

A Corpus-based Study of the Literal, Metaphorical, and Prosodic Meanings of *Embrace*

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1 Introduction

The slogan, or perhaps jargon, of *embrace challenges* or *embrace change* is commonly used in corporate and political realms for arousing support, amid oppositions or difficulties. Interestingly, these phrases are in fact clashes of two almost contradictory concepts: *embrace*, on one hand, is emotively charged, and the imagery of opening our arms as a welcoming gesture is vividly pleasant; on the other hand, *challenges* or *changes* are ideas that people do not usually entertain. *Embrace*, in this way, seems to be a precise and concise word choice to denote ‘to accept and face challenges enthusiastically’, but could also be perceived as a pretentious choice especially when the action is involuntary and lacks support or spontaneity.

The complex implications of *embrace* reflect how language is motivated and how it evokes understanding:

- 1) the linguistic motivation is figurative, and to a certain extent, visualised;
- 2) the evaluative aspect of language is value-laden and serves illocutionary functions;
- 3) language production and reception can be fuzzy because meaning is sometimes too subtle to be captured accurately or may only emerge when the collocation is considered together.

This research is a quest for the literal, metaphorical, and prosodic meanings of *embrace* as well as their motivations. The investigation is based on the usage of the word, i.e. the output of language users. Corpus-based methodology is used and concepts of metaphorical motivations and phraseology are employed to analyse and interpret the findings.

Section 4 deals with the metaphoricality of *embrace*. When *embrace* is said to have two senses, literal and metaphorical, we are making a distinction between an embodied, physical action and an abstract, mental process, in which a concrete action (‘holding an object in arms’) metaphorically motivates the idea of an abstract idea (‘to support/include an idea’). 500 instances of EMBRACE were extracted from the Bank of English corpus, based on which a qualitative study is conducted to analyse the metonymical mappings between the physical features and the various metaphorical uses.

In Section 5, with the use of corpus techniques and quantitative methods, the collocational preferences and frequently co-occurring modal expressions of *embrace* are identified, and importantly, to investigate if a subtle, prosodic meaning of the word would emerge. The study attempts to suggest a distinctive meaning that differentiates *embrace* from some possible synonyms, such as *welcome* and *accept*.

2 Research Background

This section discusses the concepts that form the theoretical basis of this study.

2.1 Conceptual metaphor and metaphorical mapping Distinguished from literary metaphors which serve rhetorical functions, the metaphorical sense of *embrace* is said to be an “everyday metaphor” (Lakoff, 1993) which reflects how human thoughts are conceptualised by their orientation, sensorimotor, and ontological experiences. The concept ‘conceptual metaphor’ (Lakoff and Johnson, 1980/2003; Lakoff, 1993) further describes the mechanisms of how we understand one mental domain in terms of another through sets of conceptual correspondences. For example, conceptual metaphor UNDERSTANDING IS GRASPING (Lakoff, 1987) explains how we conceptualise the abstract mental process of ‘understanding’ (target domain) through the concrete physical action of ‘holding onto an object’ (source domain), which is

also found to be a cross-cultural and cross-linguistic phenomenon (Sweetser, 1990: 28). Conceptual metaphor is realised linguistically as ‘linguistic metaphor’ where ‘vehicle’ and ‘topic’ express the source and target domain respectively (Kovecses, 2002; Deignan, 2005; Littlemore and Low, 2006). *I can’t quite catch/get the idea* is an example derived from UNDERSTANDING IS GRASPING. Based on the conceptual metaphor IDEAS (OR MEANINGS) ARE OBJECTS, we can then make sense of the linguistic metaphor *catch/get/embrace an idea* in which the abstract idea is conceptually understood as a physical entity which can be ‘got hold of’.

2.2 Systematicity of conceptual metaphor The mapping is said to be ‘systematic’ if the entities and the internal logic of one domain can be tightly mapped onto the other, reflecting the complex conceptual structure of the correspondence (Lakoff and Johnson, 1980/2003; Lakoff, 1987; Gibbs, 1994; Deignan, 2005). For UNDERSTANDING IS GRASPING, the range of linguistic expressions, e.g., *grasp/catch/get hold of an idea* reflects the logic and the consistency of the conceptual connections. The concept is distinguished from ‘one-off’ metaphor (ibid.) which is considered as a unique linguistic incident.

2.3 Conceptual Metonymy Conceptual metonymy is a type of figurative thinking with which “people take one well-understood or easily perceived aspect of something to *represent* or *stand for* the thing as a whole” (Gibbs, 1994: 320, italics mine). One of the classic examples is ‘the White House’ that stands for the US government which is based on the conceptual metonymy THE PLACE FOR INSTITUTION (Lakoff and Johnson, 1980/2003: 38). The mapping is also systematic, however, it concerns only one domain within which both the source and the target are found. The target highlights the salient features of the source and therefore metonymy is said to serve a ‘referential function’ (Lakoff and Johnson, 1980/2003; Gibbs, 1994; Kovecses, 2002).

The distinction between metaphor and metonymy is, however, never clear-cut. Radden (2005) demonstrates the continuum of literalness, metonymy and metaphor where metaphors are motivated through different stages from literal via metonymy, and therefore, metonymy is regarded as “a more basic and ubiquitous process” than metaphor (2005: 24-25). Goossens (2003) looks at the interactions between metaphor and metonymy. He identified one of the four types of interactions as ‘metaphor from metonymy’ – the most common type as research shows (Deignan, 2005) and is characterised by a spontaneous literal and metonymic/metaphorical reading, which is also relevant to the metaphorical motivation of *embrace*.

2.4 Partial motivation and the evaluative aspect of metaphors While metaphorical and metonymic mapping is a matching process of the conceptual elements, but importantly, it is also a selection process based on ‘hiding’ and ‘highlighting’ (Lakoff and Johnson: 1980/2003). Deignan (2005: 23) argues that the action ‘grasp’ as a linguistic metaphor highlights the swift action of ‘getting an idea’, but it also oversimplifies “the lengthy pondering that often precedes understanding”. Such selection of saliency is crucial in assigning an attribute or evaluation to the subject matter. For example, *digesting the idea* and *grasping an idea* represent differences in interpreting the pace, manner, and quality of the process of ‘understanding’ – *digesting* seems to entail a prolonged mental process with difficulties while *grasping* highlights the swiftness or even implies a brief understanding. It is clear that in this example, the understanding of a linguistic metaphor to an extent interacts with the way we understand the literal meaning of the word where the visual representation, physical experience and evaluation is provided first-hand based on our real-world experience.

2.5 Units of meaning and prosodic meaning Sinclair (1991; 1996/2004) in his seminal works suggests that meaning does not always reside in a word, but emerges subtly across a lexical phrasal unit and forms a “unit of meaning”. The whole phraseology is to be regarded as one unit constituted by a co-selection of inherent components from a specific contextual environment, and gives rise to a distinctive, prosodic meaning. One of the examples given is *brook* (ibid.: 36-37), a relatively infrequent word which denotes ‘tolerate’, nevertheless, whenever it is used, it consistently occurs in the phraseological pattern of ‘*not + brook + negative events*’ as in *brook no opposition* or *inability to brook any criticisms*. Together with the usual collocation of an authoritative figure (e.g. *president, army*), the semantic prosody of the whole lexical unit seems to express ‘an authoritative warning on intolerance’. It is a subtle meaning which is not reflected by the single word *brook* but emerges when considering the recurring phrasal components

in the immediate linguistic environment. Hunston (2007) states clearly that semantic prosody should be understood as “a discourse function of a sequence rather than a property of a word” which emerges from a specific phraseology, or a “unit of meaning”. Very importantly, the intuitive use of the lexical unit is also a subjective, value-laden and ideological choice (Thompson and Hunston, 2005) that indicates the attitudinal, affective or evaluative meaning of the speaker. Stubbs (2001) simply calls it ‘discourse prosody’ to highlight the discursive and communicative functions of the lexical unit.

2.6 Modality, phraseology and evaluative meaning In the discussion of evaluative phraseology, apart from the usual modal auxiliaries *can, should, must*, etc., Hunston (2011) also identifies a range of modal-like expressions, such as *it is difficult to, there is a need to, be in capable of, wouldn't dream of*, which denote different evaluative meanings, not limited to possibility, difficulty, ability, necessity and inclination, and construe a future event. The co-occurrence of the components of these lexical phrases is not arbitrary or accidental. In her studies of the frequent lexical sequences of *decide*, Hunston (2003) argues that the co-occurrence of the internal elements as in ‘modal+*decide*+wh-clause’ and ‘*decided*+that-clause’ are not the results of the joint operation of paradigmatic and syntagmatic patterns, but is a “single, phraseological choice” (2003: 37-38) that expresses ‘responsibility’ and ‘a completed action’ that characterise ‘decide’.

By analysing the distribution of different word-forms of a verb, Hunston (2011) hypothesises that action verbs that involve a “concerted mental process” do not usually appear in finite form but are more likely to attract modality (2011: 88). It was found that chances for verbs such as *decide, determine, explain, consider* to co-occur with modal expressions are higher, compared with other action verbs such as *walk or carry*. This provides a possible explanation for the consistency of the pattern ‘modal+*decide*+wh-clause’ just discussed.

In Section 5, we will investigate the phraseologies that are prone to co-occur with *embrace* and the prosodic meanings that emerged as a result. This would allow us to draw conclusions on the motivations of using this precise word choice of *embrace* in discourse.

3 Methodology

The Bank of English (hereafter BoE) is employed as a research instrument which provides the evidence for the qualitative studies of the senses and uses of *embrace* and the quantitative studies of its collocation and phraseology. The BoE is a 4.5 million-word, general corpus comprised of authentic English texts from primarily Britain (71%), constituting 20 sub-corpuses of written and spoken texts from across different genres, including printed media, academic texts, radio shows, etc. (University of Birmingham, n.d.).

3.1 Statistical significance and T-score The main purpose of inventing the corpus is to study the tendency and frequency of occurrence of a collocation and phraseology of a node word (Sinclair, 1991; Hunston, 2002). To measure the regularity and the certainty of the collocational pairings and phraseological patterning relies heavily on statistical methods and the justification is based on statistical significance. In this research, the statistical significance of collocates is measured by T-score, while raw frequencies of the occurrences will also be listed for reference. T-score measures the “certainty of collocation” which takes into account of the size of the corpus and the relative probability for a collocate to co-occur with the node word in the entire corpus (Hunston, 2002: 73). Collocates having a T-score of 2.0 or above are said to be worth studying (Barnbrook, 1996: 98) and only these instances will be cited in this research.

3.2 Collocation picture The BoE can also build a ‘collocation picture’ which shows all the top collocates at each position within a 6:6 span. Conventionally, positions to the right of the node word are termed ‘N+position’ and ‘N-position’ for those on the left. All the words in the BoE are tagged by word class, so we can call out collocates of a specific word class in a specific position. In addition, a collocation profile of each of the collocates within the 6:6 span can also be built. This function is significant as the phraseology extended across lexical boundaries becomes noticeable.

3.3 Qualitative and quantitative research A qualitative study is conducted on a set of 500 randomly extracted concordance lines of EMBRACE to study the metaphoricality of the word. The literal and metaphorical senses and uses are identified manually and categorised deductively by interpreting the context of the node word. The quantitative study of the collocational and phraseological behavior of *embrace*, on the other hand, is expanded to all the 11,200 occurrences in the BoE for a statistical indication of the prevalence and certainty of the lexio-grammatical patternings. To study the collocational preference, collocates up to N+3 positions are extracted as the pilot study showed that positions beyond N+3 are mostly irrelevant or repeated. The common qualities of these frequent collocates will be analysed to find out the correlation with the frequent co-occurrence of modal expressions with *to*. The findings will allow us to generalise the prosodic meaning emerged from the phraseology.

For both studies, all the word-forms of EMBRACE are analysed. The distribution of each word-form among 500 random samples is proportional to that of the entire corpus of 11,200 occurrences. The practice of sampling concordances is adopted by researchers such as Deignan (1998, 1999) and is discussed in Hunston (2002) on collocation research:

If a word has 10,000 occurrences in a corpus, it may be possible to look only at 500 concordance lines, but collocational software can make calculations using all 10,000 occurrences and so give information that is more reliable (Hunston, 2002: 75).

4 Findings and discussions of the metaphoricality of EMBRACE

This section is an analysis of the literal and metaphorical senses of *embrace* based on their semantics and collocational features provided by the concordances. Table 1 below shows the four types of senses identified and their distributions. This will lead to the discussions in Section 4.4 about its metaphorical motivations and selective nature, as well as evaluating its systematicity.

Senses	Number of instances	Percentage (out of 500 concordances)
Literal	84	16.8%
Metaphorical	370	74%
Literary #	41	8.2%
Other uses *	5	1%
Total	500	100%

#Due to a word limit, the literary uses of *embrace* will not be presented in this paper.

*These instances involve the special use of *embrace* as a proper noun which is irrelevant to this study

Table 1: Different senses identified and their distribution in the sample set of 500 concordances.

4.1 Literal sense of embrace and its features *Embrace*, in its literal sense, refers to the physical action of holding a person or an object in arms. The 84 concordances are analysed qualitatively and categorised into five different groups according to their distinct emotional features and contexts: 1) expression of love, affection, and fondness; typically found among family, friends, or members of a community; 2) expression of respect, appreciation, and reconciliation; 3) expression of welcome, acceptance, and support; 4) sexual or erotic act; 5) an act of holding objects of a certain size without involving particular emotions.

The concordance set shows a number of scenarios of embraces, from which we can generalise that an embrace can be understood as an expression of fondness and respect, demonstrating a positive and welcoming attitude. The co-texts also reveal the *spontaneous* and *voluntary* nature of an embrace, driven by an eagerness and a strong passion. The concordances below exemplify these attitudinal and emotional features with the respective adjectival and adverbial modifiers highlighted in bold type:

- 1) Ekberg and Orson Bean in **passionate** embrace. And when the members began to
- 2) **Choking back tears**, Ivanisevic **clambered through a sea of flags and banners** to embrace his father,

- 3) mother. Mama!" He **rushed forward to embrace** her, and then extended a hand to
- 4) heart-to-heart turns into a **lingering embrace**. This time **neither of them tries to stop**
- 5) flap about like imprisoned birds or **embracing in tearful turbulence**. Here they

Table 2 gives an account of the physical features associated with an embrace which involves a welcoming attitude shown by the open arms, a forward motion signalling the approach of another person, the attachment of two bodies indicates the unity of an embrace, while prepositional phrases ‘threw *into*’ and ‘wriggling *out of*’ describe the physical enclosure that an embrace creates, a state in which a person or an object is enclosed, contained or grabbed hold of.

Actions associated with an embrace	Features	Concordance lines
1. Spreading arms	anticipating and being welcoming	6) to the day when he can ‘ open his arms to embrace his brother in restored communion ’ 7) Nicole crouched down, arms extended , and Michelle ran into her loving embrace.
2. Approaching another person	a forward movement	8) walked over to his mother and almost embraced her. 9) Penelope stepped forward to embrace her sister and kissed her on both* *incidence cited outside of those 500 concordance
3. To be held in arms	being enclosed	10) Nancy threw herself into her father’s embrace 11) Michelle ran into her loving embrace. She wrapped her arms around Michelle like a protective cloak
4. Two bodies attaching to each other	holding each other tightly in arms	12) wrapped her arms around Michelle like a protective cloak, holding her tightly against her own trembling body . 13) I want you to take each other in an embrace. Push your bodies close to each other .
5. Two bodies join together and form unity	within an enclosure	14) hold her tightly in an embrace so close that not even air come between us . 15) Rose told her, wriggling out of the embrace. “What happened?” Mrs Struthers asked weakly.

Table 2: Physical actions associated with an embrace

4.2 Metaphorical sense of embrace *Embrace* in its literal sense refers to an *embodied action* of holding a physical object. When it is used metaphorically, the literal sense is transformed into denoting a *mental process* of supporting or including certain concepts. Such semantic transformation reveals systematically in a simple collocate search in the corpus. Frequent noun collocates at the N+1 position of the verb *embrace* are extracted, which range from secular matters (e.g. *life, death*) to everyday encounters (e.g. *change, technology*), from socio-political notions (e.g. *democracy, capitalism*) to religious beliefs (e.g. *Islam, Christianity*). Such diverse collections of collocations also imply the complexity of the uses of *embrace*, and for which a study is conducted to categorise the various uses of the word.

4.2.1 Metaphorical sense 1: ‘to support or accept a concept enthusiastically’ This sense refers to the action of supporting or accepting a concept with enthusiasm. It takes up a majority (74.6%) of the 370 metaphorical instances. In this sense, five uses can be categorised, namely, ‘welcome’, ‘pursue’, ‘adopt’, ‘accept’ and ‘subscribe to’. Concordances showing the prototypical usage will be cited to demonstrate the salient features that mark the distinctions.

'Welcome' – positive attitude and evaluation The 'welcome' use indicates a positive attitude and evaluation associated with appreciation, approval and an eagerness for a good cause or desirable happenings, and at times, it shows willingness and positivity despite difficult circumstances. The major distinctive feature of this use is that it indicates a *preference* or a *stance* rather than an attempted action. The sentiment features are illustrated by the concordances below with the adjectival and adverbial phrases central to the classification highlighted in bold type.

- 16) Karen Anderson is one worker who embraces **each new working day with enthusiasm**.
- 17) Now that fashion has embraced it **with open arms**, the Asian influence is spreading further still
- 18) He was **one of the first** Liberal Democrats to embrace working with Labour.
- 19) Mr Bush has responded by embracing the sections of his party **that he once avoided**.
- 20) **Once** the egotistical, autocratic, and feudal style of management is ditched in favour of something more modern, more managers **will be keen to** embrace **the concept of teleworking**

'Pursue' – tendency and readiness for a future action The 'pursue' use describes a *motivated* action. Corpus evidence shows that this distinct use expresses the *tendency to consider* or the *readiness to realise* certain ideas. It is evident from the use of modalities which assign a condition for future actions, indicating an obligation, necessity, desirability, volition and ability. These expressions denote a *conscious* choice, which contrasts the adverbial phrases of the 'welcome' group characterised by attitudinal expressions. The below concordances show the typical examples with the respective modal expressions highlighted in bold type:

- 21) 'Theatre **should** embrace new technology. If it's not ready for change then I'm sorry.
- 22) exploded the myth that to win elections it is **necessary to** embrace the consensus
- 23) Right and left have both got it wrong, **so let us** embrace the middle ground and forget the differences of the past.
- 24) about socialism in East Germany. **PREPARED TO EMBRACE** A UNITED GERMANY?
They are **preparing to** embrace,
- 25) **seems unable to** embrace Goethe's concluding optimism, it is still a powerful theatrical event

'Adopt' – taking action *Action* is the key distinguishing feature of the 'adopt' group, which is associated with realised notions, such as policies, principles, practices or ways of life. These collocates are highlighted in bold type in the example concordances below. Unlike the 'pursue' group which is characterised by modalities, the 'adopt' group is dominated by the finite use of *embrace* (e.g. *embrace/s*, *embracing*, *embraced*) which indicates either an on-going or a completed action.

- 26) and Eastern Europe are at last embracing **free markets and sound fiscal policies**.
- 27) no easy way to rule out the sort of **cruel and murderous practices** embraced by some of his followers.
- 28) Informix is embracing **ecommerce**, and declaring the Internet to be the "future of our company".
- 29) while my younger brother and I embraced **country life** with enthusiasm.
- 30) Brisbane has become a boisterous but relaxed cosmopolitan city, embracing **its sub-tropical lifestyle**.

'Accept' – being ambivalent or reluctant While 'welcome', 'pursue', or 'adopt' uses are characterised by an anticipation or a proactive reaction towards an idea, the 'accept' use distinguishes itself by an ambivalent or involuntary attitude. The co-texts suggest that the 'accept' use usually involves a long and difficult process in fulfilling certain conditions, and sometimes, 'to embrace' means to succumb to difficult circumstances or to make concessions in order to resolve certain issues. In addition, the modalities taken very often indicate difficulties or reluctance, while the collocates denote unfavourable circumstances (e.g. *risk*, *change*, *loss*). The below shows some of the examples where the modality or the co-text is highlighted in bold and the collocates in italics. Many of these collocates are concepts associated with changes or new experiences that the people concerned are uncertain about.

- 31) In Europe, many cattle farmers may **have little option but to** embrace *extensification*.

- 32) A survey published today reveals that while whites **are increasingly ready** to embrace a *multi-ethnic society*
- 33) **Only after** he creates a new heaven, or at least after he knows he will be able to do so, **could he be willing to embrace** *amor fati*
- 34) years before Oxford and Cambridge were **forced to abolish religious tests and reluctantly embrace** *the sciences*
- 35) The people here welcome *the plan* tentatively, but **there are all sort of questions that they want answered, a lot of details they need to know before they can embrace it fully and unequivocally.**

'Subscribe to' – *to attach to a belief* This use of *embrace* is the most distinguishable as its collocates are usually related to belief systems – not limited to religions, but faiths that may shape or impact people's mode of living. The below are some of the examples:

- 36) inhabitants had resisted all attempts by their Muslim rulers to embrace **Islam**
- 37) India's 'untouchables' embraced **Christianity** because they had few rights in the caste system.
- 38) I must embrace **asceticism**, throw my balms and ointments into a black plastic bag, and deck my bathroom like a cell.
- 39) A way to deal with that is to embrace **either family or the spiritual**, both of which Madonna appears to be doing now.
- 40) For the many Australians who have embraced **Tibetan Buddhism as a way of life**,

4.2.2 Metaphorical sense 2: 'to include' Another metaphorically-derived sense of *embrace* is 'to include' which constitutes 94 instances. It refers to the inclusion and integration of concepts or matters, or an allowance of heterogeneity, leading to an extension or a diversification of a scope, and therefore the object collocates, in bold type below, usually indicate a range or a variety of items.

- 41) a Commonwealth that embraces **all - all classes, all sections, all interests** - in a common life.
- 42) the court that expanded the concept of legal justice to embrace **social justice**.
- 43) soon afterwards the movement went on to embrace **a much wider range of religio-cultural issues**.
- 44) Sydney Festival, was held in January this year and embraces **film, theatre music, dance, street performers, workshops and food**.
- 45) coalition, which managed to embrace **Ulster Unionists and their hated enemy Sinn Fein**, as they sensed it was to be their day.

The 'include' use is relatively neutral in sentiment compared to those of the 'metaphorical sense 1' as the co-text of the concordances does not necessarily suggest any evaluation on the action itself. By intuition, *embrace* seems to deliver a subtle positivity compared to the word *include* which is seemingly neutral. This positivity is probably 'primed' (Hoey, 2005) by the literal sense of *embrace* which usually denotes enthusiasm and eagerness. However, based on the corpus data, this positive evaluation or sentiment is not salient in its 'include' sense, or at least, not as strong as the 'welcome' use.

4.4 Metaphorical motivation As a linguistic metaphor, *embrace* denotes that a *physical experience* of 'holding somebody/something in arms' (the vehicle/the literal sense) is mapped onto a *mental process* of 'supporting/including a concept' (the topic/the metaphorical sense). As the corpus citations show, policies, principles or religions are objects to be 'embraced'. In this section, based on the concept of 'metaphor from metonymy', we will look at the metonymic connections bridging the literal and the metaphorical senses.

4.4.1 'Metaphor from metonymy' Drawing on the idea of 'metaphor from metonymy' (Goossens, 2003), we will discuss the salient sentiments, mental states, movements or physical features of the vehicle 'embrace' that are metonymically highlighted and transferred to a metaphorical counterpart, serving as a semantic resource that motivates the various distinctive metaphorical uses of *embrace*.

Emotions: affection → enthusiasm Emotion is possibly the most noticeable element in the metaphorical transfer. In Section 4.2.1, we have seen that affective expressions describing eagerness are commonly found in the concordances showing the literal sense of *embrace*. This positive attitude and enthusiasm to a great extent motivates the ‘welcome’ use and is also commonly found in other uses expressing the keenness, support or acknowledgement for a concept.

Motivation: forward movement → anticipation As illustrated in Table 2, or by our own experience of embracing, the movement of spreading one’s arms and leaning forward are the key features of the action. Such forward movement represents a motivated action and seems to be transferred to the ‘pursue’ use which is characterised by its forward-looking attitude or the readiness in considering and realising certain ideas.

Action: to hold → acceptance, capture and possession Also from Table 2, or by general knowledge, an embrace involves holding another person or essentially, *taking* somebody in arms. When this action is transferred to the abstract domain, it is understood to be *accepting* an idea or a belief. It concerns most of the metaphorical uses because ‘to accept’ represents the threshold that underlies the actions of welcoming, pursuing, adopting, including and subscribing to ideas or beliefs.

Form: physical attachment → integration and enclosure The resulting state of an embrace is to have two bodies holding close to each other and form a unity. The form of having two entities combined into one seems to be replicated in the topic to denote bringing together a variety of concepts which is one of the major uses of the ‘include’ sense.

Mode: enclosure → inclusion Closely linked to this physical enclosure is the way the arms spread to create a wider space to accommodate another person, which is obvious in the topic ‘inclusion’. Motivated by the space created by the arms, *embrace* in its ‘include’ sense entails a spectrum, and is realised in linguistic expressions like *full, broad* or *a wide range* to express ‘inclusiveness’.

4.4.2 Partial motivation Metonymic/metaphorical motivation is selective in nature – some of the elements or qualities of the vehicle entity are not reflected in the topic. Section 4.1 showed that the action ‘embrace’ is a spontaneous and instantaneous reaction which is very often driven by emotions and eagerness. These intuitive mental aspects of the vehicle do not seem to reflect on the topic of the linguistic metaphor.

The ‘pursue’ and ‘accept’ uses are largely associated with an attempt or a plan which involves a precondition, mental preparation, and at times, a concerted effort, which attract modalities expressing obligation, necessity, volition, and difficulty (e.g., *necessary to, willing to, have little option but to*). In these uses, the metaphorical *embrace* is understood as a deliberate choice or action involving conscious considerations and decision-making, but these are the lengthy mental processes that are not observed in the literal *embrace*. One may argue that the modality of desirability or willingness is also found in both uses. However, corpus evidence shows that this inclination very often involves a third-party (e.g., *so let’s embrace, want him to embrace*) or is conditional (e.g. *only after... could he be willing to, increasingly ready to*). To a certain extent, the act is not voluntary as the action is either performed on request, subject to certain circumstances or involves difficulties.

These observations on conscious decision-making are especially marked in the ‘subscribe to’ use. Remarkably, as highlighted below, the concordances concerning religions are very often associated with coercion, negotiation, and even an exchange of interests, which challenge the usual understanding of religious commitments as a response to spiritual calling or teaching.

- 46) Muslims had established firm control over the Balkan peoples, **forcing them to embrace Islam**
- 47) how the Soviet leader **received the ayatollah's invitation to embrace Islam**,
- 48) reluctant to discuss how a computer programmer **came to embrace Islam with such fervour**,
- 49) Wightman, who **temporarily embraced Islam**, added,
- 50) denied that his **recent decision to embrace Islam was a ploy to save his life**.
- 51) at the Mosque somebody comes up with an Englishman or an American who **embraces Islam in order to marry his wife.**"

There are in fact concordances which show a genuine and sincere attitude in ‘embracing’ a religion but they seem to indicate a mature decision which is to be declared in a formal fashion:

- 1) As many pagans **professed to embrace Christianity**, they began to influence, in particular, an emphasis upon the “mystery”
- 2) One of six siblings, his grandfather was **one of the first people in Nigeria to embrace Christianity**, and his father was a dedicated evangelist.
- 3) Mr Rushdie **announces that he has embraced Islam**; religion for him has always meant Islam.
- 4) <p> 5779-Muslim male of West Indian descent, 25, 6ft, **I embraced Islam several years ago**, seeks to correspond with Muslim sister
- 5) They met under the aegis of the New Muslims' programme, though some of them **embraced Islam as much as 20 years ago**.

The findings become more remarkable when they are contrasted with *believe in*, the near-synonym. The emphasis of the mental process is almost absent in the corpus citations of BELIEVE IN – they mostly reflect an *orientation* (i.e. to believe or not to believe) while one’s religious commitment is not articulated as thoroughly as observed in the ‘embrace’ group. We could argue that *embrace* tends to express a serious and committed religious decision and is more likely to occur in contexts where one expresses or proclaims a religious cause and engagement. This observation provides further support to the claim that *embrace*, in its metaphorical sense, is characterised by substantial mental processes leading to a conscious, deliberate decision which does not correspond to the spontaneous and intuitive nature of the vehicle. An exact explanation may not be offered for this discrepancy but we may consider the fact that an ‘embrace’ is a more formal and passionate gesture compared to a ‘hug’ which appears to be more casual and brief, and is therefore conceptually closer to the various metaphorical senses of ‘embrace’.

4.2.3 Closing remarks By employing the ‘metaphor from metonymy’ framework, we have seen that the mappings between the vehicle and the topic go through metonymic selections and metaphorical transformation processes in which only certain aspects of an embrace are highlighted, namely, the emotions, movements and the resultant state, which motivate the metaphorical senses. The spontaneity and instantaneity typically featured in a physical embrace do not seem to reflect in the topic.

The metaphorical processes discussed only outline the underlying metaphorical motivation of *embrace* as a linguistic metaphor. Speakers, however, do not consciously manoeuvre these cognitive processes or study these metaphorical motivations in order to produce or receive the meaning of *embrace*, nor essentially do they need to realise *embrace* is a linguistic metaphor in order to perceive the meaning. Deignan (2005: 67) also suggests “if people are actually tolerant of ambiguity between literal and non-literal meaning, or can accept words having both kinds of meaning at once, there may be less difference in processing than is sometimes assumed”. It is therefore realistic to take into consideration how our physical, emotional, visual, and cultural experience of an embrace would have a subtle impact on our understanding of its metaphorical sense. Nevertheless, our perception of the metaphorical sense is also contingent upon our linguistic encounter with the word as Deignan (2005: 221) argues, “not every linguistic metonym that we produce is the result of online metonymic processing” because the “fixness” of metonyms is “a part of our knowledge of English”.

Given that the process of thought and understanding is complex and intertwined with unconscious aspects of memory, perception and feelings, different people will arrive at an understanding of *embrace* which is subtly different from others based on their subjective and personal judgement and experience. In other words, the interpretation of *embrace* is, to a certain extent, triggered by a conventional imagery of a physical ‘embrace’, but the vividness, the content and the emotions involved vary within a flexible range. The conventionality and the systematicity ensure that the interpretation will not lead to ambiguity or misunderstanding, but at the same time, it allows subtle aspects of meaning (e.g. emotion, value judgement and intention) to be delivered at discourse level. Gibbs (1994: 125) explains that the imagery “seem[s] to embellish what is communicated to listeners, providing them with nuances that may be part of the speaker’s subjective experience.” In this sense, the slogan *embrace challenge* can be considered as a strategic use or a precise choice of words in that, instead of using words such as *accept* or *welcome* which denote a rather rigid meaning and indicate a fixed emotion, *embrace* leaves room for a more open metaphorical

interpretation contingent upon the receiver's projection of emotion and visualisation towards a literal 'embrace'.

5 Findings and discussions of the phraseologies of *EMBRACE*

Following Sinclair's concept of 'units of meaning' (1990, 1996/2004), prosodic meaning resides in phrasal constructions and will only emerge systematically if they are studied in large numbers using the corpus method. To investigate the prosodic meaning of the metaphorical *embrace*, a corpus study of its phraseologies is conducted on all the 11,200 instances of *EMBRACE* in the BoE. The characteristic collocational profile and the habitual modality of the word will be studied, from which conclusions on the prosodic meaning of *embrace* will be drawn. As we will see, the word seems to highlight the motivation and commitment involved in dealing with new situations and to 'embrace' is to 'brave' these challenges.

5.1 Collocational behaviour of *EMBRACE* The top ten nominal collocates of the verb lemma *EMBRACE* with the highest T-score, from N+1 to N+3 position, are extracted to find out the general qualities of the collocates which may explain the motivation behind the collocational and modal preferences. It is found that *change* (or *changes*) and *technology* occur more frequently compared to the other collocates. 'Change' implies an emerging situation, while further collocate searches suggest that the most frequent pre-modifier for *technology* at N+2 and N+3 positions are those related to innovation, for example, *new*, *latest*, *advanced*. A close examination of the other collocates also suggest similar results: notions, such as *democracy*, *capitalism*, *professionalism*, *internet*, *Euro* or *market*, are very often new initiatives as revealed from the co-texts. In addition, a general search of the top collocates of *EMBRACE* ranked by T-score also suggests that *new* has a relatively high T-score of 13.68 among many other grammatical items. This evidence validates the conclusion that *embrace* is associated with changes, new situations and novel experiences.

5.2 Modality of *EMBRACE* Hunston (2011) hypothesises that verbs associated with 'concerted mental process' are very likely to attract expressions of modal meaning (see Section 2.6), while we have already seen in Section 4.4.2 that conscious considerations and decision-making are the key features that distinguish the metaphorical *embrace* from its literal counterpart. In this connection, by means of corpus techniques, we will examine the associations between *embrace* and its habitual modalities.

The ten most frequent collocates of the *EMBRACE* in N-1 position are extracted. It is found that *to* has an exceedingly high T-score of 38.89 and a raw frequency of 1,870, which is far higher than *all* ranked the second with a T-score of 16.29 and 319 occurrences. A close inspection of the top collocates of *to+EMBRACE* (see Table 3) shows that they are mainly modal expressions indicating inclination (e.g., *willing to*, *reluctant to*), volition (e.g., *tried to*, *rush to*), readiness (e.g., *ready to*, *prepared to*), obligation (e.g., *need to*, *have to*), and desirability (e.g., *eager to*, *want to*).

Collocates of <i>to+EMBRACE</i> (T-score / Frequency as collocate)			
willing (6.54 / 43)	eager (4.58 / 21)	rushed (3.99 / 16)	want (3.60 / 15)
ready (6.05 / 37)	rush (4.46 / 20)	reluctance (3.87 / 15)	order (3.33 / 12)
need (5.60 / 33)	prepared (4.43 / 20)	reluctant (3.86 / 15)	keen (3.29 / 11)
able (4.70 / 23)	tried (4.18 / 18)	enough (3.86 / 16)	difficult (3.21 / 11)
willingness (4.58 / 21)	slow (4.09 / 17)	forward (3.67 / 14)	wanted (3.18 / 11)

Table 3: Top 20 collocates of *to+EMBRACE* ranked by T-score

The research findings show that *embrace* tends to attract collocates relating to plans, initiatives or emerging situations (e.g., *new technology*, *democracy*) which entail uncertainties and challenges. Motivation, determination, and concerted effort is therefore required and is expressed linguistically through *willing to*, *need to*, *ready to*, *tried to* or *prepared to*. These modal expressions do not essentially construe a genuine desire, but an agreed deliberate action based on necessity or requirements. For example, *willing to*, *need to* and *have to* entail fulfilment, and *prepared to*, *tried to*, *able to*, *time to* highlight the conditions set out for a commitment, namely, readiness, openness, ability and timing. What is worth-noticing is the manner, openness, or ability involved in the action is subject to judgement or evaluation (e.g., *rush to*, *slow*

to and *able to*) as the action involves decisions, and decisions entail consequences and responsibilities. We can argue that these modalities function like a hedging device against the future actions and the unforeseeable circumstances.

5.3 Prosodic meaning of *Embrace* The findings demonstrate how modal expressions can be used strategically as a semantic resource which reflects one's evaluation, motivation, sentiment towards an action and allows the attitudinal meaning of a word to emerge. Drawing on the two collocational forces on both sides of the node word – modality on the left and noun collocates on the right, I would conclude that *embrace* is the precise word choice to express 'having motivation and commitment to anticipate and engage in changes and challenges'. This implicit meaning is derived from the collocational preferences of *embrace* which construe the determination and decision in committing to changes or new situations. It has to be emphasised that the prosodic meaning is slightly different from Sinclair's 'unit of meaning' (1990; 1996/2004). Sinclair looks at prosodic meaning which resides as an essential component of a phrasal unit – a constrained construction of collocation and colligation. Meanwhile, the phraseology of *embrace* discussed here is not a fixed (or semi-fixed) construction, but the habitual collocational behaviour and modal preference which provide evidence for the unique meaning of the word. I regard this as an interaction between the phraseologies and the meaning of *embrace* – how the habitual collocates, modalities and the meaning of *embrace* are mutually attracted to each other and gives rise to a subtle prosodic meaning reflected by the phraseology.

6 Conclusion

This study is an attempt to investigate the literal, metaphorical, and prosodic meanings of *embrace* and their respective motivations. By analysing their underlying meaning-production mechanisms, we can better understand how certain subtle and intuitive perceptions towards a word are generated which cannot be easily explained or observed.

6.1 Metaphoricity of *Embrace* The literal and metaphorical senses and uses of *embrace* are analysed by studying their collocational features which provide clues for generalising the motivations of the linguistic metaphor. The motivation is grounded on a metonymic process, in which the emotional intensity and the progression of a physical embrace are selectively highlighted and systematically go through the metaphorical transformations and create various uses – 'welcome', 'pursue', 'adopt', 'accept', 'subscribe to' and 'include'.

Admittedly, whether or not and to what extent our understanding of the linguistic metaphor is drawn on a physical embrace during our online mental processing go beyond what a corpus study can explain. However, the corpus provides evidence of the physical and emotional connections between the literal and the metaphorical senses. These are the subtle yet subjective aspects which a receiver may draw on in understanding a linguistic metaphor, and also, as argued throughout the study, reflect the evaluation and the intention of the interlocutor in the discourse. For example, whether to say '*embrace*' or '*include*' *the minorities* concerns a precise word choice for delivering a specific attitudinal meaning and feeling, and inviting a different perception.

This example echoes the remark of Lakoff and Johnson (1999: 58) that ideas without the use of metaphor can be "relatively impoverished and have only a minimal, 'skeletal' structure". As we have seen, the interactions between the literal and the metaphorical interpretation indeed create the rich content of a word with the abstract concept construed through the visual, emotional elements, while the meaning, however, appears rather fuzzy to describe precisely. This subtle, subjective and imaginative aspect of language is very often overlooked in pedagogic English as both teachers and learners strive to find an absolute and objective definition for a word. Learners can be encouraged and trained, possibly with a corpus, to work out the metaphorical connections, explore the imagery of a word and interpret the meaning on their own.

6.2 Phraseology and prosodic meaning The study has also shown how phraseologies can be exploited strategically as a semantic resource to reflect the prosodic meanings of *embrace* which could be too subtle to be detected by intuition. By investigating collocational and modal preference of *embrace*, it is found that *embrace* tends to occur in contexts where the agent has the need or obligation to make decisions

or to deal with changes or uncertainties. *Embrace* can then be understood as a precise word choice for expressing ‘having the motivation and commitment to anticipate and engage in challenges’, reflecting a specific attitude and evaluation of the agent towards an emerging situation. This also explains why the word tends to attract specific types of modalities and collocates.

The prosodic meaning is quite subtle while it is only reflected in some of the uses of *embrace*; dictionaries, especially learner’s dictionaries, therefore tend not to include this sense for sake of simplicity and clarity. Example sentences can be included instead to show the characteristic uses of the word or the various typical contexts where the word can be used.

6.3 Limitations and recommendations It has to be emphasised that the interpretation of the senses or uses of *embrace* in this study relies heavily on my subjective judgement based on the information given in the co-texts, which is sometimes decontextualised even in the expanded view of the concordance lines. The categorisation therefore is not meant to be definite and is confined to the senses and uses which are more distinct and prominent. Also, the concordances cited and discussed are mainly the more representative ones which show a more concise and typical usage. New categories will possibly appear if more detailed and rigorous investigations are carried out on the ambiguous uses.

The same can be said to the phraseology of *embrace*. The prosodic meaning of *embrace* investigated is mainly based on the phraseological preference revealed in the BoE, which is dominated by the uses of *welcome, pursue, adopt* and *accept*, the major uses of metaphorical sense 1. The prosodic meaning studied therefore may not be applicable to the ‘include’ sense. For more sophisticated and accurate research results, future research should rigorously exclude the instances of the ‘include’ sense, while based on these extracted concordances, a contrastive study of the phraseologies of EMBRACE and INCLUDE can be conducted to observe the differences in their prosodic meanings.

The creation of a metaphorically-derived lexis is largely contingent upon how world matters are conceptualised which also give rise to the complexity and subtlety in the metaphorical meaning. Such interaction motivates the perpetuating creation of novel metaphors, and the openness to interpretation also allows flexibility in usage. It would be constructive to carry out critical studies on how new linguistic metaphors are created and manipulated as jargons or buzzwords particularly in business, management and development discourses. The research can shed light on how new meanings and uses are created as well as how ideologies and power relations are established and repackaged in metaphors.

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