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English-to-Hindi Mapping of Compositional Verb-Particle Constructions

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Abstract

The present study investigates the semantic correspondence in the Hindi translation equivalents of compositional English verb-particle constructions (EVPCs) with the particle up. The compositional constructions include the directional and aspectual functions of particles. The study concentrates on the semantic representation of literal spatial directional and aspectual completive functions of the particle up in Hindi, a major Indian language. The researchers selected some frequent EVPCs, took examples from the British National Corpus and manually translated them into Hindi with the help of relevant dictionaries and corpus resources, including native speaker intuitions. Further, the obtained Hindi translational equivalents were analyzed for morphosyntactic structure and semantic correspondence. The study found that the compositional EVPCs are mapped in Hindi by simple(v) and complex verb constructions(verb/noun/adjective/adverb-verb). The spatial directional sense of the particle up is either lexicalized in the simple Hindi verb or polar verb (v1) of the Hindi compound verb(v1-v2), whereas in Hindi conjunct verb constructions, this directional sense is explicitly realized as a verbal modifier (generally adverb). The vector verb (v2) of the Hindi compound verb appears to map the aspectual-completive sense of the respective particle.

Keywords: *English-Hindi Mapping, Verb-Particle Constructions, Semantic Correspondence*

INTRODUCTION

English verb particle constructions (e.g., *put out, take up,* and *give in*), also known as phrasal verb constructions, have multiple contextual sense interpretations and have attracted much attention from both theoretical and applied (in both pedagogical and technological applications) linguistics (White, 2012; Roohani & Heidari, 2023). The complexity of the sense analysis, identification, and contextualization of English verb particle constructions (VPCs) is much more challenging, particularly in the context of language learning and their processing in multilingual applications. In particular, translation from English to other languages poses complex difficulties at multiple levels: identifying and contextualizing all the available senses of English VPCs and obtaining their exact equivalents in the target language (Salehipour & Karimnia, 2015). Verb-particle constructions in English consist of a verb and an adverbial or prepositional particle(s), for example, *drink up*, *take out*, *turn down*, *hand over*, *put on,* etc. Their semantics vary from compositional to non-compositional. In compositional constructions, the individual parts (verb and particle) contribute to the meaning computation, and they are interpretable compositionally, as in *she took up the carpet*; the compositional meaning of the verb *take* and particle *up* determines the semantics of the expression 'to lift'. On the other hand, the non-compositional semantics require special interpretation and are added to the lexicon, e.g., *give up* 'to surrender' and *pick up* 'to learn'. Particles seem to add their own semantics to compositional VPCs and are regular when occurring with verbs in specific verb classes (Cook & Stevenson, 2006). For instance, the particle *up* has a sense of direction when it appears in VPCs with verbs of motion such as *go/move/climb up* (Villavicencio, 2006). The semantic contribution of particles in compositional VPCs is the addition of directional (*up* in *go up*) and aspectual (*up* in *drink up*) meanings to the verb (Jackendoff, 2002; Thim, 2012). The VPCs belonging to this group usually present a transparent meaning, and as a result, their meaning can be easily transferred from one language to another. The present study examines the English VPCs with the particle *up,* particularly in their Hindi translation equivalents. The study also explores the semantic correspondence of the literal spatial directional and aspectual completive meaning of the particle *up* in Hindi. The Hindi translation equivalents were analyzed in terms of the morpho-syntactic structure of Hindi verbs with regard to the semantic correspondence of the directional and aspectual meanings

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of the particle *up*. The paper also attempts to establish a cross-linguistic correlation between the respective strategies of both languages (English and Hindi). Our study focuses on VPCs using the particle *up* because it is highly frequent and has a wide range of meanings (Tu & Roth, 2012; Machonis, 2008). The directional and aspectual functions of the particle *up* have been examined by Bhatia et al. 2017; Rudzka-Ostyn, 2008; Cook & Stevenson, 2006; Tyler & Evans, 2003; Jackendoff, 2002; Lindner, 1981 and among others. The spatial directional semantics of the particle *up* denote an entity's movement from a lower to a higher position or place, as in *pick up the coin*. On the other hand, the aspectual function of particle *up* is directly related to the completion sense where the particle is replaced by the word completely, as in *drink the milk (completely) up*. For the present study, we selected the most frequent English VPCs with the particle *up* and collected sample English sentences from the British National Corpus (BNC). The collected sample sentences were further categorized according to their senses and manually translated into Hindi by examining several English-Hindi dictionaries and corpora resources, including native-speaker intuitions. Subsequently, a list of Hindi equivalents pertaining to the selected senses of the English VPCs was prepared and analyzed based on their grammatical structure and the representation of semantic information.

English verb-particle constructions have also been considered phraseological expressions in that both constitutive elements (verb and particle) operate more like phrases than individual words (Palmer,1965). Phraseological expressions in one language might have analogous expressions in other languages despite variations in morphosyntactic structures. The key aim of this study is to determine the presence of cross-linguistic connections between English Verb-Particle Constructions (VPCs) and their equivalent counterparts in Hindi. Building a deeper understanding of such semantic relationships between phraseological expressions in different languages holds significance for various tasks, including language acquisition-learning, translation, and the automatic extraction of bilingual/multilingual lexicons. The key objective of our study is to empirically examine a specific group of English VPCs involving particle *up* with their analogous expressions in the Hindi language.

The present study primarily addresses two research questions:

What are the verbal systems in the Hindi language that represent the compositional English VPCs?

How does Hindi realize the spatial directional and aspectual completive senses of the particle *up* in English VPCs?

The linguistic contribution of this study is a detailed examination of the spatial directional and aspectual completion senses of the particle *up* in English VPCs and their corresponding generalizations in Hindi. The present study discusses and demonstrates how particles' basic or core senses are transferred from English to Hindi to compute the meanings of sentences containing VPCs. A detailed investigation has led to the identification and generalization of these two senses with respect to English VPCs. Several studies on particle semantics have shown that particles impart their primary or core meaning in compositional VPCs and exhibit a regular pattern when combined with verbs belonging to specific semantic groups. For instance, the particle *up* has a DIRECTION sense when it appears in compositional VPCs with verbs of motion (as in *go up*) and transfer verbs (as in *pick up*). Tu and Roth (2012) distinguish between two classes of VPCs: compositional and non-compositional. Distinguishing between these two VPCs requires a solid foundation in linguistics. Furthermore, this distinction can be applied to various natural language processing (NLP) applications, such as machine translation. It has also been observed that compositional VPCs can be translated directly, whereas idiomatic or non-compositional VPCs should be regarded as indivisible units. The classification and categorization of verbs in a structure based on their selectional preferences and semantic features are crucial tasks in most forms of text information processing (Levin, 1993), such as machine translation and information extraction. This study will also be beneficial for language learners and teachers to gain insight into how to map these semantically loaded linguistic elements into Hindi, and that will enrich the learning and comprehension of the semantics of English VPCs.

The paper is organized as follows: The second section provides a brief account of the work reported on the translation equivalents of English VPCs in various language pairs and outlines the semantic classification of VPCs in English. The third section presents the methodology followed to carry out this work. After that, we

report the results and discussion where we present the semantic analysis of particle *up* and their Hindi equivalents, and finally, we conclude the paper.

LITERATURE REVIEW

English Phrasal Verbs and Their Equivalent Expressions

English and Hindi, including some other Indian languages, have been compared in the context of divergence studies in recent decades, particularly in the context of machine translation applications (Dave et al., 2001; Sinha & Thakur, 2008; Gupta & Chatterjee, 2003; Chatterjee & Balyan, 2011 among others). However, we have not found a comparative study of EVPCs with Hindi (except for an initial study by Chatterjee and Balyan, 2011). Chatterjee and Balyan (2011) proposed semantic based disambiguation strategies to resolve the context of English phrasal verbs in obtaining the correct Hindi equivalent verbs for particular phrasal verbs in English. They pointed out that the identification of semantics of the object of phrasal verbs is an essential requirement in obtaining the correct Hindi verb forms. The study found that the polysemy of English phrasal verbs is reflected in the Hindi translations, and thus, Hindi has different verbs for each of the senses. A different and specific verb exists in Hindi for each of these senses. They observed that a number of VPCs (e.g. "take up", "put on", "put up", "give up", "get down") have a single Hindi verb for them. However, their study does not provide support for the view that it is possible to establish a cross-linguistic mapping between the senses of the English phrasal verb particles and their corresponding Hindi equivalent verb forms. The emphasis is paid only to contextualizing the phrasal verbs but not to explore the available verbal systems in Hindi that can account for the semantics of relevant particles in English phrasal verb constructions. Therefore, this study examines the compositional semantics of phrasal verb particles *up* and their corresponding mapping in Hindi.

In the recent decade, English phrasal verbs have been analyzed particularly in the context of their translation equivalents in various language pairs (Novakov & Lazović (2022); Santika et al., (2018); Vorobiova et al., (2018); Mandić, S. D. (2016); Awal et al., (2014) among others). In this regard, Awal et al. (2014) underscore the importance of reference corpus in teaching the translation of phrasal verbs into Malay to students. They investigate the various strategies involved in translation and point out that translating English phrasal verbs into Malay is a challenge as the English phrasal verbs are composed of a verb and a preposition or an adverb, whereas in Malay, its equivalent is almost always a single verb, which may represent a different nuance than the combined words. The researchers found that EPVs have multiple equivalents in Malay. In another study, Mandić, S. D. (2016) presents a cognitive approach to the various senses of the English phrasal verb particles *up* and *down* and analyzes their translation equivalents in Serbian. The researcher pointed out that syntactically, there are no structures like the English phrasal verbs in Serbian, and therefore, there exist multiple equivalents in Serbian, including prefixed verbs in the majority of the cases observed, followed by verbs complemented by prepositional phrases, adjectives, adverbs, collocations and very few clauses. The results show that the majority of the Serbian translations of the phrasal verbs with the particles *down* and *up* are prefixed perfective verbs. While presenting contrastive analysis, the researcher found that the Serbian prefixes are markers of perfective aspect just as particles mark telic aktionsart in English phrasal verbs. Following this, Milivojević, N. (2005) shows that particles belonging to phrasal verbs in English are, in their linguistic essence, equivalent to Serbian perfective verbal prefixes. In a most recent study reported, Novakov & Lazović (2022) conducted a comparative study of the translation equivalents of English phrasal verbs with the particles off and up in Romanian and Serbian languages that lacks formal equivalence for phrasal verbs in English. They aim to analyze the morpho-syntactic structure of the translation equivalent of phrasal verbs in both languages and point out the similarities and differences in rendering the semantics of English phrasal verbs in both Romanian and Serbian. They found that the literal spatial senses of these two particles are represented by the verb with certain prefixes in both the languages under consideration. They found that in Serbian translation, prefixed verbs are more frequent than in Romanian, especially with the literal and semi-idiomatic combinations.

Semantic Classification Of English Verb-Particle Constructions

English VPCs have often been classified in terms of their compositionality (i.e., whether all constituents of a VPC, the verb and the particle, contribute their primary meanings to the overall semantic content of the VPCs). The classes fall somewhere between fully compositional VPCs, e.g., *fly up*, and fully idiomatic VPCs, e.g., *get off*

(cf. Fraser, 1976; Jackendoff, 2002; Dehé, 2012). They have been semantically characterized as 'literal (or compositional)', 'aspectual' and 'non-compositional' (or 'idiomatic) (Jackendoff, 2002; Celce-Murcia & Larsen-Freeman, 1999; Quirk et al., 1985; Live, 1965 among others). In view of much of the literature on English VPCs, the compositional type with directional particles will here be referred to as 'compositional', while the compositional type with aspectual particles will be referred to as 'aspectual'. In non-compositional combinations, it is impossible to assign particular meanings to the particles. The combination of verb with a directional and an aspectual particle are semantically compositional and contrast with the non-compositional combinations whose meaning cannot be inferred from their parts (Thim, 2012). This threefold categorization is better subdivided, as shown in Figure (1) The scheme below created by König (1973: 98) represents three semantic types of EVPCs - directional, aspectual and non-compositional.

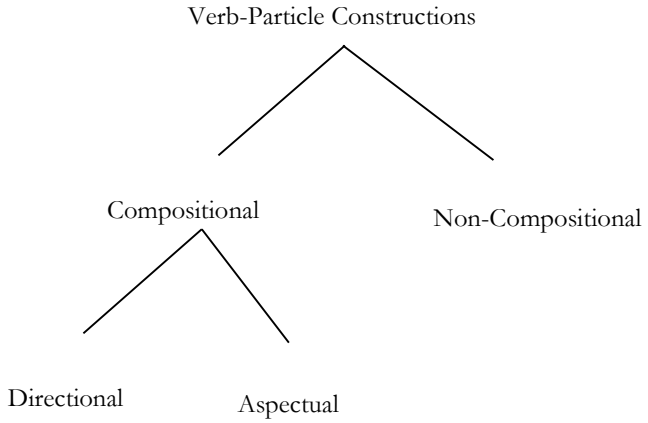

Figure 1 Semantic classification of the English verb particle constructions

Source: Thim, S (2012), p-13

Compositional Constructions: In this type of construction, the verb combines with a directional particle, and the resultant construction is semantically transparent from the meaning of its constituents. The combination of verb and particle allows an interpretation of motion through space, with the particle expressing the direction and the verb expressing the kind of verbal action. This denotes fully compositional semantics in which the particle has a directional meaning, termed directional VPCs. In this categorization, the verb and particle retain their literal meaning. Directional VPCs are fully compositional combinations as their meaning can be inferred from the individual semantics of the parts and, therefore, not stored in the lexicon (Jackendoff, 2002). For instance, in *John picked up the coin,* particle *up* adds a directional upward semantics to the verb.

Aspectual Constructions: Aspectual VPCs are defined as the class where "particles contribute consistent aspectual meaning" (Celce-Murcia & Larsen-Freeman (1999)). Aspectual particles can have inceptive (particles *off, out, up,* e.g. *start up*), continuative (particles *on, along, away, around*, e.g. *play along*), iterative (particle *over*, e.g. *write over*), or completive (particles *up, out, off, down, over*, e.g. *drink up*) meaning. In this categorisation, the verb retains its literal meaning, and the particle may only contribute to the additional aspectual meaning. In aspectual constructions, particle *up* is mainly attributed to its completive functions, as in *she drank up the milk*. The particle introduces "the concept of a goal or an endpoint to durative situations which otherwise have no necessary terminus" (Brinton, (1985) p. 160). The aspectual nature of particles is seen by several as a defining criterion of the phrasal verbs (Live, 1965; Bolinger, 1971; Fraser, 1976).

Non-Compositional Constructions: Non-compositional constructions are termed as idiomatic EVPCs. The idiomatic constructions differ from the two preceding groups in that their meaning cannot be inferred from the meaning of their constituent elements (verb and particle). The idiomatic VPCs are non-compositional and stored in the lexicon as whole combinations (Jackendoff, 2002). For instance, the individual semantics of

the verb *pick* and the particle *up* cannot account for the semantics of VPC *pick up* 'to catch' in *The ground station picked up the signal.*

METHODOLOGY

The methodology of the present work comprises the preparation of the dataset and its analysis. The dataset preparation involves the selection of EVPCs, collecting sample English sentences, and providing the correct Hindi equivalent for each of the selected EVPCs. For compositional construction of EVPCs, we took seven EVPCs with the particle *up* (*pick up, take up, come up, go up, put up, move up* and *pull up*) where the particle serves to provide spatial directional sense (Garnier & Schmitt, 2015). The dataset for directional constructions of particle *up* consists of 25 sample English sentences collected from the British National Corpus (BNC) (https://www.english-corpora.org/bnc/) using a purposive sampling method. For aspectual-completive constructions of particle *up*, we took 25 sample English sentences of 19 EVPCs (*eat up, drink up, fill up, burn up, dry up, soak up, block up, wrap up, cover up, break up, tear up, clean up, lock up, finish up, tighten up, close up, pack up, glue up* and *wipe up*) as illustrated in Jackendoff (2002) and Lindner (1981). Jackendoff (2002) and Lindner (1981) provided a more comprehensive account of the aspectual-completive functions of particles with several verbs in English. The corresponding Hindi translation equivalents for both constructions were manually assigned by looking into English-Hindi dictionaries and corpus resources, including native-speaker intuition. Through examples, we demonstrate the general procedure to compute the meaning of the particles involving compositional and aspectual VPCs. Further, we presented a detailed analysis of the mapping strategy in Hindi for both the senses of particles (directional and aspectual-completive) in EVPCs regarding the morpho-syntactic structure of Hindi verbs and the semantic correspondence of respective senses of particles in the realized Hindi verbal system. Further, we examined the cross-linguistic variations in translating the EVPCs into Hindi regarding morpho-syntactic structure and semantic features. More precisely, the representation of spatial directional and aspectual completion senses of the particles in EVPCs with *up* into Hindi is analyzed.

RESULTS AND DISCUSSION

The study reveals some interesting structural and semantic divergences between the two languages. One of the obvious divergences is that Hindi does not have VPCs: Hindi does not have the combination of verb and particle where the particle modifies its meanings and/or completely changes from compositional to idiomatic. However, Hindi employs a variety of grammatical mechanisms to convey the meanings expressed by English VPCs. Like many South Asian Languages, Hindi is rich in complex verbs (Chakrabarti, 2008; Hook, 1974). They are either the combination of noun/adjective/adverb - verb or verb – verb, where noun/adjective/adverb or first verb imparts the lexical-semantic content of the verb and the second verb provides the tense-aspect and some more vague semantic information of the construction (Singh, 1983; Butt & Ramchand, 2001). The combinations of noun/adjective/adverb and verb are called conjunct verbs, whereas two-verb (v1-v2) combinations are termed compound verbs (Kachru, 1966; Koul, 2008). The close examination of the Hindi translation equivalents of EVPCs has revealed two major groups of translation procedures for EVPCs: simple verbs and complex verbs (including conjunct and compound verb constructions). Hindi compound verbs are sometimes compared with English particles. However, based on the analysis, it becomes evident that a number of English VPCs require complex Hindi verbs as equivalents. The empirical study of the data shows that Hindi utilises both simple and complex verb constructions to realise the various semantics of English VPCs. Hindi complex verb involves compound and conjunct verb constructions (Mohanan, 1994).

English-to-Hindi Mapping of Directional 'up' in EVPCs

The directional construction of EVPCs is realized in Hindi as simple verb, compound verb and conjunct verb constructions. The directional sense of the particle *up* in EVPCs is either lexicalized in the main verb when the equivalent expression for EVPCs is a simple Hindi verb or lexicalized in the polar verb (v1) of the Hindi compound verb. The example sets (1-2) presented below illustrate the same.

Example set (1)

(1a) He bent down to ***pick up*** his bucket.

(1b) *vah apnI bAlTI* ***uThAne ke lie*** *nIche jhukA.*

{he his bucket to pick up for down bent}

The Hindi equivalent for the VPC *pick up* in (1a) is a simple Hindi verb *uthA* 'lift'. The Hindi verb *uThA* denotes the semantics of motion of an entity from a lower to a higher position or place. The simple Hindi verb contains the semantics of motion and its direction. Therefore, it can take care of the semantics of both the constitutive elements of EVPCs, the verb 'pick' and the particle 'up'. Therefore, the directional sense of the particle *up* is lexicalized in the simple Hindi verb.

Example set (2)

(2a) Rachel rose from the bed and **took up** the tray from the bed-side table.

(2b) *rechela bistara se uThI aura bistara ke pAsa kI meja se Tre* ***uThA lI.***

{Rachel bed from rose and bed of side of table from tray lift lift took}

The VPC *took up* in example set (2) is realized in Hindi as the compound verb *uThA* 'lift' *lI* 'took'. The v1 *uThA* of the Hindi compound verb denotes the semantics of an entity in hand that has been moved to a higher position. Therefore, it can take care of the semantics of both the constitutive elements of EVPCs. The v2 *lI* 'took' encodes the consequential state of action and also marks the aspectual meaning. Hook (1979) points out that the "Use of compound verbs allows the mind to travel across the phases of an action while using the simple verb illuminates a single stage. The polar verb (v1) of the Hindi compound verb represents the lexical-semantic of the English VPC *pick* up. Therefore, the directional sense of the English particle *up* is lexicalized in the polar verb (v1) of the Hindi compound verb.

Hindi, also utilizes conjunct verb constructions to map the directional sense of the particle *up*. Hindi conjunct verb is the combination of grammatical elements noun/adjective/adverb and verb. For realizing the directional sense, the grammatical sequence of conjunct verbs is an adverb-verb combination where the first element (adverb) overtly/explicitly marks the directional sense of the particle *up* in Hindi. The example set (3) below illustrates the same.

Example set (3)

(3a) We should **go up** by the lift.

(3b) *hameM liphTa by* ***Upara jAnA*** *chAhie*

{we lift in up go should}

The VPC *go up* in (3a) is realized as the Hindi conjunct verb *Upara* 'up' JAnA 'to go' that denotes a grammatical sequence of adverb-verb. The first element, *Upara*, denotes the upward direction of motion, and the second element represents the semantics of the verb 'to go'. Therefore, through conjunct verb constructions, Hindi overtly/explicitly marks the directional sense of the English particle in terms of verbal modifier (generally an adverb).

English-to-Hindi Mapping of Aspectual-Completive 'up' in EVPCs

The aspectual completive construction of EVPCs is realized in Hindi as compound verb(v-v) constructions where v1 represents the lexical-semantic content of the verb and v2 of the Hindi compound verb marks the aspectual-completive sense of the respective particle in EVPCs. In Hindi and other South Asian languages, v2 is often associated with boundedness (Hook, 1991) or inception/completion (Butt, 1995) and more complex semantics such as suddenness, forcefulness, benefaction, etc. (Hook, 1974; Poornima, 2012). The example sets (4-6) presented below are illustrative.

Example set (4)

(4a) The sponge **soaked up** the water.

(4b) *spaMja ne pAnI* ***sokha liyA.***

{sponge ERG water soak take-PST}

Example set (5)

(5a) She filled up her shelves with books.

(5b) *usane apanI alamAriyAN kitAboM se bhara dI.*

{she-ERG her shelves books with fill give-PST}

Example set (6)

(6a) He ate the sandwich up.

(6b) *vaha saiMDavicha khA gayA*

{he sandwich eat go-PST}

Concerning the aspectual-completive constructions, the analyzed Hindi translation equivalents show that the aspectual-completive sense of the particle is represented in Hindi by the v2 vector of the Hindi compound verb. The most frequent v2 in Hindi that marks the aspectual completive senses of the particles are *le* 'take', *jA* 'go', and *de* 'give'. These vectors in the Hindi compound verb indicate the termination and/or completion of the action denoted by the polar verb v1 of the Hindi compound verb and map the completive function of particle *up* in EVPCs.

CONCLUSION

The paper has examined the compositional English verb-particle constructions (EVPCs) with the particle *up* consisting of directional and aspectual-completive sense encoded by the respective particle. The study identifies primarily two significant groups of translation procedures in Hindi for mapping EVPCs. These two include simple and complex Hindi verbs. The Hindi complex verb constructions involve conjunct (noun/adjective/adverb-verb combinations) and compound verb (v1-v2 combination) constructions. The compositional directional constructions are observed to be realized in Hindi as simple, conjunct and compound verb constructions. On the other hand, the compositional aspectual-completive constructions are realized only as Hindi compound verb constructions. For compositional directional construction, EVPCs realized as simple Hindi verb or compound verb constructions, the directional sense of the particle *up* is lexicalized in the main verb or v1 of the Hindi compound verb. The compositional directional sense of the particle *up* is also realized as a verbal modifier, (generally an adverb), the first component of the Hindi conjunct verb constructions. Therefore, the directional sense of the particle is mapped in Hindi by the simple verb, v1 of the Hindi compound verb and the first element (adverb) of the Hindi conjunct verb. On the other hand, the completive function associated with the particle *up* is, in its linguistic sense, equivalent to the vector verb (v2) of the Hindi compound verb. The vectors *le* 'take', *de* 'give', and *jA* 'go' map the completive sense of particle *up* in Hindi.

REFERENCES

Awal, N. M., Ho-Abdullah, I., & Zainudin, I. S. (2014). Parallel corpus as a tool in teaching translation: Translating English phrasal verbs into Malay. Procedia-Social and Behavioral Sciences, 112, 882-887.

Bhatia, A., Teng, C. M., & Allen, J. (2017, April). Compositionality in verb-particle constructions. In Proceedings of the 13th workshop on multiword expressions (MWE 2017) (pp. 139-148).

BNC = British National Corpus. https://www.english-corpora.org/bnc/ [retrieved October 2023].

Bolinger, D., (1971), The Phrasal Verb in English, Harvard University Press, Cambridge, Mass.

Brinton, L. J. (1985). Verb particles in English: Aspect or aktionsart?. Studia Linguistica, 39(2), 157-168.

Butt, M., & Ramchand, G. (2001). Complex aspectual structure in Hindi/Urdu. M. Liakata, B. Jensen, & D. Maillat, Eds, 1-30.

Butt, Miriam. (1995). The Structure of Complex Predicates. Stanford: CSLI Publications.

Celce-Murcia, M., and D. Larsen-Freeman. 1999. The Grammar Book: An ESL/EFL Teacher's Course. 2d ed. Boston, MA: Heinle & Heinle.

Chakrabarti, D. (2008). A Study of the Complex Predicates of Hindi (Doctoral dissertation, Indian Institute of Technology, Bombay (India)).

Chatterjee, N., & Balyan, R. (2011, December). Context resolution of verb particle constructions for English to Hindi translation. In Proceedings of the 25th Pacific Asia Conference on Language, Information and Computation (pp. 140-149).

Cook, P., & Stevenson, S. (2006, July). Classifying particle semantics in English verb-particle constructions. In Proceedings of the Workshop on Multiword Expressions: Identifying and Exploiting Underlying Properties (pp. 45-53).

Dave, S., Parikh, J., & Bhattacharyya, P. (2001). Interlingua-based English–Hindi machine translation and language divergence. Machine Translation, 16, 251-304.

Dehé, N., Jackendoff, R., McIntyre, A., & Urban, S. (Eds.). (2012). Verb-particle explorations (Vol. 1). Walter de Gruyter.

Fraser, Bruce. 1976. The verb-particle combination in English. New York: Academic Press.

Garnier, M., & Schmitt, N. (2015). The PHaVE List: A pedagogical list of phrasal verbs and their most frequent meaning senses. Language Teaching Research, 19(6), 645-666.

Gupta, D., & Chatterjee, N. (2003). Identification of divergence for English to Hindi EBMT. In Proceedings of Machine Translation Summit IX: Papers.

Hook, P. E. (1979). Hindi Structures: Intermediate Level, The University of Michigan.

Hook, P. E. (1991). The Emergence of Perfective Aspect in Indo-Aryan Languages. In Elizabeth C. Traugott and Bernd Heine (eds.), Approaches to Grammaticalization, Volume II. Amsterdam: John Benjamins.

Hook, P.E. (1974). The Compound Verb in Hindi, Ann Arbor: Center for South & Southeast Asian Studies, University of Michigan.

Jackendoff, R. (2002). English particle constructions, the lexicon, and. Interface Explorations, 67.

Kachru, Y. (1966). An introduction to Hindi syntax. Urbana: University of Illinois, Dept. of Linguistics.

König, Ekkehard. 1973. Englische Syntax, vol. 2: Struktur des einfachen Satzes. Frankfurt am Main: Athenäum Fischer.

Koul, O. N. (2008). Modern Hindi Grammar. Springfield, USA: Dunwoody Press.

Levin, B. (1993). English verb classes and alternations: A preliminary investigation. University of Chicago press.

Lindner, S. J. (1981). A lexico-semantic analysis of English verb particle constructions with out and up. University of California, San Diego.

Live, A. H. (1965). The discontinuous verb in English. Word, 21(3), 428-451.

Machonis, P. A. (2008). Compositional phrasal verbs with up: Direction, aspect, intensity. Lingvisticæ Investigationes, 32(2), 253-264.

Mandić, S. D. (2016). Phrasal Verbs with the Particles Down and up in English and their Serbian Equivalents: A Corpus Analysis. Zbornik za jezike i književnosti Filozofskog fakulteta u Novom Sadu, 6(6), 107-140.

Milivojević, N. (2005). Particles and prefixes in English and Serbian. ELOPE: English Language Overseas Perspectives and Enquiries, 2(1-2), 65-75.

Mohanan, T. (1994). Argument structure in Hindi. Center for the Study of Language (CSLI).

Novakov, P., & Lazović, M. (2022). English Phrasal Verbs with the Particles off and up and Their Romanian and Serbian Translation Equivalents. Romanian Journal of English Studies, 19(1), 7-14.

Palmer, F.R. 1965. Linguistic Study of the English Verb. Longman, UK.

Poornima, S. (2012). Hindi aspectual complex predicates at the syntax-semantics interface. State University of New York at Buffalo.

Quirk, R., Greenbaum, S., Leech, G., & Svartvik, J. (1985). A comprehensive grammar of the English language. New York: Longman

Roohani, A., & Heidari Vincheh, M. (2023). Effect of game-based, social media, and classroom-based instruction on the learning of phrasal verbs. Computer Assisted Language Learning, 36(3), 375-399.

Rudzka-Ostyn, B. (2008). Word power: Phrasal verbs and compounds: A cognitive approach. Walter de Gruyter.

Salehipour, S., & Karimnia, A. (2015). Difficulties and strategies of Iranian translators in comprehension and translation of English phrasal verbs. Journal of Applied Linguistics, 1(2), 75-91.

Shakir, I. A., & Khan, T. I. (2023). Green Human Resource Management Practices: A Study on The Banking Sector of Pakistan. International Journal of Economics and Business Issues, 2(2), 22-32.

Santika, I. D. A. D. M., Putri, I. G. V. W., & Suastini, N. W. (2018). Translation of phrasal verbs into Indonesian. Journal of Applied Studies in Language, 2(1), 44-50.

SINGH, A. B. (1983). COMPLEX VERBS IN HINDI. General and Theoretical Linguistics, 1, 339.

Sinha, R. M. K., & Thakur, A. (2008). A study of the translation divergence in english and hindi mt. CSI Journal, 38(3).

Thim, S. (2012). Phrasal verbs: The English verb-particle construction and its history (Vol. 78). Walter de Gruyter.

Tu, Y., & Roth, D. (2012). Sorting out the most confusing English phrasal verbs. In * SEM 2012: The First Joint Conference on Lexical and Computational Semantics–Volume 1: Proceedings of the main conference and the shared task, and Volume 2: Proceedings of the Sixth International Workshop on Semantic Evaluation (SemEval 2012) (pp. 65-69).

Tyler, A., & Evans, V. (2003). The semantics of English prepositions: Spatial scenes, embodied meaning, and cognition. Cambridge University Press.

Villavicencio, A. (2006). Verb-particle constructions in the world wide web. Syntax and Semantics of Prepositions, 29, 115-130.

Vorobiova, O. S., Fedorenko, Y. P., Kupar, M. S., & Martirosyan, L. I. (2018). Peculiarities of Rendering English Phrasal Verbs into Ukrainian.

White, B. J. (2012). A conceptual approach to the instruction of phrasal verbs. The Modern Language Journal, 96(3), 419-438.