A Comparative Study of Word Formation in English and Pashto: Compounding and Derivation

Usman Ali
Higher Education Department, Khyber-Pakhtunkhwa Pakistan

Ushna Gul
COMSATS University Islamabad, Islamabad Campus Pakistan

Momina Azim
GGDC Birpani, Bagh, AJK Kashmir

Keywords	Abstract
• Compounding • Derivation • English and Pashto • Word Formation	*Comparative analysis of the world's languages reveals a good deal of correspondence in various areas like phonetics, phonology, grammar, syntax and morphology. Various features of languages range from perfect similarity to complete contrast. The process of word formation is one such feature. This correspondence concerns morphological and semantic aspects. The present study concentrates on the similarities and differences in the processes of compounding and derivation in Pashto and English. Following the trend of 'Contrastive Analysis' as a theoretical framework, the description and comparison were used to interpret the data. The researchers compared described and compounds and derivatives taken from both languages with main focus on their semantic and morphological patterns and features. Primary data for this work were the tokens selected from Daryab, Taj u lughat and Oxford dictionaries. On the whole, 98 tokens were picked up randomly from Oxford Dictionary and their equivalents were searched in Daryab, Taj u lughat. Qualitative and descriptive approaches were adopted in data analysis. The selected tokens were compared and analyzed on semantic and morphological bases. Major findings reveal that in the phenomena of compounds and derivatives in English and Pashto, there is perfect harmony where the equivalents in both languages have resemblance on the bases of semantics and morphological patterns. Similarly, there are tokens in both languages where there is partial harmony. Moreover, there are some other compounds and derivatives in which there is no similarity on morphological and semantic grounds. Thus, they are in complete disharmony. The study interest's researchers in the field of comparative linguistics, Pashto and English morphology and semantics, translation studies and the non-native speakers of Pashto to an extent.*

1. Introduction

Pashto, also spelled as 'Pukhto', 'Pukhtu' and 'Pushtu', is one of the two national languages of Afghanistan and the regional language of Pakistan- mainly spoken in Khyber-Pakhtunkhwa (Comrie, 1989). It belongs to the New Iranian language group- a part of Indo-Iranian language group that is the major Eastern branch of the Indo-European languages. In terms of its number of speakers, Pashto is the second most important language of the Iranian family (Collins & Stabler, 2016).

Morphology is the study of words and their internal structures as well as the patterns and principles underlying their composition. It looks at both sides of linguistic signs i.e., at the form and the meaning, combining the two perspectives- words and the principles underlying the composition of words. The phenomenon of 'word formation' is central to morphology. Languages fulfill their lexical need either by morphological changes in the existing words or coining new lexemes. Popular processes of word formation include acronym, derivation, blending, coinage, backformation, borrowing, clipping and conversion. Compounding and derivation are two such sources of word formation. In the former, two distinct words are combined to form a new word which has different meaning from its component words when taken in isolation. For instance, nouns and adjectives are combined to form a compound. The latter involves adding an affix to build a word with a meaning and or category distinct from that of its base or stem word (Grady & Archibald, 2015).

Both of the phenomena of compounding and derivation are common across languages. The vocabulary of English and Pashto is also characterized by these widely-used processes. The purpose of the present study is to compare compounds and derivatives of English and Pashto on the basis of morphology and semantics. It accounts for the correspondences and differences between English and Pashto regarding the compounds and derivatives.

2. Literature Review

In modern-day linguistics, morphology is one of the core areas of grammar, along with phonetics, phonology, syntax, and semantics (Aronoff, 2013). Morphology is divided into two major areas: inflectional and derivational. The former deals with the markers of grammatical categories such as case, number, tense, and aspect. The latter studies the formation of new words that are different either in syntactic category or in meaning from their bases. Thus, a derivational morpheme is an affix that is added to a word in order to create a new word or a new form of a word. Moreover, a derivational morpheme can either change the meaning or the grammatical category of the words (Yule, 2020).

The basic unit of morphology is morpheme. Words in a language can be subdivided into morphemes. The morpheme is a minimal unit of meaning or grammatical function. A morpheme is not identical to a word because morpheme may or may not stand alone, whereas word can stand alone (Yule, 2020).

Richards & Schmidt (2013) define word is the smallest linguistic unit that occurs on its own in speech and writing. Word can be defined from four perspectives: orthographic, morphological, lexical, and semantic (Bauer, 2003). Orthographically word is one which has a space on either side of it. Morphologically, the form of word is considered. Lexically word covers the various forms of items which are closely related by meaning. Semantically

word involves distinguishing between items which may be morphologically identical but have a different meaning (Raja, 2014).

Along with some others, inflection, coinage, borrowing, contraction, backformation, affixation, derivation, compounding, conversion, blending, clipping, and acronyms are the processes of word formation (Bieswanger & Becker, 2017). A compound is the combination of two separate words to produce a single form. Compounding is even often regarded as the most productive process of the English word-formation. In English, most compound words are nouns, verbs or adjectives. Derivation uses an affix to build a word with a meaning and/or category distinct from that of its base. In derivation, a word that is attached to an affix will change word meaning or the word category (Grady & Archibald, 2015).

The overwhelming influence of English language has led researchers to compare world's minor and major languages with English. Pashto is no exception in this trend. Hamid (2018) conducted a comparative analysis of the argument structure of English and Pashto and came up with a number of aspects in which both English and Pashto differ in their syntax concerning the argument structure. The structure of the determiner phrase in Pashto has been investigated by Imdad et al. (2021) where they investigated the equivalents of the English determiner phrase in Pashto language. Pamir and Haqparst (2023) have conducted contrastive analysis of the structure and order of English and Pashto adjectives. Yet, the morphological pattern and structure of compounds and derivation as the widely used processes of word formation in English and Pashto need to be compared. This study is an attempt to fill this gap.

3. Research Methodology

3.1 Theoretical Framework

Contrastive Linguistics, a sub-discipline of linguistics is concerned with the comparison of two or more (subsystems) of languages. Apart from its applied aspect, it also has a strong theoretical utility; it contributes to the understanding of language typology and language universals. It uses contrastive analysis as its method. This analysis usually comprises three steps: description of two languages, comparison of the two languages to show similarities and contrasts between them, and thirdly prediction of the areas of difficulties and errors for the benefit of the learner of the second or the foreign language. Theoretical contrastive linguistics mainly concentrates on similarities with the aim of discovering linguistic universals (Aziz, 2001). The present study falls in the domain of theoretical comparative linguistics and uses the first two steps: description and comparison of the sub-system of word formation with exclusive focus on compounding and derivation. Locating the aspects of difficulty for Pashto speakers for learning English or vice versa is however beyond the scope of this study.

3.2 Nature and Procedures

This study mainly follows the qualitative and descriptive approaches. Compounds and derivatives from both languages were compared, analyzed and classified into various categories on the basis of semantic and morphological correspondence.

The primary data for the study were collected from the latest dictionaries of English and Pashto. During the process of data collection, the researchers consulted Daryab, Taj-ul-loghat and Oxford dictionaries to collect and compare the tokens. The semantic and morphological patterns of the selected compounds of both languages were compared. Initially, the researchers purposively took 49 tokens from Oxford English Dictionary. Their equivalents were next searched in two Pashto dictionary i.e., Daryab and Taj u lughat. The comparison was made on the semantic and morphological bases. Each token was explained and compared with its equivalent in both languages.

4. Results and Discussion

4.1 Compounding

Table 4.1

Comparison of Compounds in English and Pashto

Pattern 1	English	Pashto
1	Barefooted	Khpialba-khpe
2	Heartbroken	Zra-chawdai
Pattern 2		
3	Ugly	Bad-sorata
4	Nervous	War-khata
5	Sibling	Ror-o-khor
6	Parents	Mor-o-Plar
Pattern 3		
7	Bathroom	Tashnab
8	Graveyard	Hadera
9	Guestroom	Hujra/dera
10	Eyebrow	Banra
11	Forehead	Tanday

4.1.1. Pattern 1: English- Free-Free morphemes vs. Pashto- Free-free morphemes

Results shown in the above table illustrate that a wide number of compounds in both languages follow a perfectly similar pattern from both morphological and semantic perspectives. The first such common pattern of compounds consists of two free morphemes in English and their equivalents in Pashto follow the same pattern. Mostly, these words consist of a noun followed by an adjective or vice versa. For example, in [1], barefooted is the combination of an adjective and a noun in English. Its equivalent in Pashto is also of the same combination (adjective + noun). 'Khpialba' stands for bare which is an adjective in both languages. The second part of this compound is 'khpe' which stands for feet in English. Thus, both these words i.e., 'foot' in English and 'khpe' in Pashto are nouns. The order is reverse in [2] (heartbroken). Here in [2], the noun (heart) is followed by adjective (broken) in both languages. Moreover, the first two compounds have the marker of 'ed' and 'en' in English that usually turn nouns into adjectives. The rest of the words given in the above table are comprised of adjectives which are followed by nouns. The same morphological structure can be found in a number of other compounds in both English and Pashto.

4.1.2 Pattern 2: English- Free morpheme vs. Pashto- Free-free morphemes

The second category in this respect contains those compounds which are formed of a single free morpheme in English. The equivalent of these compounds in Pashto are the combination of two free morphemes. The English words and their equivalent counterparts in Pashto mostly belong to the categories of nouns and adjectives. In [3], the English word and its corresponding compound in Pashto are both adjectives. Yet, the Pashto compound 'Bad-soorata' consists of an adjective and noun. The Pashto free morpheme 'Bad' is an adjective, while 'sorat' (face/shape) is a noun. The final shwa is case marker that inflects it for converting it into adjective. Similarly, [2] is a single free morpheme in English that stands for an adjective (Nervous) and its equivalent compound is in noun-adjective order (war-khata). The rest of the two instances in this pattern [5] and [6] follow the structure of [3]: parents, siblings (English, 'mor-o-plar (mother and father) and 'runra-khwaiendi (brothers-sisters) and so on.

4.1.3 Pattern 3: English- Free-Free morphemes vs. Pashto- Free morpheme

Pattern (3) is structurally opposite of the proceeding pattern (2) above. In English these compounds are comprised of free-free morphemes whereas the equivalents of these compounds in Pashto are made up of a single free morpheme.

In English, the order of these compounds is noun followed by another noun; their equivalent word in Pashto comprise a single free morpheme- a noun. For instance, [8] consists of two English nouns 'bath' and 'room'. The Pashto counterpart for this compound is a single noun 'Tashnab'. The same correspondence can be observed in English-Pashto pairs in [9], [10], [11] and [13]: graveyard' and 'hadera', guestroom' and 'dera'/'hujra', eyebrow and 'banra', forehead and 'tandai'. The phenomenon illustrated in the last two patterns is indicative of the fact that the mentioned correspondence in English and Pashto is bilateral. In some instances, a single English free morpheme equates two Pashto morphemes for expressing a concept and vice versa.

4.2 Derivation

Table 4.2

Comparison of Derivative Words in English and Pashto

Pattern 1	English	Pashto
1	Friendship	Malgartia
2	Powerful	Zorawar
3	Sinful	Gonahgar
4	Economist	Maeshatdan
5	Lucky	Qesmatdar
6	Childhood	Mashomtob
7	Gardener	Baghwan
Pattern 2		
8	Helpless	Na-chara
9	Careless	Be-ehteyata
Pattern 3		
10	Unknown	Na-ashna
11	Unhealthy	Na sama/na-jora
12	Incomplete	Na-mokamal
13	Unfair	Na-jayez
14	Disobedient	Na-farmarna
15	Unmarried	Na-wada/be-wada
Pattern 4		
16	Cheerful	Khoshal
17	Ownership	Malkiyat

4.2.1. Pattern 1: English- Free+bound morpheme vs. Pashto- Free+bound morphemes

This section presents a comparison of the derivatives as another source of word formation common in English and Pashto. The first morphological pattern in this regard is comprised of free-bound morpheme in English; its equivalent pattern in Pashto morphologically resembles its English counterpart. Morphologically, they are in perfect accordance with one another. Yet, they differ in their grammatical structure in some cases. The free morphemes in this set of English compounds are all nouns, i.e., friend, power, sin, economy, luck, child, garden. They are followed by suffixes as bound morphemes in both languages i.e., ship, ful, ist, y, hood, and er in English, and 'tia', 'war', 'gar', 'dan', 'dar', 'tob' and 'wan' in Pashto respectively.

Moreover, both of the languages carry the grammatical harmony when word classes of these derivatives are analyzed. In both languages, [1], [4], [6] and [7] are nouns, whereas, [2], [3] and [5] are adjectives that have been derived from nouns. This derivation involves the addition of suffixes to the first words (nouns) in these compounds. The bound morphemes in this category function either as inflectional or derivational morphemes. When they are used as inflectional morphemes, the grammatical category of the compounds is not changed. The first instance [1] (friendship) contains the bound morpheme 'ship'. Both friend and friendship are nouns because ship here is an inflectional morpheme. Thus, the grammatical category is not changed when friendship is derived from friend. The equivalent of friendship in Pashto is 'malgartia' is also comprised of a free morpheme 'malgaray' followed by a bound morpheme 'tia'. Here also, both the base and derived words are nouns. On the other hand, bound morphemes as derivational markers change the grammatical category of words. Powerful in [2] for example is an adjective that has been derived from the noun 'power' through the suffixation by adding 'ful' as a bound morpheme to the base. The Pashto equivalent of powerful is 'zorawar'. In this compound, the stem word 'zor' is a noun. By adding a bound morpheme 'awar', it becomes an adjective.

4.2.2 Pattern 2: English- Free+Bound morpheme vs. Pashto- bound+Free morpheme

In this category, the derivative English words are the combinations of free- Bound morphemes. The equivalent of these tokens in Pashto are in reverse order- following the bound-free morphemes structure. In these derivatives, a free morpheme, either a noun or adjective is followed by a bound morpheme in English like in pattern 1 above. For example, in [8] 'less', a bound morpheme, is suffixed with 'help' which is a free morpheme. Its equivalent derivative in Pashto has a bound morpheme 'na' as a prefix in 'Na-chara' which is affixed with 'chara' which means help in Pashto. Same is the case with [9]. Moreover, both [8] and [9] have 'less' in English that correspond to 'na' and 'be' in Pashto.

4.2.3 Pattern 3: English- Bound+free morpheme vs. Pashto- Bound+free morpheme

Unlike pattern (2), this set of derivatives are the combination of a bound morpheme followed by a free morpheme in both languages. The free morphemes as base words in this category are adjectives or verbs. The equivalents of these derivatives in Pashto are in

perfect correspondence as they are also made up of a bound morpheme followed by a free morpheme.

The first pair [10] is formed of a bound morpheme which is followed by a free morpheme (adjective) in English. Its equivalent is also of the same combination of a bound and free morpheme. The second of which is also an adjective in Pashto like English i.e. 'na' in Pashto is a bound morpheme and 'ashna' means known. The list given above have the markers of 'un, dis, in, un, etc. followed by adjectives in English. In Pashto 'na, be, bad' etc. are followed by adjectives. These prefixes in both languages are used as markers of negation that reverse the meaning of words.

4.2.4 Pattern 4: English- Free+Bound morphemes vs. Pashto- Free morpheme

This category of derivatives is a sort of exception to the above pattern. It was found in some cases that some English adjectives derived from noun through suffixation correspond to a single Pashto free morpheme. In both [16] and [17], base words as free morphemes are followed by suffixes as bound morphemes. Their equivalent terms in Pashto consist just a single morpheme as base word. For instance, both [16] and [17] have 'ful' and 'ship' as suffixes attached to base words 'cheer' and 'owner' respectively. However, their Pashto counterparts do not carry any bound morphemes either prefixes or suffixes with them. Yet, this pattern was found to be unilateral; there are no such Pashto derivatives in this order (free-bound) the English equivalents of which consist a single free morpheme.

5.   Conclusion

This study concludes that the phenomena of compounding and derivation in Pashto and English range from perfect harmony to complete disharmony. There are compounds in English and Pashto that resemble perfectly in both languages. This harmony is based on both morphological patterns they follow and the semantic contents they carry. Their comparison shows that they bear free morphemes (stems) and correspond to one another in meaning. In some other compounds and derivatives, the researchers found partial harmony regarding the morphological patterns of the counterparts taken from the two languages. It was also established that in some other compounds and derivatives, there is no correspondence regarding their morphological structure- though they serve the similar semantic and grammatical function.

5.1   Further research

This study was mainly concerned with the comparative description of compounds and derivatives in English and Pashto as the two processes of word formation. Future research can compare other processes of word formation in these two languages. Research can also be carried out on noun modification and adjectival order in English and Pashto. Similarly, investigation into the inflectional systems of English and Pashto may yield interesting findings. Lastly, the scope of this study can be extended to other closer languages to Pashto

References

Aitchison, J. (1987). *Foundations of general linguistics*. New York: Rinehart and Winston.

Akmajian, A., Farmer, A. K., Bickmore, L., Demers, R. A., & Harnish, R. M. (2017). *Linguistics: An introduction to language and communication.* MIT Press.

Ari, I.S.M. (2015). *Word formation on transgender slang words in their community in Padang* (Doctoral dissertation) Universities Negeri Padang.

Aronoff, M. (2013). Varieties of morphological defaults and exceptions. *Revista Virtual de Estudos da Linguagem-REVEL*,11,84-97.

Bauer, L. (2003). *Introducing linguistic morphology*. Edinburgh University Press.

Bauer, L., & Laurie, B. (1983). *English word-formation*. Cambridge University Press.

Bieswanger, M.,& Becker, A.(2017). *Introduction to English linguistics.(Vol.2752).*UTB.

Booij, G. (2010). Construction mrphology. *Language and Linguistics Compass*, 4(7), 543-555.

Çelik, M. (2007). Linguistics for students of English*: Book I.* Ankara: EDM.

Comrie, B. (1989). *Language universals and linguistic typology: Syntax and morphology.* University of Chicago Press.

Collins, C., & Stabler, E. (2016). A formalization of minimalist syntax. *Syntax, 19*(1), 43-78.

Crystal, D. (2018). *The Cambridge encyclopedia of the English language.* Cambridge University Press.

Dominguez, J. A. (1991). The role of morphology in the process of language acquisition and learning. *Revista Alicantina de Estudios Ingleses*, 4, 37-47.

Hamid, A. (2018). *The Syntax of Argument Structure in Pashto* (Doctoral dissertation, University of Azad Jammu & Kashmir Muzaffarabad).

Haspelmath, M., & Sims, A. (2013). *Understanding morphology*. Routledge.

Kolanchery, G. (2015). Analytical components of morphology in linguistics. *Global English-Oriented Research Journal*, 1(1), 161-166.

Lieber, R. (2004). *Morphology and lexical semantics*. Cambridge University Press.

Majroh, M. (2015). Taj-ul-loghat: Pashto dictionary.

Momand, Q., & Sehrai, F. (1994). Daryab: Pashto Dictionary.

Nordquist, R. (2020). *Types of word formation in English.*

O'Grady, W., & de Guzman, V. P. (1996). Morphology: The analysis of word structure. *Contemporary Linguistics: An Introduction,* 132-180.

O'Grady, W., & John Archibald, J. (2015). *Contemporary linguistic analysis: An Introduction*. Pearson Canada.

Qureshi, A. H., & Akram, M. (2014). *Semantic classification of Urdu compounds*.

Raja, V. L. (2014). Word formation: A morphological analysis. *Journal of Language and Literature*, 14(1), 81-86.

Richards, J. C., & Schmidt, R. W. (2013). *Longman dictionary of language teaching and applied linguistics*. Routledge.

Savira, I., & Fitrawati, F. (2019). Types of word formation used in the 16th chapter of Harry Potter and the Sorcerer's stone novel written by JK Rowling. *English Language and Literature*, 8(1).

Schmid, H. J. (2016). *English morphology and word-formation (Vol. 25)*. Erich Schmidt Verlag.

Schmmit, N.(2000) *Vocabulary in language teaching*. Cambridge University Press.

Victoria, F. & Rondman, R. (1974). *An Introduction to language*. New York: Holt, Rinehart and Winston, Inc.

Waite, M. (Ed.). (2012*). Paperback Oxford English dictionary*. Oxford University Press.

Yule, G. (2020). *The study of language*. Cambridge University Press.