Metaforlara dayalı teknik ve ekonomik terimler çevirisi / E. Eriş; E. Uluşahin (803-812. s.)

### **Technical and economic terms translation based on metaphors**

#### Emrah ERİŞ<sup>1</sup>

### Esra ULUŞAHİN<sup>2</sup>

**APA:** Eriş, E.; Uluşahin, E. (2020). Technical and economic terms translation based on metaphors. *RumeliDE Dil ve Edebiyat Araştırmaları Dergisi*, (19), 803-812. DOI: 10.29000/rumelide.752823.

#### Abstract

This study has been designed to reveal the metaphorical language use both in English and Turkish based on translations of technical and economic texts. In so doing, the three categories of metaphors developed by Lakoff and Johnson (1980) were used to analyse the data obtained from various online news agencies and platforms in which technical analysis are provided. These three metaphors are: structural, orientational, and ontological metaphors. Approximately 50 words and phrases were collected from these platforms and agencies to conduct an analysis regarding how translations of these metaphors are done into Turkish and whether these metaphors based on the three categories of Lakoff and Johnson (1980), it was concluded that the advantage of the English-speaking world in having a language which is lingua franca all over the world makes it possible to make use of a plethora of metaphors, whereas Turkish language has a more standardized metaphorical use not because the Turkish language is not fitted but because English is the first language that draws upon emerging words and phrases that may have undergone change in terms of meaning.

Keywords: Technical texts, economic terms, translation, metaphors, online platforms

#### Metaforlara dayalı teknik ve ekonomik terimler çevirisi

#### Öz

Bu çalışma, teknik ve ekonomik metinlerin tercümelerine dayalı olarak hem İngilizce hem de Türkçe mecazi dil kullanımını ortaya çıkarmak için tasarlanmıştır. Bunu yaparken, teknik analizlerin sağlandığı çeşitli çevrimiçi haber ajanslarından ve platformlarından elde edilen verileri analiz etmek için Lakoff ve Johnson (1980) tarafından geliştirilen üç metafor kategorisi kullanılmıştır. Bu üç metafor şunlardır: yapısal, yönelimli ve ontolojik metaforlar. Bu mecazların Türkçeye çevirilerinin nasıl yapıldığına ve bu metaforların Türkçede eşdeğer kelime ve deyimlere sahip olup olmadığına dair bir analiz yapmak için bu platformlardan ve ajanslardan yaklaşık 50 kelime ve kelime öbeği toplanmıştır. Lakoff ve Johnson'un (1980) üç kategorisine dayanan bu metaforların bir analizini takiben, İngilizce konuşan dünyanın, dünyanın her yerinde lingua franca olan bir dile sahip olmanın avantajının, bir çok metafordan faydalanmanın kapısını açtığı bununla birlikte Türk dilinin daha çok standartlaştırılmış bir metaforik kullanıma sahip olduğu ve bunun sebebinin Türk dilinin elverişli olmamasından değil İngilizcenin anlam bakımından değişime

#### Adres Adress

Dr. Öğr. Üyesi, Siirt Üniversitesi, Yabancı Diller Yüksekokulu, Mütercim Tercümanlık (İngilizce) (Siirt-Türkiye), emraheris1@siirt.edu.tr, 0000-0001-6753-9746 [Makale kayıt tarihi: 03.02.2020-kabul tarihi: 20.06.2020; DOI: 10.29000/rumelide.752823]

<sup>2</sup> Dr. Öğr. Üyesi, Ankara Hacı Bayram Veli Üniversitesi, Batı Dilleri ve Edebiyatları Bölümü, Fransız Dili ve Edebiyatı ABD (Ankara, Türkiye), esra.ulusahin@hbv.edu.tr, 0000-0001-5209-6292

Technical and economic terms translation based on metaphors / E. Eriş; E. Uluşahin (pp. 803-812)

uğramış, yeni ortaya çıkan sözcük ve ifadelerden yararlanan ilk dil olmasından kaynaklandığı belirlenmiştir.

Anahtar kelimeler: Teknik metinler, ekonomik terimler, çeviri, metaforlar, çevrimiçi platformlar

### Introduction

Language use is such a specific subject that it is virtually impossible to think of a stationary language that can resist the developments of today's world. This is also manifested in the notion studied by Jacques Derrida, a French philosopher, who proposed untranslatability based on the assumption that the meaning of words change constantly giving the example of the word "mercy", which was once meant to be "forgiveness" for the loser of the fights between gladiators but which now means "affection" for someone such as a mother's affection for her son or daughter. Anne Curzan (2014) states that "We sometimes notice words changing meaning under our noses (e.g., unique coming to mean "very unusual" rather than "one of a kind") - and it can be disconcerting" and adds by asking "How in the world are we all going to communicate effectively if we allow words to shift in meaning like that?". She also provides some examples such as "nice" which used to mean "silly, foolish" - and you know what it means today-, or "meat" which once referred to "food in general". This represents the "face value" of the subject when it comes to language use. And the other side of the coin points to metaphors that are frequently used by linguists and ordinary men when expressing oneself. We as humans are programmed to welcoming unorthodox rhetoric that may appeal to the message receiver. This means that metaphors are sometimes linguistic aids that stand in the breach when it comes to impressing someone who we attempt to redound on. Siqueira et al. (2009) purport that "In recent decades, the phenomenon of the metaphor has increasingly gained attention, especially in the works of linguists and philosophers, and has been a focus of interest for researchers in lexical studies and its related disciplines" While it is obvious that in the wake of changes in the meanings of words and increase in the use of metaphors in daily language use, it should come as no surprise to observe that technical or more precisely economic terms or texts are also delivered through a myriad of metaphors that may serve as tools of adornment throughout the text. "Though at first, the idea that specialized and technical texts could admit polysemous terms or definitions was rather unwelcome and objectivity and precision were considered to be essential elements of technical and scientific languages in order to attain informational accuracy" (Siqueira et al., 2009, p. 158), today, particularly online news agencies or platforms for information service regarding technical issues attempt to give wide coverage to technical texts that mainly include metaphors. Metaphor is not a matter of language itself, but it plays a central role in the way we conceptualize the world, because the human mind operates with concepts that connect metaphorically with other concepts of a similar structure (Lakoff & Johnson, 1980; Gibbs, 1999). Thus, it is essential to make use of and be aware of metaphors to understand technical texts as part of this conceptualization. Jue (2009) claims that "Economy, like politics, has a close relationship with human beings and human society and it is so important an aspect of people's life that in everyday speech people inevitably speak of economy and related topics". He adds that "These economic terms such as stock, equity, insurance, interests, GDP, financial deficit, budget are very familiar to Englishspeaking people and used in their daily life from time to time". To well-understand these terms which are known to English native speakers, translation is of utmost importance and in this case, translators undertake the crucial task of rendering the message given in texts accurately and properly based on the assumption that what is in the source text should be clarified in the target text. Unless these terms are fully and truly rendered in the target text, either translators may draw upon omission or paraphrase or summarize the text leading to full access to the source text message.

Adres Adress

In consideration of the abovementioned issues, this study seeks to investigate the issue of metaphors used in technical texts and their translations into Turkish. The language pair that is subjected to analysis is English-Turkish. Thus, a collection of metaphors used frequently in technical texts taken from online news agencies is analysed in terms of Lakoff and Johnson's (1980) categories of metaphors which are structural, orientational, and ontological. The paper encompasses the following sections: literature review, methodology, analysis and results, and conclusion.

# Literature review

Over the last decades, a huge rise has been seen in the interest in the phenomenon of metaphors, specifically in an academic sense. This issue has not been debated in Turkey in a great amount but has been the object of analysis in studies conducted in other parts of the world. In her dissertation thesis Metaphor in academic discourse: Linguistic forms, conceptual structures, communicative functions and cognitive representations, Julia Berenike Herrmann (2013) focuses on metaphors in an academic sense and studies metaphors in terms of four different issues as is seen in the title. She draws upon anthropomorphism in a sense to reveal the metaphorical language use by illustrating some quotations such as Woody Allen's "I don't like nature. It's big plants eating little plants, (1) small fish eaten by big fish, big animals eating each other. It's like an enormous restaurant (Woody Allen, cited in Grothe, 2008, p. 67). Luisella Leonzini (2017) investigated the use of verbal and visual metaphors in economicmedia discourse along with the analysis of text-image intersemiotic relations based on a cross-analysis of two corpora, respectively of English and Italian editorial articles published between 2009 and 2012. She found out that linguistic vehicle terms and groups identified in both corpora had similarities. Xia Jue (2009) conducted a study on the economic metaphors in newspapers based on the English language and divided economic metaphors into four sections as economy as human beings, economy as a machine, economy as a plant and economy as a building through illustrations from the Financial Times and CNNMoney.com. Hui Fan (2017) focused on the research of advertising translation with the directions of intercultural interaction and western translation theories from an intercultural perspective and studied strategies of translating commercial advertisements with due attention to five categories: literal, free, adaptation, creative and idioms translation.

# Methodology

This section includes a brief analysis of the categories of metaphors which are structural, orientational, and ontological, a full list of technical terms used as metaphors on *cryptobriefing.com*, *coindesk.com*, *accountancyage.com*/, and a few other online platforms, and the translations of these terms provided from some technical texts written in the Turkish language.

# Structural metaphors

Structural metaphors are cases where one concept is metaphorically structured in terms of another based on the claim that metaphor is not just a matter of language, that is, of mere words (Lakoff and Johnson, 1980, p. 6-14). They suggest that "the human conceptual system is metaphorically structured and defined" (ibid, p. 6) adding that "metaphors as linguistic expressions are possible precisely because there are metaphors in a person's conceptual system" (ibid, p. 6). It is clearly understood that humans conceptualize things around them and make use of these things to linguistically express themselves resulting in metaphorical language use. Drawing upon the *Argument is war* metaphor, Lakoff and Johnson (1980, p. 7-8) illustrate expressions from the vocabulary of war such as *attack a* 

*position, indefensible, strategy, win, gain ground,* etc. This reveals the systematicity of using metaphors in the human brain. The metaphorical nature of the concepts that structure our everyday activities under the metaphorical concept *Time is money* (Lakoff and Johnson, 1980, p. 7-8) may give clues:

*Time is money* You're wasting my time. This gadget will save you hours. I don't have the time to give you, etc.

# **Orientational metaphors**

These metaphors refer to a kind of metaphorical concept that does not structure one concept in terms of another but instead organizes a whole system of concepts with respect to one another and have to do with spatial orientation: up-down, in-out, front-back, on-off -i.e. HAPPY IS UP- (ibid, p. 14). Such metaphorical orientations are not arbitrary having a basis in our physical and cultural experience and the orientational metaphors based on them can vary from culture to culture –in some cultures, the future is in front of us, whereas in others it is in back (ibid, p. 14). For example, regarding the physical basis of the metaphor, *MORE IS UP; LESS IS DOWN*, following examples can be given:

The number of books printed each year keeps *going up*. His draft number is *high*. My income *rose* last year, etc. (ibid, 15-16).

## **Ontological metaphors**

Thomas Hofweber (2018) defines ontology as the study of what there is. Ontology, at its simplest, is the study of existence and also the study of how we determine if things exist or not, as well as the classification of existence attempting to take things that are abstract and establish that they are, in fact, real (Keefe, 2016). Based on these definitions, Lakoff and Johnson (1980, p. 25-26) suggest that our experiences with physical objects (especially our own bodies) provide the basis for an extraordinarily wide variety of ontological metaphors, which serve various purposes such as rising prices, which can be metaphorically viewed as an entity via the noun *inflation*, adding some examples under the metaphor INFLATION IS AN ENTITY as follows:

*Inflation is lowering* our standard of living. If there's much *more inflation*, we'll never survive, etc.

# A list of technical terms and their translations

This list includes a collection of technical/economic terms obtained from the website *cryptobriefing.com, coindesk.com, accountancyage.com/,* and a few other online platforms, and their translations provided by the researcher.

Metaforlara dayalı teknik ve ekonomik terimler çevirisi / E. Eriş; E. Uluşahin (803-812. s.)

| English            | Turkish   |
|--------------------|---|
| Whale              | Balina  |
| Climb              | Tırmanmak   |
| Bearish            | Aşağı yönlü   |
| Bullish            | Yukarı yönlü  |
| Bull market/run    | Boğa Piyasası   |
| Mining             | Madencilik  |
| Mining Farms       | Madencilik Çiftliği   |
| Well-oiled Machine | Sorunsuz Çalışan Makine   |
| Ramp up            | Üretimi Artırmak  |
| Infancy            | Bebeklik, Başlangıç   |
| Burn Rate          | Şirketin Para Kaybetme Oranı  |
| Baked in           | Sözleşmede, İş Anlaşması Dahilinde Olan Bir Terim                     |
| Market Cap         | Piyasa Değeri   |
| Jump from          | -den Zıplamak   |
| Frontier Markets   | Gelişme İhtimali Olan Pazarlar  |
| Immature           | Gelişmemiş (Olgunlaşmamış)  |
| Table Money        | Ziyaretçileri Ağırlaması Için Subaylara Verilen Para                  |
| Enter The Ring     | Piyasaya/İşe Girmek   |
| Catalyst           | Bir Menkul Değerin Fiyatını Artıran/Azaltan Girişimci ya<br>da Şirket |
| Liquid Market      | Likit Piyasa  |
| Ecosystem          | Ortam/Çevre   |
| Saving Grace       | Durumu Kurtaran İyi Özellik   |
| Head Above Water   | Borçtan Uzak Durmak   |

Adres Kırklareli Üniversitesi, Fen Edebiyat Fakültesi, Türk Dili ve Edebiyatı Bölümü, Kayalı Kampüsü-Kırklareli/TÜRKİYE e-posta: editor@rumelide.com

Adress

### Technical and economic terms translation based on metaphors / E. Eriş; E. Uluşahin (pp. 803-812)

| Earmarked                  | Bloke/Tahsis Edilmiş  |
|----------------------------|---|
| Money Laundering/Launderer | Kara Para Aklamak/Aklayan   |
| Tailwind                   | Büyümeyi Artıran Durum/Koşul  |
| Gatekeeper                 | İhraççı ile Yatırımcı Arasında İşlev Gören Finansal<br>Aracılar                           |
| Spike                      | Ani Çıkış   |
| Takeaway                   | İşe Yarar Bilgi   |
| Fall Off A Cliff           | Uçuruma/Fazlaca Düşmek  |
| Economic Tweaks            | İnce Ayar Veren Ekonomi Uzmanları   |
| Widow-and-orphan-Stock     | Düşük Riskle Yüksek Temettü Verenn Öz Sermaye<br>Yatırımı                                 |
| Roar/Boom                  | Yükselmek   |
| Staking                    | Kripto Paraları Belirli Bir Süre Cüzdanda Tutarak Kazanç<br>Elde Etme Yöntemi             |
| Altcoin                    | Farklı Algoritma Yapılarına Sahip Olan Bitcoin Dışındaki<br>Kripto Paralar                |
| Pick Up Steam              | Daha Hızlı Bir Oranda ve Daha Etkili Çalışmaya<br>Başlamak                                |
| Candlestick                | Bir Menkul Değerin Yüksek, Düşük, Açılış ve Kapanış<br>Fiyatlarını Gösteren Fiyat Tablosu |

### Analysis and results

This section includes the analysis of and related results of some of the full list of economic terms given in sentences with their possible translations taken from Turkish online platforms, if any. Examples are given in English and Turkish separately.

### Structural Metaphors - Animals and Animal Sounds and Moves

Example in English (1): Whale, Bear, Bull, Roar, Climb

- With the price rally, **whales** those buyers of large numbers of coins seem to have woken from their long slumber. The number of **whale** addresses ones with balances ranging from 1K BTC to 10k BTC ticked higher in the second half of January, as noted by Kraken's researchers.
- During the **<u>bull-bear</u>** transition, investors who were hurt by the market crash finally realized that "public chains are useless."
- During the **bull market** of 2017-2018, top research institutions and acclaimed researchers in China (and elsewhere) set up teams to develop public chains with higher performance requiring large-scale financing.
- Rhodium prices **<u>roar</u>** to 11-year high.

• The most recent data showed a sharp <u>climb</u> in global uncertainty in the first quarter, rising from an index reading of 161 in the fourth quarter of 2018 to 220.

Example in Turkish (1): Balina, Ayı Piyasası, Boğa Piyasası, Kükremek, Tırmanmak

- Kripto para "<u>balinası</u>" 20 bin dolarlık (yaklaşık 115 bin TL) rekor değerin arkasındaki isim olabilir.
- Endeks, böylece, bugün kapanışı bu seviyelerden yaparsa fiilen <u>ayı piyasasına</u> girmiş olacak.
- Kripto para piyasalarında düzeltme hızlandı: **Boğa piyasası** sona mı erdi?
- Aslan borsada da <u>kükredi.</u>
- Amerikan ekonomisi <u>kükredi</u>! Yılın üçüncü çeyreğinde yıllık bazda yüzde 5 büyüyen ABD ekonomisi son 11 yılın en iyi performansını gösterdi.
- BIST 100 Endeksi kapanış bazında rekora tırmandı.

The abovementioned examples in English and Turkish show a correlation in terms of the metaphors used for revealing data about technical and economic issues. It is also seen that all words and phrases in English taken as a basis have correspondences in Turkish when they are rendered into Turkish – Bull-Boğa, Bear-Ayı, Whale-Balina, etc. What is interesting though is that in one of the Turkish sentences "Aslan borsada da kükredi" includes two metaphors as "Aslan", which literally means "lion", is the metaphor referring to one of the biggest football clubs in Turkey and is preferred by the author of the text by combining the two metaphors in one sentence to adorn the information released.

### Structural Metaphors – Machines, Work, and Tools

Example in English (2): Money Laundering, Well-oiled Machine, Candlestick, Catalyst, Pick up Steam, Enter the Ring

- Pressure on accountants intensifies as **money laundering** crackdown heats up.
- Earlier this month U.S. Treasury Secretary Jack Lew spoke in front of a group of CEOs in Manhattan and compared the U.S. economy to a "**well-oiled machine**."
- UR/NZD huge bearish daily <u>candlestick</u> to critical support structure, 61.8% Fibo, eyes on Coronavirus bearish updates.
- Hypothetically, if a large government decided they were going to regulate cryptocurrency investing and introduce a detailed framework for doing so, it could serve as a <u>catalyst</u> for institutional money to <u>enter the ring</u>.
- Leading indicators for the fourth quarter indicate that Turkey's growth is **<u>picking up</u>** <u>steam</u>, the country's treasury and finance minister said Monday.

Examples in Turkish (2): Kara Para Aklama, Katalizör (Görevi Görmek), İvme Kazanmak, Piyasaya Girmek

### • Kara parayı böyle aklıyorlar.

- Ekonomi için temel problemin talep eksikliği olduğuna dikkat çeken uzmanlar, bu dönemi değiştirebilecek yeni bir <u>katalizör</u> olmadığını ifade ediyorlar.
- Moody's: İngiliz ekonomisi yaz döneminde ivme kazandı.
- Yerli firmalar **<u>piyasaya girdi</u>**, yabancı fiyatı 3'te 1'e indirdi.

One may notice that two of the words or phrases in English given in example 2 do not have equivalent words or phrases in Turkish. These are "well-oiled machine" and "candlestick". The former refers to an economy that operates like clockwork and precisely resembling an engine that does not stall while the latter refers to a type of price chart used that displays the high, low, open, and closing prices of a security for a specific period originating from Japanese rice merchants and traders to track market prices and daily momentum hundreds of years before becoming popularized in the United States (Hayes, 2019). As these words and phrases are known to English speakers, it is easier for them to explore the meaning and the metaphor; however, Turkish readers are deprived of this exploration as no Turkish equivalence is provided in any texts or even if there exists an equivalent term, it does not meet the proper meaning. Finally, all the other words and phrases are rendered into Turkish in a manner to make the metaphor conceivable.

# **Orientational Metaphors**

Example in English (3): Ramp up, Jump from, Spike, Fall off a Cliff, Boom

- Cruise lines **<u>ramp up</u>** investment in private island experiences.
- These barriers prevent crypto's **jump from** a frontier market to an emergent one.
- Coronavirus hits China's farms and food supply chain, with further **<u>spike</u>** in meat prices ahead
- Obama takes credit for the economic  $\underline{boom}$  and Trump attacks him for it here's why they're both wrong

Example in Turkish (3): Üretimi Artırmak, -den Zıplamak, Aniden/Sert Yükselmek, Uçuruma/Fazla Düşmek, Hızla Artmak

- Türkiye sanayi <u>üretimi artışında</u> AB ülkelerini geride bıraktı.
- ABD açıkladı dolar **<u>zıpladı</u>**!
- Altın fiyatları sert yükseldi.
- Ekonomi son 6 ayda <u>uçuruma düştü</u>.
- Faizler düştü, konut satışı <u>hızla arttı</u>!

Sentences given in example 3 in both languages show identical metaphorical uses though it should also be noted that phrases that are preferred in Turkish generally represent a daily language use as well, meaning that these metaphors do not make sense when compared with those used in English. For, phrases identified within example 3 in the Turkish language are general meanings of "going up or rise" in English and thus do not represent a metaphorical use properly.

## Ontological Metaphors - Anthropic Characteristics, Entities, Markets

Example in English (4): Mining, Mining Farms, Liquid Market, Frontier Markets, Widow-and-orphan Stock

- The ongoing accumulation by HODLers could last at least for a few more weeks, with the cryptocurrency set to undergo **mining** reward halving in three months.
- Are Chinese bitcoin mining farms moving to North America and why?
- Global Eyelash Growth <u>Liquid Market</u> 2019 Development Strategy, Growth Analysis and Regional Forecast 2024

#### Adres Adress

- Strix Leviathan, a Seattle-based cryptocurrency hedge fund, believes these issues are shared by all <u>frontier markets</u>.
- BCE is still a <u>"widows and orphans" stock</u>, this fund manager says.

Example in Turkish (4): Madencilik, Madencilik Çiftliği, Gelişme İhtimali Olan Pazarlar

- Ünlü Analistten Ripple (XRP) CEO'sunun "Madencilik" Açıklamasına Sert Eleştiri
- Bir madencilik şirketi ile ABD'den Whinstone'un yaptığı anlaşmayla Bitcoin <u>madencilik</u> <u>çiftliği</u> kuruluyor.
- Logo Yazılım'ın başta **gelişmekte olan pazarlar** olmak üzere hem kendi faaliyetlerinde hem de ekosisteminde sürdürülebilir dönüşümü desteklediğini aktaran Koyuncu ...

Examples in the English and Turkish languages reveal that two of the phrases "liquid market" and "widow-and-orphan stock" are not observed in Turkish online platforms as is seen in English online platforms. One of the reasons for this absence is that these phrases are new to the world and mainly originate in the English-speaking world. Besides, the phrase "frontier markets" is rendered into Turkish through paraphrase and explicitation as "gelişmekte olan pazarlar", which is believed to refer to "emerging markets" in English.

# Conclusion

This paper has been designed to reveal how metaphorical language use is handled when translating technical and economic terms into Turkish and the reasons behind omissions, paraphrasing, non-equivalent phrases during the translation process, if any. The world is changing at a rapid phase and seems to keep changing further. Thus, it should come as no surprise to see language use and meaning of words and phrases changing, specifically when it comes to technical and economic terms.

As a result of the findings based on the translations of technical and economic terms into the Turkish language, it was concluded that Turkish translations are carried out either through explicitation of English-based words and phrases or through omission and paraphrasing. It was also concluded that the number of metaphors used in English regarding technical and economic texts, English language has a wider thesaurus compared to Turkish not because the Turkish language is not fitted for this purpose but because English-speaking world has the advantage of having its language as the lingua franca all over the world.

It is also recommended that the metaphorical language use be studied in terms of other text types and languages. In so doing, more data shall be revealed related to the differences and similarities based on metaphors and their use in texts.

## References

- Curzan, A. (2014). 20 words that once meant something very different. https://ideas.ted.com/20words-that-once-meant-something-very-different/
- Fan, H. (2017). Strategies for Translation of English Commercial Advertisements from the Intercultural Perspective. Open Journal of Social Sciences, 5, 38-45, http://www.scirp.org/journal/jss
- Grothe, M. (Ed.). (2008). I never metaphor I didn't like: A comprehensive compilation of history's greatest analogies, metaphors, and similes. New York: HarperCollins.

Technical and economic terms translation based on metaphors / E. Eriş; E. Uluşahin (pp. 803-812)

- Herman, J. B. (2013). Metaphor in academic discourse: Linguistic forms, conceptual structures, communicative functions and cognitive representations. LOT Trans 10, The Netherlands.
- Jue, X. (2009). Economic Metaphors in English Newspapers. English Linguistic C-essay, Kristianstad University College.
- Lakoff, G. & M. Johnson (1980). Metaphors We Live By. Chicago: University of Chicago Press. Gibbs, Jr. R.W. (1999). "Taking metaphor out of our heads and putting it into the cultural world" in R. Gibbs, G. Steen (eds.), 145-166. *Metaphor in Cognitive Linguistics*. Amsterdam: John Benjamins.
- Leonzini, L. (2017). Metaphor and the euro crisis: a cross-national study of metaphor use in English and Italian editorials. Università Cattolica del Sacro Cuore, Milan, Italy.
- Siqueira, M., Souto de Oliveira, A. F., Hubert, D. D., Faé de Almeida, G., and Brangel, L. M. (2009). Metaphor identification in a terminological dictionary. Iberica, 17.