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Developing productive metaphoric competence through a frame-inspired task-based teaching model

Abstract. The paper reports preliminary findings from applying a frame-inspired task-based approach to metaphor teaching in an EFL classroom. The teaching model used combines Frame Semantics, a cognitive linguistic theory that takes a usage-based view of meaning, with Task-Based Language Teaching, which emphasizes second/foreign language learning through interactionally authentic language use. In this paper we examine students' productions in terms of the amount, type and function of metaphor use with a view to identifying the stages the students went through in developing their metaphoric competence in L2 writing. We illustrate how their metaphor awareness skills seem to develop along a continuum from non-deliberate isolated figurative instances to deliberate extended metaphor used as a conceptual and discursive framework for their writing. We thus provide preliminary evidence for the effectiveness of the proposed frame-inspired task-based approach to metaphor teaching.

Keywords: metaphor production, learner discourse, MIPVU, deliberate metaphor, Frame Semantics, Task-Based Language Teaching.

1. Introduction

Metaphor is a pervasive conceptual, linguistic and discursive phenomenon, and its use and role in education has been explored from various perspectives over the past decades. The importance of metaphor acquisition is emphasized in recent overviews of the relevant literature (e.g., Nacey 2017; O'Reilly & Marsden 2021; Ahlgren, Golden & Magnusson 2021). General statements about metaphorical reasoning being "inherent in human nature" (Nacey 2017: 503) and metaphor "play[ing] a central role in human language" (O'Reilly & Marsden 2021: 25) are supported by more specific references to the

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function of metaphor as mediator when introducing new — often abstract — knowledge, its importance for foreign language learners trying to understand and produce idiomatic language, and its role as a communication strategy at all stages of language learning (Ahlgren, Golden & Magnusson 2021: 196–7). It is thus reasonable to expect that "metaphoric competence" is given a fairly important role in language learning and teaching.

Metaphoric competence generally refers to "the comprehension, awareness, and retention of metaphor in speaking, writing, reading and/or listening" (O'Reilly & Marsen 2021: 26). As Nacey (2017: 504–505) observes, researchers have highlighted different aspects of this general concept by defining it in terms of "a number of skills" for competent L2 users (Low 1988: 129) or in terms of four components "(a) originality of metaphor production, (b) fluency of metaphor interpretation, (c) ability to find meaning in metaphor, and (d) speed in finding meaning in metaphor" (Littlemore 2001: 461), or by focusing on its conceptual aspect (Danesi 1994) or its linguistic (collocational) aspect (Philip 2006). Metaphoric competence has been demonstrated to contribute to all areas of communicative competence, including grammatical, textual, illocutionary, sociolinguistic, and strategic competence, and is a core ability for L2 learners (Littlemore & Low 2006).

Nevertheless, metaphor is still not well represented in the Common European Framework of References for Languages (CEFR) or in textbooks, which is a major obstacle to incorporating figurative language in instructional programmes (MacArthur 2017: 418; Nacey 2017: 510; Ahlgren, Golden & Magnusson 2021: 197). Finding ways to develop metaphoric competence is still an open question and stimulated the classroom intervention reported in this paper. Another gap addressed in this study concerns L2 metaphor production. As Nacey (2019, 2022) points out, "snapshot" views of productive metaphoric competence are usually offered, while how it develops as L2 learners' proficiency grows is so far poorly investigated.

In this context the present paper takes the EFL teacher's perspective in implementing a special approach designed to teach metaphor use in discourse and explores its effect on L2 learner texts as the course of study progresses. The texts under study belong to the descriptive-narrative genre, which has not been examined in terms of learners' productive metaphoric competence as much as the argumentative genre (e.g., Nacey 2013; Lu 2021). The frame-inspired task-based approach to metaphor teaching and learning, which constitutes the background of the study, is outlined in the next section. What follows is the report on the study, which consists of three parts: we first present the teaching context where five specially designed lesson plans were implemented to develop EFL learners' metaphoric competence; we then explain the method used for analyzing learners' written productions in terms of metaphor; lastly, we provide an overview of metaphor use in learners' productions by discussing the extent, type and function of metaphor use, and illustrating the different stages of its development. By way of conclusion, we link this paper to a wider project investigating the effectiveness of the proposed frame-inspired task-based approach to metaphor teaching and learning.

2. Background

This study is situated within the context of implementing a frame-inspired task-based approach to metaphor teaching in EFL instruction. This approach brings together Frame Semantics and Task-Based Language Teaching (TBLT), both of which offer usage-based perspectives on language and language learning, respectively.

On the one hand, the main assumption of Frame Semantics is that words must be grouped and explained in relation to "(semantic) frames". Fillmore (1982: 111) has defined "frame" as "any system of concepts related in such a way that to understand any one of them you have to understand the whole structure in which it fits". A frame is a structured body of encyclopaedic knowledge and consists of specific "frame elements" (FEs), i.e., the "various participants, props, and other conceptual roles" involved in the schematic representation of a situation (Fillmore & Petruck 2003: 359). Frame Semantics links these situation-specific semantic roles to their syntactic realizations, thus explicitly linking the semantic and combinatorial features of words. The appeal of Frame Semantics is that it amalgamates the conceptual and contextual levels of knowledge representation. Two projects are relevant in this respect for English, the Berkeley FrameNet project (`https://framenet.icsi.berkeley.edu/fndrupal`), which describes frames and shows how FEs are realized in corpus-derived sentences, and the MetaNet project (`https://metanet.arts.ubc.ca`), which views metaphors as mappings between semantic frames.

On the other hand, TBLT is an approach to second/foreign language teaching that relies on authentic language use in meaning-based, communicative tasks. It is considered a strong form of Communicative Language Teaching and has various versions determined by the focus on incidental or intentional learning and the teacher's/students' role (East 2021). A TBLT framework that incorporates both incidental and explicit learning processes has been proposed by Willis (1996). In this framework a "task" is defined as "a goal-oriented activity in which learners use language to achieve a real outcome" and a lesson is organized in three phases, i.e., pre-task, task cycle and language focus (Willis 1996: 38). More precisely, in the pre-task phase learners take part in a short preliminary activity that prepares them for the main task by making them think about a topic (a situation, a context), recall related language and develop expectations about the objectives of the lesson. The main part of the lesson is the task cycle, which consists of three stages, i.e., task (learners work on a meaning-focused task in small groups), planning (learners prepare to report on the task to the whole class), and report (each group presents its report to the whole class). Lastly, the language focus phase has two components: analysis (i.e., consciousness-raising activities) and practice on the language forms noticed in the analysis stage.

Presenting details about each of the two frameworks lies outside the scope of this paper, as this has been done in previous studies (Dalpanagioti 2021, 2022a, 2022b), which justify the compatibility of the two models, point out what each model can gain from

this integration, and provide illustrative lesson plans. To sum up, what lies at the core of this integrated approach is meaningful, contextualized language use, since both models capture both situational and linguistic contexts, thus maximizing opportunities for highlighting conceptual and lexico-grammatical patterns in a communicative setting. In theory, such an approach is expected to raise learners' awareness of not only the form and meaning of metaphors, but also, most importantly, their use in discourse. What the present study aims to do is examine whether this expectation is met in practice by considering learners' actual production. To this end, we take account of Steen's (2008) three-dimensional model of metaphor, which captures the linguistic, conceptual and communicative properties of metaphor and its basic functions of "naming" (linguistic function), "framing" (conceptual function) and "perspective changing" (communicative function). This three-dimensional model has become known as Deliberate Metaphor Theory (DMT), which sees metaphor not only "as the linguistic expression of an underlying metaphorical structure in thought, but also as a matter of communication between language users" (Reijnierse 2017: 22).

DMT draws attention to "the intentional use of metaphors *as* metaphors between sender and addressee" (Steen 2017: 1) and has triggered much discussion about the concept of "deliberateness" and its implications (Di Biase-Dyson & Egg 2020). The central feature of deliberate metaphor is the prominence of the source domain in the interpretation of the metaphor, with the consequent creation of a new perspective on the target domain. Taking a semiotic perspective, Reijnierse et al. (2018) define a metaphor as "potentially deliberate when the source domain of the metaphor is part of the referential meaning of the utterance in which it is used" (p. 136). In practice, the identification of deliberate metaphors is not straightforward, since they do not constitute a uniform class and there is no exhaustive checklist of deliberateness markers (Di Biase-Dyson & Egg 2020: 7). The examples discussed in the relevant literature show cases of conceptually novel but also conventional metaphors, linguistically expressed by direct as well as indirect metaphors, to be identified as potentially deliberate metaphors in discourse. That is why this study takes a bottom-up approach to data of learner discourse and investigates the development of metaphor use across a series of frame-inspired task-based lessons.

3. The study

3.1. Setting

The proposed frame-inspired task-based approach to metaphor teaching was implemented in an EFL course at a Greek university. The participants in the study were first-year students majoring in English and taking a mandatory course aimed at developing students' EFL skills through a focus on the descriptive/narrative genre. For the purposes of the course, students were divided (alphabetically) into small groups of about 25 participants

and continuous assessment was employed. One of the learning outcomes of the course was to improve students' writing skills in this particular genre, and therefore one of the assessment methods used was writing short descriptive/narrative texts on a weekly basis as well as two essays. Previous teaching experience in this course has shown that, although metaphors run through the reading materials used in the course, students' use of metaphors in their own productions was limited. Motivated by this observation, I designed learning materials based on the proposed approach and used them with one group of students.[2] Students' level of proficiency in English upon entering this university department is usually B2+/C1 (CEFR), and this was the case with the specific group that participated in the study, as measured by the Oxford Placement Test.

Five frame-inspired task-based lesson plans were designed and implemented in the context of the EFL course described above. This implementation was, in fact, a pilot study for testing the procedure and resources used, and gathering information about the effectiveness of the proposed approach and the designed materials. The topics of these lessons were the following: life stories, film/book reviews, experiences of illness and disease, natural disasters, and iconic monuments. Providing an overview of the lessons, Table 1 shows how they were structured in terms of TBLT and what each stage involved, how frame semantics was used in each stage, and what tasks learners primarily worked on. From the teacher's perspective, metaphor is approached in its three dimensions – linguistic, conceptual and communicative– through authentic pieces of discourse. Each lesson starts by inviting learners to identify the communicative function of a conventional metaphor systematically realized in a naturally occurring (written or oral) text and to relate the conceptual link to their own experiences. During the task cycle learners are encouraged to take fresh and interesting viewpoints in their descriptions (pointing to the communicative function of metaphor), but they are not explicitly asked to use specific linguistic or conceptual metaphors; these are incidentally encountered while searching for information on the Internet. Lastly, in the language focus phase learners' attention is drawn to the linguistic realization of frames and the conceptual metaphor involved, while they also have the opportunity to practise using metaphor more creatively to effect a deliberate change of perspective.

In order to investigate the learner's perspective, three types of data collection tools were used: (a) students' texts produced during the main task of each lesson (see the "Task cycle" column in Table 1), (b) students' essays produced at the end of the course, (c) focus group interviews giving access to students' attitudes, opinions and

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2 The participants provided their written informed consent to participate in this study.

Table 1. An overview of the frame-inspired task-based lessons

Lesson stages	Pre-task	Task cycle	Language focus
Task-based learning	Introduction to topic and task	• Doing task in groups by searching for information on the Internet • Preparing for report • Giving report to class	• Analysis • Practice
Frame semantic insights	Activation of frame(s)	Involvement in the frame(s) and incidental encounter with FEs	Linking FEs to lexico-grammatical items
Metaphor dimension prioritized	communicative, conceptual, linguistic	communicative	linguistic, conceptual, communicative
Lesson 1: Life story	Speaking activity on the famous phrase "life is a journey"; students examine a website with relevant quotes; they talk about whether they think of their experiences as being different parts of a journey.	Students are asked to propose a "genius" for National Geographic's anthology series. Each group justifies their suggestion by describing his/her life story. In the end, they decide which group has presented the most interesting life story.	Analysis: text with highlighted verbs instantiating the metaphor LIFE IS A JOURNEY; students use FrameNet to identify source, path, goal FEs in the text. Practice: controlled activity on linking lexical items with frames; guided activity on writing sentences using the Motion frame to describe someone's life; communicative activity in pairs talking about the life of a person who is important to them.
Lesson 2: Film/ book review	Speaking activity based on two short extracts from reviews of the *The Lord of the Rings* book series and movies. Students talk about how emotions created in readers/viewers are described in these reviews.	Students are asked to choose a book, film or play that has left an impression on them and prepare a short review. In the end, they decide which one was the most persuasive review.	Analysis: extract from a film review with highlighted lexical items; students use FrameNet to identify the frames evoked and notice what they have in common; students use MetaNet to understand the metaphor (CONTROL IS MANIPULATION) that motivates the use of the highlighted items. Practice: controlled activity on matching extracts from reviews with the frames exploited metaphorically; guided activity on identifying extended metaphors in movie reviews on a specific website; communicative activity in pairs writing one-sentence movie reviews to be included in the same website.

Lesson stages	Pre-task	Task cycle	Language focus
Lesson 3: Describing experience of illness and disease	Speaking activity based on a video that talks about and visualizes a city's fight against COVID-19. Students talk about whether they think of their experiences with illnesses in relation to war.	Students are asked to report on how the world has fought against the COVID-19 pandemic with a view to creating a leaflet. They consider different countries and different perspectives (e.g., doctors', patients', politicians').	Analysis: text with highlighted lexical items referring to disease literally and metaphorically; students use MetaNet to understand the underlying metaphor (DISEASE TREATMENT IS WAR) and identify other metaphors in the text. Practice: controlled activity on filling the gaps in a text (about a patient's experience with cancer) with words from MetaNet's entry for the War frame; guided activity on using a different source frame to write a hopeful quote to inspire people who experience a chronic disease; communicative activity about their hopeful quotes.
Lesson 4: Natural disaster description	Speaking activity based on two videos describing a hurricane. Students discuss a news report and a survivor's report, both of which personify the hurricane as a monster.	Students are asked to prepare a report about the 2004 Indian Ocean tsunami. They consider news reports and survivors' stories.	Analysis: extracts from news articles (about a hurricane) with highlighted lexical items; students use FrameNet to identify the frames evoked and MetaNet to understand the metaphors (NATURE IS AN AGENT and ACTION IS MOTION ALONG A PATH) that motivate the use of the highlighted items. Practice: controlled activity on filling the gaps in a text (about a hurricane experience) with words from FrameNet's entry for the Cause_harm frame; guided activity on writing headlines using metaphors from MetaNet; communicative activity in pairs talking about a natural disaster experience.
Lesson 5: Monument description	Speaking activity about how the Eiffel Tower has been described by two visitors. Students compare the two descriptions, both of which personify the Eiffel Tower as a lady.	Students are asked to choose a famous monument and describe it from a fresh viewpoint. In the end, they decide which one was the most vivid and interesting description.	Analysis: text with highlighted lexical items referring to Big Ben as an old man; students use MetaNet to understand the metaphor (MACHINES ARE PEOPLE) that extends over the whole description and to identify the metaphoric mappings. Practice: controlled activity on filling the gaps in a text (about the Taj Mahal) with words from FrameNet's entry for the Light_movement frame; guided activity on writing titles using metaphors from MetaNet; communicative activity about reconsidering the descriptions the groups presented.

suggestions. This paper focuses only on the data collected through the first source, i.e., the short descriptive/narrative texts produced during the task cycle of each lesson, for which students worked in groups of four for 20–30 minutes.[3] We thus compiled five sub-corpora (of 600–650 words each) corresponding to the five lessons. By annotating them in terms of metaphor use (in the way explained in the next section) and comparing the results, we monitor the development of students' productive metaphoric competence during the course.

3.2. Method

The goal of this paper is to examine students' productions in the five sub-corpora in terms of the extent, type and function of metaphor use with a view to identifying potential patterns of development in L2 productive metaphoric competence. To this end, MIPVU was used as a tool for identifying metaphor-related words (MRWs) in natural discourse; this is a refined and extended version of MIP ('Metaphor Identification Procedure') and the procedure has been outlined in Steen et al. (2010). The core principle of MIPVU is to compare the contextual meaning of a target word with a more "basic" or concrete meaning it has in other contexts and look for a relation of comparison. The unit of analysis in MIPVU is the lexical unit (LU), rather than the word; although LUs are generally orthographic words, some lexical units contain more than one word (e.g., compounds, phrasal verbs, multiword expressions). To identify LUs in the texts under study, we followed the guidelines provided by Steen et al. (2010: 27–32) as well as Nacey et al. (2019: 43–46); for example, we consulted the *List of Multiwords and Associated Tags in BNC2,* and if a particular expression was on that list it was counted as a single LU. We also consulted online versions of *Macmillan Dictionary* and *Longman Dictionary of Contemporary English* to establish the basic meaning and contextual meaning of each LU and to minimize subjectivity in doing so.

Following the MIPVU protocol, we identified both 'indirect' and 'direct' linguistic metaphors in students' productions.[4] In the former case, the indirect use of a word "may potentially be explained by some form of cross-domain mapping from a more basic meaning of that word", while in the latter case "an underlying cross-domain mapping is triggered through 'direct' language use, where there is no contrast between the basic and contextual senses" (Steen et al. 2010: 25–26). An example of an indirect metaphor is provided in (1); the basic (concrete, physical) meaning of the verb *raise* is "to put something

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3   The five lessons took place in a lab so that students could search for information on the Internet during the task cycle and compose their texts by collaborating on a Google Doc.

4   Implicit metaphor (Steen et al. 2010: 26) was excluded from metaphor identification in this study. We should also note that the prepositions *of, for* and *with* were not considered for metaphoricity, because their basic sense is not easy to discern (Nacey 2013: 207, 2019: 194).

in a higher place or position" (the first sense in the *Macmillan Dictionary* entry), while the contextual meaning of the verb in this example is the dictionary's fifth sense "to make someone have a particular feeling or reaction". These two senses are sufficiently distinct –since they are represented by different sense divisions in the dictionary– and are also related through comparison whereby we understand the creation of an emotion in terms of physical movement to a higher location. By contrast, in example (2) we find a simile, which is signalled by a metaphor flag (MFlag), i.e., *like*. The following compound (annotated as a single LU) is a direct metaphor because there is no distinction between its basic and contextual sense, even though there is clearly an underlying conceptual metaphor, since what is described is a tsunami rather than a plane. To understand this sentence, which directly evokes an alien source domain unrelated to the topic under discussion, we need to set up a cross-domain comparison between the referents of the words in the text. All lexical words in the simile are direct metaphors; that is why the two instantiations of *louder* have also been marked as MRWs.

(1) This movie **raises**^MRW sentiments about friendship, kindness, acceptance. (from the 'Film/ book review' sub-corpus)

(2) There was a noise ***like***^MFlag a **jet engine**^MRW becoming **louder**^MRW and **louder**^MRW. (from the 'Natural disaster description' sub-corpus)

The MIPVU method can be applied only to linguistic metaphor and it is emphasized that the identification of the conceptual structures and communicative functions of the metaphorically used words should be a separate step in the process of metaphor analysis (Steen et al. 2010: 63, 109). Among the two higher levels of analysis, we focus on the level of communication by using the Deliberate Metaphor Identification Procedure (DMIP).[5] Building on MIPVU, DMIP has been proposed for determining the communicative value of MRWs as either deliberate or non-deliberate cross-domain comparisons (Reijnierse et al. 2018: 136–137). To illustrate DMIP, we shall reconsider the MRWs in (1)–(2) in light of the question "Is the source domain of the MRW part of the referential meaning of the utterance in which the MRW is used?" (ibid.: 136). It becomes clear that *raise* in (1) constitutes a case of non-deliberate metaphor, since there are no cues that make the movement-to-a-higher-position source domain stand out, whereas the MRWs in (2) are cases of potentially deliberate metaphor. Following (Reijnierse et al. 2020: 21–25), we take account of co-text which provides evidence that the MRWs in (2) function *as* metaphors in the communicative dimension of metaphor. More precisely, (2) contains an explicit comparison signalled by means of the preposition *like* in the immediate co-text of *jet engine*; the comparison is further elaborated by the two instantiations of *louder*, but their

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5 Conceptual metaphor identification involves separate complex procedures (see, e.g., Steen's (2011) five-step procedure and Ahrens & Jiang's (2020) source domain verification procedure), which are not employed in this study.

direct metaphorical use is not signalled (for direct metaphor without metaphor signal, see VisMet — `http://www.vismet.org/metcor/documentation/relation_to_metaphor.html`). Besides the immediate, the wider co-text contributes to the identification of potentially deliberate metaphor when several metaphorical expressions appear in consecutive sentences and evoke the same source domain to describe the same target domain (Reijnierse et al. 2020: 25–30); relevant examples of extended metaphor from students' texts are discussed in the following section.

On the whole, we coded metaphors in our learner corpus at the linguistic level (using MIPVU) and at the communicative level (using DMIP),[6] and collected both quantitative and qualitative data that show how learners' metaphorical production developed during the implementation of five frame-inspired task-based lessons. The underlying assumption is that learners' language proficiency grows during the semester with increased L2 exposure, and instructional and learning opportunities. The overall goal of the study is to shed light on how metaphorical production changed as learners progressed through the semester. Three research questions are addressed in this paper:

1. Does the amount of metaphor produced in L2 writing vary across the pilot lessons?
2. Do the types of metaphor produced in L2 writing vary across the pilot lessons?
3. How does the role of metaphor evolve in learners' texts?

3.3. Findings and discussion

This section discusses findings for each of the study's research questions. On the one hand, we provide a quantitative picture of metaphor use in the students' texts per lesson in Table 2. On the other hand, we illustrate qualitative changes by presenting sample extracts from the students' productions per lesson. The size of the learner corpus under investigation is 3,200 words, corresponding to 2,915 LUs;[7] it is composed of 25 student texts organized in five sub-corpora according to the lesson in which they were produced.[8]

Students' texts were first analyzed for their metaphor density, using MIPVU to determine the metaphorical status of each of the LUs in the corpus. Metaphor density is calculated as "the number of metaphors per total number of lexical units in the sample" and highly depends on the consistent demarcation of LUs (Nacey et al. 2019: 43). Calculations of metaphor density were carried out for each text taking individual text length into account and are presented in the Appendix. Table 2 shows mean, standard deviation, and

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6 In this small-scale pilot study metaphor codings were provided by one researcher. However, the coding of several samples from the data was discussed in the cognitive linguistic reading group of the university department where the study was conducted.

7 As explained in the Method section, the lexical unit (LU) is the unit of analysis in MIPVU and doesn't always correspond to the orthographic word.

8 As explained in the Setting section, student texts are the result of group work during the task cycle of each lesson. The 25 students worked in the same groups of five.

minimum and maximum values in the metaphor density of each sub-corpus. The mean values indicate a gradual increase in metaphor density in the first four lessons (starting at 7.16% in the first lesson and reaching 11.58% in the fourth one)[9] and a sharp rise in the last lesson (20.14%). The latter figure should be interpreted with caution in light of the standard deviation, which indicates high variation within the student texts produced in the last lesson. If we consider the properties of these texts in the Appendix, we realize that the metaphor density of three texts (ST21, ST23, ST25) is particularly high due to the occurrence of direct metaphors stretching over several lines and making it necessary to code many lexical items as MRWs. On the whole, there is an increasing trend in the amount of metaphor produced, which should be seen in relation to a qualitative shift in the types of metaphor produced across the pilot lessons.

As regards word class, both the collective data in Table 2 and the individual counts per text in the Appendix show that open-class and closed-class MRWs are of about the same amount in the first lesson and then, as the semester progresses, the number of open-class MRWs clearly increases, while the number of closed-class MRWs slightly decreases. This observation is in line with studies reporting an increase in the metaphor density of open-class words as proficiency increases (see, e.g., Nacey 2019: 196), although it should be noted that this trend is not supported by other studies (see, e.g., Nacey 2022: 285). Conflicting results in this respect underline the need for collecting more data on the behaviour of open- and closed-class metaphors based on larger-scale studies.

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9   Metaphor density depends on register; for example, Steen et al. (2010: 195) report metaphor densities of 17.5% for academic texts, 15.3% for news, 10.8% for fiction and 6.8% for conversation. Although metaphor densities of this study cannot be directly compared to these figures, which do not focus specifically on the descriptive/narrative genre, we can see that there is a similarity to the figures of the "news" and "fiction" text types, which usually include descriptions and narrations. However, what is more important in this study is to compare metaphor densities for the sub-corpora under examination with each other to see how they develop throughout the course.

Table 2. An overview of metaphor use in students' productions

Students' texts per lesson	LUs	MRWs	Metaphor Density (%)				Word class		Metaphor_Language			Metaphor_Communication	
			Mean	Standard deviation	Minimum	Maximum	Closed-class MRWs	Open-class MRWs	Metaphor Flag	Direct metaphors	Indirect metaphors	Deliberate metaphors	Non-deliberate metaphors
Lesson 1: Life story	613	44	7.16	3.64	3	10.6	20	24	0	0	44	0	44
Lesson 2: Film/ book review	606	56	9.14	2.98	5.1	13.3	14	42	0	0	56	5	51
Lesson 3: Describing experience of illness and disease	569	64	11.06	2.46	7.4	13.7	18	46	2	4	60	12	52
Lesson 4: Natural disaster description	570	69	11.58	4.82	6.3	17.3	12	57	9	36	33	37	32
Lesson 5: Monument description	557	110	20.14	8.36	8.6	29.3	11	99	5	70	40	84	26

The rest of Table 2 is divided into two parts on the basis of the level of metaphor analysis: metaphor in language and metaphor in communication. At the linguistic level, there is an exclusive use of indirect metaphor in the texts produced in the first two lessons, but in the following lessons direct metaphors gradually appear. The expansion of learners' repertoire of metaphors points towards increased awareness of metaphor use. This observation is further supported by the pattern of metaphor development at the level of communication. What can be clearly seen in Table 2 is a steady rise in the number of deliberate metaphors, which is related to a shift in the function of metaphors in learners' texts.

On the whole, based on both the collective data in Table 2 and the individual counts per text in the Appendix, we identify two main stages in the development of learners' metaphoric competence in EFL writing in the context of the frame-inspired task-based intervention. The first stage is quantitative and manifests itself as an increase in the number of metaphor related words; this is evident not only in the mean metaphor density percentages in Table 2, but also if we compare MRW% values in the texts produced by each group of students across the lessons (e.g., compare MRW% in ST1, ST6, ST11, ST16, ST21, i.e., the texts produced by the first group of students). Slight discrepancies like the second group's ST17, the third group's ST13 and the fourth group's ST19 do not disturb the increasing trend in metaphor density. It should be noted at this point that such discrepancies provide an important reminder about the value of considering individual texts and not just bulk data. Overall, it seems that students start to realize the role of metaphor in description/narration and produce more metaphors of that type that is most frequently encountered in discourse, i.e., indirect conventional metaphors. The second stage is qualitative and concerns the production of additional types of metaphor (see the counts of direct metaphors in Table 2). As shown in the Appendix, all five groups experiment with direct metaphor in the fourth lesson, while three of them choose to build their texts on direct metaphors in the fifth lesson. As the lessons progress, learners produce texts containing more instances of deliberate metaphors and they seem to exploit metaphor in a more systematic manner to better serve the communicative purpose of the texts.

To explore the function of the observed metaphors, we should look beyond quantitative measures and consider sample extracts from students' productions. For each lesson we provide two samples from students' texts produced through group work in the task cycle. To visualize patterns of metaphor use in learners' productions, we use colour to differentiate among the types of metaphor at the level of language and underlining to mark deliberate metaphors at the level of communication. In extracts (3)–(12) the following coding is thus used: indirect metaphor; direct metaphor; metaphor flag; deliberate metaphor.

(3) Despite his serious health problem, Stephen Hawking managed to pursue a career in physics and become the most distinguished scientist of his time. Through his

success, he broke stereotypes and inspired many people to surpass their limits and reach new heights.

(4) Vincent Van Gogh managed to shape a whole era with his artworks, that posthumously became successful, despite the many hardships he went through. One might be surprised when they hear that Van Gogh was fighting with severe depression and struggling to climb out of poverty his whole life.

More precisely, as sample texts from the first lesson in (3) and (4) show, metaphor is mainly found in prepositions and collocations. As B2+/C1 learners, they use verbs that conventionally appear in the context of *career, stereotypes, hardships,* etc., and there is no evidence of deliberate metaphor use. However, from the second lesson onwards metaphors with a special role start to appear.

(5) An emotional roller coaster of a movie about man's best friend that will leave you considering the meaning of friendship and devotion. [...] The spiritual aspect of the film offers an interpretation of grief that transcends species: humankind and animals both grieve deeply. *Hachiko* paints a <u>mural</u> of friendship and loyalty that surpasses the boundaries of life and death.

(6) The story follows Leonardo DiCaprio, the main protagonist, whose job is to steal information by <u>invading</u> his targets' minds, <u>infiltrating</u> their subconscious. This intense movie keeps you on your toes with the rising suspense and the epic visuals. As you keep <u>diving into</u> the <u>deepest</u> parts of the human subconscious throughout the movie, you begin to wonder more and more about what is real and what's a projection of the mind.

For example, in (5), besides the common indirect conventional metaphors, we find an interesting case of metaphor manipulation used for conveying the writers' opinion on the film reviewed (evaluative effect). They have changed the conventional metaphorical collocation *paint a picture (of something)*[10] into *paint a mural,* thus making the source domain of drawing play a role in the referential meaning of the utterance. This collocational deviation is evidence of increasing metaphoric competence, although it is "a risky strategy for L2 learners, whose potential linguistic creativity may be taken for linguistic error" (Nacey 2019: 195). As regards (6), a sample from the second lesson as well, it has been chosen for two reasons: (a) it illustrates Reijnierse et al.'s (2018: 135) argument that conventional metaphor should not be equated with nondeliberate metaphor, and (b) it represents an early (and isolated) attempt to create an extended metaphor, i.e., "multiple metaphor-related words expressing the same source-target domain mapping" (ibid.: 135). A number of LUs (*invading, infiltrating, diving into, deepest*) in the extract display a contrast between the target domain meaning of gaining mental control and a source

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10 The collocation is recorded under both *paint* and *picture* entries in the *Macmillan Dictionary* in sense description 3 and 2, respectively.

domain meaning of physical movement into a place. Although a conventionalised target domain meaning is available for these items in the dictionary, they are potentially deliberate metaphors because their concentration arguably draws attention to the source domain and creates a dramatic effect.

(7) Doctors in India struggle in the brutal battlefield that the COVID-19 crisis presents. Dealing with little to no rest and pay, as well as staff shortages, Indian doctors battle ceaselessly on the front lines. Thousands of them have lost their lives, leaving the rest frightened and exhausted. All of them are heroes in the war against COVID.

(8) The Greek government took proactive measures to ensure the health and safety of its citizens. Some successful battle strategies to beat COVID-19 were that schools were ordered closed and carnival parades were canceled. Greece imposed severe social distancing measures at a much earlier stage of the epidemic than other southern European countries in order to win this battle.

In the third lesson there are more instances of using several MRWs in close proximity expressing the same cross-domain mapping with a dramatic/rhetorical impact. In (7) and (8) the underlined items (i.e., *struggle, battlefield, battle* (v), *front lines, war, battle* (n), *beat*) display a contrast between their contextual meaning related to the Covid-19 pandemic and a basic meaning related to war; the two sense descriptions can be compared, making the LUs metaphorical at the linguistic level. For each of the underlined items there is a conventionalized metaphorical meaning in the dictionary that matches the target domain of the utterance, and if examined in isolation they would not be identified as metaphors at the level of communication. However, when analysed in its surrounding cotext, it becomes clear that each one of these MRWs is part of an extended metaphor that stretches over consecutive sentences, encouraging readers to map the war experience onto Covid-19 pandemic experience stirring up their emotions. At this point we should note that this is a conventional extended metaphor reflecting the dominant military imagery used to describe a less tangible problem, especially at the beginning of the pandemic (see, e.g., Semino 2020). Since War metaphors draw from basic, embodied, sensorimotor experiences and are frequently found in communication about difficulties (ibid.: 51), it was easy for learners to extensively use this scenario to talk about the pandemic. The language focus phase of that lesson drew learners' attention to more creative possibilities of extensively using different source domains to talk about experiences with diseases. As a result, they went on to further experiment with extended metaphor in the fourth and fifth lessons.

(9) Stretching across many South and Southeast Asian countries, and reaping the lives of over 225,000 people in a matter of hours, the Indian Ocean tsunami of 2004, also known as the Christmas tsunami, was one of the most devastating in recorded history. Like a furious Titan emerging from the Indian ocean, the towering waves shattered concrete and bones as they raced across the continent,

leaving a lasting and poisonous effect: the land had either crumbled or was flooding with corpses, debris, and plant-killing salt water. Nearly no one swallowed by the waves survived.

(10) One of the deadliest natural disasters in the world that spread like a plague over multiple countries of South and South-East Asia on the 26th of December 2004. At 7:59 AM local time an earthquake that took place underwater with an unprecedented magnitude of 9.1 started to take over the coast of the Indonesian island of Sumatra which eventually triggered the outbreak of the tsunami. The Indian Ocean tsunami was rather 'contagious' as it spread as fast as an epidemic reaching out across the Indian Ocean, 'infecting' even coastal areas of East Africa.

The sample texts from the fourth lesson in (9) and (10) illustrate two extended metaphors built upon a different metaphorical simile. In (9) tsunami waves seem to be personified, as they are compared directly to a "furious Titan" (a giant god) having control of human beings: reaping their lives, racing across their land and swallowing them – human emotions and activities attributed to an inanimate entity. The cluster of metaphorical expressions is identified as deliberate due to the incongruence between the topic of discourse (tsunami) and the expression (about a god from Greek mythology). Besides the dramatic effect and vividness, the extended metaphor in (10) seems to serve another important communicative function as well: it gives internal coherence to the description. That text directly evokes an alien physical source domain (plague) unrelated to the topic at hand (tsunami), and the process of the plague spreading (from outbreak to contagion to infection) is used to structure the description of the tsunami spreading. The deliberate highlighting through the use of scare-quotes (Nacey 2013: 186-188) may convey the writers' awareness of the unusual collocations and prompt readers to resolve the anomaly through a metaphorical interpretation.

(11) The leaning Tower of Pisa: A delicious monument in Italy
The tower of Pisa looks like a massive wedding cake leaning to the ground, after being knocked by a clumsy guest. Every floor resembles a layer of the cake and the architecture, with marble columns, is as beautiful as its creamy decoration. On its top, a waving red flag completes the image, as it looks like a cherry.

(12) The Great Snake of China
Since the very start of the humankind, there has been a giant, poisonous and dangerous snake meandering over the mountains of China. Even though this snake seemed to be deadly and venomous, its hiss was weak and soft. […] Today, its long slender body stretches somewhere between 4,000 and 5,500 kilometers as it glides across China's terrain and it is considered to be a symbol of China's culture. They named it "The Great Wall of China" and its thick body is claimed to be visible from the moon.

Lastly, the deliberate use of metaphor to serve communicative functions is observed, although to a different extent, in all texts produced in the fifth lesson. By way of illustration, we may consider (11) and (12), which describe two monuments by introducing a new perspective on them through metaphor. In (11) a direct metaphor is used to introduce an extended metaphor that continues to the end of the text; a series of metaphorical similes elaborately comparing the Tower of Pisa to a wedding cake is used for creating a humorous effect and giving internal coherence to the description. The structuring function of metaphor is also evident in (12), where the Great Wall of China is systematically described as a snake. Here, like (11), there is a direct comparison between two different domains, but, unlike (11), this is not signalled with metaphor flags. In both cases, the titles underscore the intentional nature of the comparisons and the deliberate use of metaphor as a discursive framework, providing more convincing evidence of learners' increased metaphoric competence.

4. Conclusion

This paper has reported the results of a pilot study that put a frame-inspired task-based approach to metaphor teaching into practice. The overall objective has been to shed light on how metaphorical production develops in L2 writing through a series of frame-inspired task-based lessons designed for EFL university students of B2+/C1 level. The empirical data for this study were retrieved from a corpus consisting of the short descriptive/narrative texts produced by 20 students, working in groups, during the task cycle of each lesson. Five sub-corpora (of 600–650 words each) corresponding to the five pilot lessons have thus been examined to determine quantitative and qualitative facets of metaphorical production in EFL learners' texts.

As regards the amount of metaphor produced (first research question), we have seen that metaphor density gradually increases as the lessons progress, and more precisely it is the open word classes that exhibit the highest relative proportions of metaphor, pointing to a developing lexicon. The types of metaphor (second research question) have been identified at the linguistic and communicative levels. In this respect, we have observed that learners' repertoire of metaphors gradually expands by including both indirect and direct metaphors and deliberate, besides nondeliberate, ones. It seems that a quantitative shift precedes a qualitative shift in metaphor use; as learners realize the role of metaphor in description/narration, they first produce more indirect conventional metaphors (i.e., the most frequent form of metaphor in discourse), and then they produce additional types of metaphor to better serve the communicative purpose of the texts. When it comes to the functional role of metaphor (third research question), we have noticed a qualitative change from using metaphor as an aesthetic figure of speech for dramatic effect to additionally using it as a conceptual and discursive framework for creating coherence in the text. At the same time, learners' confidence to experiment with metaphor seems to

develop along a continuum from just using conventional metaphorical collocations to incidentally manipulating metaphorical collocations to building extended metaphor.

These observations should be seen as preliminary findings of an exploratory study which is part of a wider project investigating the effectiveness of the proposed frame-inspired task-based approach to metaphor teaching in EFL. This model has been designed as a comprehensive methodological framework for developing L2 learners' metaphoric competence, in response to the open call for improving existing instructional methods and materials (MacArthur 2017: 421; Nacey 2017: 510; Low 2020: 49). The present analysis of students' productions during the pilot lessons will be further enriched with data from their exam essays, as well as other students' essays collected within the same course setting in the previous academic year, during which the same topics were introduced by the same instructor but not through the proposed approach and materials. In addition, focus group interviews will give access to students' attitudes, opinions and suggestions, which will be taken into account to improve the course. In conclusion, despite its limitations, this paper may contribute to the growing body of knowledge about learners' metaphoric competence in L2 by illustrating the interaction of metaphor with writing skills, and may raise implications for teacher education.

Data availability
Data will be made available on request.

Acknowledgements

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Appendix: An overview of metaphor use per students' text

Students' texts (ST) per lesson	LUs	MRWs	Metaphor density	Word class		Metaphor_Language			Metaphor_Communication	
			MRW%	Closed-class MRWs	Open-class MRWs	Metaphor Flag	Direct metaphors	Indirect metaphors	Deliberate metaphors	Non-deliberate metaphors
Lesson 1: Life story										
ST1	80	8	10	3	5	0	0	8	0	8
ST2	112	4	3.5	2	2	0	0	4	0	4
ST3	161	14	8.7	11	3	0	0	14	0	14
ST4	129	4	3	2	2	0	0	4	0	4
ST5	131	14	10.6	2	12	0	0	14	0	14
Lesson 2: Film/ book review										
ST6	88	9	10.2	3	6	0	0	9	0	9
ST7	235	20	8.5	6	14	0	0	20	1	19
ST8	58	5	8.6	0	5	0	0	5	0	5
ST9	98	5	5.1	1	4	0	0	5	0	5
ST10	127	17	13.3	4	13	0	0	17	4	13

Students' texts (ST) per lesson	LUs	MRWs	Metaphor density MRW%	Word class — Closed-class MRWs	Word class — Open-class MRWs	Metaphor_Language — Metaphor Flag	Metaphor_Language — Direct metaphors	Metaphor_Language — Indirect metaphors	Metaphor_Communication — Deliberate metaphors	Metaphor_Communication — Non-deliberate metaphors
Lesson 3: Describing experience of illness and disease										
ST11	138	19	13.7	4	15	1	1	18	1	18
ST12	107	11	10.2	4	7	0	2	9	7	4
ST13	121	9	7.4	2	7	0	0	9	0	9
ST14	71	8	11.2	2	6	0	0	8	3	5
ST15	132	17	12.8	6	11	1	1	16	1	16
Lesson 4: Natural disaster description										
ST16	159	24	15	2	22	4	15	9	15	9
ST17	128	8	6.3	3	5	1	1	7	1	7
ST18	115	20	17.3	4	16	2	11	9	12	8
ST19	70	5	7.1	1	4	0	3	2	3	2
ST20	98	12	12.2	2	10	2	6	6	6	6

Students' texts (ST) per lesson	LUs	MRWs	Metaphor density MRW%	Word class		Metaphor_Language			Metaphor_Communication	
				Closed-class MRWs	Open-class MRWs	Metaphor Flag	Direct metaphors	Indirect metaphors	Deliberate metaphors	Non-deliberate metaphors
Lesson 5: Monument description										
ST21	64	16	25	1	15	4	13	3	14	2
ST22	62	9	14.5	0	9	0	0	9	6	3
ST23	172	40	23.2	2	38	0	36	4	36	4
ST24	150	13	8.7	2	11	0	0	13	7	6
ST25	109	32	29.3	6	26	1	21	11	21	11

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