A grammar of Dhao: An endangered Austronesian language in Eastern Indonesia

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3

Word Classes

3.1. Introduction

This chapter discusses word classes in Dhao. Dhao has nouns, verbs, adjectives, and adverbs. However, these word categories cannot be defined merely on the basis of the semantics of the lexical items. Their categorical status is determined by the integrated paradigms of constructions. Certain morphosyntactic features can be used to make distinctions between word classes. However, a considerable amount of lexical items are multifunctional and can be categorized either as nouns, verbs, or adjectives. Besides semantic/pragmatic and formal criteria, a distinct analysis is applied at the morpho-syntactic level specifically in order to distinguish verbs from adjectives in serial verb constructions (SVCs). This chapter begins with the description of nominal categories in §3.2, which includes nouns, pronouns, and numerals and classifiers. This section is followed by verbal categories in §3.3 which involves not only verbs but also adverbs. A description of adjectives is presented in §3.4, in which true adjectives and re-categorized adjectives are distinguished. Interrogative words are presented in §3.5. Finally, function words are described in §3.6, which includes basic prepositions and other prepositions, conjunctions particles, tags, and interjections.

3.2. Nominal Categories

3.2.1. Nouns

Nouns typically refer to entities that are concrete and individual physical objects. Nouns refer not only to things, persons, and places, but also to abstract notions such as feelings or ideas (Dixon, 2010b; Lehmann, Moravcsik, & Milwaukee, 2000; Payne, 2006; Schachter, 2007). This section starts with defining the formal

properties of nouns in Dhao (§3.2.1.1), followed by the subcategorization of nouns (§3.2.1.2).

3.2.1.1. Formal Properties

Nouns occur in argument slots in clause structures (Dixon, 2010b: 39). Verbs never occur as arguments in Dhao clause structure (see §5.3). In argument position, nouns typically are the heads of noun phrases, which have five defining features: (1) they can be modified by demonstratives, (2) they refer either to a possession or a possessor in possessive constructions, (3) they can take numerals and classifiers, (4) they can be modified by the quantifier *aa'i* 'all', and (5) they follow the existential verb *abhu* 'to get'. These five defining features of nouns are illustrated below. (C)*a*-reduplication as a restricted morphological property to derive nouns with will also be taken into account and will be briefly explained as well.

A typical nominal property is the modification of NPs by demonstrative pronouns, which can beeither singular or plural (§3.2.2.2). In (1) below, the singular demonstrative *èèna* 'DIST.SG' modifies *dhèu* 'person' and in (2), the plural demonstrative *se'e* 'PROX.PL' modifies *ana* 'child'. Demonstratives in Dhao canonically follow the nouns they modify.

(1) [*dhèu* ***èèna***] *la-'e*
person DIST.SG to.go-3SG
'That person (woman) left' [RL_Rade_Lingu.040]

(2) *èu* *m-ore* *boe* [*ana* ***se'e***]
2SG 2SG-to take not child PROX.PL
'You cannot defeat the children' [RL_Rade_Lingu.126]

Nouns in Dhao may refer either to the possessor or to the possession in possessive constructions. The possessor noun follows the possession noun. In (3), *ja'a* '1SG' refers to the possessor and *èmu* 'house' refers to the possession. The NP functions as a complement to the complex prepositional phrase *ètu dara* 'LOC+inside'. Furthermore, the possessive NP is modified by the demonstrative *ne'e* 'PROX.SG'.

(3) *èu* *saba* *ètu* *dara* [[***èmu*** ***ja'a***] *ne'e*]
2SG to work LOC inside house 1SG PROX.SG
'You worked in my house' [SK_Dhe'u_E'ta _Dua.093]

The quantifying properties of NPs are indicated by numerals and classifiers (see §3.2.3). Numerals alone indicate the number of the entity. Classifiers cannot stand

independently, but they obligatorily combine with numerals in an NP. As seen in (4) below, the numeral *pidhu* 'seven' immediately follows after the noun *dhèu* 'person', and in (5) the classifier *bua* 'unit' follows the numeral *dua* 'two', which in turn modifies the noun *kabolo-keke* 'palm fruit' (for a more elaborate discussion, see §3.2.3).

(4) [*dhèu* ***pidhu***] *mai*
person seven to.come
'Seven people came' [BS_Tuka_Suki.288]

(5) *lèpa* *mai* *ka* *r-èdhi* [*kabholo-keke* *dua* ***bua***]
to return to come PART 3PL-see palm.fruit two unit
'(They) came home and brought two (dry) palm fruits'
[JL_Baki_Tuka.156]

The quantifier *aa'i* 'all' is used as a noun modifier. It can appear in different positions, as is demonstrated in (6) through (9) below. In (6), the quantifier follows the pronoun *edhi* '1PL.in' and is followed by the corresponding clitic, which is an obligatory extra element co-referenced with the main NP (see §3.2.2.1.2.) In (7), it precedes the pronoun *ji'i* '1PL.ex'. The quantifier also can appear after the clausal predicate, as shown in (8), where it co-refers to the head noun *dhèu* 'person' in the subject slot. Furthermore, it also occurs independently in argument positions, such as the object position in (9).

(6) *èdhi* ***aa'i*** *ti* *sanède*
1PL.in all 1PL.in.CL to remember
'We all remember' [YK_HelaBunga.103]

(7) *papa* *ku* *pare* *pa-madhe* ***aa'i*** *ji'i*
father(Mal) 1SG.CL to cut CAUS-to die all 1PL.ex
'My father will kill us all.' [SK_Polisi.587]

(8) *dhèu* *tesa* ***aa'i*** *ètu* *dara* *kota*
person to complete all LOC inside city(IND)
'All of them assembled in town' [JL_Musu_Bajo.280]

(9) *èu* *m-u'e* ***aa'i*** *te* *ja'a* *ku'a* *boe*
2SG 2SG-to eat all because 1SG 1SG-to eat not
'You eat all, because I do not eat' [Verb_Elicited.0008]

Finally, nouns can follow the existential verb *abhu* ‘to get’, as illustrated in (10) below (see §3.3.1.2.8).

(10) ***abhu*** *bola* *èci* *ètu* *suu* *mei*
to get ball(IND) one LOC tip table
‘There is a ball at the tip of the table’ [Elicit_Prep.006]

Besides the syntactic characteristics presented above, Dhao also has partial (C)*a*- reduplication as a morphological feature, which can be used to identify derived nominals. Such partial reduplication is only confined to bisyllabic verbs and adjectives (see §4.4). An illustration is given in (11). An example of nominalization employed in clauses is represented in (12), with the derived morpheme *mamea* ‘red part’. As shown, *mamea* fills an argument position following the verbal predicate *uri pabe’a* ‘to manage well’.

(11) Nominalization

edhe	‘to soak’	V	***a-****’edhe*	‘place of soaking, materials’
nèu	‘to dress up’	V	***na-****nèu*	‘tools for dressing up, style’
roge	‘to dance’	V	***ra-****roge*	‘way of dancing’
bhèla	‘wide’	Adj	***ba-****bhèla*	‘width’
bia	‘heavy’	Adj	***ba-****bia*	‘weight, burden’
mea	‘red’	Adj	***ma-****mea*	‘red part (on weaving)’

(12) *uri* *pa-be'a* ***ma-****mea*
to.deal CAUS-good DUP-red
‘Manage the red part well’ [SF_Tao_Hengu.245]

Partial (C)*a*- reduplication, however, does not only generate nouns but also maintains the category of verbs. It simply alters the semantics of verbs. As illustrated in (13), it is the semantics of the derived verb that changes rather than the verb category. It is obvious in (14) that the reduplicated morpheme *dadugu* ‘to persuade’ is a verbal category rather than a nominal category.

(13) Semantic change with reduplication

ciu	‘be broken’	***ca-****ciu*	‘torn’
core	‘to throw’	***ca-****core*	‘to throw around’
dugu	‘to tease’	***da-****dugu*	‘to persuade’

(14) *miu* *baku* ***da***-*dugu* *ana* *iiki* *sèi*
2SG PROH.NEG DUP-to poke child small REM.PL
'(You) please, do not persuade those children'

The phonological constraint and the unpredictable semantics of the derived morphemes by the partial reduplication suggest that partial (C)*a*- reduplication cannot entirely be considered as a property of nouns in terms of morphological perspective alone (see more details in §4.4).

3.2.1.2. Subclasses of Nouns

The formal properties described above showcased the syntactic characteristics of nouns in Dhao. This subsection focuses on the subclassification of nouns on the basis of syntactic criteria. On the basis of classifiers, nouns distinguish three subclasses: persons, animates, and inanimates. Nouns indicating persons take the classifier *dhèu* 'person', animates take *ngi'u* 'body', and inanimates take *bua* 'unit'. Furthermore, inanimate nouns are grouped differently according to the specific classifiers they take (see Table 11, §3.2.3). Possession, on the other hand, distinguishes nouns into two groups: alienable nouns, which can be expressed by both NP-internal and predicative possession, and inalienable nouns, which can only be expressed by NP-internal possession (see §5.2.3). In NP possession, certain nouns can only be possessors; others can be both possessor and possessed nouns.

Basically, all subtypes of nouns can be modified by demonstratives. The use of a singular or a plural demonstrative to modify a noun is based on the semantics and the pragmatic use of the given noun. Nouns indicating time cannot be modified by the quantifier *aa'i* 'all'. In general, nouns in Dhao are subclassified into four groups: (1) proper nouns (§3.2.1.2.1), (2) common nouns (§3.2.1.2.2), (3) location and direction nouns (§3.2.1.2.3), and (4) time nouns (§3.2.1.2.4).

3.2.1.2.1. Proper Nouns

Like in many other languages, proper nouns in Dhao include names of persons, clans, and geographical locations or islands. This subtype of nouns grammatically takes singular demonstratives by default. Plural demonstratives function as associative plurals (Daniel and Moravcsik, 2013). Kinship terms are also proper nouns in Dhao, not only because of the same grammatical feature, but also because they function as honorific terms accompanying person names.

The use of proper names modified by demonstratives is illustrated in (15) and (16) below. The singular demonstrative *ne'e* 'PROX.SG' indicates the definiteness of the person mentioned in the story. The plural demonstrative *sèi* 'REM.PL' modifying the name *Rika* does not denote the number of *Rika*, but rather indicates his associates. Person names include given names and family names as shown in (18)

and place names are in (19). Unlike person names, place names cannot take plural demonstratives, as illustrated by the ill-formedness of *sèi* 'REM.PL' in (17).

(15) ***Jote*** ***ne'e*** *ètu* *suu* *dhasi* *dhimu*
Jote PROX.SG LOC tip sea east
'Jote at the eastern part' [BS_Rika_Jote.020]

(16) *la-si* *uru* *asa* *èmu* ***Rika*** ***sèi***
to go-3PL earlier to house Rika REM.PL
'They left earlier to visit Rika *at al*'s house' [JL_Rika_Jote.049]

(17) *era* *pea* *nèngu* *ka* *ètu* ***Lobho*** ***nèi / *sèi***
place to stay 3SG PART LOC Lobho REM.SG/REM.PL
'The place where he lived was there in Lombo' [FAK_Roga'a.075]

(18) Given Names and Family Names

Given Names	Family Names
Adi, Ako, Ana, Ata, Eli, Da'i, Fina, Maria, Pe'u	*Aplugi, Bella, Duli, Fiah, Kotte, Loasana, Ludji, Lusi, Mengga, Sereh*

(19) Place names

Bhali	Mbali (village in Ndao)
Dhao	Ndao (Island of Ndao)
Doko	Do'o (Island)
Edha	Rote (Island)
Nèsu	Nuse (Island)
Sahu	Sawu (Island)

Dhao family names are like personal names of ancestors or clans. There is only a given name in the indigenous naming tradition; a name is usually preceded by an honorific term. Honorific terms are derived from kinship terms, like *ama* and *ina* (Fox, 1987), as presented in the list in (20). Representative examples are given in (21) and (22) below.

(20) Names with honorifics

bèi Bhèli	'grandma Bhèli'
baki Tuka	'grandpa Tuka'
ina Mia	'Mrs. Mia'
ama Ga	'Mr. Gab'
a'a/ari Nadhu	'Brother Nadhu'

bi Fena	'Ms. Fena'
ba'i Opi	'Mr. Opi'

(21)

bèi	***Bhèli***	*ku*	*g'ag'e*	*boe*	*tengaa*	*na*	*tao*
grandmother	Bhèli	tag	to touch	not	but	PART	to make

'Grandma, Bhèli did not do anything' [CY_Lari_Na'i.543]

(22)

ama	***Loni***	***Ha'u***	*la-'e*
Mr	Loni	Ha'u	to go-3SG

'Mr. Loni Ha'u went' [FF_Koha_Lubhu.109]

While other terms are more obvious, the term *bi* (used to address a daughter/young girl) and *ba'i* (used to address a son or young boy) likely are derived from *bhèni* 'female' and *baki* 'grandfather' respectively. Kinship terms usually are paired to indicate terms of address, especially in public speaking. The pair *ina-ama* represents older people and can be translated as 'parents' or 'elders, depending on the context. *A'a-ari* represents younger people and can be translated as 'brothers and sisters'. These four terms normally are combined in parallel form, meaning 'ladies and gentlemen'. There also are other kinship terms that function as terms of address in traditional ceremonies as well. Terms such as *to'o* 'uncle' and *teto* 'auntie' are used to address people with family ties to one's father and mother, and the terms *bèi* 'grandmother' and *baki* 'grandfather' are used to address people who are older than one's parents. The list of kinship terms is presented in (23).

(23) Kinship Terms

baki	'grandfather'
bèi	'grandmother'
ama	'father'
ina	'mother'
teto	'auntie'
to'o	'uncle'
a'a	'older sibling'
ari	'younger sibling'
èpu	'grandchild'

Like person names that combine with kinship terms denoting honorifics, place names can also be preceded by common nouns denoting geographical entities. In Dhao, the terms *kabarai* 'public' and *rai* 'land' are used commonly. While *kabarai* refers only to a particular community or island, *rai* can indicate land, place, or a nation in general. For example, while the term *rai Edha* refers to the land of Rote,

kabarai Edha refers to Rote as a community. *Kabarai* is used in all contexts only in reference to Ndao. This is illustrated in (24) and (25) below.

(24) *saba* *ètu* ***kabarai*** *Dhao* *ne'e*
to work LOC island Dhao PROX.SG
'Working here on Ndao island' [RL_Uj'u_Rai_Lolo.132]

(25) *ètu* *dedha* ***rai*** ***Kota***
LOC above land Kupang
'There in Kupang city' [UA_Sambut_Jenasah.033]

Personal pronouns also share syntactic features with proper nouns in that they can be modified by demonstratives and can refer to possessors (see example (3) above). Unlike proper nouns, personal pronouns are inherently marked for number; they have exclusive grammatical constraints for demonstrative and number modification. Singular pronouns can only be modified by singular demonstratives, and plural pronouns can only be modified by plural demonstratives. Only third person pronouns can be modified by any demonstrative, as is illustrated in (26) and (27). The first and second pronouns take proximal demonstratives only, as exemplified in (28) (for a more extensive discussion, see §3.2.2.2).

(26) [*rèngu* ***sèi***] *dhèu* *limuri*
3PL REM.PL person latest
'They are young people' [ADJV_Elicit.013]

(27) [*rèngu* ***se'e***] *padhue*
3PL PROX.PL to discuss
'They talked' [FF_Koha_Lubhu.013]

(28) [*èu* ***ne'e***] *pa-j'èra* *ja'a* *sèmi* *ngaa*
2SG PROX.SG CAUS-to suffer 1SG be like what
'You make me in trouble' [PM_Meo aasu.301]

3.2.1.2.2. Common nouns

In contrast to proper nouns, common nouns are nouns that refer to a concept (Lehmann *et al*., 2000: 747). Besides being modified by demonstratives, common nouns can be either alienably or inalienably possessed (see §5.2.3). Furthermore, they can occur in existential constructions after the verb *abhu* 'to get', as explicated in §3.2.1.1 (see §3.3.1.2.8). However, they differ from proper nouns due to the fact that they can take numerals for quantification. Common nouns in Dhao distinguish

three numeral and mensurative subtypes: (1) count nouns, (2) mensural nouns, and (3) abstract nouns. The details of these subtypes are described as follows.

Count nouns can take cardinal numbers to indicate plurality. They also take classifiers according to their animacy, as explained previously (see §3.2.3). The use of count nouns modified by numerals is exemplified in (29) below (see §3.2.3). More count nouns are listed in (30).

(29)

lolo	*jas*	*na*	*tao*	***dhari***	[*èpa*	*nguru*	*lèmi*]$_{\text{Num}}$
to roll	coat(IND)	PART	to make	rope	four	tens	five

'To make a coat, it needs forty five strings (of yarn)'
[YL_Hengu.016]

(30) Count Nouns

aj'u	'wood, logs'
bhèni	'woman'
dhari	'rope'
katuka	'rice cake'
ledhe	'mountain; hill'
lesu	'handkerchief'
mege	'snake'
mei	'table'
meo	'cat'
mese	'teacher'
mone	'man'
pega	'plate'
peni	'women belt'
pasèdhu	'weaving sword'
tudi	'knife'

Based on the nominal features as explicated above, nouns denoting body parts are classified as count nouns. However, three body parts in the list in (31), *kabodho*, *karasa*, and *madha*, are multifunctional: they can also be used as location nouns (see §3.2.1.2.3). In such cases, they behave like location nouns with only singular modifiers, and cannot be counted.

(31) Body Parts

adhe	'lever'
haga	'foot, leg'
haleja	'thigh'
hèbha	'mouth'
kabake	'belly'
kabodho	'back'
kahadhu	'brain'

karasa	'side'
kètu	'head'
lakoko	'neck'
lasa'ara	'shoulder'
madha	'face'
ngi'u	'body'
ngutu	'teeth'
panutu	'beak'
panyoro	'lips'
rèu lai	'tail'
tanèi	'intestine'
urutuu	'knee'
usu	'heart'

While count nouns can be marked for plurality by means of numerals and demonstratives, mensural nouns basically cannot. In these cases, plural number and demonstratives designate sortal plural and may have an optional specific classifier (see §3.2.3). While in example (32) the singular demonstrative *ne'e* 'PROX.SG' signals that *èi* 'water' is a *singulare tantum* entity, the plural demonstrative *se'e* 'PROX.PL' in (33) signals a sortal plural. It implies the existence of some containers or pots that are filled with water to be boiled. An unacceptable modification with a numeral classifier is shown in (34), which obviously suggests that such a nominal subtype is mensurative rather than countable. Some other mensural nouns are listed in (35).

(32) ***èi*** ***ne'e*** *tao* *tasamia* *bèi* *e?*
water PROX.SG to make how grandma PART
'What about this water, grandma?' [CY_Lari_Na'i.102]

(33) *pai* [*èi* *pana* ***se'e***] *hia* *ne* *hèi*
to.boil water hot PROX.PL to give 3SG.OBJ.CL also
'Boil water for her, too' [Ani_Hahi.056]

(34) *ama* *ngee* *boe* ***kau*** ***sèra / *cue***
father to think not rice DIST.PL
'Father did not think about those rice' [SK_Dhe'u_E'ta _Dua.199-200]

(35) Mensural Nouns

agarao	'residue of oil'
ahu	'dust'
ao	'lime'
are	'paddy'
doi	'money'

èi	'water'
hualaa	'gold'
kabua	'price'
kau	'cooked rice'
lub'u	'mud'
paringi	'dew'
raa	'blood'

Other nouns that cannot be grouped into the two earlier subtypes are classified as abstract nouns. In this case the term "abstract" does not refer to the traditional definition of abstract concepts of nominal morphemes, which is antonymous with "concrete", but instead refers to the fact that this subtype of nouns cannot be pluralized and is mensurative in any sense. As illustrated in (36), the noun *dhasi* 'sea' is modified by a singular demonstrative, but not the plural one. Native speakers of Dhao may also create constructions like the example given in (37), which contains the modifying numeral *èci* 'one'. It designates a specific location rather than the specifing of a quantity. This is confirmed by the fact that such a noun cannot be modified by a numeral classifier. In this regard, nouns like *dhasi* are considered as *singular tantum*, but not as mensurative. With the nouns like *ngèlu* 'wind', only singular demonstratives apply, as shown in (38). More abstract nouns are listed in (39).

(36)

la-'e	*la'e*	*n-are*	*dhasi*	***nèi/*sèi***
to go-3SG	to go-3SG	3SG-to take	sea	REM.SG/PL

'He walked and walked until reaching the beach'
[elicited from SB_Lolo.323]

(37)

dhasi	***èci*/*cue***	*nèi*
sea	one/a	REM.SG

'The sea over there' [FF_Bheni_ae_kabo.1045]

(38)

ngèlu	***èèna/*sèra/*èci***	*tiu*	*lèke*
wind	DIST.SG/PL/one	to blow	right

'The wind blows (it)' [Elicited from YK_HelaBunga.054]

(39) Abstract Nouns

dae	'shore, ground'
èj'i	'rain'
hèu	'odor'
iha	'lap'
ngèlu	'wind'
osa	'harvest (fishing)'

sanabhu	'shadow'
sèbu	'smoke'

3.2.1.2.3. Location and Direction Nouns

Location and direction nouns all refer to places instead of physical objects, with notable exception of the body part nouns *madha* 'front', *karasa* 'side', and *kabodho* 'back'. As such, they can only be modified by singular demonstratives As illustrated in (40) and (41), both the location noun *karasa* 'side' and direction noun *badae* 'north' take singular demonstratives. It is important to note that both location and direction nouns can combine with any prepositions (see §3.6.1). As is illustrated in (40) and (42), both nouns take the locative preposition *ètu* 'LOC'.

(40) *sabha* *iiki* *èci* *tempel*
palm.container small one adhere(IND)

ètu ***karasa*** ***èèna***
LOC side DIST.SG
'One small palm container is at that side' [Eta_Dhua.038]

(41) *kèi* *na* *dai* ***badae*** ***nèi***
to dig PART to reach north REM.SG
'When digging, (it should) reach the north part'
[Percakapan20130825_b.796]

(42) *Jote* *nèngu* *ètu* ***dhimu***
Jote 3SG LOC east
'Jote was at the east' [elicited from BS_Rika_Jote.006]

Location and direction nouns differ in their semantic relation with juxtaposed nouns. Location nouns function as the possessum of a noun referring to a given location. The possessum noun specifies location in relation to the possessor noun. As illustrated in (43), *buku* 'book', a loan word from Indonesian, is the possessor noun and profiles a location, while the possessum noun *dedha* 'above' specifies the particular location. In (44), on the other hand, the location noun *dedha* 'above' does not belong to *kalaga* 'k.o.wooden couch', but instead refers another space indicating that *kalaga* is in a location higher than the speaker or a given ground.

Direction nouns specify the direction of the location noun they follow. As represented in (45)a, the direction noun *dhimu* 'east' signals the direction of the location *dhasi*. The location noun *suu* 'tip' is optional and specifies the location. This type of locational phrase is constructed alternatively in (45)b, where the

direction noun *dhimu* and the main location *suu dhimu* are treated as two separate combined locations. The starred example in (45)c shows that direction nouns cannot function as posssesum nouns.

(43) *nèngu* *n-are* *hadhu* *ètu* [***dedha*** ***buku***]
3SG 3SG-to.take stone LOC above book(IND)
'She takes the stone on the book' [Loc_Elicited.072]

(44) *ina* *na* *ètu* [***kalaga*** ***dedha***]
mother 3SG.CL LOC k.o.wooden.couch above
'His mother was on a bed above' [RL_Rade_Lingu.214]

(45) a. *Jote* *ne'e* *ètu* (*suu*) [***dhasi*** ***dhimu***]
Jote PROX.SG LOC tip sea east
'Jote was at the tip of the sea in the east' [BS_Rika_Jote.020]

b. *ètu* [[***dhimu***] [*suu* *dhasi*]]
LOC east tip sea
'In the east at the tip of the sea'

c. *ètu* *suu* *[***dhimu*** *dhasi*]
LOC tip east sea
'*at the eastern part of the sea'

Another difference between location nouns and direction nouns is that only the former can be used as a spatial connector, in which case locative prepositions are optional. This is exemplified in (46) and (48) below. The location noun *dara* 'inside' in (46) appears without a locative preposition, whereas the direction noun *dhimu* 'east' requires prepositions, such as in (47). The sentence in (48) is ungrammatical.

(46) *bèi* *ku* *lili* [***dara*** *èmu* *èèna*]
grandma tag still inside house DIST.SG
'Grandmother is still in the house' [CY_Lari_Na'i.436]

(47) *Jote* *nèngu* *ètu* ***dhimu***
Jote 3SG LOC east
'Jote was at the east' [elicited from BS_Rika_Jote.006]

(48) **Jote* *ne'e* ***dhimu***
Jote PROX.SG east

While direction nouns can be used without the direction prepositions *asa* ‘to’ and *ngèti* ‘from’, as illustrated in (49) these propositions are required with location nouns. More location and direction nouns are listed below in (50) and (51).

(49) *la-'e* *ka* *tangara* ***haa*** *ètu* *nèi*
to.go-3SG PART to.face west LOC REM.SG
‘She left then she looked over there to the west’
[BS_Tuka_Suki.537]

(50) Location Nouns

dedha	‘above/top’
haha	‘below/bottom’
karasa	‘side’
kabodho	‘behind’
madha	‘front’
dara	‘inside’
li’u	‘outside’
sebhe	‘edge’
talora	‘middle’

(51) Direction Nouns

balèu[1]	‘south’
badae	‘north’
dhimu	‘east’
haa	‘west’
kariu	‘left’
gana	‘right’

3.2.1.2.4. Time nouns

According to their syntactic and pragmatic functions, time nouns in Dhao are distinguished into time unit nouns and time period nouns. While time unit nouns can be modified by numerals, for example *ca lod’o* ‘one day’, time period nouns that refer to a period of the day do not get modified by numerals. Both types of time nouns can combine with demonstratives, as illustrated in (52) and (53). Time unit nouns are given in the list (54) below.

[1] Notice that *ba-* on *balèu* is stressless, while *lèu* is a monosyllabic word because of the schwa. This indicates that *ba-* might be a fossilized prefix. It is the same as *ba-* on *badae* ‘north’. The form *dae* is a bisyllabic word because there is no phonological constraint (length) on the vowels in the nucleus position.

(52) ***hèru*** ***èèna*** *hèru* *Holomanu*
moon 3SG moon Holomanu
'The month is the time for Holomanu ceremony' [JL_Baki_Tuka.054]

(53) ***meda*** ***èèna*** *dhèu* *èèna* *madhe*
yesterday DIST.SG person DIST.SG to.die
'Yesterday, the man died'

(54) Time Unit
lod'o 'day'
migu 'week'
hèru 'month'
tèu 'year'
mèda 'night'

The time unit noun *migu* 'week' is a loan from the Indonesian *minggu*, of which the velar nasal in word-medial position is deleted in Dhao (see §2.5 on loan words). Dhao itself does not have names for the days in a week. The time noun *mèda* 'night' is a time unit noun rather than a time period noun because it can be preceded by a numeral, whereas other time nouns, such as *madae* 'morning' and *nihia* 'afternoon' cannot. Dhao does not have indigenous terms for time units smaller than 'day', such as hours, minutes, and seconds. In order to express these time units anyways, Dhao borrowed Indonesian terms: *jam* 'hour', *menit* 'minute', and *detik* 'second'. However, in order to express a period of time in terms of hours, the verb *hake,* 'to beat' is used preceding the numerals. For example, in (55), the verb *hake* occurs before the numeral *ca nguru dua* 'twelve'. The use of the Indonesian loan word *jam* 'hour' is illustrated in (56).

(55) *dai* ***hake*** *ca* *nguru* *dua* *hèia…*
to reach to beat a ten two then
'When it was 12 p.m, then…' [FF_Koli_Bubhu.550]

(56) *ele* *boe* *dai* ***ca*** ***jam*** *do* ***dua*** ***jam*** *sa*
to lose not to reach a hour or two hour PART
'Maybe an hour or two hours' [PM_Sobhu.067]

Time period nouns include the periods of the day and relative time. This subtype of time nouns can only be modified by demonstratives, not by numerals. A list of the time period nouns is presented in (57) below.

(57) Time Period

bèli	'tomorrow'
meda	'yesterday'
doe ne'e	'today'
madae	'morning'
lo(*d'o*)*nètu*	'noon'
lo(*d'o*)*nihia*	'afternoon'

Unlike *bèli* 'tomorrow' and *meda* 'yesterday', which are lexically independent as represented by example (58), the time period noun for 'today' requires the proximal demonstrative *ne'e*. An example is given in (59). The notion of 'today' can also be expressed through the combination of the time unit noun *lod'o* 'day' and the demonstrative *ne'e* 'PROX.SG', which literally means 'this day'. Besides its dependent position, *doe* 'today' also cannot be modified by any other demonstrative aside from *ne'e*. Thus, *doe ne'e* is treated as a fixed form. Similarly, the word for 'noon' and 'afternoon' preferably are used in combination with the time unit noun *lod'o* 'day'. These two time nouns can be reduced to *lonètu* and *lonihia* respectively. While *nihia* 'afternoon' can be syntactically independent, as shown in (60), *nètu* cannot.

(58) *bèli* *èèna* *ji'i* *cèpu* *hari*
tomorrow DIST.SG 1PL.ex to loosen again
'In the following day, we loosen the rope' [SB_Tao_Hengu.055]

(59) *ma-mai* *ji'i* ***doe*** ***ne'e*** *ako* *nena*
DUP-to come 1PL.ex today PROX.SG rather slow
'Because our coming today is a little bit late' [Ada_20140427.013]

(60) *ngèti* *madae* *toke* *dai* ***nihia***/**nètu*
from morning until reach afternoon/noon
'From morning until afternoon' [SB_Tao_Rabhi.149]

3.2.2. Pronouns

3.2.2.1. Personal Pronouns

Dhao has four sets of personal pronouns. Three sets are morphologically independent while the last set is a set of bound forms that require hosts. All full forms except 2SG are bisyllabic. They have monosyllabic counterparts that are labeled reduced forms in this thesis. Another monosyllabic set is a set of clitics. These bound forms that require hosts are considered to be co-index affixes in this thesis. The paradigms of the personal pronouns are shown in Table 3.1 below.

The table shows that these pronouns distinguish two categories in particular: person and number. For person, Dhao has first, second, and third person, and for number, it has singular and plural. The plural form for first person also distinguishes exclusive and inclusive. Gender and case are not distinguished, however. The reduced forms occur only in rapid speech. There are two types of phonological reduction. In the first type, the initial syllable remains and the final syllable is reduced: this applies to '1SG', '1PL-ex', and '2PL'. In the second type, the tonic sounds are reduced: this applies to '1PL-in', '3SG', and '3PL'. The sound orthographically symbolized as *è* is a schwa [ə] that lacks syllable weight in Dhao phonology, because of which it is phonologically constrained in nucleus position (see §2.2.3.7). On the other hand, pronominal clitics are not identical to the free pronouns phonologically-speaking. The co-index affixes are reduced forms of the pronominal clitics[2].

Table 3.1: Dhao Personal Pronoun Paradigms

	Pron.	Full	Reduced	Clitics	Affixes	
					Pref.	Suf.
First	1SG	*ja'a*	ja	ku	k-	-ku
	1PL-ex	*ji'i*	ji	(nga)[3]	ng-	-'a
	1PL-in	*èdhi*	(ti)	ti	t-	-ti
Second	2SG	*èu*	-	mu	m-	-mu
	2PL	*miu*	(mi)	mi	m-	-mi
Third	3SG	*nèngu*	nu	na / ne	n-	-'e
	3PL	*rèngu*	ru	ra	r-	-si[4]

3.2.2.1.1. Full and Reduced Forms

Personal pronouns in Dhao can substitute full NPs as clausal arguments, either as subject (S), object (O), as shown in (61), or as the complement of a preposition, as shown in (62). Unlike full pronouns, reduced pronouns are only found in non sentence-final positions. Reduced forms in clause initial and medial positions, as in shown in (63) and (64) respectively are acceptable. However, reduced forms are not acceptable in sentence-final positions, as shown in (65). Reduced forms occur only in rapid speech.

[2] A possible explanation is that Dhao borrowed the forms from neighboring language of Rote (Jonker, 1903).

[3] This pronominal clitic is never attested in any position (see §3.2.2.1.2)

[4] The pronominal suffix *-si* '3PL' is most likely grammaticalized from Dhao's remote plural demonstrative *sèi* 'REM.PL'

(61) ***èu*** *pa-madhe* ***ja'a***
2SG CAUS-to die 1SG
'You kill me' [FF_Bheni_ae_kabo.443]

(62) *ja'a* *lèka* *mèdha* *èèna* ***ètu*** ***èu***
1SG to believe goods DIST.SG LOC 2SG
'I entrust this thing to you' [Verb_Elicited.00122]

(63) ***ja*** *lolo* *dua* *bèla*
1SG to roll two sheet
'I roll two sheets of yarn' [SN_Manenu.036]

(64) *ana*$_i$ [*dhu* *bantu* ***nu***] *sèra*$_i$ *kako* *hari* *la-si*$_i$
child REL to.help(IND) 3SG DIST.PL to.walk again to.go-3PL
'The children who helped him already left again'
[Elicited from: YY_PearStory.059]

(65) *èu* *ne'e* *aka* ***ja'a/*ja***
2SG PROX.SG to trick 1SG
'You fooled me' [TF_E'yu_Maraho.094]

Like full NPs, full pronouns in Dhao are allowed to take demonstrative modifiers. These demonstratives are used by the speaker for the purpose of evaluating or appraising oneself. Demonstratives follow full pronouns, in both S and O positions, as is illustrated in (66)a and (67). Other sets of personal pronouns cannot take modifiers, therefore the example given in (66)b is considered unacceptable. For a more extensive discussion, see §3.2.2.2.

(66) a. [***èdhi*** ***se'e***] *dhèu* *a'a* *ari*
1PL.in PROX.PL person older.sibling younger.sibling
'We are brothers and sisters' [Ada_20140427.049]

b. *[***ti*** ***se'e***] *dhèu* *a'a* *ari*
1PL.in PROX.PL person older.sibling younger.sibling

(67) *ja'a* *pa-èi* [***nèngu*** ***nèi***]
1SG CAUS-to water 3SG REM.SG
'I soldered it' [Elicited from: HF_Tuku_Peni.021]

3.2.2.1.2. Clitics and Affixes

In syntactic contexts, clitics and affixes behave differently. Clitics can be true arguments, like full pronouns, but affixes can only be referential elements. Instead of using the term pronominal affixes, I therefore use the term "co-index affixes" (see §4.2). As shown in (68)a, the full pronoun *èdhi* '1PL.in' occurs as the subject argument. The same position is filled by the corresponding clitic in (68)b. Whilst all other clitics can fill argument positions, the clitic for '1PL.ex' is unacceptable in any argument position, as is exemplified in (69) and (70).

(68) a. ***èdhi*** *tao* *rèu* *sabha*
1PL.in to.make leaf water.container
'We took palm leaves' [Eta_Dhua.017]

b. ***ti*** *tao* *rèu* *sabha*
1PL.in.CL to.make leaf water.container
'We took palm leaves' [Elicited]

(69) *ji'i*/****nga*** *heka* *tutu* *kadèna* *ka* *èèna*
1PL.ex just to.cut firewood PART DIST.SG
'We just cut the fire wood'

(70) *dhèu* *aae* *èèna* *piara* ***ji'i /*nga***
person big DIST.SG to.look.after(IND) 1PL.ex
'The king took care of us'

Grimes (2010: 264) lists *nga* '1PL.ex' in the pronoun inventory of Dhao, but does not provide any examples. In my data it also never occurs as an independent argument. This phenomenon suggests two possible interpretations. First, the inclusion of the pronominal clitic *nga* '1PL.ex' in the pronoun inventory of Dhao by Grimes is phonologically motivated in order to fill the phonological gap in the inventory of the pronominal system (see Table 3.1 above). Second, the clitic *nga* '1PL.ex' is obsolete.

The co-index affixes to verb roots, which co-index with the subjects of a clause. Information on the subject is fully carried by the affixes in cases where the subject position remains empty (see §4.2). Illustrations of prefixes are given in (71) and illustrations of suffixes are given in (72).

(71) a. *ja'a*$_i$ ***k***$_i$***-u'a*** *tarae-sina*
1SG 1SG-to eat corn
'I eat corn' [Verb_Elicited.0088]

b. ***k-u'a*** *tarae-sina*
1SG-to eat corn

(72) a. *ja'a*$_i$ ***la-ku***$_i$ *èmu,*
1SG to go-1SG house
'I went home' [FF_Bheni_ae_kabo.259]

b. ***la-ku*** *èmu,*
to go-1SG house
'I went home' [Elicited]

3.2.2.2. Demonstrative Pronouns

Demonstratives are cross-linguistically understood as grammatical elements which express deictics (Dixon, 2010a: 117; Diessel, 1999). Dhao applies a three-deictic system, namely proximal, distal, and remote. They have singular and plural forms. Each form has a reduced counterpart. The demonstratives in Dhao are presented in Table 3.2 below.

Table 3.2. Demonstratives in Dhao

	Singular		Plural	
	Full	Reduced	Full	Reduced
Proximal	*ne'e*	*ne*	*se'e*	*se*
Distal	*èèna*	*na*	*sèra*	*sa*
Remote	*nèi*	*ni*	*sèi*	*si*

Demonstratives in Dhao have four functions: (1) pronominal functions (see §3.2.2.2.1), (2) deictic and definiteness functions (see §3.2.2.2.2), (3) tracking functions, and (4) anaphoric and cataphoric functions (see §3.2.2.2.3).

3.2.2.2.1. Pronominal Functions

Demonstratives in Dhao are pronominal. Or rather: they are able to occur independently *in lieu* of an NP as clausal arguments (Dixon, 2010b:224-228; Diessel, 1999). As an independent NP, they may occur as S, O, or as a prepositional complement in a clause. This is exemplified in the following examples. Example (73) below shows that *ne'e* 'PROX.SG' occurs on its own as a clausal subject NP with the nominal predicate *nanuku* 'legend'[5]. In example (74) the demonstrative *èèna* 'DIST.SG' is a clausal object NP that appears after the compound verb *ra'a rinu*

[5] An explanation of constructions with nominal predicates is presented in §5.2.2.

'having a meal'. Prepositional complements are represented in (75) by the demonstrative *ne'e* 'PROX.SG' and in (76) by the demonstrative *èèna* 'DIST.SG'. These demonstratives refer to locations, as is obviously indicated by the prepositions. In (77), the demonstrative *ne'e* 'PROX.SG' occurs on its own indicating time: 'now'.

(73) [***ne'e***] *nanuku* *de…*
PROX.SG legend so
'This is a legend (folktale), so…' [SK_Polisi.056]

(74) *hia* *dhèu* *r-a'a* *r-inu* [***èèna***] *na* *èle*
to give person 3PL-to eat 3PL-to drink DIST.SG PART to finish
'Ask people to take that then they recover' [PD_Tua_Tana.088]

(75) *ja'a* *pea* [*ètu* ***ne'e***]
1SG to stay LOC PROX.SG
'I am living here' [SB_Lolo.015]

(76) (*èdhi*) *lèpa* [*asa* ***èèna***]
1PL.ex to return to DIST.SG
'(we) went back there' [SK_Polisi.1007]

(77) ***ne'e*** *ja'a* *neo* *lolo*
PROX.SG 1SG to want tell(story)
'Now, I want to tell (story)' [YK_HelaBunga.001]

Reduced demonstratives are used to modify their full form counterparts. As observed in (78), the reduced form *ni* appears after the full form *nèi*. In (79), the reduced form *si* comes after the full form *sèi*. They occur in adnominal position to the full demonstratives (for a more elaborate discussion of the reduced forms, see §3.2.2.2.3).

(78) [[***nèi***] ***ni***] *hua* *patitu* *ka* *nèi*
REM.SG REM.SG fruit to stand PART REM.SG
'It is a standing motif/design' [SF_Tao_Hengu.132]

(79) *sama* *boe* *dènge* *èmu* [*ètu* ***sèi***] ***si***]]
same(Mal) not with house LOC REM.PL REM.PL
'It was not the same with the houses there' [FF_Bheni_ae_kabo.1591]

The singular distal *èèna* 'DIST.SG' and proximal *ne'e* 'PROX.SG' combine with the comparative preposition *sèmi* 'like' into similative constructions. These constructions are used in discourse deictics (Cleary-Kemp, 2007; Himmelmann, 1996). The similative form *sèmi èèna* 'like that' is used anaphorically (80), while *semi ne'e* 'like this' is used cataphorically (81).

(80) *lole* ***sèmi*** ***èèna***
to tell like DIST.SG
'Told (story) like that' [CY_Lari_Na'i.020]

(81) ***sèmi*** ***ne'e,*** *"la-mi* *pare* *ku* *aj'u…"*
be like PROX.SG to go-2PL to slaughter tag wood
'Like this, you go to cut wood…' [FF_Bheni_ae_kabo.1207-9]

3.2.2.2.2. Adnominal Functions

In adnominal position, the demonstrative appears as an NP-final element. In this position, demonstratives have both deictic and definiteness functions. As illustrated in (82) and (83), the demonstratives *èèna* 'DIST.SG' and *sèra* 'DIST.PL' modify the respective S and O. They signal that the NP's referent is a mid-distance location away from the speaker. The demonstrative *ne'e* 'PROX.SG' in (84) modifies a nominal clause that refers to a location. The demonstrative signals the proximity of the location to the speaker. Demonstratives do not only co-occur with nouns but also with quantifiers such as *aa'i* 'all' in (85). However, only plural demonstratives have been attested in this slot. Besides spatial distance and number, these demonstratives also express definiteness.

(82) [*dhèu* ***èèna***] *la-'e*
person DIST.SG to.go-3SG
'That person (woman) left' [RL_Rade_Lingu.040]

(83) *ana* *lalu* [*dhèu* *dua* ***sèra***]
child fatherless person two DIST.PL
'Those two orphans' [SK_Polisi.515]

(84) *ngara* *rai* [[*dhu* *miu* *pea*] ***ne'e***]
name land REL 2PL stay PROX.SG
'The name of the place where you live' [BS_Rika_Jote.078]

(85) *pasa* *èle* ***aa'i*** ***se'e***
high.tide finished all PROX.PL
'After setting all of them' [GD_Kei_Ei.076]

Demonstratives can also modify personal pronouns and proper nouns (see §3.2.1). The modification of personal pronouns exhibits a constraint on space and number. The personal pronouns *ja'a* '1SG' and *èu* '2SG' can only be modified by the proximal singular demonstrative *ne'e* 'PROX.SG', whereas *nèngu* '3SG' can take all singular demonstratives. For plural personal pronouns, only *rèngu* '3PL' can be modified by all plural demonstratives, while the other three personal pronouns can only be modified by the proximal plural *se'e* 'PROX.PL'. The combinatory possibility of demonstratives and personal pronouns is presented in Table 3.3 below.

Table 3.3: Demonstratives modifying personal pronouns

Pron	**Gloss**	**Demonstratives**					
		Singular			**Plural**		
		PROX	DIST	REM	PROX	DIST	REM.PL
ja'a	1SG	+					
èu	2SG	+					
nèngu	3SG	+	+*na*	+			
ji'i	1PL.ex				+		
èdhi	1PL.in				+		
miu	2PL				+		
rèngu	3PL				+	+	+

Example (85) illustrates the proximal singular demonstrative in combination with the pronoun *èu* '2SG'. Both full and reduced demonstratives can modify pronouns. The only exception is the 3SG pronoun. It cannot take the full distal demonstrative, but can only its reduced form. This is why the pronoun is acceptable with the reduced form *na* in (87)a, but is ungrammatical with the full form *èèna* in (87)b.

(86) [*èu* ***ne'e***] *pa-j'èra* *ja'a* *sèmi* *ngaa*
2SG PROX.SG CAUS-to.suffer 1SG be.like what
'You make me in trouble' [PM_Meo aasu.301]

(87) a. [*nèngu* ***na***] *ka* *ne'e*
3SG DIST.SG PART PROX.SG
'Here he is' [FF_Koli_Bubhu.808]

b. *[*nèngu* ***èèna***] *ka* *ne'e*
3SG DIST.SG PART PROX.SG

The demonstratives modifying proper nouns or names are illustrated in examples (88) and (89). The demonstrative *ne'e* 'PROX.SG' confirms that the person named *Rika* is near the speaker either physically or non-physical. Furthermore, the demonstrative *sèi* 'REM.PL' does not modify the possessed noun *èmu* 'house' but rather the proper name *Rika*. The plural demonstrative functions as an associative plural that refers to *Rika* and his associates (see §3.2.1).

(88) [*Rika* ***ne'e***] *nèngu* *ètu* *suu* *haa*
Rika PROX.SG 3SG LOC tip west
'Rika, she was at the western part' [BS_Rika_Jote.003-004]

(89) *la-si* *hari* *asa* [*èmu* [*Rika* ***sèi***]]
to.go-3PL again to house Rika REM.PL
'They went to (visit) Rika *at al*'s house again' [JL_Rika_Jote.054]

Like common nouns, time nouns also take demonstratives as modifiers. For example, the demonstrative *èèna* 'DIST.SG' in (90) follows the time noun *lod'o* 'day' and locates the latter´s referent in a specific time in the past. In this case, *èèna* 'DIST.SG' anaphorically refers to a time already mentioned in previous discourse. Similarly, the plural demonstrative *sèra* 'DIST.PL' in (91) modifies the time noun *uru* 'earlier'. The plural demonstrative does not refer to a specific time in the immediate context, but rather to an indefinite moment in the past. The proximal demonstrative *ne'e* 'PROX.SG' in (92) modifies the time noun *limuri* 'latest' and locates its referent near the moment of speech: 'recently' or 'these days'. The short form *ne* 'PROX.SG' following the full form *ne'e* has a tracking function (see §3.2.2.2.3). From the context it is already clear that the time noun *uru* 'earlier' refers to past time, because of which the only possible modifying demonstrative is a distal one that can be either singular or plural. Furthermore, *limuri* 'latest' can only be modified by proximal demonstratives since it refers to the present time. Contrastively, time nouns, such as *lod'o* 'day' can only be modified by plural demonstratives when preceded by a numeral.

(90) ***lod'o*** ***èèna*** *na* *dhèu* *pidhu* *sèra* *lèpa*
day DIST.SG PART person seven DIST.PL to.return
'In that day, these seven children went home' [SK_Polisi.723]

(91) ***uru*** ***sèra*** *baka* *lèmi* *nguru* *riho*
earlier DIST.PL per five tens thousand
'Formerly, (it is sold) fifty thousand each' [YR_Kanau.055]

(92) *ngèti* *uru* *toke* *dai* ***limuri*** ***ne'e*** *ne*
from earlier until to.reach latest PROX.SG PROX.SG
'From the past until today' [LL_Pagar_Laut.002]

3.2.2.2.3. Reduced Forms and Discourse Functions

The reduced forms have three functions. Firstly, they function the same as typical demonstratives with deixis and local adverbial uses. Secondly, they co-occur with the full forms in tracking functions. Thirdly, they occur alone to indicate time: distal ones refer anaphorically, and proximal ones refer cataphorically. The example in (93) shows that the short demonstrative *ne* modifies the possessive NP *baki mu* 'your grandfather', in which it is deictic and marks definiteness. The demonstrative *ne'e* 'PROX.SG' in (94)a may be interpreted in two ways: as a clausal object, or as adding an imperfect aspect to a verbal scene. The full form *ne'e* in (94)b functions as an object. The full and reduced forms are not only distinct syntactically but also pragmatically.

(93) *…te* [*baki* *mu* ***ne***] *dhèu…*
because grandfather 2PL.CL PROX.SG person
'…as your grandfather is a person who…' [BS_Tuka_Suki.252]

(94) a. *ja'a* *saba* ***ne***
1SG to.work PROX.SG
'I am working now' [AL_Tuku_Doi_Pudhi.068]

b. *ja'a* *saba* ***ne'e***
1SG to.work PROX.SG
'I am doing this' [Elicited]

The reduced form *ne* 'PROX.SG' does not function as an object, as should be clear from the translation of (95)a. The full form cannot function as an imperfective aspect in (95)b either.

(95) a. *ku* *la-ku* *paroa* ***ne***
1SG.CL to.go-1SG to.call PROX.SG
'I am going to call' [CY_Lari_Na'i.533]

b. **ku* *la-ku* *paroa* ***ne'e***
1SG.CL to.go-1SG to.call PROX.SG

The examples above strongly suggest that the reduced forms belong to a different paradigm. The full demonstratives can function nominally or adnominally. The reduced forms can only function adnominally and adverbially. The latter can also combine with full demonstratives in complex peripheral forms. In some cases, the reduced forms cannot be replaced by their corresponding full forms. These reduced forms have a toned-down element of spatial reference, albeit they increasedly mark temporal and or psychological proximity or distance, which is in accordance with their tracking use (Cleary-Kemp, 2007: 331). This phenomenon has mostly been attested for Malay-based languages, such as Manado Malay (Stoel, 2005), Kupang Malay (Jacob and Grimes, 2011), and Papuan Malay (Kluge, 2014).

3.2.2.3. Relative Pronouns

Relativizations in Dhao mostly employ the specific marker *dhu*. As a relativizer, *dhu* is used to introduce a clause that either limits reference or provides additional information about the referent of an NP. As illustrated in (96), the clause marked by *dhu* specifies the referent of *mone heka* 'old man' as the one who is coming, rather than someone else. Furthermore, in (97) *dhu* introduces additional information of the NP *lii Dhao*, which deals with the quality of Dhao in a local song mentioned in the story.

(96) *mone* *heka* [***dhu*** *mai*] *èèna* *to'o* *ja'a*
male old REL to.come DIST.SG uncle 1SG
'That old man who is coming is my uncle'

(97) *lii* *Dhao* ***dhu*** *tare'a-re'a*
voice Dhao REL right-DUP
'Dhao language which is good' [YK_HelaBunga.010]

The relativizer *dhu* appears in an argument slot. It strongly indicates that *dhu* actually is a pronoun. Walker (1982) assumed that *dhu* evolved from the noun *dhèu* 'person', which once had a dual function. It was used as a noun meaning 'person, human being' and as a relative clause marker. In (98), the construction is used to tell about the way sarongs are produced. Since the context of the discourse is supposedly shared by the interlocutors, the speaker uses *dhu* to replace the subject of the following clause. In (99), the construction was taken from a speech during a marriage ceremony. The spokeswoman of the bride said that the groom had come to look for the bride, so she needed to inform her. In this example the relative *dhu*

replaces the 3SG pronoun that refers to the groom. In this construction, *dhu* occurs in a subject slot.

(98) *ja'a* *lole* [[***dhu*** *tao*] [*hèngu* *nyama* *ne'e*]]
1SG to.tell REL to.make thread rafia PROX.SG
'I will tell about dyeing sarongs' [tao_dhepi.142]

(99) *sebab* ***dhu*** *mai* *tenge* *nèngu*
because(IND) REL to.come to.look.for 3SG
'Because (he) comes to look for her' [Pinangan_20140430.107]

3.2.2.4. Interrogative Pronouns

Dhao interrogative pronouns are *cee* 'who' and *ngaa* 'what'. *Cee* 'who' is used to substitute human nouns, whereas *ngaa* 'what' substitutes non-human entities. As pronouns, they appear as clausal argument, either in subject, object, or complement position. In (100), the interrogative pronoun *cee* 'who' appears in subject position, whereas in (101) it is in object position. An example of an interrogative pronoun in complement position is shown by *ngaa* 'what' in (102).

(100) ***cee*** *leru* *nèngu* ?
who to.care.for 3SG
'Who is looking after him?' [FF_Bheni_ae_kabo.651]

(101) *rèngu* *padhane* ***cee*** *nèi*
3PL to.bury who DIST.SG
'Who did they bury?' [Verb_Elicited.00327]

(102) *ja'a* *bala* *dènge* ***ngaa***
1SG to.repay with what
'With what should I repay him?' [SK_Polisi.376]

3.2.3. Numerals and Classifiers

Numerals refer to "natural numbers". They can be distinguished as cardinal numbers that count the amount of individuals in a set, and as ordinal numbers that express rank in a series (Velupillai, 2012; Greenberg, 2000). Dhao applies a decimal system. The higher numbers are expressed by multiples of 10.

The free integers that are cardinal numbers are presented in Table 3.4 below. The numbers between 'one' and 'nine' are expressed by separate bisyllabic lexemes. Only *èci* 'one' can be reduced into a monosyllabic morpheme *ci* by deleting the initial schwa *è* (see §2.4 on reduced forms).

Table 3.4: Free integers of Dhao

èci	1	one
dua	2	two
tèlu	3	three
èpa	4	four
lèmi	5	five
èna	6	six
pidhu	7	seven
aru	8	eight
ceo	9	nine

Multiples of 10 are presented in Table 3.5 below. The multiples are preceded by the indefinite marker *ca* 'a, one'. Unlike the first three, the lexeme *juta* 'million' is a loan from Malay/Indonesian. Dhao does have an archaic term *kehi* that also means 'million'. However, the native Dhao term is no longer in use. However, its combination with *juta*, resulting in *juta kehi*, means 'more than…million', as illustrated in (103) below.

Table 3.5: Multiple decimal system

canguru	10	ten
cangasu	100	one hundred
cariho	1000	one thousand
cajuta	1000.000	one million

(103) *nèngu abhu doi ca juta kehi*
3SG to.get money one million million
'He gets money, more than one million' [Elicited]

Although the form *ca* added to multiple lexemes denotes the meaning 'one', it cannot alternate with the cardinal number *èci* 'one'. For higher numbers, multiple lexemes occur independently, preceded by cardinal numbers. The higher numbers are demonstrated in Table 3.6 below.

The higher numbers follow a pure decimal system. That is, successive numbers are added to a multiple of 10 (Greenberg, 2000). As such, 11 is characterized as *canguru èci* 'ten one'. The numeral expression for 21 is rendered as *dua nguru èci* 'twenty one'. In complex numeral expressions, higher values precede lower values without any linker. The expression for 1.573 in example (104) positions the highest value in the first place: *cariho* 'one thousand' is followed by *lèmi ngasu* 'five hundred', which is followed by *pidhu nguru* 'seventy' in turn, and finally ends with the unit *tèlu* 'three'.

Table 3.6: Higher Numbers

canguru èci	10 + 1	11
canguru dua	10 + 2	12
dua nguru	2 x 10	20
dua nguru èci	((2 x 10) + 1)	21
tèlu nguru	3 x 10	30
èpa nguru	4 x 10	40
cangasu èci	100 x 1	101
èpa ngasu	4 x 100	400
cangasu canguru èci	(100 + (10 +1))	111
cariho caguru	1000 + 10	1.010
cariho cangasu	1000 + 100	1.100
èpa nguru riho	((4 x 10) + 1000)	40.000
cangasu riho	100 + 1000	100.000
cariho lèmi ngasu pidhu nguru tèlu	((1000+(5x100) + ((7x10) +1)	1.573

(104) *cariho* *lèmi* *ngasu* *pidhu* *nguru* *tèlu*
one.thousand five hundreds seven tens three
'One thousand, five hundred and seventy three'

Fractions in Dhao use *camalore* 'a half' or ½. This term originally referred to the quantity of either objects or liquids by means of a specified classifier that signifies incomplete fullness. In fractions, *camalore* is preceded by cardinal numbers with the conjunction *dènge* 'with' between them, as shown in (105) below.

(105) Fraction
camalore ½
dua dènge camalore 2 ½
lèmi dènge camalore 5 ½
canguru dènge camalore 10 ½

Ordinal numbers are presented in Table 3.7 below. The ordinal numbers are formed from cardinals prefixed with *ka*, which originally derived from the particle *ka*. The term *uru* 'earlier' also is used when referring to a sequence of series, instead of the ordinal number for 'first'.

Table 3.7: Ordinal Numbers

ka-èci	*ka* + 1	first
ka-dua	*ka* + 2	second
ka-tèlu	*ka* + 3	third
ka-ceo	*ka* + 9	ninth
ka-canguru	(*ka* + (1 + 10)	tenth
ka-canguru èci	(*ka* + (1 + 10) + 1)	eleventh

Adverbial cardinals in Dhao use the adverb *hari* 'again'. In order to express the notion 'once' *ca* is used in combination with the verb *tèka* 'perch'. The form *catèka* 'once' is reduced regularly to *sèka* (see §2.4). In order to form higher adverbial cardinals, basic numbers precede the adverb *hari* 'again'. Adverbial cardinals are illustrated in Table 3.8 below.

Table 3.8: Adverbial cardinals

catèka	once
dua hari	twice
tèlu hari	three times
canguru hari	ten times

Adverbial cardinals are exemplified in (106). The speaker spoke of how he slaughtered a goat for a traditional ceremony. He explained that the custom (*adat*) required him to hit the goat only once and not twice. In this example, the expression for 'once' is *catèka*, whereas 'twice' is expressed by the periphrastic form *dua hari*.

(106) *musti* ***catèka*** *na* ***catèka*** *èèna* *ka*
must(Mal) once PART once DIST.SG PART

baku *dai* ***dua*** ***hari***
PROH.NEG until two again
'It must be only once, do not be twice' [PD_Tua_Tana.225]

Dhao has three different classifiers denoting the meaning 'one'. Phonologically, the base is the monosyllabic form *ca*. The other two forms *cue* and *ci'u* are historically fused from *ca* plus *bua* 'fruit' and *ngi'u* 'body' respectively (Walker, 1982: 58). Details are given in Table 3.9 below.

Table 3.9: Singular Classifiers

ca	-	a (one of, full of)
cue	*ca* + *bua* a fruit(Mal)	one thing or fruit of (for inanimates)
ci'u	*ca* + *ngi'u* a body	one body (for animates)

The form *ca* signals indefiniteness for generic words that refer either to persons, objects, places, or to time. This is exemplified in (107) by *dhèu* 'person'. Specific person words such as *bhèni* 'female' or *mone* 'male' require the cardinal number *èci* 'one'. The noun *j'ara* 'way' in (108) exemplifies indefiniteness for non-human entities. Another example of attributive indefinite numerals is shown in (109). The form *ca ama* 'one father' indicates the sharing of belonging or possession. In this context, the subject must be plural.

(107) *sebagaimana* ***ca*** ***dhèu*** *bhèni* *balu*
as(IND) a person female loss
'As a widow' [CY_Kasasi.404]

(108) *dhoka* ***ca*** ***j'ara*** *di*
only a way only
'Only for one thing (one way)' [Ada_20140427.126]

(109) *rèngu* ***ca*** ***ama*** *èèna* *ka*
3PL a father DIST.SG PART

tengaa *ina* *baka* *leo*
but mother per other
'They have one father but separate mother' [Percakapan20130825_b.419]

Examples of animate nouns modified by the numeral classifier *ci'u* are given in (110) and (111). Because the noun *ngi'u* 'body' refers to animate entities, Dhao speakers consider *ci'u* to be more appropriate for non-human nouns. Modifying human nouns with *ci'u* is considered less formal. Therefore, the expression as shown in (110) can only be used in informal situations. In formal situations, the cardinal number *èci* 'one' is used.

(110) *ka* *leo* *èmu* *dènge* [*bhèni* ***ci'u***]
PART overshade house with woman one
'Then married with a girl' [Paka_Bua_Ina_Ana.009]

(111) *hia* *ji'i* [*manu* ***ci'u***]
to.give 1PL.ex chicken one
'Gave us a cock' [RL_Rade_Lingu.068]

Inanimate nouns are modified by the numeral classifier *cue*, as in (112) and (113), where they are combined with *koha* 'boat' and *oka* 'garden' respectively. When these nouns are modified by *ca*, resulting in *ca koha* and *ca oka* (114), they are no longer considered as units but rather as separate classifiers meaning 'a boat-full' and 'a garden-full' respectively. Non-countable nouns like *salae* 'sand' in (115) require a classifier in order to become countable.

(112) *nèngu* *pare* *n-are* [*koha* ***cue***]
3SG to.cut 3SG-to.take boat one
'He made a boat (Lit: he cuts something to become a boat'
[BS_Tuka_Suki.209]

(113) *tao* [*oka* ***cue***] *ètu* *era* *loko* *Lusi* *nèi*
to.make garden one LOC place river Lusi REM.SG
'Made a garden near Lusi river over there' [LL_Pagar_Laut.019]

(114) *manu* *èu* ***ca*** *oka*
chicken 2SG a garden
'You have a garden-full of chicken' [RL_Rade_Lingu.124]

(115) *tengaa* [***salae*** ***cue***] *ho* *nèngu* *mai*
but sand one so.that 3SG to.come

ngèti *Oenale* *ho…*
from Oenale so.that
'But a grain of sand that comes from Oenale…'
[Pinangan_20140430.071]

In Dhao, not only nouns but also verbs can be used as classifiers. These are called sortal classifiers in the literature and specify units rather than quantities (Grinevald, 2004: 1020). Of those classifiers, two nouns are used as general classifiers, as given in Table 3.10 below. An illustration of *ngi'u* is given in (116), an illustration of *dhèu* in (117), and an illustration of *bua* in (118).

Table 3.10: General Classifiers

ngi'u	'body, self'	animates
dhèu	'person'	person only
bua	'fruit'[6]	inanimates

(116) *dènge ana* [*manu* ***ci'u***] [*dua* ***ngi'u***] *kahèi*
with child chicken one two body also
'And one or two chicken' [YF_Puu_Nyiu.0044]

(117) *la-'e ana iiki dhu* [*èpa* ***dhèu***] *lèmi karihu*
to.go-3SG child tiny REL four person five play
'Went in (and saw) about four or five kids were playing'
[SB_Lolo.152]

(118) *lèpa mai ka r-èdhi kabholo-keke* [*dua* ***bua***]
to.return to.come PART 3PL-to.see palm.fruit two unit
'They went home and brought two fruits of palmwine (had dried)'
[JL_Baki_Tuka.156]

Unlike animates, inanimate nouns also have specific classifiers derived from nouns, as listed in Table 3.11. In addition, some nouns used as classifiers are restricted to certain nouns, labeled here as 'unique classifiers'. These are listed in Table 3.12.

Table 3.11: Specific Classifiers

kapua	'trunk'	for all trees and plants
laa	'stem'	for sticks, woods
bèla	'sheet, cloth'	counting traditional woven clothes and pandanus mats
lai	'piece'	for counting paper

An example is given in (119). More specifically, the noun *laa* 'stem' is used as a classifier for products of trees or plants, namely sticks or wood (120). The two classifiers *bèla* 'sheet, cloth' (121) and *lai* 'piece' classify nouns referring to large sheets such as clothes and mats, and nouns referring to small sheets such as paper.

[6] This classifier might be a loan from Indonesian Malay *bua* 'fruit'. The sound /b/ in *bua* indicates that the word is a loan because Dhao uses the sound /h/ for *hua* 'fruit'.

(119) *ja'a* *èta* ***ca*** ***nguru*** ***kapua***
1SG to.tap.lontar a ten trunk
'I am tapping ten trees (of lontar)' [CY_Kasasi.084]

(120) *aj'u* ***dua*** ***laa*** *ètu* *karasa* *laa* *aj'u* *mango*
wood two stem in beside stem wood dry
'Two logs are beside a dry log' [Prep_Elicited.075]

(121) *pa-dai* *tèlu* ***bèla*** *na* *heka* *ji'i*
CAUS-to.reach three sheet PART then 1PL.ex

la'a *pahia* *kèna*
to.go.1PL.ex sell that
'After finishing three sheets then we go sell that' [SB_Enyu_Dhepi.045]

The following classifiers refer to configurations of temporary shapes. These are termed unique because they may classify only one object, or objects of the same kind (Grinevald, 2004: 1017). The term *kaloos* is a loan from Malay that means 'roll'. In Dhao it is used to refer to rolls of thread for weaving. The classifier *ho'a* refers to strands of threads that are prepared for weaving. The expression *ca ho'a* indicates that a big sarong needs thirty strands. The classifiers *nau* and *maho* indicate sets or groups. While *nau* is used for plants or trees, *maho* is used for materials like gongs. The classifiers *sagèri* and *ii* are used only for bananas. The term *ii* refers to a whole bunch of bananas attached to a stalk, while *sagèri* refers to separate bunches. The word *bèka* is used to classify objects, materials, or locations on a partial base. The unique classifiers are exemplified in (122).

Table 3.12: Unique Classifiers

kaloos(Mal)	'roll'	for thread
ho'a	'group of thread'	for thread
nau	'clump, cluster'	for plants, such as lontar, banana, etc.
maho	'set, group of'	for gongs, and group things
sagèri	'bunch'	for bunches of bananas
ii	'stalk'	for cluster of bananas
bèka	'part, fragment'	for counting parts of something, not by pairs

(122) *sig'i aae nèngu tèlu nguru ca* ***ho'a***
cloth big 3SG three tens a group.of.thread
'For big sarongs, one group consists of thirty strands'
[SF_Tao_Hengu.036]

The following classifiers are derived from verbs. They are typically used to classify uncountable nouns. Functionally they refer to container-like objects. Verbal classifiers are listed in Table 3.13 below. Examples of verbal classifiers are represented in (123) and (124).

Table 3.13: Verbal Classifiers

horo	'to.hold'	for uncountable materials, such as pea, etc
dui	'to.carry on shoulder with yoke'	for things
pa-ku'u	pa-'pinch'	for pieces of cake
pa-curu	pa-'spoon'	for spoonful

(123) *nèngu n-are* ***kabui ca horo***
3SG 3SG.take pea a hold
'She takes a handful of peas' [Loc_Elicited.012]

(124) [*èi na'i mèdi*] ***dua pa-curu***
water tobacco black two CAUS-spoon
'Two spoonful of black dye' [SN_Manenu.136-137]

Dhao has three classifiers that are used to express partitions of the nouns they classify. The classifier *èta* 'part' is used to classify materials, such as boards. The classifier *kadhèli* is used for bread, meat, strings, and rope. And the classifier *hag'e* is used to partition materials of all kinds. Illustrations are given in (125) - (126).

Table 3.14: Partition classifier

èta	'part'	for board, etc
kadhèli	'rasher, piece'	for slices of bread, meat, (cut) lengths of string, rope
hag'e	a part of, some of	For materials

(125) *nèngu j'aj'i ma* ***ceo*** ***èta***
3SG become toward nine piece
'It becomes nine parts' [EL_Dhari.026]

(126) *na tète bagi ma* ***ceo*** ***kadèli***
PART cut divide become nine piece
'Then it is divided into nine pieces' [EL_Dhari.018]

(127) *hua asa rai* ***ca*** ***hag'e***
fruit to land a part
'Some fruits are on the ground' [YY_PearStory.040]

Dhao has three classifiers for measurements. Two classifiers measure length and one classifier measures weight. Both are traditional ways of expressing measurement. Nowadays, loanwords from Indonesian are mostly used to measure, such as *kilo*, which is used for both 'kilometre' and 'kilogram', *senti* for 'centimetre', and *meter* for 'metre'. For weights, the loans *ons* 'ounce' and *gram* 'gram' are now used as well. The traditional mensural classifiers are listed in Table 3.15 below.

Table 3.15: Mensural classifiers

Length	*rèpa*	'fathom'
	èèg'a	'span'
Weight	*èma*	'eight grams'

While the mensural classifier *rèpa* 'fathom' is used to measure long objects or materials such as the keel of a boat, *èèg'a* 'span' is used to measure short materials or objects such as sarongs or tables. An example is illustrated in (128). Finally, the classifier *èma* is typically used to measure the weight of golden materials for a dowry. One *èma* equals eight grams. The expression in (129) informs that, according to Dhao customs, the dowry is five *èma* of gold.

(128) *kèni sekitar* ***èna*** ***rèpa***
keel around(IND) six fathom
'The keel of boat is six fathoms' [KN_Tao_Koha.006]

(129) *ada èdhi* ***lèmi*** ***èma***
custom 1PL.in five 8.gram
'For our custom, it is five *èma*' [KM_Maso_Minta001.124-125]

3.3. Verbal Categories

3.3.1. Verbs

The lexical category of verbs in Dhao profiles the notions 'action', 'process', and 'state' (Dixon, 2010a,b; Payne, 2006; Schachter & Paul, 2007; Bybee, 2000). However, semantic grounds alone are not sufficient to truly establish lexical categories in this case. Morphosyntactic processes play an important role in this respect. Two productive morphological processes, the prefix *pa-* and the (C)a-reduplication, also do not fully qualify for distinguishing verbs from other categories. The prefix *pa-* indeed can derive verbs from other categories such as nouns and adjectives, but with some semantic change it can also maintain the nominal category (see §4.3 on prefix *pa-*). The latter strategy is not very productive, however. Similarly, (C)*a-* reduplication is productive in indicating intensity. Such a function signals a verbal category. In this respect, (C)*a-* reduplication can characterize both nominal and verbal categories. The only morphological property that can distinguish verbal categories from other categories is the inflection of co-index affixes. The inflection is only confined to nine verbs: eight verbs that are phonologically words with initial short vowels take prefixes and the verb *la-* 'go' takes suffixes (see §4.2).

3.3.1.1. Formal Properties

Cross-linguistically, verbs typically function as the predicate head of a clause (Dixon, 2010b: 39). Since Dhao lacks a (morpho)syntactic marker to distinguish verbal predicates from other non-verbal predicates (see §5.2), such a syntactic function alone cannot be used as a defining feature. Verbal properties in Dhao include the following features: (1) a limited number of verbs can take co-index affixes for inflection (see §4.2), (2) verbs can be derived from nouns and adjectives with the prefix *pa-* that marks causative, reciprocal, and other meanings (see §4.3), and (3) only verbs can be modified by the perfective marker *le* 'PERF' and the modal *nia* 'can' (see §5.2).

In my corpus, only nine verbs in Dhao undergo inflection with co-index affixes. Verbs that use prefixes are illustrated in (130) and (131). As observed in (130) the prefix *k-* co-indexes with the clausal subject *ja'a* '1SG' and in (131) the prefix *m-* co-indexes with the subject *èu* '2SG'. The verb *la-* 'go' is illustrated with different suffixes in (132) and (133). The suffix *-mu* and *–ti* are co-referent with the respective subjects *èu* '2SG' and *èdhi* '1PL.in'.

(130) *ja'a* ***k-u'a*** *adhe* *te…*
1SG 1SG-to.eat liver because
'I eat the liver because…' [FF_Koli_Bubhu.204]

(131) *èu* *baku* ***m-ore*** *ngaa-ngaa*
2SG PROH.NEG 2SG-to.take DUP-what
'You should not take anything' [FF_Koli_Bubhu.191]

(132) *èu* ***la-mu*** *tenge* *ku* *ana* *madhutu* *kahib'i*
2SG to.go-2SG look tag child follow goat
'You go to look for a goat herdsman' [FF_Koli_Bubhu.251]

(133) *asa* *era* *mia* *hari* *èdhi* ***la-ti***
to place where again 1PL.in to.go-1PL.in
'To where we will go again' [YK_HelaBunga.095]

The verb *–ad'o* 'visit' mentioned in Grimes (2010) is excluded from the list of verbs inflected with the co-index prefixes exemplified above. It is neither found in the corpus nor attested in the analysis. As demonstrated in (134), within the SVC the verb *ngad'o* 'visit' combined with the verb *mai* 'come' has taken the the proper name *Jote* as its nominal subject. If *ngad'o* 'visit' is an inflected verb, it should agree with the subject by means of the prefix *n-* rather than *ng-* (see §4.2). The example (135) confirms that the verb remains *ngad'o*. Applying the 2SG prefix *m-* in order to agree with the subject even violates the construction.

(134) *bèli* *na* *ka* *Jote* *mai* ***ngad'o*** *Rika*
tomorrow PART PART Jote to.come to.visit Rika
'The next day, Jote visited Rika' [BS_Rika_Jote.051]

(135) *bèli* *la-mu* ***ngad'o/*m-ad'o*** *ja'a,* *angalai*
tomorrow to.go.2SG to.visit/2SG-to.visit 1SG friend
'Tomorrow, you may come to visit me, friend' [BS_Rika_Jote.050]

In order to derive verbs from other categories, Dhao makes use of the prefix *pa-*. The list in (136) illustrates the derivation of nouns and adjectives. For a more detailed elaboration on the prefix *pa-*, see §4.3.

(136) Derivational verbs from nouns and adjectives

angalai	'friend'	N	>	*pa-angalai*	'to be friend'
dhudhu	'thorn'	N	>	*pa-dhudhu*	'to have thorn'
mènyi	'oil, fat'	N	>	*pa-mènyi*	'to oil'
ngara	'name'	N	>	*pa-ngara*	'to name'
bhèla	'wide'	Adj	>	*pa-bhèla*	'to widen'
madhera	'long'	Adj	>	*pa-madhera*	'to lengthen'
mèdi	'black'	Adj	>	*pa-mèdi*	'to blacken'

In (137), the prefix *pa-* is attached to the noun *ngara* 'name' and results in a verb that means 'to name'. In (138), the prefix *pa-* is attached to the adjective *madhera* 'long' and results in a verb 'to make something long' (see §3.4.2 for a more elaborate discussion).

(137) *miu* ***pa-ngara*** *kabarai* *ne'e* *na* *ngaa?*
2PL CAUS-name land PROX.SG PART what
'What name do you give to this place?' [BS_Rika_Jote.077]

(138) *ja'a* *tuku* ***pa-madhera*** […]
1SG to.smith CAUS-long
'I made (it) to be long' [AL_Tuku_Doi_Pudhi.034]

The prefix *pa-* is not only used to create verbs but also to create other categories, those being nouns and adverbs (see §4.3). Although it is not productive for non-verbal derivations, it should be taken into account that *pa-* cannot be considered a property of verbs only.

As has been explicated throughout this subsection, co-index affixes and the prefix *pa-* cannot be relied on entirely to distinguish verbs from other categories. This is due to a couple of reasons. Firstly, the co-index affixes are confined to only nine verbs. Secondly, the prefix *pa-* is used not only to derive verbs but also to derive other categories like nouns and adverbs. The syntactic characteristics that confirm verbs in Dhao is modification by the manner adverb, the perfective marker, and the modal marker.

3.3.1.2. Subclasses of Verbs and Valency

The subclassification of verbs in Dhao is based on both semantic and syntactic grounds. Verbs are divided into nine ontological subclasses: action and production, process and state, cognition, utterance, motion, position, trajectory, directional, existential, and aspectual verbs. The valency involved in the subclassification of verbs refers to the number of semantic participants of a verbal event (see §5.4). The details of the subclassification are described in the following subsections.

3.3.1.2.1. Action and Production Verbs

Dynamic situations profiled by action and production verbs are understood as initiated by a conscious or unconscious force. Actions signal dynamic situations that imply some kind of change. The distinguishing factor here is that a constant input of energy is required to maintain the event (Bybee, 2000:797; Payne, 1997: 58). An example of such an action verb would be the verb *game* 'to hit'. On the other hand,

production verbs refer to situations that involve a chain of actions, such as *manènu* ‘to weave’. Action verbs include all valency possibilities, whereas production verbs tend to be exclusively bivalent. Action and production verbs in Dhao are presented in the list (139) below.

(139) Action and Production Verbs

kokotoo	‘to crow’	Monovalent
roge	‘to dance’	
manyèba	‘to spread’	
tangi	‘to cry’	
abo	‘to pound’	Bivalent
bhori	‘to pour’	
game	‘to hit’	
kèi	‘to dig’	
libu	‘to melt’	
lèpe	‘to fold’	
lidhu	‘to fold leaf’	
manènu	‘to weave’	
pakihu	‘to mix’	
tao	‘to make’	
tuku	‘to smith’	
hia	‘to give’	Trivalent
pa’adhu	‘to send’	
kiju	‘to tuck’	Ambivalent
pae	‘to stick’	
sai	‘to slice’	
sangidhi	‘to show teeth’	
sèg’i	‘to crack’	

Examples are given in (140) through (143) below. The use of a monovalent verb is represented by the verb *tangi* ‘to cry’ in (140) where the proper noun *Abunaba* is the agent of the event of crying. The use of a bivalent verb is illustrated by *abo* ‘to pound’ in (141), in which the agent is *bèi* ‘grandmother’ and the the patient is thenoun *kanana* ‘betel-nut’. The use of a trivalent verb is represented by the verb *hia* ‘to give’. The personal pronoun *miu* ‘2PL’ is the agent that executes the event of giving and *ja’a* ‘1SG’ is the recipient. The possessive NP *èi miu* ‘your water’ is the theme in this case.

(140) *Abunaba* ***tangi*** *sèmi* *èèna*
Abunaba to.cry be.like DIST.SG
'Abunaba cried like that' [SK_AbuNabas.021]

(141) *bèi* ***abo*** *kanana*[7]
grandmother to.pound betel
'Grandmother is pounding betel-nut' [CY_Lari_Na'i.278]

(142) *miu* ***hia*** *ku* *ja'a* [*èi* *miu*]$_{NP}$ *la*
2PL to.give tag 1SG water 2PL PART
'Please, give me your water' [FF_Koli_Bubhu.044]

(143) *nèngu* ***sèg'i*** *èpa* *kabodho*
3SG to.crack stem behind
'He takes (break) the lontar stems at the back' [Tao_Huhu.073]

(144) *ja'a* ***manènu*** *hèngu* *èèna* *ca* *minggu*
1SG to.weave yarn DIST.SG a week(IND)
'I weave the sarong in a week' [SN_Manenu.065]

3.3.1.2.2. Process and State Verbs

As indicated by its semantic explication, process verbs imply a change of state, but there is no volition and neither is there movement through space. State verbs do not encode change or action. They signal a stative situation that is extended in time. In Dhao, this type of verbs profiles both physical states like *mèu* 'be clean', and mental states like *makae* 'be ashamed'. In terms of valency, they only qualify as monovalent verbs. The list of process and state verbs is shown in (145) below.

(145) Process and State Verbs

bhodho	'to appear'	Monovalent
hare'a	'to boil'	
kèpu	'be burnt'	
laho	'be broken'	
madhe	'to die'	
maho	'be cold'	
mèlu	'to collapse'	
mèu	'be clean'	
molo	'to sink'	

[7] This sentence is commonly understood as the grandmother chewing betel-nut.

muri	'to grow, live'	
rea	'to shine (sun)'	
makae	'be ashamed'	
pèda	'be sick'	
talej'e	'be lazy'	
bècu	'be satisfied'	

An example is presented in (146). The verb *hare'a* 'boiled' designates the result of boiling the entity *èi pana* 'hot water'.

(146) [*èi* *pana*]$_{NP}$ ***hare'a*** *le*
water hot boiled already
'The water already boiled' [SK_Dhe'u_E'ta _Dua.058]

State verbs are illustrated by the verb *mèu* 'be clean' and *maho* 'be cold' in (147) and (148) below. In example (147), the verb *mèu* 'be clean' denotes the state of the noun *masi* 'salt' in clause initial position. The verb *maho* 'be cold' in (148) signals the state of the place within the NP *era ai nèi* 'the place of fire'.

(147) *masi* *kolo* *lia* *nèi* *nèngu* ***mèu***
salt top mountain.side REM.SG 3SG clean
'The salt made in the sloping riverbank was clean'
[SB_Tao_Masi.150]

(148) [*era* *ai* *nèi*]$_{NP}$ *ladhe* ***maho*** *èle…*
place fire REM.SG to.see cold already
'The place of fire, if it is already cold…' [FF_Bheni_ae_kabo.1491]

3.3.1.2.3. Cognition Verbs

Cognition verbs refer to mental activity, including experiences of the actor. In Dhao, these verbs refer to body parts such as brain, ears, and heart. These type of verbs are monovalent and bivalent, as presented in (149) below.

(149) Cognition Verbs

kasere	'to consider'	Bivalent
ladhe	'to see'	
nanene	'to listen'	Monovalent
ngee	'to think'	
sanède	'to remember'	

sanunu	'to plan'	
siri	'to predict'	
tadèngi	'to hear'	

An example is given below. The verb *kasere* 'predict' in (150) encodes an experience by the initiator, which is referred to by the personal pronoun *nèngu* '3SG' in this particular example.

(150) *hèia* *nèngu* ***kasere*** *na…*
then 3SG to.consider PART
'Then she considers that' [JL_Baki_Tuka.053]

3.3.1.2.4. Utterance Verbs

Utterance verbs involve a theme referring to the content of the utterance. They can also be expressed monovalently and bivalently, as shown in the list (151) below.

(151) Utterance Verbs

rodhe	'to scream'	Monovalent
palangu	'to farewell'	
ale	'to mention'	Bivalent
dhaa	'to answer'	
karèi	'to ask'	
lole	'to tell (story)'	
paroa	'to call'	
peka	'to tell, say'	
pa'oo	'to yell'	

Example (152) employs two utterance verbs: *paroa* 'to call' and *dhaa* 'to answer'. This sentence was taken from a situation wherein a teacher wanted to call on his students based on a name list. The term *Ama* 'father' is used as a honorific term referring to the teacher himself, while the pronoun *nèngu* '3SG' refers to any student whose name is being called.

(152) *ladhe* *na* *Ama* ***paroa*** *ngara* *cee* *na* *nèngu* ***dhaa***
to.see PART father to.call name who PART 3SG to.answer
'When I call your name, please answer' [PL_Aj'aDhao.007]

3.3.1.2.5. Motion Verbs

Motion verbs refer to verbs that incorporate the path of motion, the manner of motion, or the shape of moving objects (Bybee, 2000). For example, there are

different words for 'jumping': *ridhu* 'to jump (in general)', *soa* 'to jump (in certain space)' and *bèdhi* 'to leap'. Monovalent motion verbs obligatorily require a directional preposition to introduce their complements. Examples of motion verbs are listed in (153) below.

(153) Motion Verbs

bèdhi	'to jump'	Monovalent
ridhu	'to jump'	
soa	'to leap'	
kako	'to walk'	
lale	'to overflow'	
lela	'to fly'	
rai	'to run'	
rodo	'to crawl, creep'	
sabhoka	'to exit quickly'	
loli	'to roll up'	Ambivalent
bhadolu	'to roll' (marbles)	
bhaloli	'to roll' (ball)	

As illustrated in the examples below, the motion verb *kako* 'walk' in (154) indicates that the agent *na* '3SG.SUBJ.CL' is moving his legs in a particular manner, namely slowly through space. This is different from the verb *rai* 'run' whose motion is in a fast manner. In examples (155) and (156), the same verb *bhaloli* 'to roll' is used. The first example shows a bivalent situation. The event of rolling is executed by the agent *ja'a* '1SG'. The following example demonstrates a monovalent situation in which the participant moves voluntarily. The motion of rolling can also be distinguished by a general meaning, *loli*, the rolling of small round objects such as marbles, *bhadolu*, and the rolling of big round objects, such as a ball or fruit, *bhaloli*.

(154) *na* ***kako*** *taruu* *la-'e* ***asa*** *kaj'èu*
3SG.SUBJ.CL to.walk continue to.go.3SG to far
'He continues walking to the far' [YY_PearStory.023]

(155) *ja'a* ***bhaloli*** *hua* *nyiu* *èèna*
1SG to.roll fruit coconut DIST.SG
'I roll the coconut fruit' [Elicited]

(156) *hua* *nyiu* *èèna* ***bhaloli*** *la-'e*
fruit coconut DIST.SG to.roll to.go.3SG
'The coconut fruit rolls there' [Elicited]

3.2.2.1.3. Position Verbs

Position verbs describe the static position of an object. Unlike motion verbs, position verbs require prepositions indicating location. Examples of position verbs are presented in (157).

(157) Position Verbs

cudu	'to bow down'	Monovalent
lodha	'to be hanged'	
madèdhi	'to sit'	
titu	'to stand'	

As shown in (158) below, the position verb *madhèdhi* 'to sit' is followed by the locative preposition *ètu* 'LOC'. Likewise, in example in (159) the verb *titu* 'to stand' precedes a location noun which functions as a preposition. Note that location nouns can be used as prepositions as such (see §3.6.1.1).

(158) *nèngu* *la'e* ***madèdhi*** ***ètu*** *kolo* *hadhu*
3SG to.go-3SG to.sit LOC top rock
'He went to sit on the stone' [FF_Koli_Bubhu.322]

(159) *èu* *la-mu* ***titu*** ***dedha*** *papa* *èèna*
2SG to.go-2SG stand above board DIST.SG
'You go to stand on the board' [BS_Tuka_Suki.498]

3.3.1.2.6. Trajectory Verbs

This subclass is termed trajectory verbs: these kind of verbs have a place or path as their locational objects. Unlike motion and position verbs, trajectory verbs have the capacity to appear in a transitive construction. Trajectory verbs are illustrated in (160) below.

(160) Trajectory Verbs

dhuli	'to visit, stop by'	Bivalent
lèpa	'to return'	
lola	'to drip'	
puru	'to go down'	
-are	'to reach'	

j'unu	'to lie down'	
kajape	'to be left behind'	
pea	'to stay'	
tèka	'to perch'	

In example (161), the verb *j'unu* 'to lie down' is followed by the locative preposition *ètu* 'LOC before the location NP *ro'a koi* 'underneath the bed'. In example (162), however, the same verb occurs without locative preposition. As such, the location NP *ro'a koi* 'underneath the bed' is juxtaposed to the verb *j'unu* 'to lie down'[8].

(161) *ra* *hia* *na* ***j'unu*** ***ètu*** *ro'a* *koi*
3PL.CL to.give 3SG.SUBJ.CL to.lie.down LOC hole bed
'They asked him to sleep in space underneath a bed'
[FF_Koli_Bubhu.101]

(162) *èu* ***j'unu*** ***ro'a*** ***koi*** *ja'a*
2SG to.lie.down hole bed 1SG
'You sleep underneath my bed' [FF_Koli_Bubhu.105]

3.3.1.2.7. Directional Verbs

Three verbs are categorized as directional verbs; they also require locative or directional complements, and can be used as the second verb in serial verb construction to express the directionality with the speaker as the point of the reference (see §6.4). The verbs *la-* and *–are* originally are inflected verbs (see §4.2).

(163) Directional Verbs

la-	'to go-'	Monovalent
mai	'to come'	
-are	'to take'	Bivalent

As presented in example (164) below, the verb *la-* 'go' is inflected with the suffix *–ku* '1SG'. The location complement *dhasi* 'sea' immediately follows the verb, which behaves the same as locational verbs. In example (165), the inflected verb *laku* 'I go' appears in clause final position indicating a direction away from the position of the speaker at the time of the utterance. As such, the directional verb and the main verb form a serial verb construction (see §6.4).

[8] For an explanation about constructions as such, see §5.4.2 on transitive construction.

(164) *ja'a* *neo* ***la-ku*** *dhasi*
1SG to.want to.go.1SG sea
'I want to go to sea' [WY_Kalera_Kanaca.001]

(165) *ja'a* *nangi* *ka* *pulu* ***la-ku***
1SG to.swim PART island to.go-1SG
'I swam to island' [SK_Polisi.950]

3.3.1.2.8. Existential Verbs

Dhao has two verbs to express existential meaning: *abhu* 'to get', which has a positive reading, and *aad'o* 'be absent', which has a negative reading. The existential verb *abhu* 'to get' may be translated as 'there exist' or 'there is' and is used to indicate the existence of an entity. It usually appears clause initially, as illustrated in (166). The subject of this verb is considered to be a zero subject, whereas the subject of the following clause functions as the object of the existential verb (see §5.2.1). The negative reading of *aad'o* 'be absent' is demonstrated in (167). The fact that *aad'o* 'be absent' is a verb is confirmed by its modification by the perfective marker *le* 'PERF' (168).

(166) ***abhu*** *bola* *èci* *ètu* *suu* *mei*
to.get ball(IND) one LOC tip table
'There is a ball at the tip of the table' [Prep_Elicit.006]

(167) *bola* ***aad'o*** *ètu* *suu* *mei*
ball(IND) be.absent LOC tip table
a) 'There is no ball at the tip of the table'
b) 'The ball is absent at the tip of the table'

(168) *bola* ***aad'o*** ***le***
ball(IND) be.absent PERF
'There is no more ball'

3.3.1.2.9. Aspectual Verb

The aspectual verb in Dhao is *èle* 'finish', which indicates a perfective aspect. This verb can occur in predicative position independently, like any other type of verb in Dhao. An example is given in (169). Its verbal character is confirmed by the fact that it can take the prefix *pa-* (see §3.3.1.1). The reduced form of this verb, *le* 'PERF', is used as the perfective marker, and in turn it can modify verbs as well, as is illustrated in (170).

(169) *ho* *nèngu* ***èle*** *èci*
then 3SG to.finish one
'Then she has finished one' [tao_dhepi.046]

(170) *puri* ***pa-èle*** *le* *bhèni* *aae* *èèna*
to.restore CAUS-to.finish PERF woman big DIST.SG
'(he) has healed the queen' [LL_Pagar_Laut.108]

3.3.2. Adverbs

Adverbs typically modify categories other than nouns. Defining characteristics of adverbs in Dhao are as follows. Firstly, they cannot function as main predicates or as heads of arguments. The example in (171)a illustrates that *karohe* 'fast' follows the verb *rai* 'to run'. In such a position, it designates the manner of the action denoted by the verb *rai*, rather than designating an entity; therefore, it is an adverb. Its use in the predicate position as shown in (171)b is impossible.

(171) a. *èu* *rai* ***karohe*** *ku*
2SG to.run fast tag
'You, please run quickly' [ADJV_Elicit.066]

(172) b. **èu* ***karohe*** *ku*
2SG fast tag

Secondly, adverbs cannot normally be derived by means of the prefix *pa-* or (C)*a-* reduplication. *Mèri* 'quick' forms an exception as the attachment of the prefix *pa-* does not create a verb from the adverb, as is demonstrated in (173)a. Example (173)b shows that both *mèri* and *pamèri* cannot occur predicatively. Like bisyllabic adjectives and verbs, *mèri* can be partially reduplicated, like in (173)c.

(173) a. *nèngu* *rai* ***mèri* / *pa-mèri***
3SG to.run quick / PA-quick
'He runs quickly' [ADJV_Elicit.067]

b. **nèngu* ***mèri* / *pa-mèri***
3SG quick / PA-quick

c. ***ma-mèri*** *nèngu*
DUP-quick 3SG
'His speed' [ADJV_Elicit.072]

In general, adverbs in Dhao can be separated into two subtypes: verbal adverbs and clausal adverbs. The former are adverbs that only modify verbs, whether they precede or follow the main verb does not matter. The latter constitutes adverbs that modify the entire clause; they can occur clause-initially or clause-finally. Other adverbs that can only modify specific verbs are classified as exclusive adverbs (§3.3.2.3). This type of adverbs usually is derived from ideophones, and features lexical reduplication (see §4.4.1.4 on lexical reduplication), such as *dhi-dhii*, which can only modify the verb *titu* 'to stand'. It cannot modify any other verb.

3.3.2.1. Verbal Adverbs

Verbal adverbs include aspectual, manner, degree, and modality adverbs. The list of verbal adverbs is presented in (174).

(174) Verbal Adverbs

Aspectual	*lili*	'still'
	dhae	'not yet'
	heka	'have just (perfective)'
	eele	'away'
Manner	*mèri*	'fast'
	karohe	'quickly'
	lai-lai	'quickly'
	rute	'quickly'
	babag o	'slowly'
Degree	*j'o*	'rather'
	ako	'quite'
	oe	'almost'
Modality	*heka*	'no longer'
	nia	'can'

Aspectual adverbs, except *eele* 'away', precede the verbs that they modify. They designate whether an action or event has been completely done or whether it still is in progress. The adverb *lili* 'still' indicates that an event is still ongoing, as shown in (175). *Dhae* 'not yet' designates imperfectiveness and commonly requires *mèka* 'not yet' to co-occur, as shown in (176), whereas *heka* 'just' designates the completion of an event immediately before the utterance , as shown in (177). This adverb should be distinguished from *heka* 'no longer' and *heka* 'old'. Unlike the other three, *eele*

'away'[9] occurs after the verb and indicates the completion of an event, as is illustrated in (178).

(175) *rèngu* ***lili*** *pa-ngee-pa-ngee* *hèia…*
3PL still DUP-PA-to.think then
'While they are still thinking…' [FF_Bheni_ae_kabo.1203]

(176) *nèngu* ***dhae*** *n-èdhi* *mèka* *èu* *de*
3SG not.yet 3SG-to.see not.yet 2SG PART
'She has never seen you, so' [SB_Lolo.224]

(177) *bèi* *ku* ***heka*** *hia* *ja'a* *kèi* *ro'a* *na'i*
grandma tag just to.give 1SG dig hole tobacco
'Grandmother has just asked me to dig holes for tobacco'
[CY_Lari_Na'i.515]

(178) *baki* *Tuka* *bhoke* ***eele*** *katanga* *babo'i*
grandfather Tuka to.open away cover k.o.bottle
'Mr. Tuka opened the lid of the bottle' [BS_Tuka_Suki.453]

All manner adverbs occur after verbs indicating the speed of an action denoted by a verb. They precede verbs when combined with the politeness tag *ku*, as illustrated in (179). *Karohe* 'quickly' is commonly used for a concrete action in a situation where the referents of the subject and the object are visible to one another. Meanwhile, *lai-lai* 'quickly' usually is used for abstract action. All adverbs of degree precede the verbs they modify, as illustrated in (180), except for *j'o* 'rather', which usually appears after a verb that denotes distance, like *kaj'èu* 'far', and before the intensifier *ae* 'too' (181).

(179) *èu* ***karohe*** *ku* *mai*
2SG quickly tag to.come
'You, please come quickly' [ADJV_Elicit.065]

(180) *tao* *dhari* ***ako*** *madhera* *ciki*
to.make rope rather long little
'Make strings that is rather long' [SF_Tao_Hengu.048]

[9] Since *eele* is not attested as predicative, the construction cannot be considered as SVC as claimed by Jacob and Grimes (2011) (see §6.4 on SVCs).

(181) *a'e* *ledhe* *kaj'èu* ***j'o*** ***aae***
to.climb mountain far quite big
'Went to the mountain and it was quite far' [CY_Lari_Na'i.046]

Modality adverbs precede the verb and carry an evidential reading. The illustration is given in (182).

(182) *... tangi* ***heka*** *hèi*
cry no.longer also
'…do not cry any more' [BS_Tuka_Suki.085]

3.3.2.2. Clausal Adverbs

Clausal adverbs differ from verbal adverbs because they modify the entire clause construction; they can modify both verbal or non-verbal clauses. Some of them preferably occur clause-initially, like *cakalaa* 'suddenly'. Some of them prefer a clause-final position, like *dènge* 'immediately', and some others may be clause-initially or clause-medially. No adverb of this type can occur in all positions. Clausal adverbs are listed in (183) below.

(183) Clausal Adverbs

Temporal	*none*	'momentarily'
	ca'a-ca'a	'normally'
	kaca'a la'a	'suddenly'
	kèbalaa	'suddenly'
	kabèdhi la'a	'suddenly'
	cag'ag'a la'a	'unexpectedly'
	capa	'spontaneously (react quickly)'
	pe	'later, in the future (probably)'
	dènge	'immediately'
Focus	*hudi*	'let it be'
	dhoka	'just'
	di	'only'
	(ka)hèi	'also'
	sène	'just'
	iie	'precisely'
	hari	'again'

Most of the adverbs mentioned above occur clause-initially, as illustrated in (184) with the adverb *kèbalaa* 'suddenly'. These adverbs optionally combine with

the particle *na* 'PART' as indicated within brackets. The adverb *pe* can appear clause-initially, denoting the meaning 'later', as well as appear clause-medially, denoting the meaning 'probably', as demonstrated in (185). The adverb *dènge* 'immediately'[10] can only occur clause-finally, as shown in (186).

(184) ***kèbalaa*** (*na*) *Rika* *mai*
suddenly PART Rika to.come
'Suddenly, Rika came' [JL_Rika_Jote.009-010]

(185) *ana* *èèna* ***pe*** *saba* *dua* *lod'o*
child DIST.SG probably to.work two day
'The child probably worked two days' [SK_Dhe'u_E'ta _Dua.101]

(186) *mai* *kèpe* *r-are* *la-si* *r-èti* ***dènge***
to.come to.catch 3PL-to.take to.go-3PL 3PL-to.bring immediately

asa *era* *nèi*
to place REM.SG
'They arrested him and carried him immediately to that place'
[FF_Bheni_ae_kabo.1291]

As observed in the list of (183), Dhao has four forms to express the meaning of 'suddenly'. Interestingly, the four forms are identical in that tall of them contain the formative *la'a* or *laa*[11]. The form has no independent lexical meaning. The form *kaca'a* itself also has no lexical meaning, but seems to be related to the expression *ca'a-ca'a*, which is freely translatable as 'normally'. In contrast, *kabèdhi* itself means 'surprise'. This suggests the forms *cakalaa* and *kèbalaa* also have the ending *la'a*. The forms *caka* and *kèba* themselves are lexically meaningless. Unlike the four previous adverbs, the adverb *cag'ag'a la'a* 'unexpectedly' clearly is derived from *cag'ag'a* 'startled'.

Focus adverbs semantically signal a situation within a certain context. Such adverbs also are known as emphatic adverbs (Givón, 2001: 94). With the exception of *hudi* 'let it be' and *dhoka* 'only', all focus adverbs occur clause-finally. For example, *hari* 'again' appears in final position in example (187). The same holds for *kahèi* 'also' in (188). This adverb is optionally reduced into *hèi*. As seen in (189), *hudi* appears in initial position of the clause, and in (190) *dhoka* comes after the clausal subject. Optionally, the adverb *di* 'only' is added in clause-final position.

[10] Notice that this adverb is a grammaticalization of the preposition *dènge* 'with' (§3.6.2.1).

[11] Considered as grammaticalization of *la'a*, a verbal form that means 'go.1PL.ex'

(187) *sai* *t-are* *na* *èdhi* *bagi* ***hari***
to.chop 3PL-to.take PART 1PL to.divide again
'After cutting, it is loosened again' [AL_Kanacha.010]

(188) *ana* *bhèni* *èèna* *la'e* ***kahèi***
child woman DIST.SG to.go-3SG also
'The woman took part, too' [FF_Bheni_ae_kabo.757]

(189) ***hudi*** *ja'a* *kapai* *ku* *hari* *la* *ma*
let 1SG big tag again PART tag
'I am still small so let me grow a bit bigger' [PM_Meo aasu.011]

(190) *ma-muri* *ji'i* ***dhoka*** *hua* *a'ju* ***di***
DUP-to.live 1PL.ex just fruit wood only
'We only ate fruits' [CY_Lari_Na'i.007]

3.3.2.3. Exclusive Adverbs

Exclusive adverbs in Dhao are confined to a semantically selective group of headwords that are either verbs, adjectives, or quantifiers. For example, the adverb *eo-eo* can only modify motion verbs, like *rai* 'run' or *kako* 'walk', but also is used specifically to modify the verb *pode* 'to turn'. It cannot modify other motion verbs such as *mai* 'come' and *la-* 'go'. Adjectives can have special modifiers as well. For instance, *bedo-bedo* exclusively modifies *manii* 'thin', and *guru-guru* modifies *mèdi* 'black' only. Syntactically, exclusive adverbs occur immediately after the heads. Verbal exclusive adverbs are given in the list (191) below.

(191) Verbal Exclusive Adverbs

pode 'to turn around'	*eo-eo*	'to turn around'
kako 'to walk'	*eepo-eepo*	'to walk pantingly' /
	eko-eko	'walk staggeredly'
titu 'to stand'	*dhii-dhii* /	'to stand patiently'/
	dhoo-dhoo	'to stand steadily'
mari 'to laugh'	*eere-eere* /	'to keep laughing' /
	uuku-uuku	'to burst out'
sagèba 'be facedown'	*mopo-mopo*	'to fall facedown'
tarenga 'to supine'	*hara-hara*	'to supine'
bèj'i 'to sleep'	*goo-goo*	'sleep too soundly'
madèdhi 'to sit'	*mau-mau* /	'to sit and contemplate'
	gua-gua	'to sit silently'

pènu ‘be full’		*idhu-idhu*	‘be completely full’
mèu ‘be clean’		*lao-lao*	‘to have nothing’

As observed in the list above, all are lexically reduplicated. In very specific contexts they can be used verbally. For instance, the verb *kako* ‘walk’ is modified by *eo-eo* ‘around’ in (192).

(192) *dhèu* *aae* *na* ***kako*** ***eo-eo***
person great PART to.walk around
‘They went around’ [RL_Rade_Lingu.082-083]

Like the exclusive adverbs for verbs, exclusive adverbs for adjectives also are lexically reduplicated. The adverb *oode-oode* ‘too little’ is an exception, as its reduplication is optional. These adverbs express the meaning ‘too (excessive)’. The color *rara* ‘a bit yellow’ has no special adverb of its own, as it is a reduced form of *karara* ‘yellow’. A list of exclusive adverbs for adjectives is given in (193) below.

(193) Adjectival Exclusive Adverbs

ciki ‘a little, a few’	*oode* (*-oode*)	‘too little’
ma’aa ‘thick’	*haki-haki*	‘too thick’
manii ‘thin’	*bedo-bedo*	‘too thin’
madhera ‘long’	*lola-lola*	‘too long’
mèdi ‘black’	*guru-guru*	‘pitch black’
pudhi ‘white’	*lao-lao*	‘too white’
mangèru ‘green, blue’	*bidhu-bidhu*	‘too gree/blue’
mea ‘red’	*gèu-gèu*	‘too red’
karara ‘yellow’	*moce-moce*	‘too yellow’
karara ‘yellow’	*mu’e-mu’e*	‘too yellow’
rara ‘a bit yellow’	**moce-moce*	-
ahu ‘grey’	*ti’a-ti’a*	‘too grey’

Some examples are presented below. In (194), the adjective *ciki* ‘little’ is modified by *oode* without lexical reduplication[12]. In (195), the adjective of color is modified by *guru-guru*. All of these adverbs are used to designate the quality of the adjectives.

[12] For lexical reduplication, see §4.4.1.4.

(194) *èi* *na'i* *karara* ***ciki*** ***oode*** *ka* *ne'e*
water tobacco yellow little too.little PART PROX.SG
'There is a little bit yellow dying' [SN_Manenu.156]

(195) *lasi* *na* *dara* *dhu* *mèdi* ***guru-guru***
to.go.3PL PART inside REL black too.black
'They went and Jote's house was too black (due to smoke)
[PD_Rika_Jote.042]

The exclusive adverb *mèu-mèu* is originally derived from a stative verb that means 'clean'. In this case, it modifies the quantifier *aa'i* 'all' to denote the meaning 'wholly or completely'

(196) *ka* *a'ju* *tesa* ***aa'i*** ***mèu-mèu***
PART wood complete all DUP-clean
'All logs had been prepared completely' [FF_Bheni_ae_kabo.769]

3.4. Adjectives

A typical function of adjectives is to directly modify nouns by specifying a property of the head noun's referent (Payne, 2006: 116). As such, adjectives usually indicate dimension, colour, and value (Dixon, 1982: 13). However, semantic types alone cannot be used as parameters to define Dhao adjectives, considering that they share syntactic features with nouns and verbs as well (Balukh, 2015). Particular lexemes can occupy both predicative and non-predicative position. Observe the examples in (197) through (199).

The adjective *kaj'alu* 'dirty' modifies the head noun *èi* 'water' in (197). It can be nominal, like in (198), where it functions as object of the verbal predicate *pamèu* 'to clean up'. In (199), it behaves like a monovalent verb, expressing the state of the subject NP *èmu èèna* 'that house'. As such, lexemes, like *kaj'alu* 'dirty', require a constructional context to define their category. There are two defining criteria to determine the adjective category in Dhao, namely: (1) attributive function (§3.4.1), and (2) SVCs involving the prefix *pa-* (3.4.2).

(197) *ji'i* *usu* *eele* ***èi*** ***kaj'alu***
1PL.ex to.bail away water dirty
'We bail the dirty water' [GD_Kei_Ei.077]

(198) *nèngu* *pa-mèu* ***kaj'alu*** *ètu* *kolo* *dhua*
3SG CAUS-clean dirt LOC top palm.tree
'S/he cleans up the dirt on the palm tree' [GD_Sasabha_Eta_Dhua.006]

(199) *èmu* *èèna* ***kaj'alu***
house DIST.SG dirty
'That house is dirty' [JL_Rika_Jote.060]

3.4.1. Attributive Function

The typical function of adjective is the direct modification of nouns. In Dhao, modifiers typically follow the head noun. Only five words are true adjectives in Dhao, as they can only directly modify nouns in their bare forms. They are as listed in (200).

(200) True Adjectives

	NP	**Meaning**
aae 'big, great'	N- (*mone*) *aae*	'big thing'
iiki 'small'	N- (*ana*) *iiki*	'small thing'
aapa 'bad'	N- *aapa*	'bad thing'
to'a 'in need'	PERS.- *to'a*	'person in need'
iia 'common'	N- *iia*	'common thing, beautiful/handsome (person)'

The adjectives *aae* 'big, great' and *iiki* 'small' can function only as predicates when combined with the nouns *mone* 'male' and *ana* 'child'. As demonstrated in (201), the adjective *iiki* 'small' functions as an attribute and directly modifies the head noun *aj'u* 'wood'. In (202), the adjectives *aae* 'big' and *iiki* 'small' combine with their noun counterpart and again, they are attributive. Using their bare forms predicatively is ill-formed, as shown in (203), which suggests that they never function predicatively.

(201) *m-ore* *hari* [*aj'u* ***iiki***] *èci*
2SG again wood small one
'Take again one small log' [SF_Tao_Hengu.333]

(202) *èmu* *èèna* [***mone*** ***aae***] / [***ana*** ***iiki***]
house DIST.SG male big / child small
'That house is big/small'

(203) **èmu* *èèna* ***aae*** / ***iiki***
house DIST.SG big / small

Other words indicating states, like *mèu* 'be clean', cannot be included in the adjective category because they are not able to directly modify head nouns. An example is given in (204). The use of *mèu* immediately following a head noun, like in (204)a, is ungrammatical and requires a relative marker, as is shown in (204)b. Used predicatively it is well-formed, as is illustrated in (204)c.

(204) a. **èmu* ***mèu*** *ne'e*
house clean PROX.SG

b. *èmu* *dhu* ***mèu*** *ne'e*
house REL clean PROX.SG
'This house that is clean'

c. *èmu* *ne'e* ***mèu***
house PROX.SG clean
'This house is clean'

3.4.2. Adjectives and the prefix *pa-*

Words denoting dimension and color can be used both attributively and predicatively. However, they have different syntactic behaviors when prefixed with causative *pa-*. They require another verb to precede them, resulting in a SVC (see §6.4). Within the SVC, the derived verb with *pa-* appears as V2. For example, the attributive function is shown with *manii* 'thin' in example (205). When attaching the prefix *pa-*, it requires the verb *tao* 'to make', as shown in (206)a. The derived form with *pa-* only cannot occur as an independent predicate, as is illustrated in (206)b. All this shows that words of this type have a specific morphological constraint at the syntactic level. Therefore, in this thesis, I label them re-categorized adjectives. They are morphologically verbal, but syntactically do not behave like real verbs (Balukh, 2015). The lists of dimension and color adjectives are given in (207) and (208) respectively.

(205) *aj'u* ***manii*** *sèra* *dhèu* *leo* *abhu* *le*
wood thin REM.PL person other to.get PERF
'Those thin logs other people already got them'

(206) a. *nèngu* *tao* ***pa-manii*** *aj'u* *sèra*
3SG to.make CAUS-thin wood DIST.PL
'He makes the logs thin'

b. **nèngu* ***pa-manii*** *aj'u* *sèra*
3SG CAUS-thin wood DIST.PL

(207) Adjectives of dimension

marèma	'deep'
bab'a	'short, shallow'
madhera	'long, tall'
kapai	'big, large'
kobo	'narrow'
bhèla	'wide'
ma'aa	'thick'
manii	'thin'

(208) Adjectives of colors

mèdi	'black'
pudhi	'white'
mangèru	'green'
mea	'red'
karara	'yellow'

A contrastive example is illustrated in (209) in which the attachment of the prefix *pa-* to *hera* 'be dirty' prefers an independent predicate, rather than combining with an additional verb. This would suggest that words like *hera* 'be dirty' should be included into the category of monovalent verbs because they have no constraints at the syntactic level when taking verbal morphology.

(209) *nèngu* (****tao***) ***pa-hera*** *èmu* *èèna*
3SG (to.make) CAUS-dirty house DIST.SG
'He makes the house dirty'

3.5. Interrogative Words

Dhao has eight words to create interrogative constructions. On the basis of their function, interrogative words in Dhao are classified into four types: interrogative pronouns, numerals, classifiers, and demonstratives. The others are considered derived forms (see §3.5.5 below). The interrogative element may consist of only an interrogative word, but may also consist of an interrogative word and a related noun or verb phrase, giving it an interrogative phrase (Velupillai, 2012). The list of the interrogative words and their qualifications are presented in Table 3.16 below.

Table 3.16: Dhao Interrogative Words

Types	Interrogative Words	Gloss	Qualification
Pronoun	*cee*	'who'	human
	ngaa	'what'	non-human
Numeral	*pèri*	'how many'	amounts, number
Classifier	*cangaa*	'how much'	abstract amounts
Demonstrative	*mia*	'where'	place (location)
Other (derived)	*tasameramia/ tasamia*	'how'	manner, reason
	ngaa tao	'why'	reason
	do	'PART'	polarity (yes/no)

Interrogative words in Dhao may function pronominally, adnominally, and predicatively as presented in Table 3.17 below.

Table 3.17: Functions of Interrogative Words

Interrogative Words	Gloss	Function		
		PRO	ADNOM	PRED
cee	'who'	+	+	+
ngaa	'what'	+	+	+
pèri	'how many'	-	+	+
cangaa	'how much'	-	+	+
mia	'where'	+	+	+
tasameramia/ tasamia	'how'	+	+	-
ngaa tao	'why'	+	-	-
do	'PART'	-	-	-

3.5.1. Interrogative pronouns

Cee questions human referents, whereas *ngaa* questions non-human entities. Like other nominal elements, they occur as clausal arguments. Example (213) displays the use of *cee* 'who' in subject position. Example (214) shows *ngaa* 'what' in object position. As they are pronominal, they can occur in peripheral positions, such as the location as is shown in (212).

(210) ***cee*** *leru* *nèngu?*
who to.care.for 3SG
'Who looks after her?' [FF_Bheni_ae_kabo.651]

(211) *èu* *m-ore* ***ngaa****?*
2SG 2SG-to.take what
'What do you get'? [BS_Rika_Jote.028]
[Lit. you get what?]

(212) *n-are* *mèdha* *sèi* *ètu* ***ngaa***
3SG-to.take thing REM.PL LOC what
'Where did he take those things' [FF_Koli_Bubhu.394]
[Lit. S/he takes those things in what (place)?]

3.5.2. Interrogative Numeral

The interrogative word *pèri* questions numbers or amounts. Therefore, it is labeled interrogative numeral. In example (213), the interrogative *pèri* questions the amount of money in a given envelope. *Pèri* occupies a subject slot. Likewise, in (214) *pèri* questions the amount of parts. Since Dhao lacks an interrogative word for 'when', it makes use of *pèri* plus the time noun *lod'o* 'day, time', as is illustrated in example (215). The predicate function of *pèri* is demonstrated by the examples below. In (216) *pèri* 'how many' functions as a nominal modifier. It questions the quantity of individuals.

(213) ***pèri*** *ètu* *dara* *amplop?*
how.much LOC inside envelope(IND)
'How much is in the envelopes?' [Ada_20140427.106]

(214) *j'aj'i* *mi* ***pèri*** ***bèka****?*
to.become to how.many half-cut
'Become how many parts?' [PL_Aj'aDhao.051]

(215) *mate* *kapai,* ***pèri*** ***lod'o****?*
to.wait big how.many day
'(I) will wait until getting bigger, when?' [PM_Meo aasu.013]
[Lit. wait (until) big, how many days?]

(216) *ana* *èu* [*dhèu* ***pèri****?*]
child 2SG person how.many
'How many children do you have?' [SK_Dhe'u_E'ta _Dua.130]
[Lit. your child how many person?]

3.5.3. Interrogative Classifier

The interrogative word *cangaa* 'how much' most likely is a fossilized form of two lexical items, the classifier *ca* 'a, one' and the interrogative pronoun *ngaa* 'what'. The interrogative *cangaa* 'how much' preferably questions uncountable nouns, such as prices, and is rarely used for countable nouns. In example (217), *cangaa* 'how much' questions the price of a certain entity and is used predicatively. An example of *cangaa* with countable nouns is given in (218) where it is also in predicate position.

(217) *aku* *nèngu* *na* *kabua* [***cangaa***]?
according.to 3SG PART price how.much
'He said, "how much is the price?"' [SN_Manenu.247]

(218) [*sabha* *kaba* *miu*] [***cangaa***] *na*
palm.container shell 2PL how.many PART

tao *aa'i* *asa* *li'u*
to.make all to outside
'How many palm juice container do you have, then put all outside'
[BS_Tuka_Suki.065]

3.5.4. Interrogative Demonstrative

The interrogative *mia* 'where' serves to question location, direction, and choice. In example (219) the interrogative *mia* questions a location, and is preceded by the locative preposition *ètu* 'LOC'. This kind of construction can also combine with a preceding general location noun, *era* 'place', as illustrated in (220). Example (221) illustrates *mia* 'where' modifying the noun *j'ara* 'way'.

(219) *oni* *ne'e* *rèda* [*ètu* ***mia****?*]
bee PROX.SG perch LOC where
'Where are the bees perching?' [FF_Bheni_ae_kabo.867]

(220) *ja'a* *ètu* ***era*** ***mia*** *na* *ka*
1SG LOC place where PART PART

ja'a *todhe* *dènge* *sasadhu* *èèna*
1SG to.bring with sasando DIST.SG
'Wherever I went, I brought the sasando' [YK_music.028]

(221) *dènge* [*j'ara* ***mia***] *dhu* *rèngu* *bisa?*
with way where that they can
'By which way they can do that' [CY_Kasasi.090]

3.5.5. Other Interrogatives

3.5.5.1. *Tasameramia/tasamia* 'how'

The interrogative *tasameramia* or *tasamia* 'how' serves to question manner, reason, and comparison. In some cases, it may bear the meaning 'why'. This interrogative word *tasameramia* is lexically complex[13]. Most frequently, the form *tasamia* is used, but in formal situation *tasameramia* is said to be more acceptable. It sometimes is reduced to *samia* or *mia* only. Furthermore, the form *tasamia* may also be preceded by the verb *tao* 'make' to denote the meaning 'how to'. The illustrations in (222) and (223) denote asking for information, whereas (224) and (225) denote asking after reasons.

(222) *saba* *hèngu* *nyama* *ne'e* *pe* ***tasamia***?
to.work yarn raffia PROX.SG about how
'How to do this ikat weaving activity?' [SN_Manenu.003]

(223) *sa-saba* *hèngu* *nyama* *ne'e* *sèmi* ***mia****?*
DUP-to.work yarn raffia PROX.SG be.like how
'This ikat weaving task, how is it like?' [SN_Manenu.018]

(224) ***tao*** ***tasamia*** *èdhi* *la-ti* *hari*
to.make how 1PL.in to.go-1PL.in again
'Why do we have to go again?' [CY_Lari_Na'i.387]

(225) *ladhe* ***tasmeramia*** *miu* *eso* *eso* *eele* *ciki* *to?*
to.see how 2SG to.move to.move PART little tag
'See, why do you postpone a bit? ' [Percakapan20130825_b.682]

[13] One interpretation might be that the complex form *tasameramia* is a fossilized form of *tao asa mera mia*. Lexically, *mera* refers to '2SG-get'. The form and its gloss is presented in (1) below.

(1) *tao* *asa* *mera* *mia*
make to 2SG-to.get where/which

3.5.5.2. *Ngaa tao* 'why'

The interrogative *ngaa tao* 'why' probably is the fossilized form of two lexical items: *ngaa* 'what' and *tao* 'make'. This interrogative serves to question reasons. Unlike other interrogatives, *ngaa tao* never occurs in clause final position. It also prefers the particle *ka*, signaling that the following clause is a complement (see §3.6.4.1). In (226), *ngaa tao* questions why the subject *angalai* 'friend' comes. Example (227) questions why the subject *ja'a* '1SG' mentions the entity *bunga* 'flower'.

(226) ***ngaa*** ***tao*** *ka* *angalai* *mai*
what to.make PART friend to.come
'Why do you come (here), friend?' [SB_Lolo.255]

(227) ***ngaa*** ***tao*** *ka* *ja'a* *peka* *hari* *bunga*?
what to.work PART 1SG to.tell again flower(IND)
'Why did I mention the flower again' [YK_HelaBunga.032]

3.5.5.3. *do* 'yes-no interrogative'

Polar questions are marked by the particle *do*. This particle is homonymous with the exclamation particle *do* (see §3.6.4.1) and the conjunction *do* 'or' (see §3.6.3.1). For both its interrogative and exclamatory functions, *do* occurs at the very end of the clause. As such, intonation plays an important role in distinguishing the two. Polar questions require a rising intonation on *do*, whereas an exclamation is signalled by a flat intonation on *do*. Polar questions are used for getting yes/no answers, as is illustrated in (229). Example (230) shows an exclamation statement marked by the flat intonation on the particle *do*.

(228) *m-e'a* ***do***
2SG-to.know PART
'(do you) understand?' [Elicited from PL_Aj'aDhao.178]

(229) *èu* *pèda* ***do***?
2SG sick PART
'Are you sick?' [FF_Koli_Bubhu.749]

(230) *èdhi* *dhèu* *hiu* *hua* *na* ***do***!
1PL.in person new all DIST.SG tag
'We all are new' [Ada_20140427.109]

3.6. Function Words

3.6.1. Basic Prepositions

Dhao has ten 'true' prepositions in that they can only occur preceding nouns or noun phrases. Prepositions in Dhao typically are one-dimensional. For two and three dimension grounds, location nouns are required to express a path (see §3.2.1.2.3; Levinson and Wilkins, 2006). Other prepositional functions are derived from verbs (see §3.2.2). The classification of prepositions in this section is semantically-based. A list of Dhao prepositions is presented in Table 3.18 below.

Table 3.18: Basic Prepositions

Semantic class	**Prep.**	**Glosses**	**Other senses**
Locative	*ètu*	LOC	-
	buli	LOC	-
Target	*mi*	toward	-
	ma	toward	-
Source	*ngèti*	from	because (see §3.6.3.2)
Goal	*asa*	to	-
Path	*re*	through	pass
Instrumental/ accompaniment	*dènge*	with	own (see POSS) immediately (see §3.3.2.2)
Durative	*toke* (*dai*)	until	(reach) (see §3.2.2)
Comparative/ similative	*sèmi*	as, be.like	-

3.6.1.1. Locative and Target

Two locative prepositions in Dhao are *ètu* and *buli*, which I gave the general gloss 'LOC'. They are translatable as 'in, at, on' according to the context. The target prepositions are *mi* and and *ma*, which can be translated as 'toward'. Locative prepositions introduce a location or position in which no movement is indicated, as illustrated by *ètu* in (231) and *buli* in (232). While *ètu* can head a prepositional phrase that involves an abstract nominal complement, such as *laladhe* 'view' as shown in (233)a, the preposition *buli* cannot; as such, (233)b is judged ungrammatical.

(231) *rèngu* *pea* *dènge* ***ètu*** ***èmu***
3PL to.stay immediately LOC house

dhèu *aae* *ne'e*
person great PROX.SG
'They immediately lived in the king's palace'[FF_Bheni_ae_kabo.1837]

(232) *Rika tao èmu* ***buli*** ***suu*** ***haa***
Rika to.make house LOC tip west
'Rika built house in tip of west' [PD_Rika_Jote.010]

(233) a. *tengaa* ***ètu*** ***la-ladhe*** *ja'a*
but LOC DUP-to.see 1SG
'But according to my view' [Ada_20140427.123]

b. **tengaa* ***buli*** ***la-ladhe*** *ja'a*
but LOC DUP-to.see 1SG

To some extent, the preposition *mi* seems to indicate a location, as is shown in (234). However, in this particular construction the location is treated as the target of the action of planting, profiled by the verb *sèla* 'to plant'. As shown in (235), *mi* introduces the target of praying, which is *Ama Lamatua deda* 'God above'. In (236), the target of making a thing white is it becoming something useful. The resultant *mèdha* 'thing' is introduced by *mi*.

(234) *ka sèla* ***mi*** *hèbha kota*
PART to.plant at mouth town(IND)
'Then (he) planted (it) at the gate of the town' [BS_Tuka_Suki.334]

(235) *èdhi manèngi mangaj'i* ***mi*** *Ama Lamatua dedha*
1PL.in to.ask to.pray to father Lord above
'We pray to God above' [Ada_20140427.135]

(236) *ja'a rase pa-pudhi ho*
1SG to.wash CAUS-white so.that

nèngu j'aj'i ***mi*** *mèdha*
3SG to.become to thing
'I washed (it) in order to become white so that it becomes something'
[AL_Tuku_Doi_Pudhi.058]

Like *mi*, the preposition *ma* is used to mark a target, and as such examples (237) and (238) are grammatically well-formed. Unlike *mi*, the preposition *ma* is never used to introduce a location, so the elicited example in (239) is judged ungrammatical.

(237) *ja'a selalu lole **ma** ana-ana*
1SG always(IND) to.tell to DUP-child
'I always tell (this story) to children' [CY_Kasasi.012]

(238) *ènyu ho j'aj'i **ma** kalera*
to.plait so.that to.become to k.o.basket
'It is plaited to become a basket' [AL_Kanacha.035]

(239) **ka sèla **ma** hèbha kota*
PART to.plant at mouth town

3.6.1.2. Source, Goal, and Path

The prepositions indicating source, goal and path are *ngèti* 'from', *asa* 'to', and *re* 'through' respectively. The preposition *ngèti* 'from' indicates the source location, the origin of someone or something, or the source of information. Illustrations are given in (240) and (241).

(240) *waktu Pesa Kèli mai **ngèti** Sahu*
time(IND) Pesa Kèli to.come from name
'When Pesa Kèli came from Sawu' [BS_Rika_Jote.008]

(241) *gagiti ne'e nèngu tao **ngèti** tadhu*
catapult PROX.SG 3SG to.make from horns
'This catapult is made of animal horns'
[GD_Sasabha_Eta_Dhua.025]

The preposition *asa* 'to' introduces both physical and non-physical goals. Example (242) shows that the NP following *asa* 'to' is a physical goal, whereas *karehe* 'bad' it is a conceptual goal in example (243). In Dhao, this type of preposition can be omitted when the predicate is a directional verb, such as *la-* 'to go' or *mai* 'to come' (see §3.3.1.2.7). The semantic relationship between the complement and the predicate can be deducted from the context (Schachter, 2007: 35).

(242) *na ca'e hari [**asa** kolo ana aj'u]*
3SG.CL to.climb again to top child wood
'He is climbing again to the top of the tree' [YY_PearStory.019]

(243) *dhoka nga-ngee nèngu ne'e la-'e [**asa***
only DUP-to.think 3SG PROX.SG to.go-3SG to

karehe] *ka* *ne'e*
bad PART PROX.SG
'As her thought leads to the negative thing'
[FF_Koli_Bubhu.173]

The preposition *re* 'through' typically introduces a referent that is between two locative points – a source and a goal, which are not always mentioned in the discourse. In (244), the noun *èmu* 'house' is an intermediary path of the movement of going. In some cases, *re* behaves like a locative preposition, when the context does not indicate any transitional or intermediary movement, as shown in (245). The preposition *re* 'through' can also be used to introduce an instrument, which then can be translated as 'by, with', as is shown in (246).

(244) *nèngu* *la-'e* *hari* ***re*** *èmu*
3SG to.go-3SG again through house
'He went again through home' [FF_Bheni_ae_kabo.1087]

(245) *èu* *baku* *mari* ***re*** *kabodho* *èèna*
2SG PROH.NEG laugh through behind DIST.SG
'Don't laugh behind there' [CY_Lari_Na'i.223]

(246) *bèi* *sai* ***re*** *haga* *bèi* *ne'e* *we*
grandma chops via foot grandma PROX.SG tag
'I (grandma) make a line with my foot' [CY_Lari_Na'i.442]

3.6.1.3. Temporal Preposition

The preposition *toke* often combines with the verb *dai* 'reach' to indicate time duration or distance. Examples of *toke* are given in (247) and (248), where they introduce the duration of time. An example of the combination of *toke* and *dai* is given in (249).

(247) *dhèu* *ne'e* *bhèj'i* *boe* ***toke*** *mèu*
person PROX.SG to.sleep not until daytime
'The person did not sleep until the sun rose' [FAK_Roga'a.025]

(248) *la-mu* *tenge* ***toke*** *m-èdhi,*
to.go-2SG to.look.for until 2SG-to.see
'Please go until you find (it)' [FF_Bheni_ae_kabo.1081]

(249) *ngèti* *uru* ***toke*** ***dai*** *limuri* *ne'e*
from formerly until to.reach latest PROX.SG
'From the past until today' [LL_Pagar_Laut.002]

3.6.2. Other Prepositions

3.6.2.1. Accompaniment Preposition

The preposition *dènge* 'with' basically signals an accompaniment. It also functions as an instrument, a coordinate conjunction (see §3.6.3.1) and a possessive predicate (see §5.2.3). *Dènge* is used as a clausal adverb as well (see §3.3.2.2). In this case *dènge* 'with' is multifunctional with 'accompaniment', which is the core meaning; its other functions are extended grammaticalizations (Balukh and Arka, 2018). In (250), the preposition *dènge* 'with' indicates an accompaniment. In (251), *dènge* 'with' introduces instrumental entities; *doi* 'money' is used in the action of *paèi* 'to solder'. This instrumental reading is the grammaticalization of its core meaning when the referent is inanimate and the shared participation control over the event diminishes, while its sense of proximity arguably remains intact.

(250) *èu* *mai* *ca'e* *koha* ***dènge*** *ji'i* *ho*
2SG to.come climb boat with 1PL.ex so.that
'You come along with us in this canoe, then' [BS_Tuka_Suki.103]

(251) *pa-èi* ***dènge*** *doi* *pudhi*
CAUS-water with money silver
'Soldered silver coin and brass' [AL_Tuku_Doi_Pudhi.050]

3.6.2.2. Comparative/Similative Preposition

The preposition *semi* 'be like' indicates that an entity is compared to or contrasted with (an)other entity. In the example (252), *baki* 'grandfather' is compared to *ja'a* '1SG' in terms of behavior or identity. Likewise, in (253), a problem experienced by the subject *èu* '2SG' is compared to a problem experienced by the complement *ja'a* '1SG'. The preposition *sèmi* 'be like' also combine with question word *ngaa* 'what' to express admiration, as in (254).

(252) *ja'a* ***sèmi*** *baki* *ku*
1SG be.like grandfather 1SG.CL
'I am like grandfather' [FF_Bheni_ae_kabo.1391]

(253) *èu* *abhu* *j'èra* ***sèmi*** *ja'a* *ne'e*
2SG to.get suffer be.like 1SG PROX.SG
'You had the same trouble like me here' [FF_Bheni_ae_kabo.471]

(254) *aj'u* *nèngu* *dèbho* ***sèmi*** *ngaa* !
wood 3SG big be.like what
'How big his logs are' [ADJV_Elicit.035]

3.6.3. Conjunctions

Dhao has five coordinating conjunctions, as listed in Table 3.19, and eight subordinating conjunctions, as listed in Table 3.20.

Some conjunctions are lexically simple, such as *dènge* 'with, and', and some are complex, such as *ngèti èèna ka* 'therefore'. For the complex forms the demonstrative *èèna* 'DIST.SG', which can be reduced into *na* in turn, and the particle *ka* play an important role. Functionally, conjunctions also are derived from other categories. For instance, *ladhe* 'if' is derived from the verb *ladhe* 'to see', and *lodo* 'when' is derived from the noun *lodo* 'day, time'. A more extensive discussion of conjunctions is presented in Chapter VI on Complex Clauses.

3.6.3.1. Coordinating conjunctions

Dhao has two coordinating conjunctions that join elements, the preposition *dènge* 'with' and *aa* 'and'. There is one conjunction for contrast *tengaa* 'but', a conjunction denoting alternative *do* 'or', and a conjunction marking consequence or result *de* 'so'. The list of the coordinating conjunctions is given in Table 3.19 below. For a more elaborate description of the functions of coordinating conjunctions, see §6.2.

Table 3.19: Coordinating Conjunctions

CNJ	GLOSS	Meaning	Other meaning
dènge	ASSOC	and	with, immediately
aa	COM	and	-
tengaa	ADVR	but	-
do	CONT	or	indeed
de	RES	so	-

3.6.3.2. Subordinating conjunctions

On the basis of their functions, subordinate conjunctions can be divided into three types: complementizers, relativizers, and adverbializers. In Dhao, complementization is marked by *na* 'COMP' and relativization is marked by *dhu* 'REL'. Furthermore, adverbializers in Dhao can express causality, conditionality, time, purpose, sequence, and negative purpose. Some adverbializers share features with other categories, such as prepositions and verbs, as is explained above. The list

of the subordinate conjunctions is presented in Table 3.20 below. Because of a lack of space, examples and a more elaborate description is given in §6.3.

Table 3.20: Subordinating Conjunctions

Function	**CNJ**	**GLOSS**	**Meaning**	**Other senses**
Complementizer	*na*	COMP	'that'	-
Relativizer	*dhu*	REL	-	-
Causal	*lula*	CAUS	because	-
	ngèti	CAUS	because	from
	te	CAUS	as, since	but
	te… de…		as… so…	-
	ngèti èèna ka		therefore/ that is why/ because of that	from that, then
Conditional	*ladhe*	COND	if	see
	ladhe… na…	COND	if… then	-
	sad'i	COND	provided that/ most importantly	-
Time	*karai*	TIM	since	-
	èle ka *èle èèna ka*	TIM	then, after that	-
	ropa/rapa	TIM	when	-
	lod'o	TIM	when	day
Purpose	*ho*	IRR	so that, in order to	-
	sèna ka	'PURP'	so that	-
	aeka	'NEG.PURP'	lest	
Sequential	*hèia*	'SEQ'	then, afterwards	-
	ka	'SEQ'	then, so	
	heka	'SEQ'	then, afterwards	have just, no longer, old
Concessive	*masi ka*	'CONS'	although	-
	ngaa te	'CONS'	whereas	-

3.6.4. Particles, Tags, and Interjections

3.6.4.1. Particles

Particles refer to function words that do not have their own lexical definition. They constitute a separate word class; they may function as specific markers of particular semantic categories, such as negation and mood (Bickel and Nichols, 2007: 180).

Particles differ from other discourse markers, such as interjections, because particles are fully integrated into the syntax of utterances and cannot constitute independent nonelliptical utterances all by themselves (Ameka, 2006: 745). Articles in Dhao include words that indicate aspects, conjunction-like words, and negations, as are listed in Table 3.21 below.

Table 3.21: Particles in Dhao

	Particle	**Function**	**Gloss**
conjunction-like	*ka*	sequence, focus	then, FOC
	na	complementizer	COMP
	te	subordinator	because, but
	oo	subordinator	although?
perfective	*eele*	perfective	be away
	le	perfective	*èle* 'finish'
imperative	*la*	imperative	*lah* (IND)
	la'a	for imperative	go ahead

The particle *do* is presented independently in Table 3.22 below.

Table 3.22: Particle *do*

Function	**Syntax**	**Implication**	**Prosody**
Yes/no question	Clause/sentence Final position	It needs explicit answer from the interlocutor. The answer is not open, which is similar to its function as conjunction. It requires hearer's reaction explicitly	Rising intonation
Conjunction	Medial position, between words, phrases, clauses	It provides alternative choice for the interlocutor. Requires hearer's reaction but implicit.	Unmarked
Tag	Clause/sentence final position	The speaker has high degree of certainty and do not wait for the confirmation from the interlocutor	Rising-flat

3.6.4.2. Tags

In Dhao, tags are used to mark particular expressions, such as expressions of politeness or questions. Tags are listed in Table 3.23 below.

Table 3.23: Tags in Dhao

ku	Politeness tag		follow NP, VP for imperative
..., nga	certainty		in clause final
..., èu	certainty		in clause final
..., si (*ma*) *..., to* (Mal)	question tag		in clause final
..., we	exclamation	hey/oy	to ascertain something
..., ma	doubt		in clause final
...., la (*ma*)	implied imperative		in clause final
do	doubt		as clause final

3.6.4.3. Interjections

Interjections typically express a speaker's current mental state or a reaction to an element in the linguistic or extra-linguistic context (Ameka, 2006: 743). Interjections are typically used to express emotions but they can have other functions as well. Interjections form independent non-elliptical utterances. Interjections in Dhao are listed in Table 3.24 below.

Table 3.24: Interjections in Dhao

irii *ira ee*	auch, yech, oh my god	'surprise, astonishment'
inaa/*ina*	'oh my gosh'	surprise
hea	huh	surprise/feel sorry
ha	aha	surprise/anger
ee	uhm	hesitation/filler
oo	oh	filler, amazement
boo	wow	amazement