and popularity as the share of older people in the population is rapidly increasing. The original English term is again obviously motivated metonymically, as silver hair symbolizes old age. Interestingly, in English the adjective *grey* also collocates with *hair* and can also metonymically symbolize old age. In fact, our search of the British National Corpus shows that the collocation *grey hair* has 1.31 tokens per million words, while the collocation *silver hair* has only 0.22 tokens per million words. However, the collocations *grey hair* and *silver hair* probably do not trigger identical interpretations. While *grey hair* might be associated with less appealing aspects of old age, e.g., physical weakness, all sorts of old age-related ailments, reduced levels of energy, social exclusion, etc., *silver* in *silver hair* might potentially also be tied to the idea that silver is a precious metal, almost universally associated with wealth and success. Since the idea behind every economic activity is to earn profit and accumulate wealth, this neatly supplements the age component and provides the source expression with a euphemistic effect.⁸

⁸ It is then no wonder that the term chosen to identify economic activities meeting the specific needs of the population over 50 is *silver economy* rather than *grey economy*. The latter has already been reserved to cover the negative aspects the

IATE offers the loan translation *srebrna ekonomija* as a Croatian counterpart, but assigns it only two stars, indicating that the term is not deemed high on the reliability scale.⁹ In EUR-lex there are only five occurrences of the term, which was translated with the loan translation three times and twice with the variant *seniorsko gospodarstvo* (seniors' economy). Even though we searched hrWaC for different variants of the term, e.g., the loan translation, the expression *ekonomija treće životne dobi* (lit. third age economy), we found no occurrences. The Google search, however, produced 51 examples of the loan translation variant (*srebrna ekonomija*), in most cases followed by metadiscursive markers. On closer analysis of the hits, we were able to conclude that the term is primarily used by economic experts in research articles, EU-related websites and in newspaper articles aimed at the older population. We found no instances of the variant *seniorsko gospodarstvo* (seniors' economy), but our search for the unadapted borrowing *silver economy* returned 20 results. This variant is mostly found on Croatian webpages offering content in English, with only several examples of its use in texts written in Croatian where it was put in quotation marks and followed by a definition. Our Google search has also revealed the variant *sijeda ekonomija* (grey economy), which was used only three times.

Even though the colour spectrum of English and Croatian is not isomorphic, and Croatian has a specific colour term used exclusively to express the hair colour in old age (*sijed*), the situation in both languages is similar since in neither of them the term *silver* is the most frequent term to denote the hair colour in old age as also evidenced by our search of the hrWaC corpus, which returned only two tokens of *srebrna kosa* (silver hair) and 223 tokens of *sijeda kosa* (grey hair).

It was interesting, therefore, to observe that in Croatian the loan translation which keeps the original figurative scenario is the most common option across genres. This accords with Fuertes Olivera's (1998) observation that translators tend to look for an exact equivalent of the original figure as a strategy to simultaneously convey the two main functions of the figure, i.e., the technical and the stylistic function (Fuertes Olivera and Pizarro Sánchez 2002; quoted in Agorni 2014). In the case of translating *silver economy* with a loan translation in Croatian, translators may be drawing on the fact that the Croatian equivalent of *silver* is occasionally used to denote hair colour in old age, and are thus creating what Indurkha (1992) referred to as similarity-based metaphor which "[...] invite(s) the reader to make a comparison between the source and the target, as the transference of meaning is based on some existing similarity between the two" (Indurkha 1992, 2; quoted in Agorni 2014). The fact that the loan translation is almost always followed by a definition or a reformulation signals the novelty of the figure and the fact that its meaning is not entirely transparent, but with time and use it may become an established term, easily understood even without any metadiscursive markers. Other equivalents of *silver economy* that we came across – *seniorsko gospodarstvo* and *gospodarstvo treće životne dobi* – explicitly state the intended meaning, i.e.,

colour can culturally and experientially activate. *Grey* has a host of other rather negative connotations. For example, the fourth and fifth most frequent collocates of *grey* as an adjective are *sky* and *clouds*, which activate associations with bad weather.

⁹ IATE assigns the reliability value to each term, by assigning to it a specific number of stars. Four stars assigned to a term symbolize the highest level of reliability, while one star indicates that the reliability is not verified (<https://iate.europa.eu/assets/handbook.pdf>).

what is contained in the blended space of the CIT network (Figure 6), but are utterly devoid of the vividness of the original figurative expression.

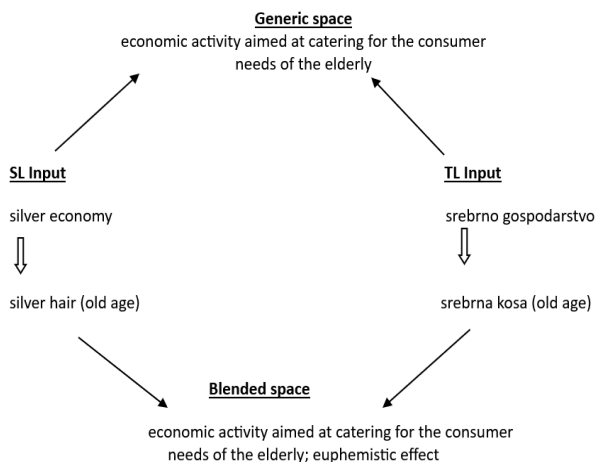


FIGURE 6. CIT model for the translation of the term *silver economy*.

6 Discussion and Conclusion

In this paper we have analysed the process of secondary term formation by looking into the introduction of three figurative terms in the field of economics from English, as the current *lingua franca* in the field, into Croatian. We have, therefore, placed our focus on the terminological gap-filling function of metaphorical terms, but were also curious about what happens in translation when a term conveys more functions (e.g., theory-constitutive or ideology constitutive functions). As noted in earlier research (Fuertes Olivera 1998, quoted in Agorni 2014), translators tend to opt for an exact, verbatim equivalent of the original figure/metaphor, rather than resorting to another figurative expression with a similar meaning, or replacing the original figure with a paraphrase. However, this may be tricky when translating figurative terms that convey several functions since, as argued earlier (e.g., Nida 1964; Nord 1997), it is very difficult to reproduce all the components and nuances of originals due to discursive and cultural pressures (Agorni 2014). Our approach was usage-based in that our conclusions are founded on the observation of how the analysed figurative terms behave in real communication (official documents, research papers, magazines, newspapers, blogs, etc.). In the paper we also argue that the Conceptual Integration Theory provides a sound framework able to account for the meaning construal in the process of translation and the choices translators make.

Our analysis has yielded several insights. First, it was noticed that often a great deal of term variation occurs when the term is first introduced into the target language/community, which has enabled an analysis of interesting emergent patterns. When, for example, a figure is based on some universal experience (e.g. *green* standing metonymically for nature and implicitly for the ecological and sustainable in *green public procurement*), the figure is readily transposed into the target community, in this case with the cognate metonymic expression, and there is actually not much variation. However, when the figure is grounded in the source culture as

in the case of *greenwashing*, or is not firmly entrenched in the target culture, as in the case of *silver economy*, term variation is much more present due to asymmetries between two languages and cultures. Our data show that in such instances official documents, presumably handled by professional translators, often prefer a paraphrase (*manipulativni zeleni marketing* – manipulative green marketing, *seniorsko gospodarstvo* – senior economy) which explicitly expresses the intended meaning and sometimes also keeps the ideological value of the term while the original figure is lost. Denroche (2019) maintains that such explicitation which makes information, and also culturally specific knowledge – which is implied in the source text – explicit is the result of differences between the language systems and is by some authors (e.g., Pym 2010) considered to be a translation universal.

The term variants drawn from the web corpus and the Google search show a much more colourful picture. In these environments the unadapted borrowings, as in the case of *greenwashing*, and loan translations, as in the case of *silver economy*, are the most frequent choices, but almost always followed by different metadiscursive markers, reformulations and attempts at translation which all explicitly or implicitly convey the ideological value of the term. This is in line with conclusions offered by Delavigne (2014), who says that “the moment a technical or scientific term moves outside the boundaries of its typical or ‘natural’ environment, mutual understanding is lost. In order to bring it back, a work of discursive negotiation involving different reformulation strategies becomes necessary”.

It is also worth noting that in the case of *greenwashing* and *silver economy*, the unadapted borrowing and the loan translations, respectively, are more common in texts produced by experts in the specific specialized field (e.g., in research papers) and by non-professional translators, e.g., journalists and authors of different blogs and texts published on the websites of different companies. Due to English being the current *lingua franca* in almost all fields of human activity, the authors of such texts are, presumably, very often bilingual and aware of the original figure and its connotations in the source language, but also of the fact that the intended audience might not be familiar with these, which might be the reason why they often supply their term variants with different metadiscursive markers and reformulations.

Our analysis of the translation choices made by professional translators via the model of conceptual integration network suggests that the most successful TL term variants are those that are able to project into the blended space the same emergent meaning as intended by the SL term and also those that require of the TL speaker the same kind of conceptualization and meaning construal as required of the SL speaker by the SL term. This was the case with the term *green public procurement*, which due to the universal availability of its figure, was able to retain in the TL all the intended functions of the SL term, i.e., its theory-constitutive and its ideology-constitutive function.

However, due to the cultural specificity of certain figures, as in the case of *greenwashing*, it is often impossible to retain the original image. In such cases translators opt for paraphrases, which most often do not trigger in the TL the same kind of conceptualization and meaning construal as in the SL, but the intended emergent meaning from the blended space is stated explicitly, as with the sense of manipulation in *manipulativni zeleni marketing*, keeping both its theory-constitutive and its ideology-constitutive functions intact.

In the case of *silver economy*, however, professional translators have provided two solutions – the loan translation *srebrna ekonomija*, which keeps the same figure as the SL term, and the paraphrase *seniorsko gospodarstvo* in which the original image is lost. We have checked IATE for solutions provided by other official EU languages and have observed with interest that some of them (German, Danish, Finnish, French, etc.) also struggle between *silver economy* on the one hand and *seniors' economy* on the other, supposedly due to the novelty of the figure. Some authors criticize the introduction of novel metaphors from English into other target languages as examples of terminological colonialism (cf. Fuertes-Olivera and Velasco-Sacristan 2012). Vrgoč and Mihaljević (2019), for example, voice concerns of many when they justly argue against extensive indiscriminate calquing of terms on the model of English, which often brings about unintelligible solutions which flout the TL rules. This may be the reason why some translators in the case of *silver economy* opt for the TL term which explicitly states the intended meaning of the SL term. In this particular case such a solution results in an impoverished vision as the original image is lost and the meaning construal in the TL is very different from the meaning construal in the SL. In terms of the conceptual integration network, the translator has resorted to the content of the blended space.

While it may seem that this translation is completely justifiable since the idea of *silver* metonymically standing for old age is not heavily entrenched in Croatian, our corpus analysis of the collocation patterns of *hair* and *kosa* in English and Croatian, respectively, has shown that in neither of these languages does *silver* or *srebrna* metonymically symbolize old age, the most frequent collocation of *hair* and *kosa* being *grey* and *sijeda*, respectively. In our opinion, this may be the factor tipping the scale in favour of the loan translation as it would invite in the TL a similar process of meaning construal as triggered by the original term in the SL. As we argued above, this would be in line with Fuertes Olivera's (1998) observation that translators tend to keep the original figure in the TL as a strategy to simultaneously convey both the technical and stylistic function of the term (Fuertes Olivera and Pizàrro Sanchez 2002, quoted in Agorni 2014).

Since our study is confined to only three cases of figurative terms recently introduced from English to Croatian, we cannot draw any general conclusions. However, we still believe that the findings which have emerged point to some tendencies. First, we have noticed that term variation is much more common when the figure in the SL term is grounded in culturally specific knowledge. Second, field experts are more prone to retaining the original figure in the TL, even when it is grounded in the culturally specific elements of the SL community, while professional translators in such cases resort to paraphrases.

When it comes to figures grounded in universal human experience, the situation is not as clear-cut. Our additional searches of the IATE have revealed different approaches taken by professional translators and terminologists. For example, the figurative term *data mining* from the field of information technology and data processing, denoting *information extraction activity whose goal is to discover hidden facts contained in databases and other large sets of data*, has two Croatian variants: the paraphrase *dubinska analiza podataka* and the loan translation *rudarenje podataka*. The former term is assigned only two stars, its use being marked as deprecated, while the latter is assigned as many as four stars, placing it high on the reliability scale.

On the other hand, for the term *radon daughters* from the field of science, denoting *the short-lived decay products of radon*, IATE offers only one Croatian term variant, i.e., the paraphrase *radonovi proizvodi raspada*. Our Google search, however, has shown that when writing their papers experts use the loan translation *radonove kćeri*. This loan translation is quite intelligible, as when interpreting it speakers of Croatian can draw on the knowledge structure entailed by the metaphorical mapping CHEMICAL ELEMENTS ARE A FAMILY.

Our earlier research (Milić and Vidaković, 2017) into figurative terms translated from English into Croatian – more precisely, into their intelligibility to native speakers of Croatian – lends support to the findings of our present analysis, as it has shown that those figurative terms, translated verbatim, which were based on universal and experientially-grounded figurative scenarios (e.g., *daughter-company* – *tvrtka kćer*, *green economy* – *zelena ekonomija*, *hard currency* – *čvrsta valuta*, *guerrilla marketing* – *gerilski marketing*, *tangible assets* – *opipljiva imovina*, *hostile takeover* – *neprijateljsko preuzimanje*) were more comprehensible to native speakers of Croatian than those that were based on knowledge which was not a part of Croatian culture (e.g., *business angel* – *poslovni anđeo*, *golden parachute* – *zlatni padobran*, *bull market* – *bikovsko tržište*, *bear market* – *medvjede tržište*).

We therefore argue for the retention of the SL figure whenever possible and whenever this is not blocked by intercultural and interlingual factors, as the retention of the original figure facilitates the understanding of the figurative scenario and its potential use for further theory constitutive, ideology-constitutive and theory explanatory purposes.

We believe that our findings have repercussions for translator training as translators should be able to distinguish between different functions the figurative term is set to convey. Besides, we are convinced that translators would profit from a theoretical acquaintance with the basic mechanisms of CIT and CMMT, as this would enable them to better analyse novel figurative lexicalizations and find the best possible equivalents in the target language (cf. Temmerman 2002). In addition to that, and as evidenced in particular in the case of *silver economy*, corpus analyses can prove to be a quite useful tool in the translation of terms, as they provide translators with a better understanding of how terms behave in the SL, which can then, coupled with corpus analyses of the TL, navigate translators towards the most appropriate choices (cf. also Vrgoč and Mihaljević 2019).

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