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LEVIN'S CLASSIFICATION ON MALAYALAM VERBS

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ABSTRACT

Verbs play a major role in describing a sentence meaning. Verbs express the semantics of an event being described, as well as the relational information among participants in that event, and project the syntactic structures that encode that information. Verbs are also highly variable, displaying a rich range of semantic and syntactic behavior. Verb classifications help Natural Language Processing (NLP) systems to deal with this complexity by organizing verbs into groups that share core semantic and syntactic properties. The paper provides an attempt made to the classification of Malayalam verbs based on Beth Levin's verb classification in English. This can prove to be a powerful resource for the research in the area of cognitive linguistics with respect to Malayalam and various other NLP applications as well.

KEYWORDS: Frame Net; Lexical; Prop Bank; Semantic; Syntactic

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INTRODUCTION

Verbs mainly express the basic idea of any sentences. Traditionally, verbs have been classified as transitive and intransitive, where a transitive verb is intended to express a relation between any two arguments, while an intransitive one is treated as a one-place predicate. Verb classes have proven useful in numerous NLP tasks and applications, such as computational lexicography, language generation, machine translation, WSD, document classification, and sub categorization acquisition (Anna, 2004). These are well-defined representation that extracts syntactic and semantic meaning of the sentence. A verb is that part of speech in a sentence which communicates some kind of action, event, state of being, state of happening etc. To curtail the ambiguity in the lexicon, the verb classes can be used. These can be used to fill the gaps in the lexical knowledge. The classification of verbs becomes the fundamental research topic of computational linguistics when the importance is given to understanding the role of verbs in conveying the semantics of natural language.

Different linguistic theories have used this thought in a number of ways to account for the syntactic and the semantic structure of a sentence. Computational verb lexicons are key that supports the NLP frameworks, which are aimed at semantic interpretation. It has been observed that the lexical classes, having shared meaning components and similar syntactic behavior of words, are of huge importance in NLP and can be utilized in multiple ways by NLP systems (Jackendoff, 1990). These classes are useful in generalizing various linguistic properties and catching higher level of abstractions in terms of semantics and syntactic characteristics. These facilitate in encouraging the collective behavior of words.

Levin Classes (Beth, 1993) of verb classifies the English verb into various classes and diathesis alternations. WordNet (Fellbaum, 1998), VerbNet (Kipper, 2005) group verbs into syntactically and semantically similar classes. VerbNet is a domain independent lexicon that consists of about 270 verb classes. FrameNet (Charles, 2003) defines a set of semantic frames annotating additional semantic information needed to capture the meaning of a word.

The motivation behind this work is to explore whether the Malayalam verbs can be categorized semantically based on the Levin's classification (Beth, 1993) for English verbs. The present study deals with only verb classes and not the alternations.

Related Works

The classification of verbs in Levin's (1993) on the basis of intuitive semantic grouping and their participation in valence alternations, is much used by the NLP community as an indication of the semantic similitude of the verbs (Maria, 1999). Levins classification of verbs (1993) considers to be a wide classification of English verbs and widely used in classifying verbs. Levin discovered relationships among a few aspects of the semantics of verbs with the syntactic behavior of the verbs and with the interpretation in their argument (Beth, 1993). Levins classification gives a categorization of 3, 024 verbs (4, 186 senses) into 50 wide and 186 fine-grained classes according to their role in 79 alternations.

VerbNet (Kipper, 2000) (Kipper, 2005) is a comprehensive syntactic-semantic descriptions of Levin classes and is a lexicon comprising of about 5800 verbs in English and group verbs. It is a hierarchical, domain independent; broad coverage online verb lexicon. It is a domain independent lexicon that consists of about 270 verb classes. Each VerbNet verb class entries share equal syntactic frames having the same syntactic behavior. VerbNet is efficiently used in many NLP applications.

A different way of classifying the verbs is by using Frame Semantics. The FrameNet finds its applications in semantic role assignment, natural language understanding, machine translation, textual entailment, information extraction etc. FrameNet presently has approximately 170,000 manually annotated sentences providing a unique training data-set for semantic role labeling (Baker et al., 1998). In FrameNet data-set, the sentences are organized in a hierarchic order with each frame referring to a specific concept.

PropBank (Palmer, 2003) is another vital lexical resource for Semantic Role Labeling (SRL). PropBank is a proposition bank in which sentences are annotated with verbal propositions and their arguments. It was proposed by Martha Palmer et. al. It is similar to FrameNet however varies in two noteworthy ways (Dutta, 2011). It has been comprehensively utilized for the SRL task of CoNLL shared task 2004-05. WordNet is a comprehensive lexical database, which comprises the semantical verb classification by means of a semantic network. The organiPropBank (Palmer, 2003) is another vital lexical resource for Semantic Role Labeling (SRL).

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Chafe's approach (Chafe, 1970) mainly deals with the nature of the verb that the noun accompanies. Cook's verb classification is a matrix system based on two parameters 1. The vertical parameter consists of four basic verb types namely State verbs, Process verbs, Action verbs and Action-process verbs. The other parameter consists of the roles, namely agent and/or patient, experiencer, benefactive or octave.

Richa (2017) in her paper gave a detailed semantic-syntactic classification of Hindi verbs. This classification of Hindi verbs provided a wide range of information with respect to the linguistic properties of the verbs. A formal classification of Hindi main verbs based on their form was done by Suraj Bhan Singh (2003). The verbs are classified into 4 types namely Simple root (saraldhaathu), composite root (saamaasik dhaathu), complex verb (misra dhaathu) and composite verb (saMyukta dhaathu) (Begum, 2008). Kachru has classified hindi verbs based on the syntactic structure.

Verb Classification in Malayalam

Malayalam is morphologically rich language. The complete sentence can be combined together to form a single word making it highly difficult to decompose into words. There are many verb classifications in Malayalam. Suranad Kunjan Pillai identified 2880 verbs for the classification based on the based on the tense mainly the past tense form of verbs. His classification of the verbs was based on the past form. There are 12 classes of verbs ending with '_____ - tu'and 4 classes of verbs ending with 'go - i'. A R Rajaraja Verma, known as Kerala Panini, has classified verbs into 38 different classes. The classification by (Jayan, 2011) has about 53 classes of verbs and by (Jayan, 2012) has about 42 classes of verbs. The classification was mainly done based on the tense markers that the verb takes with it and the morphophonemic changes that occurs in the verb roots.

Malayalam verbs can be classified on the basis of Levin's classification. All classes of Levin's classification are not considered. It is noted that the same verbs which take different meanings are classified into different categories.

Verbs of Putting

This describes the putting of an entity at some location, specifying the specific spatial configuration, placing verbs in some manner. These are further classified as Put Verbs, Verbs of Putting in a Spatial Configuration refers to the some verbs that are used to represent the verbs that, Funnel Verbs, Verbs of Putting with a Specified Direction, Pour Verbs. The coil Verbs relate to putting something around something else., Spray/Load Verbs, Fill Verbs, Butter Verbs, Pocket Verbs by Levin. Malayalam verbs are classified on the first level.

Ex അടുക്കിവയ്ക്കുക (aTukkivaykkuka), വയ്ക്കുക (vaykkuka), തൂങ്ങുക (tungnguka), ഒഴിക്കുക (ozhikkuka), തിരിക്കുക ((tirikkuka), കറങ്ങുക (kaRangnguka), വിതറുക (vitaRuka), വര്ഷിക്കുക (varshikkuka)

(a.) രാമു പുസ്തകങ്ങള് അടുക്കിവച്ചു. (raamu pustakangngal aTukkivaccu.)

Ramu book+pl arrange+past

Ramu arranged the books.

(b.) രാമു പുസ്തകം മേശപ്പുറത്ത് വച്ചു.(raamu pustakam meeSappuRattu vaccu.)

Ramu book on table place+past

Ramu placed the book on the table.

Verbs of Removing

These are classified as Remove Verbs, Banish Verbs, Clear Verbs, Wipe Verbs, Verbs of Possessional Deprivation: Steal Verbs, Verbs of Possessional Deprivation: Cheat Verbs, Pit Verbs, Debone Verbs, Mine Verbs.

Ex. ഒഴിവാക്കുക (ozhivaakkuka), റദ്ദാക്കുക (Raddaakkuka), വ്യക്തമാക്കുക (vyaktamaakkuka), വൃത്തിയാക്കുക (vRIttiyaakkuka), തട്ടിപ്പറിക്കുക (taTTippaRikkuka), ചതിക്കുക (catikkuka)

Verbs of Sending and Carrying

Send Verbs, Slide Verbs, Bring and Take, Carry Verbs, Drive Verbs are subclasses under this classification.

Ex: കടത്തുക (kaTattuka), കൊണ്ടുവരിക (koNTuvarika), എടുക്കുക (eTukkuka)

Push/Pull Verbs

These are verbs that define the function of exerting force on an object.

Ex. ഉന്തുക (untuka), തള്ളുക (taLLuka)

Verbs of Change of Possession

The sub-classes under this category are Give Verbs, Contribute Verbs, Verbs of Future Having, Verbs of Providing, Verbs of Exchange, Berry Verbs

Ex: നല്കുക (nalkuka), കൊടുക്കുക (koTukkuka), നേടുക (neTuka), മാറ്റുക (maaRRuka)

Learn Verbs

Ex: പഠിക്കുക (paThikkuka), ഹൃദിസ്ഥമാക്കുക (hRIdisthamaakkuka), അഭ്യസിക്കുക (abhyasikkuka)

Throwing Verbs

These are further classified as Throw verbs and Pelt Verbs.

Ex. വിഷേപിക്കുക (viksheepikkuka), എറിയുക (eRiyuka), പതിക്കുക (patikkuka), എയ്യുക (eyyuk

a)

Verbs of Contact by Impact

These are further classified as Hit Verbs, Swat Verbs, Spank Verbs, Non-Agentive Verbs of Contact by Impact bump

Ex. വിക്ഷേപിക്കുക (viksheepikkuka), എറിയുക (eRiyuka), പതിക്കുക (patikkuka), എയ്യുക (eyyuk

a)

Touch Verbs

These are the verbs that pertain to contact.

Ex: തൊടുക (toTukuka), നുള്ളുക (nuLLkuka)

Verbs of Cutting Verbs

These are further classified as Cut verbs and Carve verbs.

Ex: മുറിക്കുക (muRikkuka), തുളയ്ക്കുക (tuLaykkuka), കൊത്തുക (kottuka)Verbs of Combining and

Attaching

These are further classified as Mix Verbs, Amalgamate Verbs, Shake Verbs, Tape Verbs, Cling Verbs

Ex: സംയോജിപ്പിക്കുക (saMyoojippikkuka), ലയിപ്പിക്കുക (layippikkuka), യോജിപ്പിക്കുക (yoojipp ikkuka), കുഴയ്ക്കുക (kuzhaykkuka), കുലുക്കുക (kulukkuka)

Verbs of Separating and Disassembling

These are further classified as Separate Verbs, Split Verbs, Disassemble Verbs, Differ Verbs

Ex: ഭാഗിക്കുക (bhaagikkuka), പിളര്ക്കുക (piLarkkuka), വേര്പ്പിരുയുക (veerppiruyuka), നുറു ക്കുക (nuRukkuka), വിഭിന്നമാവുക (vibhinnamaavuka), വ്യത്യസ് തമാകുക (vyatyastamaakuka), വേര്തിരിക്കുക (veertiriskkuka)

Verbs of Coloring

These verbs mainly describe the changing the color of an object by painting or coating etc by some means.

Ex: ചായമിടുക (caayamiTuka)

Image Creation Verbs

These verbs mainly describe the creation of various images on any surface like sand, mud, paper etc. The subcategories under this classification are Verbs of Image Impression, Scribble Verbs, Illustrate Verbs, Transcribe Verbs

Ex: മുദ്രകുത്തുക (mudrakuttuka), അടയാളപ്പെടുത്തുക (aTayaaLappeTuttuka), വരയ് ക്കുക (varaykkuka), വര്ണ്ണിക്കുക (varNNikkuka)

Verbs of Creation and Transformation

These verbs normally creates or transforms any entity taking an object. The categories under this class are Build Verbs, Grow Verbs, Verbs of Preparing, Create Verbs, Knead Verbs, Turn Verbs, Performance Verbs

Ex: ഉണ്ടാക്കുക (uNTaakkuka), അഭിവൃദ്ധിപ്പെടുത്തുക (abhivRIddhippeTuttuka), വേവിക്കുക (vee vikkuka), കണ്ടുപിടിക്കുക (kaNTupiTikkuka), രൂപപ്പെടുത്തുക (ruupappeTuttuka), വിരിയുക (viriyuka), വ റക്കുക (vaRakkuka), രചിക്കുക (racikkuka), ഭേദപ്പെടുത്തുക (bheedappeTuttuka), അഭിനയിക്കുക (azhinayi kkuka), മൂളിപ്പാടുക (muuLippaaTuka)

Engender Verbs

These mainly describe the relationship between any two arguments, mostly one argument acts as an existence to the other.

Ex. സ്യഷ്ട്രിക്കുക (sRIshTikkuka), ജനിപ്പിക്കുക (janippikkuka), മുട്ടയിടുക (muTTayiTuka), ഉത്പാദി പ്പിക്കുക (utpaadippikkuka)

Verbs with Predicative Complements

Appoint Verbs, Characterize Verbs, Dub Verbs, Declare Verbs, Conjecture Verbs, Masquerade Verbs, Orphan Verbs, Captain Verbs

Ex. തിരഞ്ഞെടുക്കുക (tiRanjnjeTukkuka), കണക്കാക്കുക (kaNakkaakkuka), ഗുണമറിക്കുക (guNam aRikkuka), നിയമിക്കുക (niyamikkuka), ന്യായികരിക്കുക (nyaayikarikkuka), പ്രഖ്യാപിക്കുക (prakhyaapikk uka), തീരുമാനിക്കുക (niiruumaanikkuka), സാക്ഷ്യപ്പെടുത്തുക (saakshyappeTuttuka), സങ്കല് പിക്കുക (sang kalppikkuka), പ്രസ്താവിക്കുക (prastaavikkuka), അനുമാനിക്കുക (anumaanikkuka)

Verbs of Perception

The verbs in this subcategory describe the actual perception of some entity. They take the perceiver as subject and the one that is perceived as direct object. The subclasses under this broad class are : See Verbs, Sight Verbs, Peer Verbs, Stimulus Subject Perception Verbs

Ex. കാണുക (kaaNuka), തിരിച്ചറിയുക (tiriccaRiyuka), നിരീക്ഷിക്കുക (niriikshikkuka), ദര്ശിക്കു ക (darshikkuka), കണ്ടെത്തുക (kaNTettuka)

Psych-Verbs Verbs of Psychological State

The verbs are classified according the semantic roles of the arguments that these verbs take with it. These are divided into Amuse Verbs, Admire Verbs, Marvel Verbs, and Appeal Verbs

Ex. അമ്പരപ്പിക്കുക (anparappikkuka), ആനന്ദിപ്പിക്കുക (aanandippikkuka), അനുരഞ്ജിപ്പിക്കുക (anuranjjippikkuka), പൂജിക്കുക (puujikkuka), പ്രശംസിക്കുക (praSaMsikkuka), വേദനിക്കുക (veedanikkuka), കോപിപ്പിക്കുക (koopippikkuka), വിഷമിപ്പിക്കുക (vishamippikkuka)

Verbs of Desire

These verbs express the desire based on the Want verbs or the Long verbs.

Ex: ആഗ്രഹിക്കുക (aagrahikkuka), ആശിക്കുക (aaSikkuka), പ്രതീക്ഷിക്കുക (pratiikshikkuka)

Judgment Verbs

There are positive and negative judgement verbs.

Ex. സ്തുതിക്കുക (stutikkuka), ശിക്ഷാര്ഹമാക്കുക (Sikshaarhamaakkuka), ഹിംസിക്കുക

(hiMsikkuka)

Verbs of Assessment

These are the verbs that normally make some type of assessment of something with respect to some attribute.

Ex. അപഗ്രഥിക്കുക (apagrathikkuka), തിട്ടപ്പെടുത്തുക (tiTTappeTuttuka), പരിശോധിക്കുക (pariSoodhikkuk

a)

Verbs of Searching

The verbs mainly describe the action of searching. These are further classified as Hunt Verbs, Search Verbs, Stalk Verbs, Investigate Verbs, Rummage Verbs, Ferret Verbs

Ex. വേട്ടയാടുക (veeTTayaaTuka), പരിശോധിക്കുക (pariSoodhikkika), പിന്തുടരുക (pintuTaruka),

നിരീക്ഷിക്കുക (niriikshikkuka), വീക്ഷിക്കുക (viikshikkuka), കണ്ടുപിടിക്കുക (kaNTupiTikkuka) Verbs of

Social Interaction

These verbs mainly correspond to the group activities like interactions. This class includes a significant number of verbs relating to 'fighting' and 'verbal interactions'. The classes under this category are Correspond Verbs, Marry Verbs, and Meet Verbs .

Ex. കണ്ടുമുട്ടുക (kaNTumuTTuka), സന്ദര്ശിക്കുക (sandarSikkuka), വിവാഹിതരാകുക (vivaahitar aakuka)

Hold and Keep Verbs

These are further classified as Hold verbs and Keep verbs.

Ex. സംഭരിക്കുക (saMbharikkuka), മുറുകെപ്പിടിക്കുക (muRukeppiTikkuka)

Verbs of Communication

These verbs are mainly used for the transferring the ideas and for better communication. Verbs of Transfer of a Message, Tell, Verbs of Manner of Speaking, Verbs of Instrument of Communication, Talk Verbs, Chitchat Verbs, Say Verbs, Complain Verbs, Advise Verbs

Ex. ചോദിക്കുക (coodikkuka), വിശദീകരിക്കുക (viSadiikarikkuka), പിറുപിറുക്കുക (piRupiRukku ka), സംസാരിക്കുക (saMsaarikkuka), തര്ക്കിക്കുക (tarkkikkuka), വാദിക്കുക (vaadikkuka), പുലമ്പുക (pula mpuka), വിവരിക്കുക (vivarikkuka), ചിലയ്ക്കുക (cilaykkuka), കുശുകുശുക്കുക (kuSukuSukkuka)

Verbs of Sounds Made by Animals

Verbs that describe the sounds generated by animals.

Ex. കൂവിവിളിക്കുക (kuuviviLikkuka)

Verbs of Ingesting

These verbs mainly deals with the ingestion of foods. These verbs are classified as Eat Verbs, Chew Verbs, Gobble Verbs, Devour Verbs, Dine Verbs, Gorge Verbs, Verbs of Feeding

Ex. കഴിക്കുക (kazhikkuka), കൊറിക്കുക (koRikkuka), വിഴുങ്ങുക (vizhungnguka), ഭക്ഷിക്കുക (bh akshikkuka), തീറ്റിപ്പോറ്റുക (tiiRRippooRRuka)

Verbs Involving the Body

These are completely related to the bodily processes. These are again classified as Verbs of Bodily Processes, Verbs of Nonverbal Expression, Verbs of Gestures/Signs Involving Body Part, Snooze Verbs, Flinch Verbs, Verbs of Body-Internal States of Existence, Suffocate Verbs, Verbs of Bodily State and Damage to the Body

Ex. തുമ്മുക (tummuka), കരയുക (karayuka), മണപ്പിക്കുക (maNappikkuka), താലോലിക്കുക (taaloo likkuka), ചുളിക്കുക (cuLikkuka), വണങ്ങുക (vaNangnguka)

Verbs of Grooming and Bodily Care

These verbs relate to the taking care of the whole bodily. These are again classified as Verbs of Caring for the Whole Body, Verbs of Caring for a Specific Body Part, Verbs of Dressing, Verbs of Killing

Ex. പരിചരിക്കുക (paricarikkuka), വിവസ്

ത്രീകരിക്കുക (vivastriikarikkuka), ചീകുക (ciikuka), കത്രിക്കുക (katrikkuka), അണിയുക (aNiyuka), മോടി പിടിപ്പിക്കുക (mooTipiTippikkuka), അലങ്കരിക്കുക (alangarikkuka)

Verbs of Emission

This class involves the emission of stimulus like sound, smell, light etc. These are further sub classified ad Verbs of Light Emission, Verbs of Sound Emission, Verbs of Smell Emission, Verbs of Substance Emission

Ex. ജ്വലിക്കുക (jvalikkuka), ദുര്ഗന്ധംവമിക്കുക (durgandhaMvamikkuka), മന്ത്രിക്കുക (mantrikkuka), ഞര ങ്ങുക (njarangnguka), ചൊരിയുക (coriyuka)

Destroy Verbs

These verbs describe the complete destruction of an entity.

Ex. തരിശാക്കുക (tariSaakkuka), തകര്ന്നടിയുക (takarnnaTiyuka), തട്ടിത്തകര്ക്കുക (taTTittakarkkuka), ഇ ല്ലാതാക്കുക (illaataakkuka), ശൂന്യമാക്കുക (Suunyamaakkuka)

Verbs of Change of State

These verbs describe the change in the current state of an object to some other state. These are classified as Break Verbs, Bend Verbs, Cooking Verbs, Other Alternating Verbs of Change of State, Verbs of Entity-Specific Change of State, and Verbs of Calibratable Changes of State.

Ex. പൊട്ടിക്കുക (poTTikkuka), മടക്കുക (maTakkuka), തിളപ്പിക്കുക (tiLappikkuka), വറക്കുക (vaR akkuka), ചൂടാവുക (cuuTaavuka)

Lodge Verbs

These verbs pertain to the one's living situation. They communicate different actions of living.

Ex. പാര്ക്കുക (paarkkuka), പാര്പ്പിക്കുക (paarppikkuka), കുടിയിരിക്കുക (kuTiyirikkuka), താമ സിക്കുക (taamasikkuka)

Verbs of Existence

These verbs are concerned with the existence based on some location of an entity. These are further classified as Exist Verbs, Verbs of Entity-Specific Modes of Being, Verbs of Modes of Being Involving Motion, Verbs of Sound Existence, Verbs of Group Existence, Verbs of Spatial Configuration, Meander Verbs, and Verbs of Contiguous Location

Ex.നിലനില്ക്കുക (nilanilkkuka), അതിജീവിക്കുക (atijiivikkuka), ശബ് ദിക്കുക (Sabdhikkuka), വര്ഗ്ഗീകരിക്കുക (varggiikarikkuka)

Verbs of Appearance Disappearance and Occurrence

These verbs helps in the appearance of an entity. These are classified as Verbs of Appearance, Verbs of Disappearance, and Verbs of Occurrence

Ex. ഹാജരാകുക (haajaraakuka), അപ്രത്യക്ഷമാവുക (apratyakshamaavuka), നശിക്കുക (naSikkuka), സംഭവിക്കുക (saMbhavikkuka)

Verbs of Body-Internal Motion

These verbs mainly deals with the motion of the animate subjects that occur.

Ex. പുളയുക (puLayuka), ചവിട്ടുക (caviTTuka), തൊഴിക്കുക (tozhikkuka)

Motion Verbs

These are the verbs that relate to the motion which are the characteristic features of an entity. These are classified as Verbs of Inherently Directed Motion, Leave Verbs, Manner of Motion Verbs, Verbs of Motion Using a Vehicle, Waltz Verbs, Chase Verbs, Accompany Verbs.

Ex. ചെന്നെത്തുക (cennettuka), വന്നുചേരുക (vannuceeruka), വെടിയുക (veTiyuka), കറങ്ങുക (ka Rangnguka), ഇഴയുക (izhayuka), ഓടുക (ooTkua), അലയുക (alayuka), ചാടിവീഴുക (vaaTiviizhuka)

Avoid Verbs

The verbs that are related to avoidance.

Ex: ത്യജിക്കുക (tyajikkuka), വര്ജ്ജിക്കുക (varjjikkuka), ബഹിഷ്കരിക്കുക (bahishkarikkuka)

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Verbs of Lingering and Rushing

The verbs that describe the action of the duration of an activity that an argument does. These are sub divided as Verbs of Lingering and Verbs of Rushing.

Ex: മിനക്കെട്ടിരിക്കുക (minakkeTTirikkuka), വേഗപ്പെടുത്തുക (veegappeTuttuka), നീട്ടിവയ് ക്കുക (niiTTivaykkuka), തിരക്കുകൂട്ടുക (tirakkukuTTuka)

Measure Verbs

These verbs mainly describes the value of some attribute with respect to the scale of measurement. Register Verbs, Cost Verbs, Fit Verbs, Price Verbs, Bill Verbs are the subclasses under this classification.

Ex: രേഖപ്പെടുത്തുക (reekhappeTuttuka), വിലയാകുക (vilayaakuka), പിഴയിടുക (pizhayiTuka)Aspectual Verbs

These verbs defines the initiation, termination, or continuation of an activity. The two subcategories are Begin Verbs and Complete Verbs.

Ex: തുടങ്ങുക (tuTangnguka), ആരംഭിക്കുക (aaraMbhikkuka), പൂര്ത്തിയാക്കുക (puurttiyaakkuka)

CONCLUSIONS

Verbs mainly convey the basic idea of any sentences. This work is a preliminary attempt on clas-sifying verb based on the Beth Levin's verb classification of English. Levin's classification was based on the syntactic alterations and the semantic verb classes. The study deals only with the broad categories of Levin. 1505 Malayalam verbs are taken for this study. This work can be extended to the fine grained level classification including more verbs. Also it can be checked for the alternations of Levin.

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