# **Coroneologisms and Word Formation Processes in Hindi-English Codemixed Words**

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### **Abstract**

The COVID-19 pandemic came with a flux of new words, terminologies, and phrases, which led to the rapid coinage or neologisms in the world's different languages. These lexical innovations may take place within one language as well as with the combination of two different languages. Therefore, this paper scrutinizes coroneologisms and word-formation processes in Hindi-English code-mixed words. Such a phenomenon happened due to the acceptance of English by Indians besides their mother tongue which makes them bilingual. The data were gathered from newspapers, blogs, social media, TV news, etc. Next, the linguistic analysis of the data revealed different types of word classes in Hindi-English codemixed words such as compounding, affixation, blending, and reduplication. Out of these, compounding and borrowing were reported as the most productive types of coroneologisms in Hindi-English code-mixed words.

**Keywords:** COVID-19 terms; coroneologisms; Hindi-English codemixed words; word-formation processes

#### **Povzetek**

Pandemija COVID-19 je prinesla številne nove besede, terminološke izraze in besedne zveze, kar je privedlo do hitrega nastanka neologizmov v različnih jezikih sveta. Leksikalne inovacije se lahko zgodijo v enem jeziku kot tudi pri kombinaciji dveh različnih jezikov. Prispevek prouči koroneologizme in besedotvorne procese v hindujsko-angleških besedah in ugotavlja, da je do omenjenih procesov prišlo zaradi sprejemanja angleščine kot skorajšnjega maternega jezika, s čimer so govorci postali dvojezični. Študija na podlagi podatkov iz časopisov, blogov, družbenih medijev, televizijskih novic in in drugih medijev analizira procese kot so združevanje, afiksacija, mešanje in reduplikacija, med katerimi sta se v primeru hindujsko-angleških koroneologizmov združevanje in izposoja izkazala kot najbolj produktivna.

**Ključne besede:** termini o COVID-19; koroneologizmi; hindujsko-angleške besede; besedotvorni procesi

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#### 1 Introduction and background

There exists a variety of literature on English word-formation processes that offers an insight into the ways English vocabularies have significantly expanded through numerous types of neologisms and over numerous domains like advertisement, internet, and mass media (Kathpalia, 2018). In this regard, we have focused particularly on code-mixed coroneologisms that are created out of the words of two linguistically different languages, i.e. Hindi and English, with special reference to COVID-19 associate terms. Such type of Hindi-English code-mixing is casually viewed as 'Hinglish' (Bhatia, 2011, p. 44), which is not merely a coincidence of English borrowing to bridge the lexical lacuna but rather a highly complex process that typical differentiates itself from the usual borrowing and getting immense popularity especially in the advertising and social media languages. In their study, Bhatia and Ritchie (2006a, p. 518) claimed that this type of codemixing should not be viewed as a corrupt form of language used by bilinguals but "as a systematic and rule-governed phenomenon which satisfies the creative needs of bilinguals", of which creativity is impossible to achieve within the boundaries of a single language. As a result of overwhelming response towards such a use of language, i.e. codemixing "English usage in day-to-day interaction, advertising and media have achieved a distinct state of fusion and hybridisation of linguistic forms, which is unprecedented in the history of human communication" (Bhatia & Ritchie, 2008, p. 11). Although codemixing operates at the discourse level, our focus in the current paper remains on bilingual words internal structure, whereby the words or their parts both from Hindi and English are fused to produce the desired level of creativity to the target audience by the content writers, news editors, and social media millennials.

Bilinguals have access to two linguistic repositories as compared to monolinguals who only use one. In Bhatt's (2008) view, to produce and interpret such combined expressions, an individual needs to have both "bilingual and bicultural competence". For instance, to produce and understand the Hindi-English blend expressions like crickshetra (cricket+ Kurukshetra 'conquest of the Kauravas and Pandavas'), similarly agonypariksha (agony + agnipariksha 'surviving the ordeal'), one needs to have an acquaintance of both the Hindi word creation processes and the cultural nuances of Hinduism epic 'Mahabharata and Ramayana' (refer to Kathpalia & Ong, 2015). Of particular relevance here are the shadowing boundaries between English and Hindi; the boundaries of English and Hindi in the former example is easily capturable. Still, in the latter instance, the boundaries are more translucent and appear to be the case of phonetic overlapping between the English word 'agony' and the Hindi word 'agni' (fire). Recent studies (Li, 2011, p. 1223; García & Li, 2012, p. 24) show that to understand such type of linguistic mixing that leads to code-mixing, one must have a fair understanding of 'translanguaging practices' in human language because this not only stretches the boundaries between language and culture but also promotes linguistic creativity and

criticality. In this case, 'languaging' refers to the strategy used by an individual to communicate creatively in a given context, while 'trans' means the way one tries to violate the traditionally drawn boundaries between languages (García & Li, 2014). Flexible bilingualism in this context allows us to violate grammar principles and mix two languages to create new and contextually suitable meanings.

Such a perspective encircles both creativity and criticality, and will in this paper allow us to see code-mixing through the lens of rule-governed aspect and word-formation processes fluidity perspective.

### 2 Literature review

Several studies have examined the language play in the English language, including several of its dialects (Crystal, 1998; Cook, 2000), however, relatively a few have focused on a language play from the multilingualism perspective. Despite the widespread use of code-mixing in a globalised era, the literature shows a dearth of such studies which have explored the relationships between code-mixing and multilingual idiosyncrasy, especially in the context of world Englishes (Bolton, 2010). This becomes more pertinent in the context of interlingual creativity and word-formation process level, which have remained largely unexplored, especially in the world's different languages (Kathpalia, 2018). Zhang (2015) is one of the exceptions in the context of non-native English stretched zone, i.e. Chinese-English code-mixed multilingual play. An official microblog was established by the municipal corporation of Shanghai to broadcast weather information. In his work, the particular interest remains on morphological innovation and the use of "X+ing" in code-switched words (viz: zhaomuing 'recruiting'), and the interlingual play in hybridised expressions created out of English weekdays (viz: mangday 'Monday') that showcase the prevailing trend of code-mixing in Chinese entertainment and social media domains, especially among multilingual communities. In addition, Lin (2011) conducted a study on multilingual creativity in Chinese-English code-mixed words among the students of China in London, others were by (Yon, 2011) on Chinese immigrants using an online forum, and Zhang (2012) examined Chinese netizens in several domains.

Another notable work was done from a stretched zone perspective, which focuses on monolingualism and multilingualism lexical innovations in the Italian linguistic landscape scenario (Vettorel & Franceschi, 2013). With a special focus on the hybridisation processes that operate at the word-creation plane that is viewed as an emblem of modernity, style, and quality in stretched zone perspectives. The hybridised data of Italian-English show creative fluidity at several linguistic levels from orthography, phonology, morphology, grammar, syntax, semantics, semantics as well as idiosyncratic constructions. These hybridised Italian English words were grouped into different word creation classes based on the derivation (viz: kissucci = kiss + ucci

'endearment's suffix'), clipping (viz: light instead of 'lighthouse'), blending (viz: ristopub = ristorante + pub), compounding (viz: isibike = isi, a shortened form of a name in Italian culture Isidoro and it is pronounced in Italian as easy + bike 'easy-bike'), and lastly idiosyncratic constructions (viz: gadjet in place of 'gadget'). Authors have claimed that such hybridisation with English is relatively more frequent in bigger cities where it is used as a persuasive tool to attract customers, especially to cater to the needs of globalisation. The urban population show relatively more positive attitudes towards the hybridisation of Italian with English, especially in the advertising domain, as they relate it with the symbol of modernism, class, and prestige. Despite having positive attitudes towards such linguistic hybridity, it is viewed as less formal in several domains concerning the linguistic landscape in Italy. A similar view exists towards the use of Spanglish among the youths of Spain concerning Internet domains where they often use code-mixed words of Spanish-English. In her study, Balteiro (2012) noted that the English verb owned has gained a special meaning and is used by Spanish when they defeat their opponent in online games. Its use has been advanced and used in several other domains in Spanish to form different hybridized words according to the given context (viz: owneado, owneador, owneamiento, owneo, and others). Moreover, several other interesting works have been done on code-switching in the European contexts (Kelly-Holmes, 2000; Schlick, 2002, 2003), in French language (Martin, 2002, 2008), and similarly in the Italian language (Pulcini, 1995; Griffin, 2004; Coluzzi, 2009; Furiassi, 2010; Vettorel, 2013) but none of them have focused primarily on lexical derivations and innovation standpoints.

Further, studies on Russian were also conducted from the stretched zone perspective. Some of them have reported the perceptual shift towards the Englishization or Romanisation of Russian from the 80s and its current traces though the effect is estimated as mild (Rivlina, 2015). The main cause for its retraction is the limited span of contact between English and Russian, fragile relations with the native English-speaking countries, and the negative attitudes among its citizens due to the linguistic resistance against the expansion of English and foreign script in these lands. As a result, the practice concerning English-Russian bilingualism have not flourished unlike others (e.g. Spanis-English, Bulgarian-English, etc.) and practised in a limited domain only like popular literature, memorable messages, media, and advertising signboards (Rivlina, 2015). Because of this, the creative experiment of English remained confined to the intra-sentential level only. Few examples are available in writing hybridisation where English writing is fused with Cyrillic writing (viz: TERRITORIA refers to 'territory'). In the current outset of Russia, English hybridisation with Russian remains very restricted though slightly gaining popularity, especially in the field of advertising. In this context, several interesting works have focused on the Enlishization of Russian among which special reference to English borrowings can be found in Maximova (2002), Rivlina (2005), Eddy (2007), Yelenevskaya (2008), and Proshina (2010).

Several other studies were also conducted to examine English code-mixing in multilingual advertising signboards. Lamarre (2014, p. 132), for example, examined the linguistic landscape practices in Montreal and viewed them as "bilingual winks", a technique of mixing French and English words to surpass the language of legislative regulating authority from the public and commercial signboards. As a product of such covert bilingual recombination that resulted in the creation of shop signboards containing 'Chouchou' used to refer to a shoe shop (means 'sweetiepie' in French language but articulated as 'shoe-shoe'). On the contrary, a shift in the blending trend has been noticed where English appears to be more prominent in words like 'Pawtisserie' = paw + patisserie, which refers to pet food shop. Such a deviation from the usual language norms makes a wider scope for English to enter into French culture overtly, is considered the creative showcasing of language dynamics in Montreal, announcing freedom from the imposed language rules on a bilingual culture. Moreover, this could lead to more vigorous recombination of linguistic hybridity, specifically for customer persuasion perspectives in the domain of advertising.

In opposition to the English stretching zone countries, the expansion and the use of English is often noticed in everyday communication in different domains, especially in non-English speaking regions of Africa and Asia. In the Indian context, where bilingual practices are seen as a natural phenomenon, English has sneaked into several Indian languages that "led to an unmarked pattern of widespread naturalistic coalescence". This led to both inter and intra-sentential codemixing in addition to phonological and morphological recombinations (Bhatia & Ritchie, 2006b, p. 795). Of remarkable attention is linguistic hybridity or code-mixing of Hindi and English because the two languages "symbolise economic power, social mobility, and wider communicative access to the speakers of other Indian languages" (Bhatia & Ritchie, 200b, p. 796). As a result, code-mixing between these two languages appear to be more productive and frequent across several domains than any other language of the Indian continent.

Moreover, a rich literature is available on bilingual recombination of Hindi and English, especially from intra- and inter-sentential perspectives (Vishwamohan, 2004; Bhatia & Ritchie, 2006a, 2006b; Kachru, 2006b; Nair, 2008; Si, 2010; Bhatia, 2011; Kothari & Snell, 2011; Sailaja, 2011; Bhatia, 2012; Kathpalia & Ong, 2015). On the other hand, a few studies have focused on word-level code-mixing (Kathpalia, 2018) but excluded prefixes. However, only one study was done in the 1970s that have concentrated on Hindi-English code-mixing. Still, from a data-driven perspective, the discussed classes were hybrid collocation, lexical combinations, word order, and reduplication but ignored blends (Kachru, 1975).

Therefore, the main objective in the current study is to bridge such lacuna by addressing coroneologisms in Hindi-English code-mixed words in addition to prefix-through the recently gathered words related to COVID-19 terms. In particular, we will shed light on three key word-formation processes: i) affixation, which undertakes the

application of English affixes on Hindi words or viz a viz, ii) blending, a situation where the words of English and Hindi are mixed, and iii) compounding, a process of combining two words and one from both the languages, in such a way that the meaning of newly compounded words can be determined from its component word. In case of reduplicated words, where the whole or its part or syllable of the existing word is repeated to support the compounding process.

Based on the above, this paper aims to answer the following three questions:

- 3. What are the particular word-formation types responsible for these coroneologisms through Hindi-English code-mixing?
- Are such word creation processes structured, patterned, productive, and appear across different domains?
- 5. What factors are involved in creating such coroneologisms through wordformation processes?

The existing study further expands on the plane that will display how the linguistics resources of the two linguistically different languages have been exploited to coin these coroneologisms in Hindi-English code-mixed words and how these lexical innovations will contribute to the literature of English stretched zone context.

#### 3 Methodology

This paper focuses on coroneologisms formed through the code-mixing of Hindi and English words from a word-formation processes perspective in different domains. Hereafter, the term "Hindi-English words" will be used with special reference to coroneologisms. Examples of Hindi-English words used in this study are taken from our collected wordlists. In some cases, it is difficult to understand whether the word primarily belongs to Hindi or English language, however, most Hindi speakers across the country will recognize these Hindi words as a combination of code-mixed words.

This study will distance itself from the traditional notions of matrix and embedded language because of the disagreement shown towards the concepts of mixing English-Hindi or vice versa. Alternatively, this study will approach the items through the lens of bilingualism that allows us to analyze two linguistically different, independent, additive, and interdependent languages (García & Li, 2014) to imagine bilingualism practices concerning intra- and inter-related languages. Mixing this angle of bilingualism with that of linguistic fluidity, we reach the term "translanguaging" (Li, 2011, p. 1222; García & Li, 2014, p. 2) that will further be used to examine the internal structure of coroneologism in Hindi-English code-mixed words since it allows Indian bilinguals to cross both linguistic and cultural boundaries between the two languages to produce code-mixed words. In particular, we will use the notion of "flexible" multilingualism to examine the code-mixed words on the scale of multilingualism to check whether the

language presents clear or shadowing boundaries (Blackledge & Creese, 2010; Zhang & Chan, 2015). Therefore, the paper examines the Hindi-English words in terms of the stem, whether the given stem belongs to English (viz: vaccinewala) or Hindi (viz: sankarman-type).

Moreover, all the collected code-mixed words will be classified based on the scale of word-formation processes such as affixation (includes both inflectional and derivational one) and compounding (includes reduplication, specifically complete reduplication). The classification will include the nature of such formations, specifically from their predictability and ad hoc perspectives. Such an analysis allow us to understand coroneologisms from the sociolinguistic angle which stresses that linguistic hybridity or mixing languages is "a systematic and rule-governed phenomenon which satisfies the creative needs of bilinguals" that is impossible to achieve within the boundary wall of a single language system (Bhatia & Ritchie 2006a, p. 518). Those who make it are competent bilinguals with access to two linguistic repositories that enable "them to mix language to achieve maximum efficacy from the two linguistic systems at their disposal" (Bhatia, 2011, p. 49).

Lastly, words on the wordlist used in this research were collected from different sources such as advertisements, news, TV episodes, and social media (Facebook, Twitter, Instagram, and YouTube) during the two waves of the COVID-19. Details are shown in the Table 1 below.

## 4 Data analysis

In this section, we will discuss the prominent types of word-formation processes in Hindi-English codemixed COVID-19 terminologies that drove to coroneologisms. In this regard, we have noticed three broad categories of word creation processes, i.e. affixation, blending, and compounding. Moreover, these word-formation processes have been categorised into two types, coinage and affixation, as mentioned below:

| Category      | Words | Percentage (%) |
|---------------|-------|----------------|
| Affixes       | 14    | 03.80          |
| Compounding   | 323   | 87.77          |
| Blending      | 9     | 02.44          |
| Abbreviations | 7     | 01.90          |
| Acronyms      | 15    | 04.07          |
| Total         | 368   | 100            |

Table 1: Coroneologisms category in Hindi-English words

#### 4.1 Coinage

This word-formation type allows us to create a completely new lexical item either deliberately or accidentally (Yule, 2020). Our data strongly suggests that most of the terminologies about the coronavirus crisis are newly coined or created. In this context, the most dominating neologism is COVID-19, to which both the international community and lexicographers have unanimously accepted. They are subsequently stored in the dictionary as a new lexical entry that refers to the coronavirus. In the latest unscheduled update, the Merriam Webster Dictionary on 26 May 2020 has released a "COVID-19 crisis catalogue: A glossary of terms" given the ongoing pandemic, where the appearance of COVID-19 term was seen as a dominant one. Similar to this, the Oxford English Dictionary (OED) also witnessed, "The most striking change has been the huge increase in the frequency of the words coronavirus and COVID-19 themselves". Before 2020 the commoner was hardly aware of the term 'corona virus', though the medical community was familiar with the coronavirus family. But the term COVID-19 was coined in February 2020, and nowadays international community got acquainted with it. Notably, most COVID-19 inspired terminologies have also been adopted by Hindi language orthography. However, some of them have been transliterated, such as **कोविड-**19 /kovid-19/.

#### 4.2 **Affixation**

Affixes are generally divided into inflectional and derivational affixes. According to Bauer (1983), inflectional affixes are responsible only for grammatical alteration of words, such as play, plays, and playing. In contrast, derivational affixes are used to derive new words with a new lexical meaning, such as real, unreal, and result in word class, such as boy (noun) to boyish (adjective). We have found that Hindi-English words allow both inflectional such as selfiyaan (Hindi suffix -iyaan is added to make the plural of English word 'selfie') and derivational affixes such as doctorgiri (refer to someone who acts like doctor), similarly, with English such as desiness (refer to the quality of being Indian) and Hindi word such as heropanti (acting like a hero) affixes. More examples have been presented in the table below of how Hindi-English codemixed COVID-19 words allow inflectional and derivational affixes, including prefixes and suffixes and whether they are from Hindi or English. But notably, the data show scarcity of infix as both Hindi and English do not have an infix system (Kathpalia, 2018).

Table 2: Examples of English inflections in Hindi-English COVID-19 words

| Suffix | Examples             | Meaning                    |
|--------|----------------------|----------------------------|
| -S     | yodhas/tikaas/jawans | warriors/vaccines/warriors |

| Suffix | Examples       | Meaning                                 |
|--------|----------------|---|
| -yaan  | entriyaan      | -yaan= a direct feminine, plural suffix |
| -on    | vaccinon/bedon | -on = plural suffix                     |
| -ein   | filein         | -ein = feminine plural suffix marker    |

Table 3: Examples of Hindi inflections in Hindi-English COVID-19 words

Interestingly, the above Table 2 shows examples from both Hindi and English languages and presents the ways inflections are attached to the stems in each other language's words. While in Table 2, English suffix -s was attached to Hindi stems, the subsequent Table 3 shows examples of Hindi suffix -yaan, -on, and -e attached to English stems.

Nair (2008) claims that using English verb endings (e.g., -ing, -s, and -ed) and plural morpheme (-s) are frequently used with Hindi Nouns and Verbs. Similarly, Hindi suffixes are also affixed to English stems responsible for marking number, gender, and case into English words, as exemplified in the above tables.

Kathpalia (2018) argued that the percentage of derivational (53%) affix is slightly higher than the inflectional one (46%). Further, she noted that out of the total derivational affixes from both English and Hindi languages, the number of English affixes were (24%). In comparison, Hindi affixes were (76%), even more pertinent that the majority of them were suffixed (95%) as compared to prefixes, i.e. (5%). In this study, we have also considered the Hindi prefix a- which is frequently attached with English stems, especially with nouns. The data of inflectional (prefixes) and derivational suffixes of both English and Hindi languages are exemplified in Tables 4, 5, and 6 below:

Table 4: Examples of Hindi derivation in Hindi-English COVID-19 words

| Prefix | Examples      | Meaning         |
|--------|---------------|-----------------|
| a-     | a-sankarmit   | un-infected     |
|        | a-symptomatic | without-symptom |

Table 5: Examples of English derivations in Hindi-English COVID-19 words

| Suffix | Examples       | Meaning        |  |
|--------|----------------|----------------|--|
| -type  | sankarman-type | infection-type |  |

| Suffix       | Examples               | Meaning   |
|--------------|------------------------|---|
| -garast      | corona <b>garast</b>   | patient = refer to suffering of disease<br>'occurs with noun' |
| -giri        | doctor <b>giri</b>     | giri = refer to '-ism'  |
| -vaalaa (M)* | corona <b>vaalaa</b>   | vaalaa = occur with noun and indicate a possessor or owner    |
| -vaalii (F)  | mask <b>vaalii</b>     |   |
| -vaale (P)   | police <b>vaale</b>    |   |
| -vaalon(OP)  | hospital <b>vaalon</b> |   |
| -sb (H)      | Dr <b>sb</b>           | sb = as an honorific marker                                   |

Table 6: Examples of Hindi derivations in Hindi-English COVID-19 words

Our data suggest that the frequently used English suffix was -type and Hindi suffix -waala/waalii/waale/waalon, -giri, and -sb. Next, the data further revealed that inflectional affixes are slightly less frequent than derivational affixes in both English and Hindi. Therefore, it is pertinent to mention that the data show a wider scope of using derivational affixes in both languages. Bauer (1983) noted that the inflection affixes is fragile because it belongs to smaller and closed classes. They are also known as blockers. However, the scope of derivational affixation is much wider than inflectional one, even though it invites some language-specific restrictions. The English suffix -able shows semantic consistency and can be attached to any transitive verb to form an adjective. For example, workable (Bauer, 1983), and interestingly this feature is loaned in the Hindi language to perform the same function as in the word 'chaleable', meaning workable. Typically, the Hindi-English words do not contain English suffix only but also prefix -un, as in unjhelable. Similarly, the Hindi prefix a- is also frequently attached to English stems to perform the same function means used to make negative of any word (see table 4). The data presented in the tables above mainly shows the suffixation of English in Hindi-English words because the use of prefix is slightly less common, comparatively. However, we could not encounter words which would simultaneously contain prefixes and suffixes. We strongly recommend checking such a phenomenon with more Hindi-English words.

Interestingly, the Hindi suffix morphemes are frequently attached to English stems. Some of these trending suffixes are: -vaalaa/vaalii, -baazi, -giri, -panti, sb, and -yaan, etc., used by bilingual Indian speech community in their daily conversation as well as in Hindi cinemas, advertisements, TV series, and dramas. Even they appear in Hindi cinema names, for example, a movie released in 2015 named 'Meeruth**iya** Gangsters', 'womeniya' (women+duniya) a famous song in a Hindi movie named 'Gangs of Wasseypur'. The trace of these expressions are also found in the works of several scholars like Kachru (1975): educated-type, school-vaalaa, police-vaalaa; Gargesh

<sup>\*</sup> M= Masculine, F= Feminine, P= Plural, OP= Oblique Plural, H= Honorific

(2006) and Sinha (2011): milk-vaalaa; Kachru (2006b), heropanti. It is noteworthy to mention that inflectional morpheme/suffix -valaa can appear in different forms depending on the number and gender of the noun, as for example valaa (male), vaalii (female), and vale (singular), valon (oblique plural). In this context, Singha (2011) noted that all -valaa constructions form multiword expressions in Hindi language. The suffix valaa construction appears to be productive in terms of Hindi-English bilingual COVID-19 terminologies. Further, the suffix -baaz is originally from Persian, borrowed into the Hindi language, and used frequently with English stems. For example, as in Hindi TV dramas and serials; dramebaaz. In a work Kathpalia (2018) noted such examples: countrybaaz, daringbaaz, designbaaz, fightbaaz, flirtbaaz, fraudbaaz, helpbaaz, smartbaaz, etc. The other type of Hindi suffix -giri, and -panti were in use but gained recognition recently only through political and Bollywood discourse titles, for example, Politicalgiri (its Hindi equivalent is Netagiri), Policegiri, and Heropanti. Finally, the use of Hindi honorific -sb is also frequently used with English words, for example, Drsb, to perform dual function; to show honour and to show geographical affiliation, i.e. north-India (Nair, 2008).

Despite several language-specific grammatical constraints and differences between inflectional and derivational affixes, our data revealed that both affixes were used frequently with Hindi and English words to coin new Hindi-English expressions of different domains given the COVID-19 pandemic. The data we have presented reveal that the process of affixations is quite productive between the two languages (Hindi and English) and allows us (Indian bilinguals) to create new terms/words related to the COVID-19 crisis, eventually more than what is feasible within the same language as per the existing grammar rules. In the following sections, we have focused on another potential type of word formation process that allows Indian bilinguals to coin new Hindi-English words, that is blending.

# 4.3 Blending

Blending refers to amalgamation or fusion of two words to create a new word. The literature suggests different names of this process (blending) like: coalesced words, portmanteau words, and telescoped words. Despite different expressions, all refer to the notion of creating new words by conjoining parts of existing words in human languages across the globe. In this work, we have examined Hindi-English blends as an "extra grammatical phenomenon" (Mattiello, 2013, p. 127) but with consistency in patterns. The data were analyzed based on Mattiello's (2013) proposed classification. Mattiello's classification is an improved and revised version of different previous taxonomies. In the following Table 7, some examples of blending patterns in Hindi-English COVID-19 words have been presented.

The examples of Hindi-English blends revealed one pattern, i.e. complete blend (beginning+end). Mattiello (2013, p. 118) divided blends into three types: 'morphotical' (complete and partial reduplicated blends), 'morphonological', and 'graphical' (overlapping vs. non-overlapping blends) but we have found only one type of blend in our data, i.e. complete blend. Moreover, the COVID-19 related blends were made within the same language, which means either in Hindi or English. Furthermore, only a few examples of Hindi blends concerning pandemics were reported. In contrast, blends in the English language were more frequent, and most of them has been adopted in the Hindi language through transliteration. In this study, we have found examples for morphotactic blends, which means the data showed only complete blends. Referring to complete blends, this is formed by reducing the source words of both languages to the splinter. Notably, the structure of complete blends contains its sub-pattern, which is as beginning+end, as exemplified below.

| Туре                                  | Illustration     | Hindi                                | Combination | Pattern | English               | Combination       |
|---------------------------------------|------------------|--------------------------------------|-------------|---------|-----------------------|-------------------|
| al blend<br>words reduced<br>splinter | tikotsav         | tika 'vaccine' +<br>ustav 'festival' |             | Cipremi | Cipla +<br>Remdesivir |                   |
| Total blend                           | words r          |                                      |             |         | Covaxin               | Corona + vaccine  |
| Tota                                  | source v<br>to s |                                      |             |         | Covishield            | Covid +<br>shield |
|                                       | All so           |                                      |             |         | Cowin                 | Corona +<br>win   |

**Table 7:** Examples of COVID-19 blends

#### 4.4 Compounding

The concept of compounding is perceived as a "lexeme containing two or more potential stems that have not subsequently been subjected to a derivational process" (Bauer, 1983, p. 29) (as cited in Kathpalia, 2018). Further, we have classified compounds on the scale of semantics into endocentric and exocentric types, as exemplified in the Table 8 below.

These compounds have been classified on syntactic accounts based on the formation patterns/structure of the whole or component part of compound constructions. Based on the existing types of compounds (noun+noun, noun+verb, adjective+noun, and phrasal compound, and others) found in the English language, the analysis was further extended to examine the existing patterns/structures of compounds in Hindi-English, as presented in the Table 9 below.

| Туре                     | Illustration  | Examples  |
|--------------------------|---|---|
| Endocentric<br>compounds | A hyponym of a grammatical head as in <i>mahawave</i> means 'big covid second wave'               | mahawave = maha 'big' + wave<br>'relating to corona surge';   |
|                          |   | mahavaccinedrive = maha 'biggest'<br>+ vaccine drive 'relating to<br>vaccination in view of corona' |
| Exocentric compounds     | A hyponym of an unexpressed semantic head as in <i>sampurn lockdown</i> means 'complete lockdown' | sampurnlockdown = sampurn<br>'complete' + lockdown  |

**Table 8**: Types of COVID-19 specific compounds in Hindi-English (Adopted from Kathpalia, 2018)

**Table 9:** Showing formation patterns/structures of COVID-19 associated compounds (Adopted from Kathpalia, 2018)

| Туре             | Examples          | Meaning  |
|------------------|-------------------|--|
| Noun+noun        | sankramandar      | infected rate  |
| Adjective+noun   | atmanirbharbharat | atmnirbharbharat, (Independent India) a slogan given during first wave of covid-19 by GOI. |
| Noun+verb        | tika khoj         | vaccine (re)search   |
| Phrasal compound | parvasi mazdoor   | migrant labor  |

Our data revealed that most of the Hind-English bilingual compounds were reported in the noun compounds class belonging to both noun+noun and adjective+noun types. Most of the COVID-19 related words were formed of noun+noun combination. See an interesting case of compounding; tandoorii 'physical/social distancing' (Bhatia & Edmonds, 2021). The second trending type of compounding was formed of adjective+noun English-Hind pair (see appendix). Additionally, a limited number of phrasal compounds have also been reported.

Yet another important type of compounding is formed through reduplication, i.e., called 'eco-words' or 'rhyming words' formation. Such words are created through the exact replication of sounds, syllables, or words or else by altering the first part or syllable of the second word (Mattiello, 2013, p. 141). The alterations could be performed with vowels, consonants, or both vowels and consonants. Notably, Hindi speakers form eco-words by altering the first part or syllable of the second word with 'va' or 'u'. In contrast, the second part or syllable remains the same according to the first word, for example, taxi-vaxi or taxi-uxi 'taxi and like'. Further, the first word can stand alone and bear its semantic value, while the second word serves a

communicative or rhyming function. The instance of complete/full reduplication was not reported. Table 10 below shows such examples of reduplication.

Table 10: Types of COVID-19 reduplication (adopted from Kathpalia, 2018, originally from Mattiello, 2013)

| Туре          | Illustration          | English-Hindi                             |
|---------------|-----------------------|---|
| Partial       | Replicating only part | corona-vorona = corona and the like       |
| reduplication | of word or sound      | vaccine-phaiksin-uksin = vaccine and like |

The eco-word formation presence in our data was found to have a higher frequency. The data also revealed specific patterning of making eco-word in both the languages, i.e. in English, the second word starts with /p, b, or w/ (such as lockdownphockdown) and in Hindi, the second word starts with /v or u/ (as in, sankarmanvankarman/unkarman 'infection and the like'). Kachru (2006a) notes that the first word has its meaning while the second word bears no meaning or communicative meaning and cannot occur independently. The case of complete reduplication in Hindi-English was not present. However, the examples in partial reduplication are more productive than complete reduplication in Hindi-English scenario. Lastly, the other types of reduplication were also not found in the data, like semantic reduplication (such as lathistick) in the case of Hindi-English scenario.

#### 4.5 Borrowing

It is a very common practice whereby a lexical item of one language travels to another language, and the process is called adaption or borrowing. In Crystal's (2010) opinion, in modern times, English is considered as the biggest donor of lexical items to the world's different languages remains a great receiver as well. In this context, it has borrowed lexical items from the world's 120 different languages, including Sanskrit, Hindi, Urdu, French, and Arabic, etc. (Nordfuist, 2019). In the context of borrowing from the coronavirus perspective, 'lockdown' is widely accepted by the world's other languages, including Hindi. However, Hindi has loan translated the word 'lockdown' 'process of imposing restrictions to stop the spread of the virus' as 'talaabandi' and used interchangeably by Hindi speakers. Roig-Marín (2020, p. 2) further notes that "Covid has been borrowed as an Anglicism and users of languages with grammatical gender like French, Catalan, Spanish, and Italian have tended to prefer the masculine gender because of its associations with (corona)virus, masculine in those languages". Considering this notion, it can be said that Hindi is also a gender-sensitive language, and speakers use the word 'Covid' as a masculine gender.

Further, in this study, borrowings have been analyzed according to their sub-types, i.e. loan translation or calque and load blend. However, we have not encountered any examples of loan shifts in Hindi-English COVID-19 associated words. In the following Table 11, the examples of loan translations and loan blends have been represented.

Illustration Hindi Type English Loan Equivalent translation of each social distancing samajikduri translation word in the target language Loan blend Either first or second ward is corona test corona jaanch anshik lockdown translated into its equivalent partial lockdown word in the target language corona warrior corona yodhdha

Table 11: Showing the examples of COVID-19 words

Table 12: Examples of English inflections in English-Hindi COVID-19 words

| Suffix | Examples      | Meaning                                     |
|--------|---------------|---|
| -S     | corona yodhas | corona warriors; -s = English plural marker |
|        | corona jawans | corona warriors                             |

Table 13: Showing the examples of Hindi inflections in Hindi-English COVID-19 words

| Suffix | Examples           | Meaning  |
|--------|--------------------|--|
| -on    | corona wardon      | corona wards; -on = Oblique plural   |
|        | isolation centeron | corona incharges; -on = Oblique plural isolation centers; -on = Oblique plural |
| -yaan  | corona entriyaan   | Corona enteries; -iyaa = a direct, feminine, plural suffix                     |

### 5 Findings and discussion

This study addressed three questions: i) What are the commonly used types of Hindi-English code-mixed neologisms that have emerged due to the COVID-19 outbreak?, ii) What are the dominant word-formation classes and are these neologisms rule-governed code-mixing products, including productivity and domain dependant?, and iii) What are the factors that trigger such code-mixing in Hindi-English and concern COVID-19 neologisms?. The five word-creation processes in the Hindi-English codemixed words that we have examined related to COVID-19 terms, namely coinage, affixation, blending, compounding, and borrowing, revealed that compounding is the most

productive type of neologisms. As far as language boundaries are concerned, it was evident that the words of both Hindi and English can easily be identified concerning inflections (viz: yodhas), derivation (viz: Drsb and Drgiri), and compounding (viz: mahawave), respectively. However, in the case of blending the demarcation of boundaries between Hindi-English words and English-Hindi words were opaque and difficult. Moreover, a limited number of words have been reported (see Appendix-I below). In this regard, Kathpalia (2018) claimed that the code-mixing of English words with the words of world's other languages is also frequent and equally fluid as well as productive in terms of word-formation processes. There are instances of codeswitched words that show clear demarcation of language boundaries (e. g. Chinese-English 'zhaomuing', and Italian-English 'kissucci'), and there are examples that appear to be opaque concerning language boundaries, (e.g. Chinese-English 'mangday', Russian-English 'EuGOODu', and French-English 'Chouchou').

The paper also attempts to answer the question whether or not the Hindi-English code-mixed word-formation processes are systematic and whether they show any patterns. It further attempts to establish the difference between grammatical and extra-grammatical constructions on account of morphological knowledge of both Hindi and English. In this context, words formed through regular rules were kept under grammatical class, while unpredictable words were kept under extra-grammatical category. For example, words formed through compounding and affixation processes were transparent and predictable from the existing rule of Hindi and English, whereas blends were extra-grammatical constructions. Therefore they were unpredictable as they "are generally not transparently analyzable into morphemes" (Mattiello, 2013, p. 250). Our data further revealed that the words formed through affixation in Hindi-English were easily breakable into their component words or morphemes or parts of stem and affixes, for example, doctaron = doctor + -on (Hindi plural suffix). However, the scenario is relatively less transparent in terms of blends, as they are formed by combining the words of two different languages. In conclusion, they are partially or fully unpredictable. Moreover, our data show spareness in blend formation as compared to the affixation and compounding, but their formation shows some regularity (see the Appendix- I).

The formation of Hindi-English codemixed COVID-19 terms are both productive and rule-governed, as they are formed through the regular word creation processes of both languages, specifically compounding and suffixation. Additionally, we have also devised such words that are formed of extra-creativity and, through the extension of regular rules of the language, kept under extra-grammatical or non-rule governed constructions, as they are unpredictable from their component parts. The data of this study revealed both types of lexical innovations concerning Hindi-English codemixed COVID-19 terminologies; one created out of productivity (coining new terms using the existing word-formation processes), and the second formed out of creativity (creation of new words/terms through manipulating the existing rules). Based on the

aforementioned discussion, it can be noted that the productivity of rule-governed coinage is significantly higher than non-rule governed coinage in Hindi-English words. This may be because the coinage through the rule-governed process is easier. Bauer (2001) noted that both rules and analogy contribute to morphological innovations. Still, the product of rule-governed coinage is quite predictable from its components, while extra-grammatical construction is only partially predictable.

Moreover, Mattiello (2013) argued that the motivation for word creation of different classes, including grammatical and extra-grammatical categories, could be context-dependent. According to this, the current study's data reveals that coinage through the affixation process in Hindi-English words is a part of Indian bilinguals' daily language, as they created it through the rule-governed process of Hindi-English. However, blends are not the case; rather, such constructions are created out of extra-grammatical process/morphology. Therefore, mostly we encounter them in advertisements, TV shows, and other media because in them the focus remains on customer persuasion (refer to Tables 2-7 above).

The third question of this study deals with the motivation for the creation of neologisms through the code-mixing of Hindi-English words. Examples analized in this study seem to be a product of social, political, cultural, and linguistic interactions among Indian bilinguals. Primary observation from these creations appear to be inspired mainly by the bilingual culture, where monolingualism appears to be an abstract idea (viz: coronayodha = corona + yodha 'survivor'). Consequently, Hindi-English codemixed COVID-19 terms also started floating frequently on digital and mass media platforms (viz: mahawave = maha 'big' + wave 'relating to corona surge'). Moreover, word-creation through Hindi-English code-mixing is mainly due to its increasing popularity among Indian youths. They view it as a new way of life or "new lifestyle mantra" (Pal & Mishra, 2011, p. 175). This gives rise to the sense that the creation of code-mixed words is due to the overwhelmed use of digital media in India, especially the dominant use of Hindi-English mixed words on popular social media websites like Facebook, Twitter, Instagram, e-Encyclopaedia, and lifestyle information related websites like health, beautification, etc. In this context, some trending words that are the product of Hindi-English code-mixing like Facebhook (Facebook + bhook 'hunger'), similarly, Filmygyan (film + Hindi suffix -y, + gyan 'knowledge'), etc. So this creativity is extended and used to create Hindi-English code-mixed COVID-19 terminologies, especially by the government and TV shows to spread awareness among the Indian masses on how to fight the coronavirus. In addition to such a noble cause, given customer persuasion, the advertising agencies and experts started mixing Hindi-English words to persuade the customers, e.g., 'maha vaccine drive' (largest vaccine drive) used to spread awareness among the Indian citizens towards vaccination. Therefore, concerning COVID-19, the government and social organisations, advertisers, and educationists have also made frequent use of Hindi-English codemixing to create new names, terms, and slogans to show their awareness of their target audience in the

fight against COVID-19. For example, a famous Indian government slogan, 'do ghaz duri mask hai zaruri' means 'two-meter physical distance and mask is a must'.

The lists we have prepared in this study clearly show the speed and enthusiasm for coinage and lexical innovations in Hindi-English code-mixed COVID-19 terminologies. Crystal (2020, p. 1) has noted that there are collections that complied neologisms concerning COVID-19 in the English language but numbers are still increasing. In this regard, the authors of the current study attempted to compile a list of such code-mixed neologisms in Hindi-English that have been created after the outbreak of the COVID-19 pandemic. Ro (2020, p. 1) claims that the only coinage is 'COVID-19', and all other terms related to the COVID-19 were created with the pre-existing words and revised and redefined given the coronavirus pandemic.

The present study's findings strongly support the notion of linguistic change, as this is an inevitable phenomenon in any human language. This study was directed to shed light on the coroneologisms of Hindi-English codemixed words, and it was noted that out of all the new coinage, COVID-19 was the only term that has topped the list of lexical innovations in 2020 after the coronavirus outbreak. Notably, the term COVID-19 was coined in February 2020 and subsequently accepted by the international community. The authors of this study also believe that there are COVID-19 inspired neologisms that are yet to be entered in the dictionary due to the frequent mutation of the virus and rounds of waves. Consequently, governments of different countries are implementing several policies and strategies to curb the virus. Therefore, the creation of COVID-19 specific terms is still underway, and social media is a good reservoir of such terminologies at a global level.

One of the significant observations of this study is that most of the COVID-19 terms went under pragmatic change. In this context, the concept of 'social distancing' (Hindi equivalent 'samajik duri') has completely changed, now this refers to the several related health behavior concepts like 'maintaining minimum social distance', 'wearing a mask', 'no physical contact', 'avoid handshaking', and 'hand sanitization', etc. may lead to saving human lives from the deadly virus of covid. Most of these terms were pre-existing in the dictionary but re-introduced and became part of our daily lives after the pandemic. Moreover, the change in social attributes due to COVID-19 will leave a long-term impact on human life, especially in terms of social behavior in everyday life.

The significance of Hindi-English code-mixed COVID-19 related terms is crucial from an Indian bilingualism perspective, as these terminologies help people in getting updates/information related to COVID-19. These terminologies may also be used as standard terminologies that may unite the Hindi-English bilingual audience in the fight against the coronavirus. Somehow, the unified terms concerning COVID-19 have already mobilised the people of the world against the virus. Moreover, such coinage and lexical innovations concerning the coronavirus needs to be collected and stored in the form of a dictionary so that in real-time, these terms can be shared with all

concerned authorities in a minute or two. In this direction, seeing and discovering these terms through the lens of the word creation processes in Hindi-English language is of paramount importance. This will lead to creating a Hindi-English bilingual database of such terms.

Lastly, the types of word creation processes outlined in this study (see section 4 above) clearly state the processes that how COVID-19 specific terms were formed through the code-mixing of Hindi-English words. This confirms that coroneologism is inevitable and contributes significantly to the development and lexical innovation in a Hindi-English scenario. Ample evidence of neologisms and lexical innovations have been presented in the current data concerning compounding and affixation in Hindi-English codemixed words (see Appendix-I). Based on the investigation of the word-formation patterns of Hindi-English code-mixed COVID-19 terminologies, this study reports five types of word-formation processes concerning coroneologisms. This satisfies the notion of lexical innovations that took place due to pandemics in Hindi-English words. These word formation classes were: coinage, compounding, affixation, blending, and borrowing (see Appendix-I).

### 6 Conclusion

This study examined three key issues related to Hindi-English word-formation processes, their productivity, and motivations from a translanguaging point of view. The attention was also given to the fluidity and productivity of these lexical innovations from a linguistic perspective, particularly from a morphological viewpoint. The morphological analysis revealed that the boundaries between Hindi and English are very fluid and allow bilinguals to create new words out of their knowledge of linguistic creativity. Linguistic creativity is significant from a morphological perspective and vital to the social hybridization that further opens the way for better interaction between the two socially different languages. Moreover, the data analysis also revealed that Hindi has borrowed a significant amount of lexical items from the English language related to the COVID-19 pandemic terminologies that drove to Hindi-English codemixed coroneologisms. Out of all the word-formation processes, compounding was reported as the most productive type. This allows Indian bilinguals to creatively combine the words of two linguistically different languages, which is less possible to achieve such a level of lexical innovations within a single language system.

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Appendix-I: Hindi-English codemixed COVID-19 associated word lists

| Hindi words              | English words          | Hindi-English words  |
|--------------------------|------------------------|----------------------|
| Word formation type: Con | npounding              |                      |
| कोरोनामरीज़              | Symptomatic            | राष्ट्रीयलाकडाउन     |
| (korona mariz)           |                        | (rashtriya lockdown) |
| कोरोनासंकट               | Asymptomatic           | स्थानीयलाकडाउन       |
| (korona sankat)          |                        | (asthaniye lockdown) |
| कोरोनाकाल                | Coronavirus            | घातकवायरस            |
| (korona kaal)            |                        | (ghatak virus)       |
| कोरोनाविस्फोट            | Quarantine             | वैक्सीनसंकट          |
| (korona visphot)         |                        | (vaccine sankat)     |
| कोरोनाजिहाद              | Isolation              | वायरससंक्रमण         |
| (korona jihad)           |                        | (virus sankraman)    |
| कोरोनाटीका               | Self-isolation         | घातकवायरस            |
| (korona tika)            |                        | (ghatak virus)       |
| वैक्सीननिर्माण           | Covishield             | फीज़िकलसंपर्क        |
| (korona nirman)          |                        | (physical sampark)   |
| कोरोनामहामारी            | Contactless            | लाकडाउनउलंघन         |
| (korona mahamari)        |                        | (lockdown ulanghan)  |
| कोरोनालहर                | Antibodies             | पाज़िटीवदर           |
| (korona lahar)           |                        | (positive dar)       |
| कोरोनारोकथाम             | Webinar                | संपूर्णलाकडाउन       |
| (korona roktham)         |                        | (sampurn lockdown)   |
| सामाजिकदूरी              | Cowin                  | जनताकरफ्यू           |
| (samajik duri)           |                        | (janta curfew)       |
| अदृश्यवायरस              | Corona Vaccine         | पाज़िटिव्टीदर        |
| (adrishya virus)         |                        | (positivity dar)     |
| कोविडप्रबंधन             | Corona Bulletin        | वैक्सीननीति          |
| (kovid prabandhan)       |                        | (vaccine niti)       |
| कोविडनियमावली            | Corona Positive        | वैक्सीनगुरू          |
| (kovid niyamawali)       |                        | (vaccine guru)       |
| मुफ्तटीकाकरण             | Corona Negative        | पहलीवेव              |
| (muft tikakaran)         | C                      | (pahli wave)         |
| संक्रमणदर                | Covid Caseload         | दुसरीवेव             |
| (sankraman dar)          |                        | (dusri wave)         |
| कोविडकेंद्र              | Corona Report          | कोविडइलाज            |
| (kovid Kendra)           | ·                      | (covid ilaj)         |
| कोरोनायोद्धा             | Corona Case            | कोविडमुक्ति          |
| (korona yodha)           | -                      | (covid mukti)        |
| संक्रमणसंख्या            | Community Transmission | जेनोमसमूह            |
| (sankraman sankhya)      | ,                      | (genome samuh)       |
|                          |                        | ·                    |

| आक्सीजनसंकट<br>(oxygen sankat) | Quarantine Center     | नयास्ट्रेन              |
|--------------------------------|-----------------------|-------------------------|
| (oxygen sankat)                |                       |                         |
| (oxygen sankar)                |                       | (naya strain)           |
| कोरोनाडर                       | Positivity rate       | आकसीजनमाफिया            |
| (korona dar)                   |                       | (oxygen mafia)          |
| कोरोनासंक्रमित                 | Covid return          | आकसीजनचोरी              |
| (korona sankramit)             |                       | (oxygen chori)          |
| कोरोनातांडव                    | Corona Update         | आंशिकलाकडाउन            |
| (korona tandav)                |                       | (anshik lockdown)       |
| कातिलकोरोना                    | Self-isolation        | जीनगुरू                 |
| (qatil corona)                 |                       | (gene guru)             |
| कोरोनाखतरा                     | Self-Quarantine       | देसीवैरिएंट             |
| (corona khatra)                |                       | (desi variant)          |
| कोरोनाहाहाकार                  | Vaccination Programme | विदेशीवैरिएंट           |
| (corona hahakar)               |                       | (videshi variant)       |
| कोरोनापीड़ित                   | Vaccination Scheme    | कोविडचुनौती             |
| (corona pidit)                 |                       | (covid chunouti)        |
| कोरोनाव्यापार                  | Vaccination Center    | टीकाडोज़                |
| (corona vyapar)                |                       | (tika dose)             |
| कोरोनासंक्रमण                  | Vaccine Production    | कोविड१९मरीज़            |
| (corona sankraman)             |                       | (covid 19 mariz)        |
| कोरोनामामलों                   | Covid infection       | जाँचरिज़ल्ट             |
| (corona mamlon)                |                       | (janch result)          |
| कोरोनामामले                    | Corona case           | स्परस्प्रेडरघटना        |
| (corona mamle)                 |                       | (super spreader ghatna) |
| सक्रियमामलों                   | Clinical Trial        | महावैक्सीनेशनड्राइव     |
| (sakriya mamlon)               |                       | (mahavaccine drive)     |
| दूसरीलहर                       | Clinical Phase        | कोविडगाइडलाइन           |
| (dusri lahar)                  |                       | (covid guideline)       |
| तीसरीलहर                       | Clinical Stage        | कोरोनावायरस             |
| (tisri lahar)                  |                       | (corona virus)          |
| टीकाउत्पादन                    | Corona Patient        | संपूर्णलाक्डाउन(sampurn |
| (tika utpadan)                 |                       | lockdown)               |
| टीकानिर्यात                    | Face Mask             |                         |
| (tika niryat)                  |                       |                         |
| आत्मनिर्भरभारत                 | Covid Patient         |                         |
| (atmnirbhar bharat)            |                       |                         |
| कोविडटीकाकरण                   | Corona Mutants        |                         |
| (covid tikakaran)              |                       |                         |
| कोरोनाज्ञस्म                   | Corona Variants       |                         |
| (corona zakham)                |                       |                         |
| वैश्विकमहामारी                 | Complete Lockdown     |                         |
| (vaishvik mahamari)            |                       |                         |

| Hindi words                 | English words       | Hindi-English words |
|-----------------------------|---------------------|---------------------|
| टीकाउत्सव                   | Covid Warrior       |                     |
| (tika utsav)                |                     |                     |
| टीकाअभियान                  | Corona Warrior      |                     |
| (tika abhiyan)              |                     |                     |
| टीकाकरणअभियान               | Frontline worker    |                     |
| (tikakaran abhiyan)         |                     |                     |
| कोरोनाकहर                   | Containment Zone    |                     |
| (corona kahar)              |                     |                     |
| कोरोनाविशेषग                | Contact Tracing     |                     |
| (corona visheshag)          | · ·                 |                     |
| कोरोनाविषलेशन               | Social Distancing   |                     |
| (corona vishleshan)         | S                   |                     |
| कोरोनामाहिरीन               | Essential Business  |                     |
| (corona mahirin)            |                     |                     |
| कोरोनारोगी                  | Essential Shop      |                     |
| (corona rogi)               |                     |                     |
| कोरोनामुनाफा                | Night Curfew        |                     |
| (corona munafa)             | S                   |                     |
| कोरोनादसतक                  | Vax Drive           |                     |
| (corona dustak)             |                     |                     |
| टीकाकरणम्हिम                | Physical Distancing |                     |
| (tikakaran muhim)           |                     |                     |
| कोरोनाउछाल                  | Super Spreader      |                     |
| (corona uchal)              |                     |                     |
| सरकारीआँकड़े                | Community Spreader  |                     |
| (sarkari ankde)             |                     |                     |
| टीका आयात                   | Vaccine war         |                     |
| (tika aayat)                |                     |                     |
| टीकानिर्यात                 | Human Trial         |                     |
| (tika niryat)               |                     |                     |
| कोरोनाशव                    | New strain          |                     |
| (corona shav)               |                     |                     |
| कोरोनामंत्र                 | Corona Expert       |                     |
| (corona mantra)             |                     |                     |
| कोरोनादिव्यांग              | Corona Testing      |                     |
| (corona divyang)<br>कोविडशव | Tooting kit         |                     |
| काविडराव<br>(covid shav)    | Testing kit         |                     |
| कोरोनासंक्रमणरोकथाम         | Covid wards         |                     |
| (corona sankraman roktham)  | COVIU WAI US        |                     |
| कोरोनादवा                   | Vaccina driva       |                     |
| (corona dava)               | Vaccine drive       |                     |
| (corona dava)               |                     |                     |

| Hindi words                    | English words          | Hindi-English words |
|--------------------------------|------------------------|---------------------|
| कोरोना अस्पताल                 | Corona time            |                     |
| (corona aspatal)               |                        |                     |
| प्रवासीमज़दूर                  | Corona Period          |                     |
| (pravasi mazdur)               |                        |                     |
| साप्ताहिकतालाबंदी              | Zoom Meeting           |                     |
| (saptahik talabandi)           |                        |                     |
| आरोग्यसेत्                     | Zoom Calling           |                     |
| (arogya setu)                  |                        |                     |
| आरोग्यसेतृएप                   | Oxygen Concentrator    |                     |
| (arogya setu app)              |                        |                     |
| जमातीमरीज                      | Oxygen Cylinder        |                     |
| (jamati mariz)                 |                        |                     |
| कोरोनासेवा                     | Corona Phobia          |                     |
| (corona seva)                  | <del>-</del>           |                     |
| कोविडदौर                       | Oxygen Plant           |                     |
| (covid daur)                   | 70                     |                     |
| कोरोनाएहतियात<br>कोरोनाएहतियात | Oxygen Generator       |                     |
| (corona ehtiyat)               | 76-                    |                     |
| कोरोनासमाचार                   | Oxygen Supply          |                     |
| (corona samachar)              | , , , ,                |                     |
| कोरोनासेवाभाव                  | Vaccination drive      |                     |
| (corona sevabhav)              |                        |                     |
| कोरोनापरिक्षा                  | Community transmission |                     |
| (corona pariksha)              |                        |                     |
| स्वास्थस्विधा                  | Respiratory droplets   |                     |
| (savasthya suvidha)            |                        |                     |
| संकटकाल                        | Crisis time            |                     |
| (sankat kaal)                  |                        |                     |
| प्रतिरोधकक्षमता                | Water droplets         |                     |
| (pratirodhak chamta)           |                        |                     |
| कोविडवायरसमहामारी              | Crematory Space        |                     |
| (covid virus mahamari)         |                        |                     |
| कोविडमुक्तभारत                 | Covid Hospital         |                     |
| (covid mukt bharat)            |                        |                     |
| कोविडसेवादल                    | Covid ward             |                     |
| (covid sewa dal)               |                        |                     |
| कोविडइंतज़ामियाकमिटी           | Covid area             |                     |
| (covid intezamiya committee)   |                        |                     |
| कोरोनावायरससंक्रमण             | Covid incharge         |                     |
| (corona virus sankraman)       |                        |                     |
| आपदामें अवसर                   | Covid-19 symptoms      |                     |
| (aapda mein avsar)             | • •                    |                     |

| Hindi words                                     | English words             | Hindi-English words |
|---|---------------------------|---------------------|
| कोरोनावायरससंकट                                 | Red Volunteers            |                     |
| (corona virus sankat)                           |                           |                     |
| कोरोनावायरसमहामारी                              | Cowin Platform            |                     |
| (coronavirus mahamari)                          |                           |                     |
| आक्सीजनटास्कफोर्स                               | New variants              |                     |
| (oxygen task force)                             |                           |                     |
| प्रधानमंत्रीकेयरफंड                             | Future waves              |                     |
| (pradhanmantri care fund)                       |                           |                     |
| माइगरेंटवरकरक्राइसिस                            | Lockdown measure          |                     |
| (migrant worker crisis)                         |                           |                     |
| कोरोनावैश्विकमहामारी                            | Peak cases                |                     |
| (corona veshvik mahamari)                       |                           |                     |
| कोरोनावायरससमाचार                               | Mask guidelines           |                     |
| (corona virus samachar)                         | -                         |                     |
| श्रमिक रेलगाड़ी                                 | Fully vaccinated          |                     |
| (shramik railgadi)                              | ,                         |                     |
| दोगज़दूरी                                       | Mask up                   |                     |
| (do gaz duri)                                   |                           |                     |
| धवस्तस्वास्थव्यवस्था                            | Covid fatalities          |                     |
| (dhwast swastha vyavastha)                      |                           |                     |
| राष्ट्रीयवैगयानिककार्यबल                        | Massive Virus             |                     |
| (rashtriya vaigyanik karyabal)                  |                           |                     |
| कोविडइलाजप्रोटोकौल                              | Anti-covid drug           |                     |
| (covid ilaj protocol)                           |                           |                     |
| कोरोनाटीकाकिल्लत                                | Genome Committee          |                     |
| (corona tika qillat)                            |                           |                     |
| कोरोनाटीकाउत्पादन                               | Corona Data               |                     |
| (corona tika utpadan)                           |                           |                     |
| वायरसशोधकमिटी                                   | Vaccine Regime            |                     |
| (virus shodh committee)                         |                           |                     |
| कोविडहिफाज़तीदस्ता<br>(covid hifazati dusta)    | Healthcare infrastructure |                     |
| (covid Illiazati dusta)<br>निःश्ल्कएंब्लेंससेवा | Canama saguansina         |                     |
| (nishulk ambulance sewa)                        | Genome sequencing         |                     |
| पूर्वकोविडय्ग                                   | Covid Protocols           |                     |
| 1ूपपापडयुग<br>(purva covid yug)                 | Covid Frotocois           |                     |
| कोरोनासंक्रमणग्राफ                              | Covid Challenge           |                     |
| (corona sankraman graph)                        | Sovia chancinge           |                     |
| कोरोनाटीकाकेंद्र                                | Covid Care                |                     |
| (corona tika Kendra)                            |                           |                     |
| सौसालहमहामारी                                   | Corona report             |                     |
| (sau salah mahamari)                            |                           |                     |
| ,   |                           |                     |

| Hindi words    | English words                  | Hindi-English words |
|----------------|--------------------------------|---------------------|
|                | RT-PCR test                    |                     |
| (asankramit)   |                                |                     |
| संक्रमित       | Rapid Antigen                  |                     |
| (sankramit)    |                                |                     |
| संक्रमण        | Corona hotspot                 |                     |
| (sankraman)    |                                |                     |
| टीका           | Home isolation                 |                     |
| (tika)         |                                |                     |
| टीकाकरण        | Get Vaccinated                 |                     |
| (tikkaran)     |                                |                     |
| तालाबंदी       | Community Spread               |                     |
| (talabandi)    |                                |                     |
| कोरोना         | Corona Therapy                 |                     |
| (corona)       |                                |                     |
| कोरोनायुग<br>, | Vaccine Dose                   |                     |
| (corona yug)   |                                |                     |
|                | Plasma Treatment               |                     |
|                | Viral Load                     |                     |
|                | Congregate Setting             |                     |
|                | Incubation Period              |                     |
|                | Covid shot                     |                     |
|                | N95 respiratory                |                     |
|                | Swab test                      |                     |
|                | Viral shedding                 |                     |
|                | Curve Flattening               |                     |
|                | Mass testing                   |                     |
|                | Case loads                     |                     |
|                | Oxygen bank                    |                     |
|                | N95 Mask                       |                     |
|                | Anti-Virus                     |                     |
|                | Triple Mutant                  |                     |
|                | Covid Range                    |                     |
|                | Covid Shelter                  |                     |
|                | Covid Manual                   |                     |
|                | Covid Cell                     |                     |
|                | Covid Cell  Covid Meal         |                     |
|                | Covid Meai<br>Covid technician |                     |
|                |                                |                     |
|                | Covid Block                    |                     |
|                | Covid Fund                     |                     |
|                | Covid Guidelines               |                     |

| Hindi words | English words                  | Hindi-English words |
|-------------|--------------------------------|---------------------|
|             | Covid helpline                 |                     |
|             | Corona helpline                |                     |
|             | Novel Corona Virus             |                     |
|             | Covid Home Testing             |                     |
|             | Corona Second Wave             |                     |
|             | Covid Second Wave              |                     |
|             | Corona third phase             |                     |
|             | Home isolation tracking        |                     |
|             | Covid-19 National Emergency    |                     |
|             | Person to Person Transmission  |                     |
|             | <b>Confirmed Positive Case</b> |                     |
|             | PM Cares Ventilator            |                     |
|             | Vaccination Blue Print         |                     |
|             | Covid-19 Ground Report         |                     |
|             | Corona Virus Outbreak          |                     |
|             | Acute Respiratory Illness      |                     |
|             | Covid-19 task force            |                     |
|             | Covid Positivity Ratio         |                     |
|             | Suspected covid19 patients     |                     |
|             | Red Volunteers Helpline        |                     |
|             | Antibody testing kit           |                     |
|             | Superspreader events           |                     |
|             | Vicious third wave             |                     |
|             | Covid shot production          |                     |
|             | Evidence based policy making   |                     |
|             | New mask guidelines            |                     |
|             | Test positivity rate           |                     |
|             | Public health measure          |                     |
|             | Covid Special train            |                     |
|             | Migrant worker crisis          |                     |
|             | Vaccination on call            |                     |
|             | Presumptive Positive Cases     |                     |
|             | Prevent Spreading illness      |                     |
|             | Emergency use authorisation    |                     |
|             | Flattening the curve           |                     |
|             | Covid Victim Body              |                     |
|             | Corona virus hotspot           |                     |
|             | Testing and tracing            |                     |
|             | resume and tracing             |                     |

| Hindi words  | English words                       | Hindi-English words |
|--|-------------------------------------|---------------------|
|  | Morbid and comorbid                 |                     |
|  | Super Spreader Kumbh                |                     |
|  | Isolation tracking app              |                     |
|  | Highly contagious disease           |                     |
|  | Covid relief fund                   |                     |
|  | Vaccination Help Desk               |                     |
|  | Drive through Vaccination<br>Center |                     |
|  | Drive in Oxygen Center              |                     |
| Word formation type: Blending                      | }                                   |                     |
| टीकोत्सव टीका + उत्सव<br>(tikotsav; teeka + utsav) | Cipremi                             |                     |
|  | Covaxin                             |                     |
|  | Coronil                             |                     |
|  | Covishield                          |                     |
|  | Immunocompromised                   |                     |
|  | Immunodtereficient                  |                     |
|  | Coronials                           |                     |
|  | Cowin                               |                     |
| Word formation type: Abbrevia                      | ation & Acronyms                    |                     |
|  | PPE                                 |                     |
|  | PUI                                 |                     |
|  | WFH                                 |                     |
|  | PPM                                 |                     |
|  | COVID                               |                     |
|  | SARS                                |                     |
|  | SARS-CoV-2                          |                     |
| Medicine and Vaccine Terms                         |                                     |                     |
|  | Covaxin                             |                     |
|  | Covishield                          |                     |
|  | Cipremi                             |                     |
|  | Steroid                             |                     |
|  | Covifor                             |                     |
|  | Coronil                             |                     |
|  | Faviflu                             |                     |
|  | Remdesivir                          |                     |
|  | Sputnik                             |                     |
|  | Pfizer- BioNTech                    |                     |

| Hindi words                   | English words               | Hindi-English words |
|-------------------------------|-----------------------------|---------------------|
|                               | Moderna                     |                     |
|                               | Johnson & Johnson's Janssen |                     |
|                               | AstraZeneca                 |                     |
|                               | Novavax                     |                     |
|                               | Convidecia                  |                     |
| Suffix                        |                             |                     |
| कोरोनावाद (coronavad)         |                             |                     |
| कोरोनाहार (coronahar)         |                             |                     |
| कोरोनाग्रस्त (coronagrast)    |                             |                     |
| Prefix                        |                             |                     |
| असंक्रमित (asankarmit)        |                             |                     |
| Hind Inflections in Hindi-Eng | glish Words                 |                     |
|                               | -                           | कोविडवार्डों        |
|                               |                             | (covid wardon)      |
|                               |                             | कोरोनाइनचार्जीं     |
|                               |                             | (corona inchargon)  |
|                               |                             | कोविडहोस्पिटलों     |
|                               |                             | (covid hospitalon)  |
|                               |                             | कोविडवारियरों       |
|                               |                             | (covid warrioron)   |
|                               |                             | कोविडबेडों          |
|                               |                             | (covid bedon)       |
|                               |                             | कोविडसेंटरों        |
|                               |                             | (covid centaron)    |