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The Role of L2 Proficiency in Metaphorical Language Production

Abstract

The present study explores the impact of L2 proficiency on metaphorical language production among Georgian learners of English, with the aim of examining the relationship between EFL proficiency levels and the accurate use of metaphorical language. The analysis is conducted on a Georgian EFL essay corpus compiled for this research, which includes argumentative essays written by 60 Georgian learners with B1, B2, and C1 proficiency levels. The study pursues three primary objectives: firstly, measuring metaphor density across the three proficiency levels; secondly, examining the prevalence of different metaphorical error categories; and lastly, exploring the impact of the learners' L1 background on EFL metaphor usage. Based on the findings, a clear correlation emerges between the participants' proficiency levels and metaphor density, reaching the highest density at the advanced level. A thorough analysis of metaphorical errors highlights a noteworthy trend among B2-level learners, who not only exhibit the highest proportion of errors within metaphors but also demonstrate the most significant influence of their L1 on these errors. A detailed inspection of error categories within L1-influenced metaphorical errors underscores the prevalence of confusion of sense relations and phrasal errors as the predominant categories. Overall, these results lend support to earlier observations by Littlemore et al. (2014) and Iaroslavtseva and Skorczynska (2017) that emphasize the essential role of B2 level foreign language proficiency in shaping learners' metaphoric competence and experimenting with figurative language.

Keywords: metaphor production, L2 proficiency, L1 influence, error analysis

1 Introduction

Figurative language plays a crucial role in enhancing linguistic communication, enabling individuals to convey complex ideas, emotions, and nuances. Proficiency in figurative language not only signifies language competence but also forms an essential component for L2 learners striving for advanced or native-like fluency. Metaphor holds a prominent position among a range of devices that constitute figurative language; therefore, exploring the closely connected cognitive factors in metaphorical language processing can provide valuable insights into L2 acquisition.

Lakoff and Johnson, the fathers of Conceptual Metaphor Theory (1980), distinguish between conceptual metaphors, embedded in an individual's cognitive processes, and linguistic metaphors, evident in language use. As an illustration, the conceptual metaphor ARGUMENT IS WAR might find expression in language through a linguistic metaphor such as *I've never won an argument with him* (Lakoff & Johnson 1980: 4). Understanding conceptual metaphors

contributes to the comprehension of linguistic metaphors. According to Kövecses (2020: 2), conceptual metaphors involve cross-domain mappings where the target domain is understood in terms of the source domain. The source domain is more physical, and the target domain is more abstract. For example, in the linguistic metaphor *He was smouldering with anger* (ANGER IS FIRE) the source domain FIRE is more physical, and the target domain ANGER is more abstract (Kövecses 2020: 5, 14). Building upon this, the study examines linguistic metaphors, investigating their diverse applications, both creative and conventional, within the domain of written expression.

The aim of the article is to explore metaphorical language and the interplay of language proficiency, cognitive factors, and L1 influence within the context of L2 production. The analysis is carried out on metaphor production in argumentative essays composed by Georgian learners of English. The primary objective is to gain insights into how learners' proficiency levels influence both the frequency and accuracy of metaphor usage. To achieve this, the study delves into the specific categories of metaphorical errors made by learners at the B1, B2, and C1 proficiency levels. It also investigates the extent to which learners may transfer metaphorical patterns from their native language.

The paper is organized as follows: Section 2 will provide an overview of the theoretical background, metaphor characteristics, and metaphor types, along with a discussion of previous studies investigating metaphorical language production in essays by L2 learners. Section 3 will detail the methodological approach to collect data for a Georgian EFL¹ essay corpus, encompassing the method for metaphor identification, error categorization, and the exploration of L1 influence. In Section 4, the paper delivers a comprehensive analysis of both quantitative and qualitative findings, followed by a detailed discussion. Section 5 concludes the paper.

2 Theoretical background and literature review

2.1 Metaphoric competence

The comprehension and production of metaphors in second language acquisition are complex processes influenced by various linguistic and cognitive factors. Metaphoric competence, in its broad interpretation, refers to learners' cognitive ability to comprehend and produce metaphors as well as their sociolinguistic abilities, such as an awareness of common metaphors, socially sensitive metaphors, multilayered metaphors and so on (Littlemore & Low 2006: 79). Meanwhile, its narrow interpretation refers only to the ability of metaphor comprehension and production (Littlemore & Low 2006: 79). The authors point out that L2 learners vary significantly in their metaphoric competence in the target language, including their ability to provide multiple interpretations for a metaphor, find meaning in metaphors, process metaphors quickly, create new metaphors, and deduce a word's metaphorical sense from its core meaning within context (Littlemore & Low 2006: 79–80). Littlemore and Low (2006: 71) list eight linguistic factors that affect metaphor comprehension and production in L2:

1. Limited knowledge of the basic senses of the words – when learners cannot comprehend a metaphor because of an unknown word or cannot find a contextually appropriate figurative meaning (Littlemore & Low 2006: 71). For instance, it can be challenging for

¹ English as a Foreign Language

learners to interpret the unknown word *hurdle*, in the idiomatic phrase *fall at the first hurdle* (Littlemore & Low 2006: 71).

2. Limited cultural knowledge – when learners activate incorrect source or target domain of cultural metaphors (Littlemore & Low 2006: 72). For example, it is probably difficult to interpret *he's a bit of an anorak* for non-native English speakers because they do not have a culture-specific belief that *anorak* is an unfashionable outfit, often worn by old-fashioned people with peculiar hobbies; hence, it is a metonymic reference to a geek/nerd (Littlemore & Low 2006: 73).
3. The centrality of the expressions to a conceptual metaphor – when learners find it difficult to link linguistic metaphors to their source domain. For instance, it is difficult to find the link between *step on it* and its meaning ‘hurry up’ because the basic source domain (FORWARD MOTION) is elaborated into the motion of a vehicle (Littlemore & Low 2006: 74).
4. Word class – when learners comprehend noun metaphors more easily than verb metaphors because it is hard to notice boundaries between metaphoric and non-metaphoric verbs, e.g. *take a break*, *give recognition* (Littlemore & Low 2006: 74–75). As Littlemore and Low (2006: 75) note, satellite-framed languages, such as English, express the manner of movement within the verb and show the direction of movement with the help of prepositions, e.g. *to dash in*. In contrast, verb-framed languages, such as Spanish, show the direction of movement in the verb and define the manner of movement within a non-finite verb, e.g. *entro en la casa corriendo* (he entered the house running). Verbs of the former type are often metaphoric or metonymic.
5. The time needed for comprehension – when learners prefer to quickly find the word in the dictionary or ask the teacher rather than start with the basic sense and independently figure out the figurative meaning of a word (Littlemore & Low 2006: 76).
6. Technical language – when adult non-experts or young learners find it difficult to comprehend technical language (Littlemore & Low 2006: 76–77). Cameron (2003), as cited by Littlemore and Low (2006: 76–77), found that young learners reading a text about the human heart misinterpreted *muscular walls* as being rigid rather than understanding the intended meaning of ‘enclosure’.
7. Limited predictability of the derived senses – when learners produce a figurative expression that is motivated and possible but not authentic in L2 (Littlemore & Low 2006: 77).
8. Conventionalization and phraseology – when learners find it difficult to produce metaphors in conventionalized/fixed phraseological patterns. For example, learners should be aware that the collocation *heavy price* is mostly figurative, and postmodified *at a price* (*at a price that does not even include costs*) is literal (Littlemore & Low 2006: 77–78).

2.2 L2 proficiency and metaphor production

In light of previous insights, metaphors go beyond being mere linguistic ornaments; instead, they are an integral part of language and thought, playing a crucial role across all levels of L2 proficiency in shaping effective communication. Research on metaphor production in an EFL

context is limited compared to metaphor comprehension studies; nevertheless, it underscores a correlation between L2 proficiency and the ability to produce metaphors in the target language. Trosborg (1985) was one of the early scholars who investigated the link between L2 proficiency and metaphor production, employing a short story completion task conducted on students ranging from secondary school to university levels. Trosborg (1985: 548–549) identified a substantial correlation between L2 proficiency and metaphor production, showing that as proficiency improves, advanced learners use more conventional and novel metaphors, even though the latter constitute a minor part of the total number of expressions.

Considering learners with elementary proficiency, Boers (2004: 221) highlights their struggle with metaphorical expressions in their second language due to limited lexical knowledge, emphasizing the crucial role of teacher guidance in navigating these difficulties. Meanwhile, advanced learners, armed with extensive lexical knowledge, show the ability to independently comprehend metaphorical expressions; however, their performance in producing such expressions is not as proficient (Boers 2004: 222). Citing Kellerman (1978), Boers (2004: 222) notes that advanced learners often tend to be reluctant in producing metaphorical language, frequently avoiding expressions when uncertain about their correctness in the target language. In contrast, intermediate learners emerge as the most actively engaged group in metaphor production (Boers 2004: 222). Drawing from these findings, Boers (2004: 211) emphasizes that a critical component of L2 acquisition is increasing metaphor awareness among language learners, regardless of their proficiency level, enabling them to recognize metaphor as a pervasive element in everyday language, identify conceptual metaphors behind various figurative expressions, and consider potential cross-cultural differences in metaphors.

Expanding on the observations in this chapter, this research seeks to provide a nuanced analysis of metaphorical language production among Georgian learners of English, revealing distinct patterns of metaphor use and metaphorical errors across various proficiency levels in the EFL context.

2.3 Previous research on metaphor production in L2 essays

Previous research on metaphor production in L2 essays primarily examines metaphoric density, i.e., how often students produce metaphors in a text, exploring its variations across proficiency levels and investigating the influence of learners' L1 on metaphor errors. The most comprehensive data on metaphor production is derived from studies conducted by Littlemore et al. (2014) and Turner (2014), where they analyzed essays written for the Cambridge ESOL² examination, which are available in the Cambridge Learner Corpus. Littlemore et al. (2014) investigated metaphor production in essays authored by Greek and German learners of English across the A2 to C2 proficiency range. They employed the MIPVU methodology for metaphor identification in a 200-essay corpus, which included manual metaphor analysis (Littlemore et al. 2014: 120–122). The calculation of metaphoric density, representing the frequency of metaphors in the text, involved dividing the count of metaphorically used words by the total word count and then multiplying the result by 100 (Littlemore et al. 2014: 122). Notably, the essays by both Greek and German learners exhibited a consistent increase in metaphor density, reaching its peak at the advanced C2 level (Littlemore et al. 2014: 125–127). It is important to highlight that their research revealed a significant L1 influence on metaphor errors, most

² English Speakers of Other Languages

prominently seen at the upper-intermediate level and gradually declining at the advanced level (Littlemore et al. 2014: 140).

Turner's (2014) study compared Japanese and French native speakers' essays at A2 to C2 levels, revealing divergent metaphor usage paths. Japanese learners consistently increased metaphoric density, while French learners exhibited a slight decline between B1 and B2, but experienced a substantial increase between A2 and B1, as well as between C1 and C2 levels (Turner 2014: 84–85). Both abovementioned studies suggest that learners with different L1 backgrounds exhibit distinct trends in their metaphorical competence development.

In another large-scale study, Nacey (2013) examined metaphor usage in argumentative essays written by Norwegian learners of English at the B2 and C1 levels from the NICLE³ corpus and compared them to essays authored by native English speakers from the LOCNESS⁴ corpus. The results showed that Norwegian learners exhibited a higher frequency of linguistic metaphors in their essays when compared to native English speakers (Nacey 2013: 242).

In relatively smaller-scale studies like the current one, researchers often compile experimental corpora rather than relying on pre-existing ones. This is necessary when an EFL essay corpus is either unavailable for a particular L1 background or unsuitable for research purposes. One such study conducted by Iaroslavtseva and Skorczynska (2017) examined key theoretical assumptions about the impact of L1 on L2 written production. They analyzed a corpus of 100 essays written by Spanish learners of English at the B2 and C1 levels, with each essay averaging 120 to 250 words and covering various social topics (Iaroslavtseva & Skorczynska 2017: 54). Employing the MIPVU method, the researchers manually examined the corpus. Their primary aim was to determine the frequency of linguistic metaphors and error categories (Iaroslavtseva & Skorczynska 2017: 53). Iaroslavtseva and Skorczynska (2017: 57) observed an increase in metaphor frequency from the B2 to C1 levels, especially with open-class metaphors. Additionally, their findings indicated that B2 learners showed the most significant influence from their native language (Iaroslavtseva & Skorczynska 2017: 57). Notably, Iaroslavtseva and Skorczynska (2017) and Littlemore et al. (2014) shared similar methodologies, with the main difference being that the latter utilized a more extensive dataset encompassing all CEFR⁵ proficiency levels. Both studies revealed that metaphor usage increases with higher L2 proficiency levels, with the most prominent L1 influence observed at the B2 level.

Lastly, Paris (2018: 162–165) analyzed 52 essays written by B1 and B2 French learners of English to gain insights into their figurative language performance. Some drawbacks of the essay task included the fact that the essays were completed as take-home assignments, and all of them were written on the same topic, lacking the diversity of topics found in the abovementioned studies (Paris 2018: 160). The study revealed that B1-level essays exhibited figurative language in roughly 20% of sentences, encompassing L1 transfers, idiomatic expressions, and overextensions, with only about a third considered acceptable. Conversely, B2-level essays showed a higher occurrence of figurative language at around 34%, primarily in the form of idiomatic expressions. L1 transfers were less frequent, while acceptable figurative units constituted roughly half of the instances (Paris 2018: 162–165).

There are a few other studies examining essays for L2 production in terms of metaphorical language (see for example Falck 2012; Hoang & Boers 2018; Kathpalia & Carmel 2011; Utkina 2016), but they lack alignment with CEFR levels. Instead, these studies categorize the

³ The International Corpus of Learner English

⁴ The Louvain Corpus of Native English Essays

⁵ Common European Framework of Reference for Languages

participants based on their university program year or self-assessed language proficiency, resulting in less reliable learner divisions.

In contributing to the existing body of knowledge, this study employs a Georgian EFL essay corpus to offer a more nuanced analysis of metaphor production in language learners across distinct proficiency levels, encompassing aspects such as metaphoric density, categorization of errors, and a thorough examination of L1-influenced metaphorical errors.

3 Methods and procedure

3.1 Effective data collection for L2 research

The selection of a data collection method can significantly impact the validity and comprehensiveness of L2 acquisition research. In the current study's methodological approach, one of the primary considerations is the use of natural written texts, which offers the benefits of reliability and authenticity.

As emphasized by Ellis and Barkhuizen (2005: 15), the data collection methodology for analysing learner language involves careful considerations such as the conditions under which written samples are produced, genre selection, and the nature of examination prompts. Nowadays, the largest corpus of learners' essay writing is The International Corpus of Learner English (ICLE), which includes argumentative essays contributed by learners from 25 diverse mother tongue backgrounds, encompassing Asian and European languages (Ellis & Barkhuizen 2005: 29). Notably, it does not include data from learners with a Georgian language background. As exemplified by the ICLE, a clear source of "authentic" written samples arises from essays generated during examinations (Ellis & Barkhuizen 2005: 30). There may be doubts regarding the "naturalness" of written language samples produced within an examination setting. However, Ellis and Barkhuizen (2005: 50) contend that such samples can be considered natural because examinations provide a genuine context for learners to employ their L2, and the resulting data have not been deliberately prepared for research purposes. In alignment with the ICLE corpus, the present study also focuses on argumentative essays; however, all the essays were produced under timed examination conditions without linguistic prompts and access to reference tools. The significance of these factors will be discussed further below.

Ellis and Barkhuizen (2005: 29–30) state that the choice of genre is a crucial decision, as it can significantly influence both the macro and micro linguistic characteristics of the samples under analysis. They also point out that key factors include whether the samples are timed or untimed and whether learners have access to reference tools, such as dictionaries and grammars, during the writing process. Differences in these conditions may impact the nature of language production, as demonstrated by the Swedish sub-corpora of the ICLE, which includes both untimed and timed essays (Ellis & Barkhuizen 2005: 29–30). Notably, timed essays were produced under examination conditions, introducing additional factors, such as time pressure, which could influence the written products. However, the presence of reference tools in the untimed condition and their absence in the timed condition makes it difficult to attribute differences between the two sample types solely to time pressure (Ellis & Barkhuizen 2005: 30).

Finally, according to Ellis and Barkhuizen (2005: 30), the nature of the examination prompts used in the data collection process constitutes another critical consideration, as they can have a

significant impact on the essays produced. As the authors observe, clinically elicited focused samples tend to direct learners primarily toward conveying a message, emphasizing fluency, while experimentally elicited samples involving prompts prioritize form, emphasizing accuracy (Ellis & Barkhuizen 2005: 31). Importantly, naturally occurring data offers the advantage of providing insights into the participants' authentic language use, whereas experimentally elicited data illustrates their careful linguistic style (Ellis & Barkhuizen 2005: 48). Nonetheless, both data collection methods can be validated to align with specific research goals (Ellis & Barkhuizen 2005: 47).

3.2 *Compilation of the Georgian EFL essay corpus*

The Georgian EFL essay corpus consists of argumentative essays written by 60 Georgian learners of English, evenly distributed with 20 essays from each of the B1, B2, and C1 proficiency levels. As there were no other existing Georgian EFL essay corpora available, this corpus was specifically compiled for this study, with a focus on ensuring both the reliability and authenticity of written samples. The argumentative essays, which are collected in line with the methodological considerations outlined above, have an average length of 150-200 words, and the essay corpus consists of a total of 10250 lexical units.

The participants were Georgian native speakers aged between 18 and 20, with a distribution of 19 males and 41 females. Half of the participants were in their final year of high school, while the other half were BA students at Georgian University. Proficiency levels were assessed using *The Oxford Placement Test*, a reliable computer-adaptive English language assessment test for non-native speakers, which evaluates proficiency across CEFR levels from Pre-A1 to C2, encompassing sections for use of English and listening.

The essay writing task was carried out in a school/university setting under the supervision of an instructor, with a one-hour time limit. The participants were required to handwrite their essays to prevent the use of spelling and grammar correction functions found in word processing software programs. Students were tasked with expressing their viewpoints on a variety of social and moral issues and supporting their arguments with reasons and examples.

The essays were initially carefully transcribed into MS Word format, preserving the original mistakes and preventing the introduction of any additional errors. They were then organized into electronic spreadsheets, which included detailed information about each lexical unit, including part-of-speech tags, error types, and metaphoricity. The corpus deliberately preserved its initial, unchanged state, with no lemmatization or adjustments made to its grammatical and structural language components.

3.3 *Types of metaphor*

To align with the metaphor identification methodology, the study aimed at identifying three types of metaphors: indirect, direct, and implicit. Below, I will provide examples of metaphor types and additional metaphor tags using samples from the Georgian essay corpus.

An indirect metaphor, considered the most common case of metaphorically used words, involves a linguistic and conceptual level of metaphorical usage, characterized by a contrast between the word's basic and contextual meanings, with the basic sense only indirectly present in its metaphorical use (Steen et al. 2010: 5–6). As much as 99.5% of the metaphors identified in this study belong to the category of indirect metaphors. An instance of an indirect metaphor

is shown in (1), where the word *nest* is used to describe a cozy and comfortable home. One of the definitions of *nest* in the *Macmillan Dictionary* describes it as ‘a place that is warm, safe, and comfortable’, whereas its clearly contrasting basic sense is defined as ‘a structure that birds make to keep their eggs and babies in’.

(1) We are all individuals and we need time to be on our own, away from our nests.⁶

A direct metaphor refers to metaphorical expressions that are directly expressed through language without a contrast between the contextual meaning and a more basic, non-metaphorical meaning. This form of metaphor includes similes, analogies, and other non-literal comparisons, where words or lexical units are used directly and can be explained through cross-domain mapping to a more basic referent or topic in the text (Steen et al. 2010: 5–6). Notably, direct metaphors constituted only 0.5% of the metaphors identified in this study. For the facilitation of recognizing direct metaphors, Steen et al. (2010: 175) introduce the concept of Metaphor flags (Mflags), which act as lexical cues within a text to aid in identifying direct metaphors. The most frequently encountered Mflags consist of terms such as *like*, *as*, *as if*, and *so-called*. In (2), the noun *prisons* is a direct metaphor, indicated by the Mflag *like*.

(2) Zoos feel like prisons and animals are prisoners without committing crime.

Implicit metaphor entails metaphors marked by anaphoric elements, manifesting through substitution and ellipsis, and employing lexical units to convey meaning via cross-domain mapping (Steen et al. 2010: 39–40). However, there were no instances of implicit metaphors found in the Georgian essay corpus. The limited occurrences of direct metaphors and the absence of implicit metaphors did not allow for a comprehensive exploration of their usage in this study. Consequently, the research predominantly focused on the abundant indirect metaphors.

To enhance the reliability of metaphor analysis, this study integrates three additional metaphor tags introduced by Steen et al. (2010). The WIDLII tag, which stands for ‘When In Doubt, Leave It In’, is applied to identify ambiguous words that may have both metaphorical and non-metaphorical meanings (Steen et al. 2010: 33). In this study, only 0.22 % of all lexical units were assigned the WIDLII tag. For example, consider sentence (3), where the noun *world* is defined in *Macmillan Dictionary* as ‘the planet that we live on’ in its basic meaning, while in the contextual sense, it refers to ‘society in general, in all countries’. The differentiation between the basic and contextual senses of *world* allows it to be perceived as a metaphor; however, it can also function as a metonymy, where *world* stands for ‘all the inhabitants of the world’. Therefore it received a WIDLII tag.

(3) Lastly, people who have an interesting job are more likely to make a positive impact on the world.

The DFMA tag, which stands for ‘Discarded For Metaphor Analysis’, is used when lexical units lack context or remain unfinished, making it challenging to determine their precise intended

⁶ All the example sentences provided in this article are presented in their authentic form, preserving their original spelling and punctuation.

meaning (Steen et al. 2010: 34). Only 0.17% of all lexical units in the study received the DFMA tag. In the following example (4), the intended word behind *instruction* cannot be unequivocally determined, as the author’s usage of *instruction* could potentially refer to *work, activities, tasks, assignments, duties*, and so on.

- (4) Banning smoking in office buildings can increase worker productivity. Smokers won’t interrupt their instruction all the time to smoke.

Lastly, the PP tag, which stands for ‘Possible Personification’, is employed to detect potential cases of personification (Steen et al. 2010: 34). It was applied to 0.28% of all lexical units in the study. In sentence (5), the interpretation of the verb *using* is classified under possible personification.

- (5) Many laboratories are using animals.

If we interpret the noun *laboratories* metonymically, considering it to represent the individuals who constitute the laboratories, then the verb *using* is not employed figuratively. However, if we choose to view the *laboratory* as an object capable of applying human abilities, then the verb *using* takes on a metaphorical usage, as its fundamental sense pertains to human-related actions.

3.4 Procedure of analysis

The methodology employed for metaphor identification in this study, referred to as MIPVU⁷, consisted of four primary stages (Steen et al. 2010: 5–6, 26–42). It began with a thorough examination of the entire text to establish a comprehensive grasp of the essays. The subsequent step involved the identification of lexical units within the text, facilitated by an automated part-of-speech tagging procedure. The following essential phase involved determining the basic and contextual meanings of individual lexical units using dictionaries. Ultimately, when the contextual sense deviated from the basic sense, the lexical unit was identified as metaphorical. Following Steen et al.’s (2010: 16) recommendation, the analysis employs both the print and online⁸ versions of the *Macmillan English Dictionary for Advanced Learners*, supplemented by the online *Longman Dictionary of Contemporary English*.

Notably, in the metaphor identification procedure, the default linguistic unit typically comprises a single headword in the dictionary (Pragglejaz Group 2007: 15). However, exceptions apply to phrasal verbs, polywords, and compounds, which are treated as single units due to their nondecomposable meanings. Idioms, on the other hand, are viewed as decomposable, necessitating the analysis of their distinct components as separate lexical items (Pragglejaz Group 2007: 26–27, Steen et al. 2010: 27–31). However, Cserép and Narimanishvili’s (2022) analysis suggests that the meaning of certain phrasal verbs is often motivated, allowing for their decomposition into separate lexical units. Additionally, some idioms were identified as either nondecomposable or only partially decomposable. Building on this prior research, the present study approaches idioms and phrasal verbs with consideration to their decomposability.

⁷ Metaphor Identification Procedure Vrije Universiteit

⁸ The online *Macmillan Dictionary* website was discontinued in June 2023.

Lastly, to assess the prevalence of different metaphorical error categories and ensure reliability in the error correction process, the essays underwent thorough professional proofreading by an English native speaker analyst. The errors were subsequently categorized into six major categories based on Nacey's (2010, 2013) error taxonomy, which is suitable for both general and L1-influenced error classification. The error categories, along with their definitions and examples, are available in Appendix 1.⁹

The present study gathers evidence of L1 influence from a range of sources, including bilingual English-Georgian dictionaries and Georgian monolingual and bilingual corpora. Furthermore, Georgian idiomatic expressions are referenced from two primary sources: the *Online Dictionary of Georgian Idioms* and *The Database of Georgian Idioms and Proverbs*. Additionally, the study utilizes the method of reversed translation and native-speaker intuition.

In addition to the utilization of the abovementioned sources and methods, Gilquin (2008) recommends that researchers take additional measures to identify instances of L1 transfer. While it may initially appear that a learner's linguistic behaviour resembles that of their native language, further investigation could reveal similarities with learners from different linguistic backgrounds (Gilquin 2008: 14). In such cases, the primary explanation is not necessarily L1 influence but rather intralingual factors stemming from the inherent challenges of acquiring a second language. Therefore, examining the interlanguage of the learner in comparison to that of learners from different native language backgrounds should be considered a valuable addition (Gilquin 2008: 14).

For instance, a direct comparison between the learners' native language and their interlanguage might initially suggest that the incorrect usage of plural noun *advices* instead of its singular form or *pieces of advice* by Georgian-speaking learners, as seen in example (6), is primarily due to L1 influence. This inference stems from the fact that, unlike English, the Georgian language permits the pluralization of the noun *advice*. However, upon conducting a more extensive analysis of data produced by learners from various linguistic backgrounds, we discover that the misuse of the noun *advices* is a prevalent characteristic in learner English. Among the 25 L1 backgrounds represented in ICLE, 15 exhibit this same error. While it is not possible to entirely rule out the influence of L1 influence for Georgian-speaking learners, it appears that intralingual factors predominantly contribute to this issue.

- (6) ...teachers are also needed because they can give us wider knowledge and personalized advices.

4 Results and Discussion

To measure the frequency of metaphors across three different proficiency levels, I examined a total of 10250 lexical units, identifying 1132 units as metaphorical. The metaphoric density of the texts produced at each level was determined by dividing the count of metaphorically used words by the total number of words at that level, and subsequently multiplying the result by 100. As indicated in Table 1, the highest metaphor density was found at the C1 level (13.3%), gradually declining at B2 and B1 levels. This trend is consistent with findings from prior research conducted by Littlemore et al. (2014), Iaroslavtseva and Skorczynska (2017), and Paris

⁹ For a detailed analysis of error categories, see Narimanishvili (2023), which outlines the step-by-step process of identifying and categorizing metaphorical errors in English written production.

(2018), all of whom observed an increased metaphoric density linked to higher proficiency levels.

Proficiency level	Number of lexical units	Number of metaphorical lexical units	Metaphor density
B1	3111	292	9.4 %
B2	3490	355	10.2 %
C1	3649	485	13.3 %
Total	10250	1132	

Table 1. Metaphoric densities across proficiency levels

During the second stage of the analysis, the emphasis was on error examination, resulting in the identification of a total of 153 metaphorical errors across all proficiency levels. These metaphorical errors revealed a distinct pattern in their distribution across the various proficiency levels, as indicated in Table 2. The highest proportion of metaphors containing an error, amounting to 18.6%, was observed among learners at the B2 proficiency level. This finding suggests that B2-level learners display a pronounced inclination to explore figurative language, resulting in a relatively high percentage of metaphorical errors. At the B1 level, there was also a noteworthy presence of metaphorical errors, accounting for 14.7% of the total number of metaphors, signifying active engagement with metaphorical language at this proficiency stage. In contrast, the C1 level exhibited notably fewer metaphors containing an error, accounting for only 9.1% of the total number of metaphors, indicating a more precise and refined utilization of metaphorical language among advanced learners. This aligns with the observations of Littlemore et al. (2014) and Iaroslavtseva and Skorzczynska (2017), indicating that the frequency of metaphorical errors peaks at the B2 level and then diminishes as proficiency levels advance. Littlemore et al. (2014: 139) thus describe the B2 level as an experimental stage where learners employ metaphor more creatively, resulting in a higher incidence of errors. In Tables 3 and 4, these metaphorical errors will be analyzed from the perspectives of error categories and L1 influence, respectively.

Proficiency level	Total metaphors	Metaphorical errors	Metaphorical errors %
B1	292	43	14.7%
B2	355	66	18.6%
C1	485	44	9.1%

Table 2. Distribution of metaphorical errors by proficiency level

For a more detailed understanding, metaphorical errors were categorized into seven distinct error categories, and their rates across different proficiency levels were examined, as depicted in Table 3. Grammatical errors were more prevalent at the B1 and B2 levels compared to the C1 level. This observation can be attributed to the ongoing development of foundational

language skills among learners at the intermediate proficiency levels, leading to potential struggles with the grammatical complexities of figurative language. Conversely, advanced-level students are likely to have significantly improved their grammatical proficiency, leading to a reduced occurrence of grammatical errors when employing metaphorical language. The persistence of confusion concerning sense relations at all three levels suggests that learners consistently encountered challenges in understanding and effectively applying sense relations within metaphors, irrespective of their proficiency level. Notably, phrasal errors were more frequent at the C1 level and less common at the B1 and B2 levels. This indicates that learners with higher proficiency levels tend to employ complex phrasal expressions and confidently integrate sophisticated language structures into their writing. Intermediate learners, on the other hand, tend to opt for simpler language structures. The remaining categories, substance level errors, collocation errors, and synforms, exhibited infrequent occurrences with minor variations across proficiency levels, indicating that these error types are not a primary concern in this context.

Error category	B1 Errors	B2 Errors	C1 Errors
Grammatical Errors	17 (39.5%)	24 (36.4%)	12 (27.3%)
Confusion of Sense Relations	12 (27.9%)	19 (28.8%)	12 (27.3%)
Phrasal Errors	8 (18.6%)	13 (19.7%)	13 (29.5%)
Substance Level Errors	3 (7%)	8 (12.1%)	5 (11.4%)
Collocation Errors	2 (4.7%)	2 (3%)	1 (2.3%)
Synforms	1 (2.3%)	0	1 (2.3%)
Total	43	66	44

Table 3. Metaphorical error category distribution at each proficiency level

Finally, Table 4 provides a comprehensive overview of error distribution, encompassing total errors, metaphorical errors, and L1-influenced metaphorical errors. The expected decline in total errors as proficiency levels advance signifies a sustained enhancement in language proficiency among learners at more advanced competency stages. The more intricate aspect of the analysis involves identifying the influence of learners' L1 on metaphorical errors, revealing a total of 32 such errors across all proficiency levels. To further validate that these identified errors are indeed influenced by the Georgian learners' native language rather than being common mistakes made by learners from diverse linguistic backgrounds, a search was conducted in the ICLE corpus. This search revealed either the absence of such errors in data from other L1 backgrounds or, in rare instances, as few as one occurrence, which does not hold significance.

Interestingly, learners at the B1 level exhibit a relatively small proportion of L1-influenced metaphorical errors, suggesting that, at this stage, L1 influence is not a primary concern in terms of metaphorical errors. At the B2 level, the influence of learners' L1 on metaphorical errors becomes most pronounced, accounting for 27.3% of errors in this category, indicating that B2-level learners are actively experimenting with metaphorical language while still retaining

reliance on native language patterns. Even at the advanced C1 level, the significance of L1 influence on metaphorical errors remains substantial at 22.7%, underscoring the persistent impact of learners' native language on their language use, despite their advanced proficiency.

The identified patterns resonate with Littlemore et al.'s (2014: 139–140) research, which illustrated a significant increase ($\approx 25\%$) in L1-influenced metaphorical errors from B1 to B2 levels, followed by a slight decrease ($\approx 5\%$) from B2 to C2 levels. Consequently, Littlemore et al. (2014: 140) suggest that the B2 level is pivotal for metaphor production due to both the highest occurrence of metaphorical errors and greatest L1 influence. Furthermore, Iaroslavtseva and Skorczynska's (2017: 56) study, which encompassed only B2 and C1 levels, also revealed a higher prevalence of L1-influenced metaphorical errors at the B2 level (53%) compared to the C1 level (42%).

Proficiency level	Total errors	Metaphorical errors	L1-influenced metaphorical errors (%)
B1	456	43	4 (9.3%)
B2	329	66	18 (27.3%)
C1	122	44	10 (22.7%)

Table 4. Distribution of errors by proficiency level

When examining the various error categories within L1-influenced metaphorical errors, it becomes apparent that confusion of sense relations is the predominant error category. Specifically, there were 13 instances of L1-influenced metaphorical errors involving the confusion of sense relations at the B2 level, 5 at the C1 level, and 3 at the B1 level. In (7), *heart* serves as an example of an L1-influenced metaphorical error that arises from the confusion of sense relations. Here, the author opted for a direct translation of a Georgian idiomatic expression, *heart thoughts*, instead of using its English counterpart, *innermost thoughts*. The relevant entry for *heart thoughts* is available in the *Online Dictionary of Georgian Idioms* and is illustrated in (8).

(7) Friends are crucial part of humans' life and everybody is trying to make true friends with who they can share their heart thoughts.

(8) *gulis ts'adili*
 heart.GEN thought.NOM
 'thought of a heart (a heart's thought)'

Another instance of an L1-influenced metaphorical error stemming from the confusion of sense relations is presented in (9), where the author used the word *etalon* instead of *role model*. In Georgian, the term *etalon* is employed to convey meanings such as 'role model', 'idol', or 'exemplar'. However, according to *Collins English Dictionary*, it is a physics term denoting 'a device used in spectroscopy to measure wavelengths...'.¹⁰ Nacey (2010: 174) refers to such

¹⁰ <https://www.collinsdictionary.com/dictionary/english/etalon> (Accessed 10 November 2023).

errors as false friends, as they are pairs of words in two languages that look or sound alike, leading learners to mistakenly consider them equivalent despite lacking shared meanings.

(9) They [parents] are the first and most significant etalons for young people.

Phrasal errors are the second most frequent L1-influenced metaphorical errors, with 5 errors each at the B2 and C1 levels. In (10), the author directly translated the Georgian idiomatic phrase as *on a hot heart* instead of using its English equivalents, *with a hot head* or *without thinking*. The entry relevant to *on a hot heart* is also accessible in the *Online Dictionary of Georgian Idioms*, as demonstrated in (11).

(10) Nevertheless, there are many cases when a person happens to use a gun on a hot heart and takes somebody's life...

(11) *tskhel gulze*
 hot.NOM heart.on
 'on a hot heart'

Example (12) highlights another case of an L1-influenced phrasal error, as the author directly translated the Georgian idiomatic phrase as *eaten up their time* instead of employing its English equivalent, *have had their day*, signifying that the subject has outlived its usefulness. The corresponding entry for *eaten up their time* is available in the *Online Dictionary of Georgian Idioms*, as illustrated in (13).

(12) They claim that old buildings have already eaten up their time and they are unsuitable for modern use.

(13) *tavisi dro moch'ama*
 its time.NOM up.eat.3SG
 'It ate up its own time.'

There was only one L1-influenced metaphorical collocation error identified at the B1 level given in (14). Since in Georgian *online meetings* collocates with the verb *make* the author used it instead of *have online meetings* or *conduct online meetings*.

(14) What's more, they even had to make online meetings with patients who could not leave their houses.

L1-influenced metaphorical errors were absent in the remaining categories of grammatical errors, substance level errors, and synforms, for valid reasons. The synforms category, which involves phonetically similar words with shared meanings in the L2, remains unaffected by learners' L1 influence. Similarly, substance level errors, stemming from misspellings or mispronunciations of L2 words, are not linked to L1 influence. The study did not assess L1 influence on grammatical errors due to differences in linguistic typologies between the given L1 and L2, making direct comparisons challenging. It can be inferred that language proficiency

and attention-related factors exert a more substantial influence on errors within these categories than L1 transfer.

5 Conclusion

The study undertaken here has explored the intricate relationship between L2 proficiency, L1 influence, and metaphorical language production among Georgian learners of English. The research encompassed three primary objectives: measuring the density of metaphors across different proficiency levels, evaluating metaphorical error categories, and examining the role of learners' L1 backgrounds in shaping their metaphor production.

The analysis of metaphor density revealed a consistent pattern in which metaphor production increased with advancing proficiency levels. These findings are in line with prior research by Littlemore et al. (2014) and Iaroslavtseva and Skorczynska (2017). Similarly, as observed in these earlier studies, the B2 level stood out with both the highest proportion of metaphorical errors and the most notable L1 influence on such errors, indicating a tendency for metaphorical experimentation at this stage of language proficiency.

For a novel and more comprehensive insight, metaphorical errors were classified into seven distinct error types, and their prevalence across proficiency levels was analyzed. Learners in the intermediate stages mostly struggle with the semantics and grammatical structures of metaphors, while at the advanced level, phrasal errors prevail, suggesting an inclination toward using complex metaphorical expressions. The results also emphasise the enduring impact of learners' native language on their metaphorical errors, even at advanced proficiency levels.

Overall, these findings enhance our understanding of metaphorical language production and metaphoric competence among Georgian learners of English, carrying implications for researchers exploring how English learners with different L1 backgrounds employ metaphors. Future research could involve larger-scale corpora to broaden the scope of analysis. Additionally, it could expand by incorporating beginner and proficient levels, contributing to a more comprehensive examination of metaphorical language production across all proficiency stages.

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Appendix 1. Error categories

Name	Definition	Example
Synforms	Phonetic near-misses which share semantic features.	* <i>economical/economic</i>
Confusion of sense relations	The selection of an inappropriate member from a set of near-synonyms.	* <i>detect/notice</i>
Collocation errors	Semantically determined word selections, statistically weighted preferences, and arbitrary combinations.	* <i>to <u>do</u> capital punishment/to <u>carry out</u> capital punishment</i>
Grammatical errors	Errors in syntax, use of tense, pluralization, articles, and suffixation.	* <i>persons/people</i>
Substance level errors	Misspelling errors resulting from punctuation, oversight, mispronunciation, or confusibles.	* <i><u>joint</u> forces/<u>joined</u> forces</i>
Phrasal errors	The whole phrase/word sequence is incorrect and requires multiple corrections or total replacement.	* <i>are not less in crime percentages/do not have lower crime rates</i>