MIDDLE VOICE CONSTRUCTION IN BURUSHASKI: FROM THE PERSPECTIVE OF

A NATIVE SPEAKER OF THE HUNZA DIALECT

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This study is about voice system in Burushaski, focusing especially on the middle voice (MV) construction. It claims that the [dd-] verbal prefix is an overt morphological middle marker for MV constructions, while the [n-] verbal prefix is a morphological marker for passive voice. The data primarily come from the Hunza dialect of Burushaski, but analogous phenomena can be observed in other dialects. This research is based on a corpus of 120 dd-prefix verbs. This research has showed that position {-2} on the verb template is occupied by voice-marker in Burushaski. The author argues that the middle marker is a semantic category of its own and that it is clearly distinguished from the reflexive marker in this language. The analysis of the phenomenon in this study only comes from the dialect of Hunza Burushaski, so a lot of research remains to be done on the other three dialects of Burushaski: Yasin dialect, Nagar dialect and Srinagar dialect.

TABLE OF CONTENTS

LIST OF ABBREVIATIONS

1	First person
2	Second person
3	Third person
ABL	Ablative (Case)
ABS	Absolutive (Case)
ADJ	Adjective
C	Countable Noun
CAUS	Causative
COM	Comitative
CON	Converb
DAT	Dative
D	Discrete Nouns, e.g. [ddan] 'stone'
EMPH	Emphatic
ERG	Ergative
F	(Human) Female
GEN	Genitive
IMPER	Imperative
IPFV	Imperfective (Aspect)
INDF	Indefinite (Article)
INF	Infinitive
LOC	Locative
M	(Human) Male

MM	Middle-Voice Marker
NEG	Negation, Negative
OBJ	Object
OPT	Optative
PASS	Passive
PFV	Perfective
PL	Plural
PRES	Present
PROG	Progressive
PST	Past
PTC	Particle
PTCP	Participle
Q	Question (particle/marker)
REFL	Reflexive
RECP	Reciprocal
SG	Singular
U	Uncoutable

CHAPTER 1

INTRODUCTION

This thesis represents my understanding of the voice system in Burushaski, focusing

especially on the middle voice (MV) construction. I claim that the [dd-] verbal prefix is an overt

morphological middle marker for MV constructions, while the [n-] verbal prefix is a

morphological marker for passive voice. My data primarily come from the Hunza dialect of

Burushaski, but analogous phenomena can be observed in other dialects.

The middle marker (MM) means the grammatical device used to "indicate that the two

semantic roles of Initiator and Endpoint refer to a single holistic entity" (Kemmer 1993: 47). In

the view of that definition, I look at a middle marked verb in Burushaski and illustration follows

the example: I use [1]GGh spelling exclusively for writing Burushaski here.

1. hiles   dd-i-íl-imi

        boy   MM-3SG-soak-3SGM

        'The boy drenched'.

In (1), the semantic structure of the dd-prefix verb (middle voice morphology) takes

two [2]semantic macroroles: EFFECTOR and LOCUS. The suffix [-imi] on the dd-prefix verb

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[1] In May 2011, fellow linguist Tyler Utt and I devised a Roman Orthography we called GGh Girmiyar Ghattayar spelling or Spelling for reading and writing. In this orthography: there are five short vowels {a e i o u} pronounced as in Italian; long vowels are shown by double letters. The consonants {b d f g h j k l m n ng p r s t w y z} have roughly the same values as in English ({g} is always "hard" as in *give*). {c} represents a coronal affricates; its basic value is [ts]. {d t} are intermediate between alveolar and retroflex places of articulation, while {dd tt} represent dentals (n.b. not geminates). {gh} is a voiced velar fricative [ɣ]. {h} represents aspiration in {ch crh cyh kh ph th tth}. {q} is a voiceless uvular stop [q]. {r} represents retroflex articulation in {cr crh sr zr}, {rw} is the voiced retroflex glide [ɻ] peculiar to Burushaski. {x} is a voiceless velar fricative [x]. {y} denotes palatal articulation in {cy cyh sy}.

[2] The semantic macroroles are: "the actor and undergoer, which are generalized across thematic relations. Actor is a generalization across agent, experiencer, instrument and other roles, while undergoer is a generalization subsuming patient, theme, recipient and other roles" (Van Valin 2001: 1). The choice of semantic macrorole is determined by the semantic structure of the verb, and the decisive feature is the presence of an activity predicate in the logical structure (Van Valin 2001: 5) Hence in Burushaski, then intransitive activity verbs like [gaárc] 'run' take an actor macrorole, while intransitive accomplishment verbs like [i-ir-imi] 'die' take an undergoer macrorole. The reflexive verbs like [i-wal-imi] 'he fell down' take an undergoer macrorole. But the semantic structure of the verbs with the

agrees with the EFFECTOR, and the LOCUS evokes semantic object marking, the pronominal prefix [i] on the verb. The Burushaski verb is iconic for separately marking these two distinct semantic roles. The single argument [hiles] 'boy' in a middle voice sentence in (1) has two semantic macroroles: [3]ACTOR (EFFECTOR) and UNDERGOER (LOCUS) of the dd-prefix verb [dd-i-il-imi] 'He drenched'. The semantic characteristics of the dd-prefix verb or middle marked verb indicate that the two semantic roles of ACTOR and UNDERGOER refer to that "[single] holistic entity" referred to Kemmer (1993: 47).

The dd- prefix occupies position {-2} in the verb template:

2. The Maximal Morpheme String in a Finite Verb (Berger 1998i:104)

-3	**-2**	-1	Stem	+1	+2	+3	+4	+5
NEG	**dd-/n-**	CAUS/Pr.Prefix	Verb	PL	DUR	SUB	-m/-n	IMP/AUX/Q

The middle marker the dd- prefix refers to the middle subject (single argument) which is syntactically a single entity but suggests two semantic macroroles. I argue throughout this study that the semantic characteristic of the dd-prefix verb takes two semantic macroroles: 1) ACTOR and 2) UNDERGOER. However, all the dd-prefix verbs in Burushaski are not middle marked verbs. Therefore, I classify the dd-prefix verbs into five classes. If the dd-prefix verbs express prototypical transitive meaning as it is in, [iddél-imi] 'he hit him', [ddécirimi] 'He cooked it', these verbs would not be considered middle marked verb in this study. A detailed discussion on the classification of the dd-prefix verbs is in chapter 4 section 4.2.

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dd-prefix like [dd-i-ye'-mi] 'He stood up' take two semantic macroroles: the actor and the undergoer of the verbal action.

[3] It is defined as "the actor could be described as referring to the participant to which responsibility for the state of affair is attributed while the undergoer could be portrayed as referring to the participant which is mostly affected by the state of affair" (Van Valin 2001: 8).

The most striking fact is that the n- prefix in the same position -2 in verb template marks the passive voice. I provide an example of an active clause, and an example of a corresponding passive clause follows.

3. Active/Passive in Burushaski

a. hiles-e   ddasin-0   mu-íl-imi   **(Active)**

   boy-ERG girl-ABS   3FSG-drench-3SGM

   'The boy drenched the girl'.

b. ddasin   **n**-umú-il-in   b-om   **(Passive)**

   girl   PASS-3FSG-dip-PTCP   be-3FSG

   'The girl was drenched'.

(3a) is a prototypical two-participant transitive construction: it contains a subject, Agent, "boy" (marked ergative), and an unmarked direct object, patient "girl". 3(b) is a passive sentence, more like the English passive construction where an underlying transitive object is promoted to subject and the agent is not specified in the construction. The marking pattern on the verb reveals interesting facts. The bold faced verbal prefix [n-] marks the passive voice and the [-in] suffix changes the active verb into a non-finite verb form. The grammatical subject in the passive voice is the UNDERGOER of the verbal action. The passive participle verb in Burushaski is ALWAYS followed by the auxiliary verb, as in English and the suffix [–om] on auxiliary verb agrees with the UNDERGOER of the verbal action in Burushaski.

In (1) above, the middle voice construction has all the defining characteristics of middle-system languages: The application of middle voice morphology in sentence (1) shows an increased degree of affectedness of the subject, but there is no syntactic adjustment of arguments or de-transitivization as there is in the passive construction of (3b). Following Croft (1991), I

understand the middle voice phenomenon in terms of control and affectedness. In (3a), the active voice, the subject controls the action, and the object is affected by the action. Conversely, in (3b), in the passive subject, (UNDERGOER) is affected by the action, but does not control it. In (1), the middle falls between these two extremes—the subject controls the action (ACTOR) and is always affected (UNDERGOER) by it—the choice of semantic roles is determined by the semantic characteristics of the dd-prefix verb. The subject of "middle" and "middle domains" has been approached from the perspective of functional, typological, and cognitive frameworks, following contributions made by Faltz (1985), Haiman (1983), Kemmer (1993), Maldonado (1992), and Manney (2000). However, the claim made in this thesis contrasts with the general view of middle marking as evolving from reflexive constructions (Kemmer 1993, Faltz 1985). In Burushaski, the middle is in direct contrast with the reflexive construction syntactically and semantically. We saw in (1) that the semantic of middle voice verb or the dd-prefix verb takes two semantic macroroles, while the reflexive construction in (4) is always a two-participant event and a prototypical transitive construction. I am providing an example of reflexive construction below to illustrate this.

4. ddasin-e   mu-khar   i-íl-umo

   girl-ERG   3FSG-REFL   3SG-drenched-3FSG

   'The girl drenched herself'.

In (4), the Burushaski reflexive is a word of the form [inherently possessive pronoun + -khar], where the possessive pronoun refers to grammatical subject. The whole form [-khar] functions as a direct object NP and triggers object marking [i] in the verb and it never decreases the valence of the verb. The subject in the reflexive sentence is a prototypical agent, who acts volitionally, hence reflexive sentences are syntactically transitive and the semantic role of the

4

subject is that of Agent. There are no reflexive constructions like [I know myself or I understand myself] in Burushaski. The middle marker in (1) above has its own distinctive syntax and semantics and it is clearly distinguished from the prototypical reflexive construction in Burushaski. I expand on these topics in this study.

The research in the area of MV in non-Indo-European languages is very recent, so no study of this phenomenon in Burushaski has to my knowledge yet been attempted. I use examples in perfective aspect (the basic aspect in Burushaski) but the middle morphology can be applied to other aspects [Imperfective (IPFV) and Habitual (HAB) in a similar manner]. For example the dd-prefix verb in the paradigm below [dd-a-yal-am] MM-1SG-heard-1SG 'I heard' is a verb of perception. The semantic structure of the dd-prefix in the verb of perception below takes two semantic macroroles: PERCEIVER and STIMULUS in all aspects.

Table 1.1 Paradigm of the Perceptive Verb [dd-á-yal-am] 'I heard'

Person	PFV 'X heard'	IPFV 'X will hear'	HABITUAL 'X hears'
1SG	dd-á-yal-am	dd-á-yalj-am	dd-á-yalj-abaa
2SG	dd-ukó-yal-uma	dd-ukó-yalj-uma	dd-ukó-yalj-aa
3SGM	dd-é-yal-imi	dd-é-yalj-i	dd-é-yalj-ay
3SGF	dd-umó-yal-umo	dd-umó-yalj-o	dd-umó-yalj-uboo
1PL	dd-imé-yal-uman	dd-imé-yalj-an	dd-imé-yalj-abaan
2PL	dd-amá-yal-uman	dd-amá-yalj-uman	dd-amá-yalj-aan
3PL	dd-ó-yal-uman	dd-ó-yalj-uman	dd-ó-yalj-aan

1.1 Background

In Indo-European languages like Greek, Latin and Vedic Sanskrit, MV is characterized by special verbal morphology. Lyons (1968:373) states that middle morphology applies to verbs

when the "action or state affects the subject of the verb or his interest". Example (5) below illustrates this phenomenon in Greek (Palancar 2004: 55).

5. **Greek**

    a. lu-omai

       wash-1SG.MID(INDIC.PRES)

       'I wash myself'.

    b. lu-o

       wash-1SG.ACT (INDIC.PRES)

       'I wash' i.e. something other than myself

    c. lu-omai   khito:n-a

       wash-1SG.MID   robe.ACC.SG

       'I wash the robe (for myself)'.

The middle form of the verb 5(a) contrasts with the active form in 5(b). 5(a) expresses an action that directly affects the subject, but 5(b) has the speaker involved in an activity which is directed to another participant (not mentioned), for example clothes or something. In 5(c), the subject not only does the action of washing the robe but indirectly takes benefit from it. The literature on MV constructions argues that middle voice expresses actions, events, and states referring to the subject's own sphere (Maldonando 2007: 1). The author provides an example from Spanish. Spanish uses reflexive marker to express middle/reflexive construction. In (6b), middle marker se refers to grooming action involving the subject.

6. **Spanish**

    a. Gloria peino a Adrian

'Glorian combed Adrian's hair'

   b. Adrian   se   peino

      Adrian   MID   combed

   'Adrian combed himself'.

The transitive voice corresponds to situations where two participants mostly agent and patient interact (Kemmer 1993).

1.2 Goals

The present study has three goals: (1) to propose that Burushaski has a middle voice construction and provide a detailed analysis of this phenomenon; (2) to claim that the dd-prefix attached to verbs is an overt distinctive morphological marker of the middle in this language, and that the n- prefix attached to the verb is a passive marker; (3) to show that middle and reflexive are two distinct types of constructions, and that the middle in Burushaski does not derive from the reflexive.

1.3 Research Data and Methodology

This research is based on a corpus of 120 verbs which are marked with the dd- prefix, the middle voice marker. I collected the verbs from the first Burushaski-Urdu Dictionary published in 2009 by the Bureau of Composition, Compilation and Translation, Karachi University Press and compiled by the Burushaski Research Academy, and I collected fairytales for the project Archive of Annotated Oral Burushaski texts under the direction of Dr. Sadaf Munshi at the University of North Texas. I draw on my native-speaker intuition (the Hunza dialect) while identifying and analyzing the verbs from the dictionary from the oral texts. All the data is

gathered and analyzed at word and sentence level to achieve the objectives of the study. The data was cross-validated with the elders of the community through telephonic conversation.

1.4 Organization of the Thesis

This chapter provides a general introduction to the middle voice that is, to my understanding of middle voice constructions in Burushaski, and to my claim for the necessity of proposing a distinctive morphological marker for this phenomenon in Burushaski. Chapter 2 provides an overview of the Burushaski language and some of its linguistic features as they have been discussed in previous studies. This chapter also discusses noun classes and pronominal prefixes. Chapter 3 gives a detailed literature review on middle voice constructions in different languages. Chapter 4 talks about the dd-prefix verb forms and their semantics in Burushaski and explains the research methodology used for this study and provides an analysis of the data, using the theoretical framework of Kemmer (1993) and other relevant studies. Chapter 5 deals with reflexives, reciprocals and middles in Burushaski and shows that the middle voice is not derived from reflexives, but are rather a semantic category of its own. The final chapter compares middle voice with passive voice. This final chapter also briefly focuses on the converbs in Burushaski, which have morphological structures similar to those of verbs with passive participles, and shows the distinction between the two constructions. This chapter also concludes the thesis.

CHAPTER 2

THE BURUSHASKI LANGUAGE

2.1 Language Information

Burushaski is a language isolate spoken by more than 10,000 people in Hunza, Nagar and

Yasin in the Gilgit-Baltistan region of Pakistan; there is also a small population of around 300

speakers in Srinagar, India. The word *Burushaski* (ISO 639-2/3 code [bsk]), which in G.Gh.

orthography is [burúsyaski] is accented on the second syllable, and the native speakers in Hunza

pronounce this word as [burusy-íski] and the suffix [-iski] means 'language'. So Burushaski

means the "language of Burushos". Similarly, Burushos use the same suffix for naming other

languages in the region like [guícy-iski] means the 'language of [guicyo]' for the Wakhi

language, and [sreén-iski] means 'the language of the Shin people [sreen]' for Shina. Burushos

call their language [mi-syáaski] 'our language' or 'like us' with the 1pl. inherent-possession

prefix.

Gilgit-Baltistan is situated in the Northern Areas of Pakistan, at the meeting point of

Afghanistan, Russia, India and China. It is one of the most mountainous regions on earth, where

all the great mountain ranges, Karakorum, Himalaysas and Hindu Kush meet. Burushaski is

spoken in a region which remained isolated from the rest of the world for many centuries and is

home to speakers of several language families: Indo-Aryan, Indo-Iranian, Tibeto-Burman and

Altaic (Anderson 1997). A majority of speakers are multilingual in one of the regional

languages, viz. Indo-Aryan Urdu, Shina, Kashmiri, Khowar, and Tibeto-Burman Balti (Anderson

1997, Munshi 2006). Urdu is the lingua franca in the region and the language of literacy in

schools. In the last two decades, English has also become a very popular and useful language in

the region.

2.2 Burushaski Phonology

2.2.1 Consonantal Inventory

In table 2.1, I provide the phonetic inventory of consonants and I use G.Gh. Orthography for sound symbols. Burushaski has 38 consonants.

Table 2.1: Burushaski Consonantal Inventory

Place ➡ Manner ⬇	Bilabial	Labio-Dental	Dental		Alveolar/Retroflex		Palatal		Velar		Uvular	Glottal
Stop	P b		tt	dd	t	d			k	g	q	
	Ph		tth		th				kh			
Affricates			c		cr		cy	j				
			ch		crh		cyh					
Fricatives		f v	s	z	sr	zr	sy				x gh	h
Nasal	M		n						ng			
Liquid			l				r					
Glide	W				rw		y					

The characteristic feature of the consonantal inventory in Burushaski is the large number of coronal stops and affricates. And it has the largest inventory of nonsonorant retroflex sounds of all the languages in the region (Anderson 1997). The retroflex glide [rw] is not found in Dardic languages. Sounds which are [+asp] or [+voice, +obstr] are not allowed in word-final position.

2.2.2 Vowels

Table 2.2: Burushaski Vowel Inventory

	Front	Central	Back/Round
High	[i] [ii]		[u] [uu]
Med	[e] [ee]		[o] [oo]
Low		[a][aa]	

2.3 The Burushaski Verb

The verb is a microcosm of the entire sentence structure because it has an originally agglutinative structure (Bashir 2004: 27). Burushaski is a head-final language, so the verb mostly comes in sentence final. The inflected verb is packed with information for person, number, and gender of the subject Noun Phrase. It also carries information about tense and aspect. The maximal morpheme string in a finite Burushaski verb (Berger 1998i:104) is given below with an example verb.

7. **Burushaski finite verb template**

   a-tt-í-yarc-il-um-a

   NEG-d-prefix-Pronominal prefix-Verb stem-Subject Marker-PTCP-Q

   'Did not rain'.

8. **The Maximal Morpheme String in a Finite Verb (Berger 1998i:104)**

-3	**-2**	-1	Stem	+1	+2	+3	+4	+5
NEG	**dd-/n-**	CAUS/Pr.Prefix	Verb	PL	DUR	SUB	-m/-n	IMP/AUX/Q

My focus in this study is on position {-2} of the verb template provided above which is occupied by the dd-prefix/n-prefix. I claimed above that the dd-prefix is a morphological middle Voice marker. Provided that this claim is true, and the template in position {-2} does occupy a position of voice marker, then the n-prefix should have at least a similar , if not the same function, because these morphemes are in complementary distribution in the verb template: a verb can have either a dd-prefix or an n-prefix. I provide two examples below and show that the slot does occupy a voice marker position because the n-prefix marks the passive voice and the dd-prefix marks the middle Voice. It is a striking fact that the dd-prefix and the n-prefix occupy the same slot for the voice marker, which has similar functions in this language.

9. **Active/Passive Voice Alternation**

   a. ja-a in é-sqan-am **(Active Voice)**

   1SG-ERG 3SG.ABS 3SG-kill-1SG

   'I killed him'.

   b. in **n**-é-sqan-in bam **(Passive)**

   3SG PASS-3SG-kill-PTCP be.3SG.PAST

   'He was killed'.

10. **Middle Voice (Spontaneous middle event: Kemmer 1993)**

   a. chil **dd**-u-cyhághur-ila

   water MM-3U-chill-3U

   'The water became cold'.

My argument follows with other examples in chapter 4. Here, I briefly discuss verb agreement and case marking phenomena which deals with in detail in previous literature (Anderson 1997, Berger 1998, Munshi 2006, Willson 1996) In (9a), the ergative marker /e/ attached to the agent Noun Phrase. On the verb, the suffix agrees with the subject and the object provokes pronominal prefix on the verb.

I discuss below noun classes and case-marking patterns, and provide a list of suffixes and pronominal prefixes which agree with a variety of participants in the sentence structure. This helps me to present my argument and gloss my data.

2.3.1 Noun Classes

Burushaski nouns are classified into four classes (Berger 1998, Willson 1996, Lorimer 1935-37, Munshi 2006). These classes are 1) human noun, 2) human female noun, 3) x nouns,

which are non-human animates and some inanimates and 4) y nouns, which are inanimate. Munshi (2012: 41) classifies the last two unclear classes into 'x' (non-human concrete) and 'y' (abstract and amorphous nouns). I agree with the first three classifications in Burushaski linguistics but the vagueness of the last noun 'abstract and amorphous' class needs to be further classified. So I classify these nouns into five classes through the evidence provided by verbal agreement. Below are the five classes with the reason for adding one more class. I show them on the verb with the mentioned symbols in [].

     1) Human male noun [M]

     2) Human female noun [F]

     3) Discrete nouns (animals and birds) noun [D]

     4) Countable Nouns for singular [SGC] and plural [PLC]

     5) Uncountable Nouns [U]

I divide the traditional 'class IV' or 'y' class nouns into two further classes: 1) Countable nouns are those nouns which always show a distinction between singular and plural. Some of these nouns are pluralized in terms of number, for example, [ha] 'house' and [hakícyang] 'houses' or [ghatténcr] 'sword' and [ghattáang] 'swords'. Others are pluralized in terms of their quantity, for example [chil] 'some amount of water' and [chilmíng] 'large amount of water'; [ttik] 'some amount of sand' and [ttikéng] 'large amount of sand'. The verbal agreement on pronominal prefix for Countable singular nouns is: [i, í, é, ée], i.e. 3SG, and the verbal agreement on pronominal prefix for Countable plural noun is [u, ú, ó, oó], i.e. 3PL. 2) The second class is Uncountable Nouns. The nouns in this class are either singular or plural, for example [phu] 'fire' is always singular and [ddilk] 'manure' is always plural. Therefore, I call them Uncountable

nouns. The explanation with the reason for further classification of these nouns is explained with examples in section 2.3.3.

2.3.2 Case Marking

Burushaski has a highly developed case system and different types of case. There are several different types of cases in Burushaski (motivated structurally or by verbal agreement, e.g ERG, GEN, DAT) (Anderson 1997: 1220). Table 2.3 below provides the list of the declension patterns which had been identified in previous works (Berger 1998, Willson 1996, Munshi 2006). I provide examples 32-40 below to illustrate the use of case marking in Burushaski.

Table 2.3 Case Marking in Burushaski

Case	Ending	BSK	Gloss
Absolutive	-Ø	giyaas-Ø	'baby'
Ergative	-e	hiles-e	'boy'
Genitive Male/OBL	-e	in-e	'his'
Genitive Female	-mo	in-mo	'her'
Dative	-ar	gar-ar	'for wedding'
Locative	-ulo	haal-ulo	'in the home'
Superessive	-ate	teebal-ate	'on the table'
Instrumental	-ate	crhur-ate	'with the knife'
	-ange	a-khar-ange	'to myself'
Ablative	-um, -cum	in-cum	'from him'
		el-um	'from there'
Comitative	-ci	i-ci	'with him'

11. Ergative case marked [–e]

ddasín-e   hiles-Ø   i-wásyi-mo

girl-ERG   boy-ABS   3SG-drop-3SG.F

14

'The girl dropped the boy'.

12. Absolute case: zero marking

ddasin-Ø mu-yír-umo

girl-ABS SGF-die-SGF

'The girl died'.

13. Genitive/Oblique case

ddasin-mo mu-riing

girl-OBL.F 3SGF-hand

'The girl's hand'.

14. Dative case [-ar]

ja-a á-s-ar   dd-í-Ø-imi

1SG-OBL 1SG-heart-DAT MM-3SG-[come]-3SG

'I liked it' or lit. 'It came into my heart'.

15. Locative [-ulo]

mi mál-ulo   baan

1PL field-LOC   be.PRES

'We are in the field'.

16. Instrumental [-k, -ate]

dda-yó-k ddel

stone-PL-INS hit

'Hit (him) with a stone'!

17. Ablative [=cum, -um]

mi haal-um dd-u-us-uman

1PL   home-ABL   MM-3PL-come.out-PL

    'We came from home/out of the home'.

18. Comitative [-ci]

    ett   a-ci   xarát-imi

    that   1SG-COM   stick-3SG

    'That got stuck to me'.

2.3.3 Pronominal Prefixes at Position -1 of the Verb Template

The focus of my study is the dd-prefix verb which occupies position {-2} in the verb template and it is always followed by pronominal prefix which agrees with the object or semantic object in sentence structure. I provide the list of prefixes and their agreements in the table 2.4 below. In previous work on Burushaski there has been a detailed analysis of variant Burushaski prefix realizations and their metrical stress patterns (Berger 1998i:91). I consider Berger's analysis as a standard for my analysis here but I make a slight modification to his table in the section of class IV noun which I classify them into further two classes: 1) Countable Noun Class and 2) Uncountable Noun Class.

In Berger's table, [i-] pronominal prefix is used for both SG/PL class VI noun agreements. Since I split the 'y' class into two further classes (Countable and Uncountable Noun class), I add a pronominal prefix agreement for Plural Countable Noun in the table above. I use the symbol "C" for these nouns. First, I look at the verbal agreement pattern for the Countable noun classes to illustrate my reason for adding the additional table follows the examples.

16

Table 2.4: List of Pronominal Prefixes

Person	No Accent	Accented	Accented	Accented	Vowel Insertion
1SG	a-	á-	á-	áa-	dd-
2SG	gu-	gú-/kú-	gó-/kó-	góo-/kóo-	dd-u
3SGM	i-	i'-	é-	é-	dd-
3SGF	mu-	mú-	mó-	móo-	dd-u
1PL	mi-	mi'-	mé-	mée	dd-i
2PL	ma-	má-	má-	máa-	dd-a
3PL	u-	ú-	ó-	óo-	dd-
SGD	i-	i'-	é-	ée-	dd-
PLD	u-	ú-	ó-	óo-	dd-
SGC	i-	i'-	é-	ée-	dd-
PLC	u-	ú-	ó-	óo-	dd-

19. Countable

a. ttom   crik   man-ila

   tree   sprout   become-3SGC

   'The tree has sprouted'.

b. ttom-icyan   crik   man-ican

   tree-PL   sprout   become-3PLC

   'The trees have sprouted'.

The examples above clearly make a distinction between singular and plural. I mentioned in section 2.3.1 above that there are certain nouns in this class which show a distinction between singular and plural in terms of number and quantity. In (19a), the singular suffix [-ila] on the verb agrees with the subject and in (19b), the plural suffix [-ican] on the verb agrees with the plural subject. The nouns of this class show a clear distinction between singular and plural on verbal agreement.

The next class, which I call Uncountable nouns, already discussed in section 2.3.1, don't

make a distinction between singular and plural. The nouns in this class are either singular for example, [tthas] 'smoke' [xuróncr] 'cloud' [gasr] 'sale', [ttisr] 'wind' or plural for example [bras] 'rice' or [anngí] 'beard'. The variation in the pronominal prefix on verbs is due these uncountable nouns. For example:

20. ja-a　　　　　a-nngí　　　　é-tt-am

　　ISG-ERG　　1SG-beard　　3U-do-1SG

　　'I did my beard' or 'I shaved'.

The [–am] suffix agrees with the subject and beard is the object of the verbal action provokes semantic marking //i-//>[é-] which is singular. We saw that though [anngi] 'beard' is an Uncountable noun, but it takes singular object marking on the verb. Therefore, I further classify the last noun class into two classes that were discussed above. I expand on this topic in chapters 4 and 5.

2.3.4 Variations in the Pronominal Prefixes at Position -1 of the Verbal Template

We saw in many examples above that the object always agrees with a pronominal prefix on the verb, if the semantic object of the verbal action is countable—it gets the regular singular and plural object marking, for example:

21. **Countable Object**

　　a. ja-a　　　　　　　srapik dang　é-tt-am

　　　 1SG-ERG　　　　bread bake　3SGC-do-1SG

　　　 'I baked a loaf of bread'.

　　b. ja-a　　　 srapík-uc　　　dang　ó-tt-am

　　　 1SG-ERG bread-PL　　　bake　3PLC-do-1SG

　　　 'I baked loaves of bread'.

In (21a), the singular object gets the singular pronominal prefix //i//>[é] on the verb and suffix [-am] agrees with the subject. And, in (21b), the plural object gets the plural pronominal prefix //u//>[ó] on the verb and the suffix [-am] agrees with the subject. If the object or result of the verbal action is non-discrete or uncountable, then the pronominal prefix does not change. For example:

22. Uncountable object—singular marking //i//>[é]

    a. in-e   ghár-an   é-tt-imi

         3SG-ERG   song-SG.IND 3U-do-3SG

         'He sang a song'.

    b. in-e   ghár-ing   é-tt-imi

          3SG-ERG   song-PL   3U-do-3SG

         'He sang songs'.

In (22), the semantic object or result of the verbal action [ghar] 'song' is of the class of Uncountable "PERFORMANCE nouns". It gets singular object marking //i//>[é] because the result of the verbal action is not countable like "bread[s]' in (21) is. Hence, if the result of verbal action is uncountable noun class then there is always variation in the pronominal prefix. If the result of the verbal action is discrete and countable then the pronominal prefix ALWAYS agrees with the object. And, if the result of the verbal action is uncountable then it depends on the semantic structure of the verbal action. We saw in (22), the singular effect or single performance in both examples takes singular object pronominal prefix marking on the verb. The example shows below in which the result of the verbal action is uncountable, and the pronominal prefix is plural.

23. Uncountable—plural object marking //u//>[ó]

    a. balas   dd-u-wál-imi

        bird   MM-U-fly-3DSG

        'The bird flew'.

    b. balásy-o   dd-u-wál-imiyen

        bird-PL   MM-U-fly-3DPL

        'The birds flew'.

    c. asqur   dd-u-xár-ila

        flower   MM-U-blossom-3SG

        'The flower blossomed'.

    d. asqur-ing   dd-u-xár-ican

        flower-PL   MM-U-blossom-3PL

        'The flowers blossomed'.

In (23) the choice of semantic macrorole is determined by the semantic structure of the verb; the decisive feature is the presence of an activity predicate in the logical structure. I claim above that the semantic structure of the d-prefix verb take two semantic macroroles: actor and undergoer. In (23a&b), the suffix agrees with the actor but the semantic structure of the verb (repetitive action) requires a plural object marking [-u], and the same thing happens in (23c&d)—all those verbal actions resulted in non-discrete or uncountable objects.

2.3.5 Dd-prefix Verbs

The function and origin of the dd-prefix has been considered one of the most complex and intriguing questions of Burushaski verb morphology (Anderson 1997, Bashir 2004, Berger

1998). Burushaski has a very limited number of basic verbs; dd-prefix verbs make up the largest percentage of the basic verbs. In Hunza Bsk, there are 300 basic verbal stems (Berger 1998i: 26). In Yasin Bsk around 280 basic verbs are attested, out of which 174 (62%) have a dd-prefix form which shows that most of the basic verbs are dd-prefix verbs (Tiffou & Morin 1993). The process of dd-prefixation is not productive in the language anymore, as new verbs are created by combining nouns or adjectives (native or borrowed) with one of a few basic light verbs, such as [-tt-] 'do' for transitive sentences and [man-] 'become, happen' for intransitive constructions. The dd- prefix in the language today is a partial survival of an earlier system (Bashir 2004).

I classify Burushaski dd-prefix verbs into five different types: 1) Bound stem dd-prefix verbs, 2) Inflectional dd-prefix verbs; 4) Complex Predicate dd-prefix verbs; 4) Lexical dd-prefix verbs; and 5) Lexicalized dd-prefix verbs. A detailed discussion of the reason for this classification of the dd-prefix nouns is given in 4.2.

2.3.6 Previous Linguistic Research on the dd-Prefix Verb

The study of the dd-prefix has been the interest for all the linguists who have been working on Burushaski. I summarize their views and presented analysis on the dd- prefix below:

Lorimer's work (1935-38) is one of the pioneering and the earliest works on the Hunza dialect of Burushaski. With respect to the function of dd-prefix verb, the author said "An examination of all known examples has failed to throw any light on its meaning or function. It cannot originally have been without significance, but whether it still possesses any must remain a problem for future enquirers" (Lorimer 1935).

Morgenstierne (1945:81) says, "The original function of this prefix has faded away, but probably, it was an indication of direction, signifying that the action took place in the direction of

the speaker, somewhat like Pashto *ra*".

Hermann Berger, a German linguist, also made a significant contribution to the description of the language. His meticulous three-volume work included the first Burushaski-German dictionary, a text collection, and a grammar. Berger also had similar views about the function of the dd-prefix, but said that no common element of meaning could be identified in a synchronic analysis (1998:32).

Another morphological study (Tiffou & Morin 1993) on the dd-prefix is based on a long-term study of the Yasin dialect. They studied a corpus of 280 verbs compiled from previously published lexica (Lorimer 1935, Berger 1998, Morin & Tiffou 1988, and Tiffou & Pesot 1989). The main conclusions from this study are: 1) They found out that out of 280 verbs, 174(62%) take the dd-prefix, 2) They classified these verbs into five classes and devised a relative chronological ordering based on vowel harmony, 3) Their result also shows that the main function of the dd- prefix is not to make intransitives, instead they assign to it a secondary function, they write, "the function of the dd-prefix is to relate a theme to a verbal process, disengaged from its context" (1993:388).

Bashir (2004) did a detailed study of the dd-prefix verbs. These are the major findings of the author on the function and origin of the dd-prefix verbs: 1) The author says that "the function of the dd-prefix at the most general level, [is] to distinguish process/state/result-oriented verbal conception from actor-oriented ones"(2004). 2) The origin of the dd-prefix was a deictic prefix indicating motion towards the subject (cf. for example [dd-i-0-ími] 'come') and the n-prefix was a deictic prefix indicating motion away from the subject (cf. for example the verb [ni] 'go') (2004:27). I am not focusing on the origin of the dd-prefix in this paper so I merely refer readers to Bashir (2004) for a detailed discussion of this topic. Morin and Tiffou agree with the findings

of Bashir and stated that "it is not essentially associated with the passive construction and...its presence is not necessarily associated with some active morphological operation in the language. In other words it may be lexical" (1988:503-6).

However, Morin and Tiffou (1988) made a very interesting observation in Yasin Burushaski (YB) about the dd prefix verbs while discussing passive voice in Burushaski which is related to my hypothesis of the dd- prefix as a voice marker. The authors provide the following examples:

24. Reflexive [iya] 'itself' and the dd-prefix in Yasin Burushaski

a. cel   iya   pháani

water   REFL   overflow

'The water burst out.

b. cel   dd-u-phaan-i

water   MM-U-overflow-3SG

'The water burst out'.

c. *cel iya dd-u-pháani

*water itself burst opened

*The water itself burst out.

Morin and Tiffou (1988:521)

The authors argue that "the subject [of the first sentence 24(a), but not of the second sentence 24(b)] could be emphasized with [iya] 'itself'. The result follows if [iya] 'itself' is interpreted as a means of emphasizing the agentivity of the actor, which cannot co-occur with the [dd-prefix verb]. It is doubtful, however, that all [dd- prefix] verbs are synchronically analyzed as such, in view of the reanalysis noted above: if the meaning of [dd-] were completely

transparent to the user, there would be no reason for them to reinterpret it as part of the stem" (

Morin & Tiffou 1988).

The observation made above regarding the reflexive pronoun [iya] 'itself' in YB which

cannot co-occur with the dd-prefix leads to an interesting reanalysis of dd-prefix verbs in

Burushaski. I expand on this topic in chapter 4 and 5.

CHAPTER 3

MIDDLE VOICE: LITERATURE REVIEW

In the first section of this chapter, I discuss the middle voice in linguistic research. In

section 3.2, I provide a detailed summary of the semantic and functional theory of Suzanne

Kemmer (1993), which is used as the main theoretical framework for this study. In addition to

that, I provide definitions of the term used by that author which helps with the analysis of MV in

Burushaski. In the last section, I look at three kinds of middle systems based on middle voice

morphology.

3.1 Linguistic Research in the Middle Voice

The linguistic research on the middle voice that I reviewed for this study can be divided

into two different categories: 1) middle voice Systems in general and 2) middle voice in

particular languages. In the following paragraphs, I discuss each of these in detail.

M.H. Klaiman proposes a three-fold typology of voice systems cross linguistically, in her

book *Grammatical Voice* (1991). These voice systems are: 1) Derived Voice, 2) Basic Voice and

3) Pragmatic Voice. Derived Voice is introduced as a term for changes in verbal morphology that

indicate the changes in the allocation of nominal arguments to structural positions. Thus,

passivization is classified as a derived voice, since it involves re-assignment of grammatical

functions, particularly to core arguments. The argument that is assigned the role of patient is

prototypically associated with the grammatical function of object, while in passive constructions;

the very same referent is associated with the subject. The passive sentence is intransitive; the

patient is encoded as the subject and the agent is optionally encoded as a non-core argument.

The second voice system is the basic voice system, which does not involve remapping of

nominal position and thematic roles. There are no changes in the valence of the verb. Klaiman studied a number of languages that employ basic voice systems. The languages of this type have a subclass of verbs that allow voice-marking alternations, while others can only function in predicates marked either for active or for middle voice. Thus, middle voice is classified as basic voice system. The voice alternation is shown to reflect the affectedness of the subject referent, as it is illustrated in the following example from Fula (Klaiman 1991: 62-63).

25. Basic Voice in Fula

a. mi   moor-ii   mo

 1SG   braid.hair-PAST.ACTIVE his/her

 'I dressed his/her hair'.

b. mi   moor-ake

 1SG   braid.hair-PAST.MIDDLE

 'I got my hair dressed'.

In (25), the verbally marked voice contrasts in active/middle systems indicates that affectedness of the subject by the action is encoded in the verb. In (25b), the subject does not actively instigate the action, but is affected by it. And, the voice alternations in (25b) are shown to reflect the affectedness of the subject referent. Klaiman proposes that in Ancient Indo-European, the primary function of middle voice was to mark an identity between the source of the action and the entity principally affected. Klaiman claims that middle voice was then extended to express situations in which the affected subject of the verb is distinct from the actor as it is in passive voice. The author provides the following example from Sanskrit to support her claim:

26. namate   dandah

bend=MID   stick=NOM

'The stick bends'.

27. namyate   devadattena   dandah

bend=PASS   by=Devandatta   stick=NOM

'The stick is bent by Devadatta'.

The third type of voice system discussed in the study is pragmatic voice. This voice system involves marking of differences in the propositional salience of argument depending on pragmatic factors.

Manney (2000) discusses the middle voice in Modern Greek using a cognitive approach to middle voice. The author gives a synchronic account of middle voice in Modern Greek. The study looks for a common core meaning for middle voice. She gives an account of these typical uses of middle voice in Modern Greek:

1) Spontaneous or change of state

28. ispóri   skorpistikan   s tin   avlí

the-seed:NOM   scatter:3PL:MID/A   PREP the-yard:ACC

'The seeds scattered in the yard'. (i.e. because of wind or the moment of birds)

29. oyeorɣós   skórpise   tus spórus

the-farmer:NOM   scattered: 3SG:ACT/M   the seed: ACC

s tin   avlí

PREP the-yard: ACC

'The farmer scattered the seed'.

The middle structure in 28 clearly implies that there is no person or volitional entity was responsible for the movement of the seeds rather the event happened because of an unspecified chance occurrence (i.e. the blowing of the wind etc.)

2) Self-affecting or self-contained agentive events

30. apomákrine   to áloɣo   apó tin fotyá

  move:3SG:ACT/M the-horse:ACC   PREP the-fire:ACC

  'S/he moved the horse away from the fire'.

31. apomakínθike   apo tin fotyá

  move:3SG:MID/A PREP the-fire:ACC

  'S/he moved away from fire'.

(30) is a transitive clause, and it depicts an agent who acts on a second participant, whereas the middle construction in (31) is morphosyntactically intransitive and designates an agent who performs a particular process which only involves the subject.

3) Subject acting for his own benefit

32. o náftis   pu épese   stin θalasa

  the-sailor:NOM   REL fall:3SG:ACT PREP the-sea:ACC

arpakse   to sosivio   pu tu   ériksan

grab:3SG:ACT/M the-life saver:ACC REL 3SG:GEN throw:3PL:ACT/O

'The sailor who fell into the sea grabbed the lifesaver that they threw to him'.

(He may have grabbed it for someone else)

33. o náftis pu épese   stin θalasa

  the-sailor:NOM   REL fall:3SG:ACT PREP the-sea:ACC

arpaxθike   to sosivio   pu tu   ériksan

grab:3SG:MID/A   the-life saver:ACC   REL   3SG:GEN   throw:3PL:ACT/O

'The sailor who fell into the sea grabbed the life-saver that they threw to him'.

(He clearly grabbed it for himself)

(Manney 2000: 45-46)

In (33), middle construction expresses an action involving subject's own interest whereas the active sentence in (32) has no such implication.

Thus the one form, middle voice can have several meanings. The author says, "while the general constructional template for middle structures has a variety of specific instantiations, these formal variants consistently invoke one or more of a cluster of related meanings which recur across numerous semantic classes of middle inflected verbs as they occur in particular middle structures"(Manney 2000: 53).

There is a lot of literature on middle voice constructions in particular languages. The middle voice in Otomi is explored in an article by Palancar (2004). The author shows that Otomi has a nasal morpheme {N-) that serves as an exponent of middle voice. The study is based on 72 verbs which display that middle morpheme. The study shows that there are a substantial number of verbs attached to {N-} morpheme which have become full-fledged middle lexemes in the language, for example [mphiʔtisíi] 'got dressed' is a middle lexeme verb derives from [phits'i] 'put something on top of another thing'. The Otomi middle co-occurs with both transitive and intransitive bases, though 90% of the middle verbs in the data are intransitive. The most important finding of this paper is that middle voice in that language did not evolve from a reflexive marker. The author supports his argument with the evidence that Otomi does not use {N} morpheme in typical situation types associated with the reflexive marker. The example from Otomi explains this (Palancar 2004: 69)

34. Reflexive and Middle in Otomi

a. no=r ʔbɛhño bì k'ot'á=r   hmi   ka=r   ñhe

    def=sg woman 3.pst look.at.3poss.B=sg   face loc=sg mirror

    'The woman looked at herself in the mirror'.

    (Lit., 'The woman looked at her face in the mirror'.)

b. *no=r ʔbɛhño   bì   *N*-k'ot'á=r   hmi   ka=r   ñhe

    def=sg woman   3.pst M-look.at.3poss.B=sg face loc=sg mirror

    'The woman looked at herself in the mirror.'

In (34a), the transitive construction expresses reflexive action, such as 'looking at oneself' and (34b) shows that the middle-marked verb for such situations is not possible. The author further argues that middle systems like the one in Otomi are concerned with the degree of involvement of the subject in the situation expressed by the verb. In such systems, source verb and derived verb are very frequently syntactically intransitive. In Otomi, the application of middle morphology to an intransitive shows an increased degree of involvement or affectedness of the subject, but there is no syntactic adjustment of the argument involved; that both verbs have the same referent as subject. In the following examples when the middle morpheme is attached to active verbs, the action only involves subjects. Consider the examples below found in Palancar (2004: 62)

35. dá   šint'a=ma   rueda

    1.PST turn.something.around=1POSS   wheel

    'I turned around my wheel'.

36. dá   n-čint'i

    1.PST M-turn.around

'I turned around'.

37. dá   Ɂbɛdi(∅)

1.PST lose(-3OBJ)

'I lost it' (i.e., my wallet).

38. dá   m-Ɂɛdi

1PAS M-lose

'I got lost'.

Fernández (2005) discusses the middle marker in Pima Bajo, a Uto-Aztecan language spoken in Northwest Mexico. The author presents a view that contrasts with the general view that the middle evolves from the reflexive. Evidence is provided from data that the middle and reflexive are syntactically and semantically different constructions in this language. The examples in (39) below show the distinction between reflexives and middle voice. (39a) shows a transitive expression. In (39b) the prefixed pronoun [in-] 1SG-NSBJ shows the affected patient or reflexive which is co-referential with the agent subject [aan] 1SG-SUB, and that contrasts with the middle voice expression in (39c), the object or non-subject pronoun [a-] 3NUMTR.NSBJ does not have a co-referntial relation with the subject, since it comes from a third-person pronoun(Fernández 2005: 285-286).

39. Three-way distinction in Pima Bajo

   a. aan   **am**-gɨg.

      1SG.SBJ 2SG.NSBJ-hit-PFV

      'I hit you'.

   b. aan$_i$ **in**-$_i$gig.

      1SG.SBJ 1SG.NSBJ-hit-PFV

'I hit myself'.

c. aan_i   **a-₀gɨg**.

1SG.SBJ   3NMNTR.NSBJ-hit-PFV

'I got hit'.

Fernández claims that "even though [(39c)] might have a transitive interpretation, 'I hit someone or something', but the middle meaning is preferred, and that is intransitive, i.e., 'I got hit'The transitive interpretation of expression like [(39c)] is eliminated by means of two properties of the language: the first one illustrate the use of Noun Phrase to provide the full reference of the patient object as in [(40)] ; the second is the productive use of a null or zero anaphora to denote a patient third-person participant as in [(41)]"(2005: 286).

40. aan   lii   óob   gɨg

1SG.SBJ   DIM   person   hit-PRF

'I hit the child'.

41. aan   gɨg

1SG.SBJ   hit-PRF

'I hit it/him/her'.

He further advocates the view that in Pima Bajo the subject in the middle construction can either be non-agentive 'executor' or 'an affected participant'. Another goal of this paper was to argue that the preferred aspect for middles in this language is perfective or completive because Middle Constructions typically emphasize the endpoint or result of an event.

3.2 Semantic Contexts of Middle Voice

The most comprehensive analysis of the middle voice as a semantic category is in the

work of Suzanne Kemmer (1993). The author carried out a typological comparison of middle-voice systems in thirty languages of various genetic and areal affiliations. In the following sections, I summarize her work and explain the key concepts used for the analysis of the phenomenon. I adopt her work as the principal theoretical framework for my effort to analyze the middle voice construction in Burushaski. In the first section, I provide a list of ten basic situation types identified by Kemmer—that are frequently marked by middle morphology cross-linguistically (1993:16-20) and (1994:182-183). In 3.2.1, I talk about the semantics of middle constructions and how they differ from intransitive, reflexive and transitive clauses. Finally, in section 3.2.2, I talk about different middle marking systems and conclude the chapter.

3.2.1 Middle Domains or Middle Situation types

Middle morphology is found in those verbs which express actions involving the subject (Smyth 1920, Klaiman 1991) and a middle morpheme or middle marker is a language-specific grammatical device which is used to "indicate that two semantic roles of Initiators and Endpoint refers to a single holistic entity" (Kemmer 1993: 66). Palancar argues that middle voice "is fundamentally a semantic phenomenon which is not easy to grasp by employing grammatical diagnoses (2004:55). Kemmer's typological approach to the middle is very convenient because it stipulates the different semantic realms where middle voice morphology is expected to occur cross-linguistically. The situation types identified by Kemmer (1993) are a representative sample of data from thirty languages of diverse genetic and areal affiliations. In these situation types, each situation is a specific semantic class that is related with middle morphology or morphosyntactic middle marking. I present the list of ten situation types below. In each case the subject is affected by the event. The morphemes in boldface represent the middle markers.

33

Table 2.1: Middle Marked Situation Types

1. Grooming or body action			2. Change in Body Posture		
Latin	*lavo-r*	'I wash myself'	Bahasa Indonesia *ber-iutut*		'kneel down'
Hungarian	*borotvál-koz-*	'shave'	Djola	*lak- ɔ*	'sit down'
3. Non Translational Motion (movement without change in location)			**4. Translational Motion (self-induced motion along a path)**		
Classical Greek	*trepe-sthai*	'to turn'	Guugu Yimidhirr	*madha-adhi*	'climb up'
German	*sich verbeugen*	'to bow'	Old Norse	*koma-sk*	'come'
5. Cognitive Middle			**6. Emotion Middle**		
Latin	*medito-r*	'meditate'	Latin	*irasco-r*	' be angry'
Mohave	*mat ahay*	'believe'	Hungarian	*ban-kod*	'grieve'
7. Emotive Speech Actions			**8. Self-benefactive Middle**		
Latin	*fate-or*	'I confess'	Hungarian	*keredz-ked-*	'ask'
Hungarian	*dicse-ked*	'boast'	Turkish	*ed-in*	'acquire'
9. Spontaneous Event			**10. Natural Reciprocal Event**		
Old Norse	*grona-sk*	'turn green'	Old Norse	*hitta-sk*	'meet'
Sanskrit	*vardhat-e*	'grow'	Sanskrit	*samvadhat-e*	'speak together'

Kemmer (1993:16-20) ; (1994:182-183)

Table 2.1 shows the semantic realm where middle morphology occurs cross-linguistically—called "middle situation types" in Kemmer (1993). With an exception of spontaneous events, all middle situation or actions carried out by human or by an animate subject.

34

It is emphasized that there exists a great deal of variation across languages in the list of situation types that are middle marked. Kemmer observes that in some dialects of German the verbs for 'sit down' and 'lie down' are middle marked e.g, **sich** *hinsetzen* and **sich** *hinlegen* , but a common equivalent for 'stand up' is not e.g, *aufstehen* .

According to Kemmer (1993: 73), the middle voice is placed on a continuum formed by prototypical one-participant event and prototypical two-participant event roughly half way between reflexive and one-participant event: This idea is illustrated in Figure 3.1 below:

Two-participant Event   Reflexives   Middle   One Participant
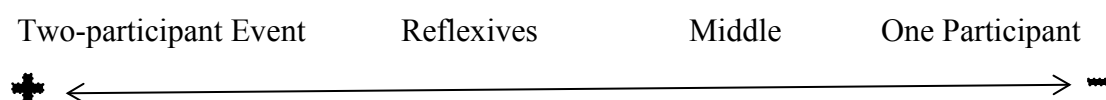
Figure 3.1: Degree of Distinguishability of Participants

The graded scale in Figure 2.2 orders two- and one-participant events according to "distinguishability of participants". Kemmer explains that this spectrum spans from maximum, in which the Agent and Object are physically and conceptually distinct to a high degree, as exemplified by the prototypical transitive event, to a minimum, the one participant event, in which the physical conceptual separation between the participants is zero. This is further elaborated that there are no distinct boundaries on this scale: from left to right, the separation between Agent and Object—between the Controller and the affectee, between Initiator and Endpoint—gradually diminishes until there is an identity between the two and "the conceptual differentiation of Initiating and Endpoint facet is utterly non-existent" (Kemmer 1993: 73). Hence, the degree of distinguishability of participants clearly correlates directly with a scale of semantic transitivity. This can be seen in comparing the Russian examples provided in (Haiman 1983: 769).

42. Russian Reflexive and Middle Marker

a. On　　　　utomil　　　　sebja

3SG　　　　exhuasted　　　REFL

'He exhausted himself'.

b. On　　　　utomil-sja

3SG　　　　exhausted-MM

'He grew weary'.

In (42a), the reflexive event conceptually distinguishes the actor as initiator of the action

and as endpoint of the action. Use of the middle marker in (42b) is a spontaneous event and there

is no clear distinction between the initiator and endpoint of the action.

The middle is intermediate in terms of participant separation and transitivity, so it is

located between the extremes of the two- and one-participant events, although it is more towards

the intransitive event. The reflexive displays a greater degree of distinguishability, and it is closer

to the two participant event. The reflexive constructions vary in their conceptualization cross-

linguistically, in some languages as in Burushaski, they are transitive, with the subject "separated

into cause and effect", as when reflexive pronoun serves as the object of clauses, but in others,

they are intransitive. (This is explained with examples in chapter 5). The middle voice, on the

other hand is closely associated with intransitives cross-linguistically (Croft 1994:107, Klaiman

1991: 63).

3.2.2 Middle Marking Systems

Kemmer distinguishes three kinds of middle systems based on middle morphology. The

distinctions between these three systems are related to their marking for middle situations in

contrast with their marking for reflexive situations.

A. One-form Middle System

In this system, the middle marker is identical to the reflexive marker. German is a good example to illustrate this system. The markers are boldfaced. For example:

43. German

Er sieht **sich** 'He sees himself' (Reflexive)

Er fuerchtet **sich** 'He is afraid' (Emotional Middle)

(Kemmer 1993:24)

French, Guugu Yimidhirr, Changama, and Pangwa are other good examples of one-form middle systems. The middle marker *se* '(one) self' in French shares the same morphological form for reflexive situations.

B. Two-form Middle System

In this system, the reflexive marker is similar to the middle marker but not identical. And these markers are historically related. The reflexive marker is often a noun, or a pronoun, and sometimes a verbal affix. According to Kemmer, for the languages that fall in this system, the middle marker always has less phonological weight than the reflexive marker. Hence, the author calls the reflexive marker "heavy" and the middle marker "light". Russian displays this kind of marking:

44. Russian

sebja heavy (Reflexive)

-sja light (Middle)

(Kemmer 1993: 25)

C. Two-form Non-cognate System

In this system there are two distinct markers for reflexives and middles, and these markers are not historically related. The middle marker in this case also has less phonological weight than that of the reflexive marker. Turkish is a good example to illustrate this system.

45. Turkish

kedi-　　　　　　　heavy (Reflexive)

in-　　　　　　　　light (Middle Marker)

(Kemmer 1993:25)

Burushaski also falls into this system. In Burushaski, the reflexive marker and the middle marker are distinct both morphologically and historically. I provid an example to illustrate this below, and this is discussed in detail in later chapters. The reflexive marker is a pronoun in Burushaski [-khar]. And it is also phonologically heavier than the middle marker.

46. Burushaski

-khar　　　　　　　Reflexive Pronoun

dd-　　　　　　　　Middle Marker (Verbal Prefix)

CHAPTER 4

DD-PREFIX VERB FORMS AND THEIR SEMANTICS IN BURUSHASKI

This chapter classifies Burushaski dd-prefix verbs into five types: 1) Bound stem dd-prefix verbs, 2) Inflectional dd-prefix verbs, 3) Complex-Predicate dd-prefix verbs, 4) Lexical dd-prefix verbs and 5) Lexicalized dd-prefix verbs. The classification have provided a rational to distinguish the middle marked dd-prefix verbs from those in which the dd-prefix (middle marker) does not have a semantic function of the middle voice morphology. In this chapter, I explored the question as to whether the verbs which take the dd-prefix (middle voice morphology) in Burushaski conform to the general patterns that Kemmer (1993) found for middles in other languages in her typological study.

The first section of this chapter deals with the corpus of 120 dd-prefix verbs collected in the First Burushaski-Urdu Dictionary compiled by the Burushaski Research Academy under the supervision of Dr. Professor Nasir-uddin Nasir Hunzai, published by Karachi University Press (2009). The section also discusses data collection methods and the data organization for achieving the specific objectives. In section 4.1, I classify dd-prefix verbs into five types and discuss each of these separately. In section 4.2, I look at the semantics of middle voice domains with special reference to the middle situations identified by Kemmer (1993). This helps to confirm whether the dd-prefix verbs occurrences in Burushaski match general cross-linguistic patterns found for middle verbs.

4.1 The Corpus

The data for this study comes from the Burushaski-Urdu dictionary (2009) which was compiled through the efforts of volunteer Burushaski native-speakers of the Hunza dialect. Data

were collected for cross-validation for over fifteen years. I also draw upon my native-speaker's intuition for identifying the dd-prefix verbs from the dictionary. I cross-checked the data for validation from elder Burushos back home through telephonic communication. The corpus for this study is 120 verbs. I also used my four years' experience of direct exposure to the occurrences of the dd-prefix verbs in the texts which I started collecting in 2010, and which I transcribed, translated and analyzed from January 2011 to now for the Burushaski documentation project 'Archive of Annotated Burushaski Oral Texts' led by Dr. Sadaf Munshi at the University of North Texas.

4.2 Classification of the dd-prefix Verbs

The dd-prefix verbs in the corpus have different morphological structures. In order to achieve the objective of the study, I classify the dd-prefix verbs into five different types: 1) Bound stem dd-prefix verbs, 2) Inflectional dd-prefix verbs, 3) Complex-Predicate dd-prefix verbs, 4) Lexical dd-prefix verbs and 5) Lexicalized dd-prefix verbs.

4.2.1 Bound Stem dd-prefix Verbs

In the corpus, there are 63 dd-prefix verbs of the 120 (52%) which have presumably been derived from nouns and adjectives. These verbs make up the largest percentage of the verbal lexicon and also of my corpus. They include verbs derived from adjectives, e.g. from [cyhághur-um] 'cold' is derived [ddu-cyhághur-imi] 'It became cold'. Hence, I call this type of verbs "bound stem dd-prefix verbs" or "derived dd-prefix verbs". The derived words in the language are always idiosyncratic and not productive (Pyne 1997: 26). The reason for making this claim is that no morphological operation on this verb drops the dd-prefix, so these derived words became

bound stem dd-prefix verbs. When these verbs change into transitive or causative verbs through morphological operations, the dd-prefix stays as a part of the verb; but these secondary dd-prefix verbs so formed don't have the semantic characteristics of middle-voice morphology in their clauses as the case for the basic dd-prefix verbs. Hence, the transitive and causative bound stem dd-prefix verbs are not middle marked verbs. The dd-prefix in these verbs does not have the semantic function of middle voice morphology.   The traceable source of these dd-prefix verbs is: nouns and adjectives. I was able to trace the source of only 20 verbs out of 63 (31%). Below is the list of the few of the dd-prefix verbs of this type with their sources, and their meanings.

Table 4.1: Bound Stem dd-prefix Verbs

Gloss	Verb	Source	Meaning	Class
become cold	dd-u-cyhághur-as	cyhaghúr-um	cold	Adjective
Branched	dd-u-cyháqar-as	i-cyháqar	ray of sunlight	Noun
become tight	dd-u-cyhán-as	cyhanúm	tight	Adjective
come true	dd-u-chán-as	chan	truth	Noun
become green	dd-i-srqímiy-as	sriqám	green	Adjective
get stuck	dd-i-kát-as	gat	knot	Noun
become sour	dd-u-srqúr-as	sruqúrum	sour	Adjective

There were 43 verbs out of 63 (68%) in the corpus for which I was not able to find any source. I talked to elders in the community trying to find sources for these verbs, but they did not know the meaning of those roots. For example, there is a verb [dd-i-phírc-imi] 'become twisted'. I tried to elicit the root *[phirc] by repeating the word and giving examples to them, but they

41

were not recognized as valid words. They no longer exist as independent words. I provide a brief

list of this type below and illustrate their function with examples.

Table 4.2: Bound Stem dd-prefix

Gloss	Word	Hypothetical Root
Droop	dd-i-chígin-as	chigin
become ripe	dd-i-ghu'n-as	ghun
Fainted	dd-ée-ttarkin-as	ttarkin
Arise	dd-i-wár-as	war
Suit	dd-í-marw-as	marw

I provide one example from each below to illustrate this.

47. The bound stem dd-prefix verb //gat// 'knot' (Noun)

    a. in   chíl=ulo   dd-í-kat-imi   **(Basic)**

        3SG   water=LOC   MM-3SG-stuck-3SG

        'He got stuck in the water'.

    b. ja-a   in   dd-é-s-kat-am   **(Causative)**

        1SG-ERG 3SG   MM-3SG-CAUS-stuck-1SG

        'I obstructed him'.

    c. ja-a   in   dd-eé-s-kat-am   **(Causative)**

        1SG-ERG   3SG MM-3-CAUS-stuck-1SG

        'I caused him to get stuck'.

48. Bound stem dd-prefix verb

    a. i-xatt   dd-i-chígin-imi   **(Basic)**

3SG-mouth   MM-3SG-hang-3SG

'His mouth drooped'.

  b. ine   cyhap dd-í-cikin-imi   **(Transitive)**

3SG-ERG meat   MM-3SG-hang-3SG

'He hung the meat'.

4.2.2 Inflectional dd-prefix Verbs

    In the corpus, there are 22 verbs of 120 (18%) in which the dd-prefix is attached with the

transitive or intransitive verbs. For example the intransitive verb [gaarc-imi] 'he ran' is attached

with the dd-prefix and becomes [dd-í-yaarc-imi]$^{//g//:deletion}$ 'It rained' (Lit meaning: The rain ran

down). I call this type of the dd-prefix verbs "inflectional dd-prefix verbs", and these verbs tend

to be regular and productive in this language. For example, when the basic verb is causative, the

dd-prefix drops immediately and the morphological operation is only on the basic verb. This

shows clearly that the basic form is intransitive and transitive han an attached dd-prefix for

middle voice morphology. I provide the list of these verbs in table 4.3 and then illustrate the

phenomena with examples immediately following:

Table 4.3: Inflected dd-prefix Verbs

Gloss	Word	Source	Meaning	Class
(skin) come off	dd-u-phátar-as	i-phátar-as	to peel	transitive
be fry	dd-u-ghúl-as	ghulá-as	to burn	transitive
be fastened	dd-u-phús-as	i-phús-as	to tie	transitive
to become	dd-u-mán-as	man-áas	to be	Intransitive
to enjoy staying	dd-é-wrut-as	hurút-as	to stay	intransitive

49. Inflected dd-prefix verbs

   a. ja-a   ghasrún   i-**phátar**-am   **(transitive)**

      1SG-ERG   carrot   3SG-peel-1SG

      'I peeled the carrot'.

   b. á-skil   dd-u-**phátar**-ila   **(Inflected Middle)**

      1SG-face   MM-U-come.off-3

      'My skin came off/ peeled off'.

   c. ja-a   ghasrún   ée-**patar**-am **(Causative)**

      1SG-ERG   carrot   3.CAUS-peel-1SG

      'I made him peel carrots'.

In (49a) above, we see [i-phátar-as] 'to peel', a transitive verb, to which is added the dd-prefix and which thereby becomes a middle voice verb [dd-u-phátar-as] 'skin came off' in (49b). In a further morphological operation in the causative sentence (49c), the dd-prefix in this case does not show up on the verb, as with the bound stem dd-prefix verbs in 4.2.1.

This distinguishes these two kinds of the dd-prefix verbs from each other. The bound stem dd-prefix verb in transitive and causative constructions is an unexpected feature of the dd-prefix verbs; but these became bound stem just like body parts and other verbs in the language. The stem of the inherently possessed body parts and other bound stem words do not have meanings of their own. For example [góo-srki] 'your pillow', the bound stem [srki] does not have meaning of its own; it only has a meaning with the prefix. [cf. a-mi 'my mother' *mi 'mother']

4.2.3 Complex Predicate dd-prefix Verbs

In the corpus there are 4 out of 120 (3%) dd-prefix verbs which occur in complex

predicate structures. I call these "complex-predicate dd-prefix verbs" because these multi-word compounds [(Noun/Adjective /Verb) + dd-prefix Verb] behave as single verbs. I illustrate this with an example and then provide the list of each complex predicate dd-prefix and discuss their functions in detail below.

50. Complex Predicate verb [dduusimi]

ja-a	gapál-e	matto	dd-u-ús-imi
1SG-GEN	head-GEN	brain	MM-[4]EP.V-come.out-3SG

'My head hurts' Literal: The brain is coming out of my head.

In (50), the complex predicate is: [matto] 'the brain/head' + [dduusimi] 'came out' [Noun(subj) + Verb].   The semantic structure of the dd-prefix verb in a complex predicate takes two semantic macroroles: EXPERIENCER and STIMULUS. I discuss all the dd-prefix verbs in complex predicates and discuss their semantic functions.

(A) Dd-i-∅-imi [MM-3SG-come-3SG]

The most frequent dd-prefix verb which appears in the corpus in the complex predicate middles is the zero-stem verb [ddiimi] 'come' in Burushaski which presumably had a single-stem voiced consonant //dd-i-0-imi// which has been lost morphonologically between the vowels. The infinitive form of that verb is [zruwas] 'to come'. It is one of the inflectional dd-prefix verbs discussed in 4.2.2. Since, my focus here is not on the diachronic analysis of the verb; I look at the synchronic and semantic functions of this verb [ddiimi] 'he came' in a complex predicate. Like the verb [dduusimi] 'came out' in the sentence above, this verb also constructs complex predicate middle sentences in Burushaski. I provide examples below and illustrate their syntactic and semantic functions.

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[4] EP.V is epenthetic vowel

51. Complex predicate zero stem verb [dd-í-∅-imi**]**

    a. ja-a   cyaáy-an-e   ray   dd-í-∅-imi

        1SG-GEN   tea-SG.IND-GEN   desire MM-3SG-come-3SG

        'I crave tea' Literal: My tea desire came'.

    b. ja-a   gaar   dd-í-∅-imi

        1SG-GEN   giddy MM-3SG-come-3SG

        'I feel dizzy' Literal: 'Giddiness came'.

    In (51a) WANTER AND DESIRE appear in a NP within a NP [[ja-a cyaayan]e ray] and

in (51b) [ja-a gaar] is also a NP. The complex predicates in the sentences above are [ray+ddiími]

[Noun + Verb] and [gaar+ddiími] [Noun+Verb]. In (51a), the semantic structure of the dd-prefix

verb take two semantic macroroles: WANTER and DESIRE. In (51b), the semantic structure of

the dd-prefix also takes two semantic macroroles: EFFECTOR and LOCUS.

    (B) dd-u-ús-imi [MM-3SG-come.out-3SG] 'It came out'

    The next dd-prefix verb [dd-u-ús-imi] which occurs in complex predicate middles is

[dduúsimi] 'come out', cf. caus. [dd-i-yus-imi] 'He made him come out' and [dd-ee-gus-imi] 'He

made him take it out. The root of this verb is //gus//. Since, my focus here is to look at the

semantic function of the dd-prefix verb in complex predicates; I discuss the semantic

characteristics of the dd-prefix verb.

    52. Complex predicate verb [dduusimi]

    a. ja-a   a-s=cum   bar   dd-u-ús-imi

        1SG-GEN 1SG-heart=ABL   word   MM-EP.V-came.out-3

        'I have forgotten the word' Lit.: The word left my heart.

    b. in   laq   dd-u-ús-imi

3SG　　　naked　MM-EP.V-come.out-3SGM

'He undressed completely' Lit.: He came out naked.

The complex predicates in (52) are: [bar dduúsimi] [Noun+Verb] and [laq dduúsimi] [Adj+Noun]. In (52) the semantic structure of the dd-prefix verb in complex predicate in (52a) takes two semantic macroroles: EFFECTOR and LOCUS and (52b) is a body action verb and the dd-prefix verb take two semantic macroroles: ACTOR and UNDERGOER. In this case the vowel [u-] following the the dd-prefix is vowel insertion (serving to separate consonant clusters), rather than a semantic marking.

(C) Dd-u-ún-imi 'He held it'

The third dd-prefix verb in the corpus of complex predicates is [dd-u-un-imi] 'He held it'. The root of this verb is [-gun-] (bound) which appears in the causative for [dd-ee-gun-am] 'He made him hold it'. I provide some example sentences and discuss its semantic function below:

53. Complex Predicate verb [dduunam]

a. ja-a　　　mu-ríing=ce　dd-u-ún-am

1SG-ERG 3F-hand=with MM-EP.V-hold-1SG

'I held her hand'.

b. karíim-e　　　gharícy-ar　　　dd-u-ún-imi

karim-ERG　　　talk.IPFV-DAT　　　MM-EP.V-hold-3SGM

'Karim started talking'.

(53a) is not a complex predicate. These sentences belong to indirect situation types identified by Kemmer (1993: 74). This structure consisting of initiator and some non-patient or oblique participant in the event is considered an indirect situation type. It is very interesting to note that the subject gets ergative marking and that there is no direct object in the construction.

47

(D) Ddelimi 'He hit him'

The fourth dd-verb (dd.stem verb) in my lexicon is [ddélimi] 'He hit him'. It forms prototypical transitive sentences which is unusual for a middle-marked verb. This verb is lexicalized and has become a transitive verb; I discuss it in detail in the next section on lexicalized dd-verbs. For now I am focusing on the function of the dd-verb in complex predicates. If we look at the structure of this verb [ddél-am], the stem is [ddel] which means 'hit'. It is the only dd-prefix verb in the Burushaski lexicon which allows a further pronominal prefix outside the stem, as in [mu-ddel-] [3F-hit] 'hit her'. I look at a few examples below where it appears in complex predicates and discuss its function.

54. Complex Predicate [ddelam]

a. ja-a   á-misr   dd-é-l-am

    1SG-ERG   SG-finger   MM-3SGC-hit-1SG

    'I injured my finger' Lit.: I hit my finger.

b. ja-a   á-miy-anc   dd-ó-l-am

    1SG-ERG   1SG-finger-PL   MM-3PLC-hit-1SG

    'I injured my fingers'. (note e- 3SG replaced by o- 3PL inside stem)

c. je   yaárapcriy-ar ddrang   ddél-am

    1SG   down-DAT   step   hit-1SG

    'I stepped down' Literal: I hit the steps down.

In (54a&b) sentences split the structure of the verb and it shows that this lexical middle [ddel-] 'hit' derives from the dd-prefix verb structure [dd-e-l], MM-OBJ-Stem. I discuss this phenomenon in detail in the next section on lexicalized dd-prefix verbs. These complex-predicate middles express the body-action middle situations identified by Kemmer (1993:53).

These middle situations involve actions carried out with or through one's own body. The semantic structure of the dd-prefix verbs in the complex predicate in (54) take two sematic roles: ACTOR and UNDERGOER—even though the actor and undergoer semantically refers to single argument in the sentence structure and interestingly the subject gets ergative marking. In (54c), the subject is in absolutive for an ergative verb and it also expresses body-action middle.

(E) [E-tt-am] 'I did it'

The last //dd-// > tt (stem verb) which appears in my corpus of complex predicates is [e-tt-am] which is a light verb //dd-//>[-tt-] 'do' for prototypical transitive constructions in Burushaski (productive form in the language today for constructing new verbs such as [kaal éttam] 'I called him') where "call" is borrowed from English. This is another lexicalized dd-prefix verb like [ddel] 'hit' and I discuss it at length in the following section on lexicalized dd-prefix verbs. Here I focus on its function in complex predicate dd-prefix verbs. I provide examples below and illustrate its semantic function.

55. Complex-Predicate [ettam]

a. ja-a   á-nggi   é-tt-am

    1SG-ERG   1SG-beard   3SG-do-1SG

    'I shaved' Lit.: 'I did my beard.

b. ja-a   ó-orimuc   ó-tt-am

    1SG-ERG   3PL-nails   3PL-do-1SG

    'I cut my nails' Lit.: 'I did my nails'.

The complex-predicates in (55a) are: [ánggi]+ tt] and (55b) [óorimuc]+-tt-] [N+V]. Those two complex predicates are the best candidates for body action middle situations identified by Kemmer (1993: 53). It should be noted here that this light verb [-tt-] is generally

used to form transitive sentences in the language, but we can't rule out the possibility of this becoming a lexeme from the dd- prefix morpheme through the process of lexicalization, which is of course very rare. The semantic structure of the light verb in (55a&b) as we saw with the dd-prefix verbs take two semantic roles: ACTOR and UNDERGOER.

4.2.4 The Lexical dd-initial Stem Verbs

In the corpus, only 4 of the total 120 verbs (2%) which are dd-initial stem verbs which I refer to "Lexical dd-initial stem verbs". I provide examples of these lexical dd-initial stem verbs first and explore whether they have a function similar to the dd-prefix verbs. I do not include [ddel] 'hit' here which belongs historically to the lexical middles but which has been reanalyzed as a new verb stem. I discuss this verb in the section on lexicalized dd-initial stem verbs at the end below.

56. **Lexical dd-initial stem verbs**

 a. hing   ddoón-imi

  door   open-3SG

  'The door opened (itself)'.

 b. ghamu dduúrw-imi

  ice   melt-3SG

  'Ice melted'.

 c. sal   dduúr-imi

  water.wheel turn-3SG

  'The water wheel turned (by itself)'.

d. hiles   ddaghá-mi

        boy   hid-3SG

        'The boy hid'.

It is very interesting to note that the dd-initial stem verbs in (56) have semantic

characteristics similar to those of dd-prefix verbs. In (56a) the dd-initial stem verb takes two

semantic macroroles: ACTOR (inanimate agent not specified) and UNDERGOER "door". In

(56b&c), the verbs take two semantic macrorole: ACTOR (external factor) and UNDERGOER.

The suffix agrees with the UNDERGOER of the verbal action and there is no pronominal prefix

(semantic marking) on the verb for the external factor that caused the change of state. In (56d)

the dd-initial stem verb assigns two semantic macroroles: ACTOR and UNDERGOER.

These lexical dd-initial stem verbs do not derive from any other source; rather these

become the source of transitive and causative verbs in the language. Consider these examples

below to illustrate this:

57. The dd-initial stem verb as a source Verb

    ja-a   hing   ddoón-am

    1SG-ERG   door   open-1SG

    'I opened the door'.

The verb in (57) is a prototypical transitive construction. The source of the verb is the

lexical dd-initial stem verb which we saw in the sentences above.

4.2.5 Lexicalized dd-verbs

There are two lexicalized dd-verbs in my corpus: [ddel] 'hit' and //dd-//>[-tt-] 'do'. I

provide two prototypical transitive sentences for these two forms below and discuss the process

of lexicalization of these two verbs in detail:

58. Lexicalized Dd-prefix verbs

    a. karíim-e   ddasín   mu-ddél-imi

       karim-ERG   girl   3SGF-hit-3SGM

       'Karim beat the girl'.

    b. hilés-e   ddasín   maán mó-tt-imi

       boy-ERG girl   kiss 3SGF-do-3SGM

       'The boy kissed the girl'.

The transitive use of the verbs 'beat' or 'kiss' in two sentences above is quite evident. If we analyze the lexicalized dd-prefix verbs in the Transitivity Parameter set out by Hopper & Thompson (1980), we get the following results: 1) The action in both cases is highly volitional; 2) The action of the highly potent agent completely affects both Objects.

Following Kemmer's (1993) hypothesis, it is evident that the middle marked verbs in those sentences above don't have the characteristics of middle voice morphology. The middle-marked verb or the dd-prefix gradually lost its semantic characteristics and has become a part of the stem of the verb [ddel] and the light verb [-tt-] 'do'. These lexicalized dd-verbs are not part of the middle voice morphology.

4.3 The Semantic Domain of the Dd-prefix verb In Burushaski

In this section, the semantic domain of the dd-prefix is explored with special reference to Kemmer's (1993) typological description of middle voice. Each middle situation identified by that author was examined in the context of the Burushaski language. My native-speaker intuition

and my corpus of 120 verbs was my guide throughout the exploration of middle situations in Burushaski. I talk about each middle situation below separately.

4.3.1 Body Action Middles

A. Grooming and Body Care

In this section, I identify middle situation types in Burushaski which are "carried out on or through one's own body" (Kemmer 1993: 53). The first body-action middle type is grooming and body care. I provide examples below in the Burushaski context:

59. Grooming and Body Care

a. in   dd-i-yáaltt-imi

   3SG   MM-3SG-wash-3SG

   'He became clean'.

b. a=ci   sent   dd-é-l-am

   1SG=onto scent MM-3SG-hit-1SG

   'I wore perfume', lit. I struck scent onto myself.

c. a-skil=ce   kiriím dd-é-l-am

   1SG-face=with   cream MM-3SG-hit-1sg

   'I applied cream to my face'.

All those sentences above show that the dd-prefix is frequently used for grooming and body care actions which are one the middle situation types identified by Kemmer (1993). The semantic characteristics of the dd-prefix verb in the sentences take two semantic macroroles. In (59a), the suffix agrees with ACTOR and UNDERGOER evokes semantic marking on the

53

pronominal prefix. And in (59b&c) the dd-prefix verbs take two semantic roles: USER and IMPLEMENT.

The next middle situation time is Change in Body Posture and I explored the question as to whether Burushaski uses the dd-prefix verbs for those situations too.

B. Change in Body Posture

In these, "the verb denotes actions in which a volitional entity acts on its own body"(Kemmer 1993:55). And other type of verbs identified in this category "are the manipulations of [a] body or body parts without any particular change in the location of [the] body" (1993:56. I found the following examples in Burushaski.

60. Change in Body Posture

   a. in   dd-í-ttal-imi

      3SG   MM-3SG-wake-3SG

      'He woke up/got up'.

   b. in   [5]dd-í-ye-mi

      3SG   MM-3SG-raise-3SG

      'He stood up/got up'.

   c. yuútis   dd-ée-pirkan-imi

      3SG-foot   MM-3SGC-twisted-3SGC

      'His foot became twisted'.

   d. oótis   dd-áa-man-imi

      1SG.foot   MM-1SG-become (numb)-3SG

      'My foot became numb'.

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[5] It is interesting to note that [e-yan-imi] 'he slept' is not middle marked and the reason is that action, unlike stood up or got up, is not volitional.

In (60a-d), the dd-prefix verbs take two semantic macroroles: ACTOR and UNDERGOER. The suffix agrees with ACTOR and UNDERGOER gets pronominal prefix on the verb.

C. Non-translational Motion Actions

Another type of action which gets middle marking in languages is non-translational motion. These actions "involve motion rather than motion of an entity along a path" (Kemmer 1993:56). There many middle-marked verbs in Burushaski denoting such actions but I provide examples of a few of them below. The semantic characteristics of the dd-prefix verb (middle voice morphology) in the sentences below take two semantic roles: ACTOR and UNDERGOER.

61. Non-translational Body Actions

a. ín-e   ddattághar   dd-í-Ø-imi

   3SG-GEN tremble   MM-3SG-[come]-3SG

   'He trembled'.

b. in   dd-i-khíkin-imi

   3SG   MM-3SG-stretch-3SG

   'He stretched'.

c. in   dd-ée-mattalin-imi

   3SG   MM-3SG-yawn-3SG

   'He yawned'.

D. Translational Body Actions

The fourth body action which expresses middle situations is translational Body Actions. These actions express motion of a human body in a linear axis, which implies that the motion has both a starting point and an end point. Motions in a rotational axis were discussed above. The dd-

prefix verbs in all the sentences below have two semantic macroroles: the actor and undergoer of the verbal action—event thought the actor and undergoer are the same referents.

62. Translational Body Actions

a. in   [6]dd-í-∅-imi

    3SG   MM-3SG-[come]-3SG

    'He came'.

b. balas   dd-u-wál-imi

    bird   MM-U-fly-3SG

    'The bird flew'.

c. hiles   cyhár-at-ar   dd-u-ús-imi

    boy   mountain-LOC-DAT MM-EP.V-climb-3SG

    'He climbed a mountain'.

The body-action middles in Burushaski conform to the general pattern found in the world's languages. All these body-action verbs denote actions that are "carried out by human or animate entities on or through their bodies ... complex actions distinguished into their component parts of acting and acted on entities" (Kemmer 1993: 58). All the Burushaski body-action verbs are marked by the dd- prefix.

4.3.2 Indirect Situation Types

The second situation type identified in the world languages which gets middle marking on the verb are called "indirect situations". These situation types are defined as "those involving a coreference between the Initiator and some non-Patient participant in the event" (Kemmer

---

[6] [zrucri] 'He will come' is not middle marked because the verb does not have the characteristics of middle morphology and it takes one semantic macrorole: actor.

1993: 74). In a situation when the actor performs an action only for his/her own benefit, that situation is called an Indirect Middle Situation (1993: 78). First I provide examples of Indirect Middles which I was able to identify in my corpus:

63. Indirect Middles

a. in-e   ja-a=cum   baran   dd-u-ghárus-imi

   3SG-ERG 1SG-OBL=ABL   word   MM-U-ask-3SG

   'He asked something from me'.

b. saminúw-e   saif=cum   pen   dd-í-mar-umo

   samina-ERG   saif=ABL   pen   MM-3SGC-borrow-3SGF

   'Samina borrowed pen from Saif'.

c. amjadd   há-alar   dd-é-srqaltt-imi

   Amjad   home-DAT   MM-3SGM-reach-3SGM

   'Amjad reached home'.

(63a-c) expresses indirect middle situation. In all those sentences, the Agent and Recipients are co-referential.

4.3.3 Cognition Middle

The cognitive domain or mental domain is further divided into simple and complex mental events. As for the basic description of mental events, Kemmer claims that in simple events, "the mental source is semantically similar to an experiencer, but is a more complex thematic role in that it presupposes a specific cognitive proposition in the mind of initiator" (1993: 138). Mental events are further subdivided into three main types: emotion, cognition and perception. I explored sentences in Burushaski for each type and discuss the examples.

64. Emotional Middle

   a. ja-a   a-móos   dd-í-Ø-imi

      1SG-GEN   1SG-anger   MM-3SG-come-3SG

      'I have become angry' Lit: My anger came.

   b. ja-a   a-móos   súw-am

      1SG-ERG 1SG-anger   bring-1SG

      'I was enraged' Lit: I brought my anger.

   c. ja-a   niré   dd-í-Ø-imi

      1SG-GEN   pity   MM-3SG-come-3SG

      'I feel pity' (Lit: My pity came)

   d. ja-a   in=ce   niré súw-am

      1SG-ERG 3SG=with   pity bring-1sg

      'I pity him/her'. (Lit. I brought pity toward him/her)

   e. ttattoóno dd-umóo-ghas-umo

      T.   MM-3SGF-laugh-3SGF

      'Tatono laughed'.

   f. u   ttattoóno   mu=ci   ghas-uman

      3PL   T.   3F-AT   laugh-PL

      'They laughed at Tatono'.

The dd-prefix verbs in 64(a-f) take two semantic macroroles: EMOTER and TARGET.

65. Speech Action middle Verbs

   a. in   dd-i-phílan-imi

      3SG   MM-3SG-agree-3SG

'He was convinced'.

b. in   dd-u-phóghur-imi

3SG   MM-EP.V-boast-3SG

'He boasted'.

There are not many cognition dd-prefix verbs found in my corpus. The dd-prefix verbs in (65a) take two semantic macroroles: EMOTER and TARGET. (65b) is another speech action middle verb as it is Twi [ohyehye ne-hõ] 'he boasts' (Kemmer 1993: 134). The next one in this category is perception verbs. I explored experience-based perception verbs in Burushaski below:

66. Experience-based Perception Verbs

a. je   dd-á-yal-am

1SG   MM-1SG-listen-1SG

'I listened'.

b. je   asqúring-e   nas   dd-á-y-ᵧam

1SG   flowers-OBL   smell   MM-1SG-get-1SG

'I perceived the flower's smell'.

In the sentences above, the semantic characteristics of the dd-prefix verbs take two semantic macroroles: PERCEIVER and STIMULUS. In (66b) [dd-á-y-am] 'perceived' the dd-prefix is attached to [a-yáy-am] 'received' and the root is //ga// 'take it'. I have presented the paradigm of these two verbs below.

Table 4.4 Take: Receive: Perceive [//ga//> a-ya-yam> dd-a-y-am]

Person	Received	Perceived
1SG	a-yá-yam	dd-á-y-yam
2SG	gu-yá-ma	dd-ukó-y-ma
3SGM	i-yá-mi	dd-é-y-mi
3SGF	mu-yá-mo	dd-mó-y-mo
1PL	mi-yá-man	dd-imé-y-man
2PL	ma-yá-man	dd-amá-y-man
3PL	u-yá-man	dd-ó-y-man

Another category of perception verbs are stimulus-based dd-prefix verbs. I explored these verbs in the language to see if they get middle marking. Examples follow below:

67. Stimulus-based perception verbs

    a. koot   gu=ci   kala   dd-í-marw-imi

        coat   2SG=with   very   MM-3SG-suit-3SG

        'The coat suited you so well'.

    b. áa-r   maza dd-í-Ø-imi

        1SG-DAT sweet MM-3SG-come-3SG

        'It feels so good' Lit: The sweet comes to me.

In stimulus-based perception verbs (67a&b), the dd-prefix verbs take two semantic macroroles: PERCEIVER and STIMULUS.

4.3.4 Complex Mental Event

The second major type of mental event is the complex mental event. The complex events

in Burushaski also get middle marking. The examples illustrate the point:

68. Complex Mental Event

a. ja-a   jamaátt á-s=ki   dd-umó-∅-omo

    1SG-GEN wife   1SG-heart=into   MM-3SGF-[come]-3SGF

    'I miss my wife' Lit: My wife came to my heart.

b. je   jamaátt-mo   mó-s=ki   dd-aá-∅-ɣam

    1SG   wife-GEN.F   3SGF-heart=into   MM-1SG-[come]-1SG

    'My wife missed me' Lit: I came into heart of my wife.

In the complex mental events (68a&b), the dd-prefix take two semantic macroroles: EMOTER and TARGET.

4.3.5 Spontaneous Events

In my corpus, the largest percentage (42%) of 120 dd-prefix verbs express spontaneous situations which are considered very common by Kemmer (1993:142) for middle marking languages. The situations which show changes of state of an entity are considered spontaneous situations. These events have been divided into three types: 1) Physical processes or actions which occur without direct initiation of a human entity; 2) Physiological Processes of biological entities; and 3) psycho-chemical changes such as melting and freezing. I gave a detailed list of each type in the table below in which all of the verbs get middle marking in Burushaski.

5.3.5 (A) Spontaneous Events

Physical Process	
The boy was born	hiles **dd-í**-man-imi
The wasp came into being	ghalghu **dd-í**-war-imi
The milk seeped out	mamu dd-u-**syú**syun-imi

5.3.5 (B) Spontaneous Events

Physiological Process	
The apple ripened	baaltt **dd-í**-ghun-imi
The tree sprout	ttom **dd-í**-srk-imi
The flower blossomed	asqur dd-u-**xár**-imi
The curry rotted	xam dd-u-**mú**srqur-imi
The milk became yogurt	mamu dd-u-**má**n-imi

5.3.5 (C) Spontaneous Events

Physiochemical Changes	
The ice melted	ghamú ddu**úrw**-imi
It froze	ghamú ddu**ún**-imi
It bent	dd-u-**ghán**dar-imi

The situations in the table above involve an inert entity undergoing a change of state. Kemmer claims that "...two possible conceptualization exist that are reflected in human language [:1]The event can be treated as having a direct cause or [2] as occurring autonomously, without reference to a causer" (1993: 147). The accent marking (bold-faced) on the dd-prefix verbs in the table above reveal interesting facts: 1) if the dd-prefix verbs gets accent marking on the

pronominal prefix, then the events are treated as having a direct cause or induced by a specified

actor (For example [**dd-í**-man-imi] 'A boy was born' (English translation is passive but it is not a

passive construction in Burushaski)>[dd-é-s-man-umo] 'She gave birth to a boy') 2) if the dd-

prefix verbs get accent marking on the stem, then the events are treated as the causer or ACTOR

is not specified or the change of state is induced by an external actor, (for example [mamu dd-u-

mán-imi] 'The milk became yogurt'> but not *[jaa mamu dd-é-s-man-am] *I make yougurt').

Further morphological operation on the spontaneous middle voice verbs having an unspecified

external causer or actor makes it ungrammatical. The spontaneous middle morphology in this

way is distinct from other middle situations.

The discussion above confirms that middle-marked verbs in Burushaski occur in most of

the "middle situation types" identified by Kemmer (1993).

CHAPTER 5

REFLEXIVES, RECIPROCALS AND MIDDLES IN BURUSHASKI

This chapter distinguishes the middles from prototypical reflexives constructions,

reflexive verbs and reciprocals in Burushaski on the basis of the semantic role of the subject

participant in the events. The middle marker and reflexive play different roles: the reflexive

marks coreference between two participants, while the middle voice morphology (the verb with a

dd-prefix) has a wide range of semantic characteristics. In the first section of the chapter, I show

the distinction between reflexive and middles. In the next section, I talk about reflexive verbs

and show how these are distinguished from the middles and passives. In the end, I talke about

reciprocals and conclude the chapter.

5.1 Reflexives and Middles

The reflexive [a-khar] 1SG-REFL is a word of the form [inherently possessive pronoun +

-khar], where the possessive pronoun refers to grammatical subject. The whole form [-khar] or

reflexive marker functions as a direct object NP and triggers object marking [i] in the verb and it

never decreases the valence of the verb. There are no reflexive sentences in Burushaski with

stative verbs like (I love/hate/know/understand myself). [*jaa akhar a-gham baa] '1 hate myself'

is not grammatical in Burushaski. The subject in the reflexive sentence is always a prototypical

agent, which acts volitionally, hence reflexive sentences are syntactically transitive and the

sematic role of the subject is that of Agent.
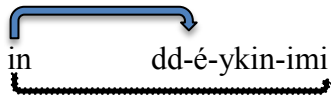
69. Reflexive Sentence //a-hakin//>[áykin]

a. in-e   i-khár   é-ykin-imi

    3SG-ERG   3SG-REFI   3SG.CAUS-learn-3SG

64

'He taught himself'.

b. in-e   ddasin   mó-ykin-imi

3SG-ERG   girl   3F-teach-3SG

'He taught the girl'.

70. Middle Sentence

in   dd-é-ykin-imi

3SGM   MM-3SGM-learn-3SGM

'He became a learner'.

In (69a), the reflexive sentence is a prototypical transitive sentence with the subject being an Agent getting ergative marking as it is in transitive sentence (69b). The reflexive marker is the direct object of the verb and it marks coreference between the two-participants: the subject, and the direct object of the verb. In (70) the dd-prefix has two semantic macroroles: EXPERIENCER and STIMULUS and the choice of the macroroles is determined by the semantic structure of the dd- prefix verb. The suffix on the verb agrees with EXPERIENCER, and STIMULUS evokes semantic marking on the pronominal prefix. The semantic of the dd-prefix verb shows an accomplished event while the reflexive construction is just a one-time event.

The semantic role of the Agent in (69a) does not agree with Kemmer's definition, "the reflexives and middles have progressively lower distinguishability, which means that the Initiator (controller or conceived source of action) and Endpoint (affected participant) are not separate, but necessarily the same entity" (1993:73). Her definition fits (70) the middle event; but, not (69), with the reflexive event. In (69), the Initiator and the Endpoint are completely separate entities and there is maximal distinguishability of participants: the learner and the object of "learning" which is marked by the reflexive marker. In (70), the middle subject:

EXPERIENCER is shaped and changed by the event of learning, just as the the change of the state of milk becoming yogurt-a difficult task for conceptual separation.

The reflexive marker takes case marking like any noun or pronoun in the language.

5.1.1 Case Marking with the Reflexive Marker

The reflexive in Burushaski inflects for any case just like any noun or pronoun; the case marker of reflexives is determined by its syntactic function in its clause. The figure 5.1 below provides all the inflected cases with the reflexive marker. I discuss its syntactic function later.

Figure 5.1: Inflected Cases of the Reflexive Marker

CASE	1SG.REFL
Accusative	akhár-∅
Dative	akhár-ar
Oblique	akhár-e
Ablative	akhár=cum
Locative	akhár-ate
Comitative	akháre=kaa

Below, I discuss the reflexive with oblique case marking or indirect object. In the example below, the reflexive marker with oblique marking gives a meaning of possession with the referent. This is illustrated in (71) below.

71. ja-a   pen   a-khár-e   yán-am

1SG-ERG   pen   1SG-REFL-OBL   bought-1SG

'I bought the pen for myself' (not for you).

The reflexive marker can also take dative marking. The dative case marked reflexive is also an indirect object or benefactive. The example below in 72 illustrates this:

72. Reflexive marker with Dative marking

kariím-e   i-khár-ar   yán-mi

Karim-ERG   3SG-REFL-DAT   bought-3SG

'Karim bought (it) for himself'.

5.2.2 Reflexive Verbs and Middles

In Burushaski, the reflexive verbs distinguish themselves from middles. Burushaski transforms verbs to reflexive verb forms with morphological means. The source of reflexive verbs is emphatic. According to Kemmer, the notion of source is "every individual grammatical marker in a language has a diachronic source use, which can be defined as a distinct situation type whose expression by that marker is diachronically immediately prior to the use of that marker in its current semantic/pragmatic usage" (1993: 37). We look at examples and illustrate the morphological marking below:

73. Reflexive verbs

a. hósar   i-ghás-imi

   pumkin   3SG-rot-3SG

   'The pumpkin rotted'.

b. *hósar   iʔiy   i-ghás-imi

   pumkin   EMP.2   3SG-rot-3SG

   'The pumpkin rotted itself'.

c. hósar   iʔiy   i-ghásy-ibi

   phumkin   EMP.2   3SG-rot.IPFV-be.3SG.PRES

   'The pumpkin is rotting'.

In (73a&c), the suffix agrees with the UNDERGOER and it also evokes pronominal prefix on the verb. In (73a), the verbs are in perfective aspect, which is the basic aspect of Burushaski verbs. The use of emphatic marker [iʔiy] in (73b) makes the sentence ungrammatical. The undergoer of the verbal action has zero volition in (73a&c) sentences. In (73c) the aspect of the verb stem changes from perfective to imperfective aspect through regular palatalization of the verb stem, a characteristic feature in this language. The most striking fact is the habitual events are distinguished not only through aspect change but also through the use of emphatic marker 2 in those events.

The emphatic marker 2 (shows more emphasis) which derives from emphatic marker 1 by reduplication [i-i]> [iʔi-i] is used with reflexive verbs in habitual aspect. The emphatic marker [-i] is inherently possessed for person. The table below provides the list of emphatic and reflexive pronouns:

Table 5.2: Emphatic Marker 1 & 2

Person	Emphatic 1	Emphatic 2
1SG	jé-i	jijé-i
2SG	gú-i	gugú-i
3SGM	í-i	iʔí-i
3SGF	mú-i	mumú-i
1PL	mí-i	mimí-i
2PL	má-i	mamá-i
3PL	ú-i	uʔú-i

I provide examples below to show how distinction between reflexive verbs and middles is marked through marking patterns and through semantics:

74. Marking pattern on reflexives and middles and their semantics

    a. ghuyán xa   giyá-bican

        hair   down   fall-3U

        'The hair fell'.

    b. ghuyán i?iyi   xa   giyácy-ican

        hair.N   EMP.2   down fall.IPFV-3U

      'The hair is falling'.

    c. ghuyan dd-u-móq-imi

        hair.N   MM-U-fall-3

        'My head\hair is getting bald'.

  In 74(a-c), the reflexive verbs is distinct from the dd-prefix verbs. The reflexive verb take

an undergoer semantic macrorole, but the semantic structure of dd-prefix verb takes two

semantic macroroles: EFFECTOR and LOCUS. (74a) expresses a momentary event, (74b) is an

imperfective or habitual event and the (74c) expresses a repetitive action. This fact distinguishes

reflexive verbs from dd-prefix verbs in Burushaski. Here is another example:

75. Reflexive Verb and Middle

   a. ma   má-yan-uman

     2PL   2PL-sleep-PL

     'You all slept' //ddang// 'sleep' >[yan]

   b. ma   dd-amá-ttal-uman

     2PL   MM-2PL-woke.up-PL

     'You all woke up' //ddaal//'raise' > [-ttal-]

In (75a), the subject in the reflexive verb //ddang//>[ma-yan-uman]$^{//dd//-deletion}$ is undergoer of that action—the undergoer gets double marking on the verb. In, (75b) //ddaal//>dd-ama-ttal-uman], the semantic structure of the dd-prefix verb takes two semantic macroroles: EFFECTOR and LOCUS. The semantic of the reflexive verb requires double marking for the UNDERGOER of the verbal action, but the semantic structure of the dd-prefix assigns two semantic macroroles: ACTOR and UNDERGOER. The events expressed by the reflexive verbs are characterized as having, one participant both physically and conceptually, and hence "no degree of distinguishability of participant roles" (Kemmer 1993). For example in reflexive verb: [a-yáy-am] 'I got hit' has one participant role. But, middle events in Burushaski have minimal degree of distinguishability between participant roles PERCEIVER AND STIMULUS both physically and conceptually. For example in middle marked verb of perception: [nas dd-a-y-am] 'I perceived the smell'.

It should be noted that the subject in the sentence with an emphatic marker 1 is ALWAYS volitional; hence the sentence is prototypical transitive. It should not be confused with the emphatic marker 2. I give an example of an emphatic marker and illustrate this:

76. Emphatic Marker 1

ine	pinsíl	í-i	lip	é-tt-imi
3SG-ERG	pencil	EMPH	throw	3SGC-do-3SG

'He threw the pencil himself'.

77. Emphatic marker 2

pinsíl	i-riíng=cum	iʔí-i	lip	i-máy-b-i
pencil	3SG-hand=ABL	EMP.2	drop	3SG-happen.IPFV-be-3SGC

'The pen drops from his hand by itself'.

(76&77) distinguishes the emphatic marker 1 [i-i] from emphatic marker 2 [iʔi-i] (more

emphasis). In (76), the event is in the perfective aspect and the agent is volitional who acts on the

patient, the pencil. In (77), the event is imperfective, and the subject is the UNDERGOER.

The reflexive verbs have always been confused with Passives in Burushaski linguistics.

These constructions are distinguished from passives because there is no there is no syntactic

adjustment of arguments or de-transitivization as there is in passive construction—these are

reflexive verbs. I provide an example and the illustration follows.

78. Reflexive and Passive Voice

 a. ó-os   mu-wár-umo

//gus//>'woman'//a-gus// [ó-os]$^{//g// \text{ deletion}}$ 'my woman'

   1SG-woman   3F-tired-3F

   'My wife got tired'.

 b. ó-os   n-umú-war-in   bom

    1SG-woman   PASS-3F-tired-PTCP be-3F.PST

    'My wife was tired'.

Burushaski passives, as is true also in Japanese (Shibatani 2006) can be used with both

transitive and intransitive or reflexive verbs. In (78a), the semantic structure of the double

marked reflexive verb takes an undergoer. In (78b), the passive is used with reflexive verb in

regular passive construction in Burushaski.

5.2 Reciprocals and Middles

In section 5.1, I distinguished reflexive verbs from middles. The sematic domain of

reciprocals is also considered relevant to middle semantics like reflexives (Kemmer 1993:95).

We look at this in Burushaski below.

Burushaski has a distinct reciprocal marker for expressing reciprocal situation. It is the reduplication of the word [hin] 'one' //hin hin//> [hihin] for the human-class noun class and //han han//> [hahan] for discrete noun class. The reciprocal in Burushaski behaves like the reflexive, but the subject in reciprocals is always a plural entity. I provide examples below to illustrate this:

79. ú$_w$-e   hi-hín   i-chán-uman

3PL-ERG   RECP   3SG-count-PL

'They counted each other'. (notice singular object but plural subject)

In (79), the subject is also an agent, a volitional entity performing an action on an affected patient; hence the verb in the reciprocal sentences is ALWAYS a prototypical transitive construction in Burushaski. The reduplication marker similarly evokes semantic marking like 3SG-[OBJ] on the verbal pronominal prefix. In the examples below, I provide examples for reciprocal and middles and situation and a discussion follows.

80. ú$_w$-e   hihín   i-phús-uman

3PL-ERG   RECP   3SG-tie-PL

'They tied each other'.

81. u   dd-u-phús-uman

3PL   MM-3PL-tied-3PL

'They were tied up' [English looks like passive: 'they were in state of being tired'.

The sentences above distinguish reciprocals from middles on these grounds: 1) the reciprocal sentence is a prototypical transitive sentence, and the agent, acts volitionally on the patient in reciprocal, 2) the middle voice has a single argument, but the semantic of the dd-prefix verb takes two semantic macroroles: the EFFECTOR and LOCUS—expressing a state verb. The

reciprocal expresses one-moment action, but the middle voice expresses that EFFECTOR and LOCUS are tied for a long time—a different semantic structure.

5.3 Conclusion

I clearly distinguished middles from reflexive and reciprocal events in the discussion above. On typological grounds, Kemmer (1993, 1994) observes that middle situations are closely related to reflexives and reciprocals. The middle marker is not historically related to either the reflexive or to the reciprocal maker.

The analysis in this chapter contradicts the general decision to analyze middles as deriving from a transitive clause via a reflexive construction (Kemmer 1992, Faltz 1985). The distinctive morphological marker the dd-verbal prefix in question is not related to the reflexive and the reciprocal for several reasons: 1)Burushaski has a distinct reflexive marker [-khar] and a distinct marker [hihin] and the middle marker the dd-verbal prefix is not related to them 2) The reflexive and reciprocal constructions are prototypical transitive constructions, but the dd-prefix verb has distinct semantic characteristics 3) The reflexive and reciprocals do not cover the wide range of semantic functions expressed by the middle voice morphology. The next chapter discusses the semantics of middle voice morphology.

CHAPTER 6

MIDDLE VOICE AND PASSIVE VOICE

This chapter discusses the marking patterns on the verb template for the middle voice in contrast with the passive and active voices. I showed that that the semantics of the dd-prefix verb involves two semantic macroroles (I refer readers to Van Valin 2001: 1 for a detailed discussion on semantic macroroles): ACTOR and UNDERGOER; and the dd-prefix is a middle-voice marker and a semantic category of its own. That it does not evolve from the reflexive or the emphatic marker, is evident because the reflexive marker appears in direct contrast with the middle marker, and the markers are distinct and are neither historically nor phonologically related. This chapter passes the dd-prefix through different tests to further authenticate that claim. In order to do that I compared and contrast the middle voice with the active voice, the passive voice, and converb[7] constructions. The final section of this chapter concludes the findings of my thesis.

6.1 Middle Voice and Passive Voice in Burushaski

I claimed in section 2.3 that position {-2} in the Burushaski verb template is occupied by the middle voice marker position. I present the verb template again for convenience below:

82. Burushaski Verb Template (Berger 1998:140)

-3	-2	-1	Stem	+1	+2	+3	+4	+5
NEG	dd-/n-	CAUS/Pr.Prefix	Verb	PL	DUR	SUB	-m/-n	IMP/AUX/Q

---

[7] Converb is a non-finite verb that serves to express adverbial subordination, i.e. notion like 'when', 'because', 'after', 'while'. For example, [sriyam, **n**-i-sr-**in** gucyhayam] 'I ate. After eating, I slept'.

The verb template shows two prefixes: the dd- prefix and the n- prefix, which are in complementary distribution. I claimed that the n- prefix marks the passive voice in the language and the dd-prefix marks middle voice. These markers are in complementary distribution and that suggests that position {-2} on Burushaski verb template is a specified slot for VOICE MARKER. I have a nice list of inflected middles in my corpus which is my source and my native-speaker intuition is my guide here again for exploring it further. I illustrate this below with examples and discuss their syntactic and semantic function.

83. Position {-2} slot for Voice Marker

    a. já-a   phárcin   chíl-ulo   i-íl-am   **(Active)**

       1SG-ERG hat   water-LOC   3SG-dip-1SG

       'I dipped the hat into the water'. (Prototypical Transitive)

    b. phárcin   chíl-ulo   **n**-i-íl-in   bim   **(Passive)**

       hat   water-LOC   PASS-3SG-soak-PTCP   be-3SG.PAST

       'The hat was drenched in the water'.

Verb Template: Passive Voice

-2	-1	0(root)	+1
n-	i-	il	-in
PASS	UNDERGOER	soak	PTCP

    c. phárcin   (haráltt-ulo)   **dd**-i-íl-imi   **(Middle)**

       hat   rain-LOC   MM-3SGC-dip-3SG

       'The hat got drenched in the rain'.

Verb Template: Middle Voice

-2	-1	0 (root)	+1
dd-	i-	il	-imi
Middle Voice	LOCUS	soak	EFFECTOR

The example in (83a) is a prototypical two-participant transitive event in which a human entity, ACTOR acts volitionally on a direct object UNDERGOER, which is affected by the event. The suffix agrees with EFFECTOR and LOCUS gets marking on the pronominal prefix.

In (83b), the subject of the passive voice is UNDERGOER and it evokes semantic marking on the verb pronominal position and also on the auxiliary verb. The [n-] prefix a passive marker and the [-in] suffix is the participial marker PTCP, which represents the modified NP, UNDERGOER or "the hat" in the sentence above. The passive participial is ALWAYS followed by an auxiliary verb, as does the English passive, only the agent is not specified in Burushaski passive sentences.

In (83c) the dd- prefix changes the semantics of the verb and takes two semantic macroroles: EFFECTOR and LOCUS. Hence, this further supports my claim that position {-2} on the verb template is the slot for VOICE MARKER. The dd- prefix marks Middle Voice and the n- prefix marks Passive.

I would advise the readers here that the passive participial verb form should not be confused with the converb, the non-finite verb (of similar morphological structure) which is used for coordination or subordination in the language. The morphological structure of converb is: [n-i-íl-in] [PASSIVE /n/+ prefix. verb. stem +/in/ PARTICIPLE suffix], and I gloss it as CON-3SG-dip-PTCP. The CON is the marker for converb here. I present the table to illustrate this below which can be compared with template for passive above:

Verb Template: Converb

-2	-1	0 (Root)	+1
n-	i-	il	-in
CON	3SG	soak	PTCP

This differentiates it from Passive Marker, PASS for the n- prefix and the Participial

Marker, PTCP for the [-in] suffix in the verb. This passive participial verb looks exactly like the

converb, but a simple test can differentiate them very easily. The passive participial verb always

occurs with auxiliary verbs [n-i-kirmin-in bilum] 'It was written'. On, the other hand the converb

always appears as a single word in the sentence [sri-mi nisrin ni] 'He ate, after eating he left'.

The converb can never be negated in Hunza Burushaski. When we negate the passive participial,

the negation is always on auxiliary verb, not on the passive participial verb, just like in English. I

would give an example of converb and passive participle verb below in a sentence which

illustrates this further.

84. Passives and Converbs

a. já-a   hólpa saa=ce   gató-ng   báalcy-a

　　1SG-ERG outside sun=LOC   cloth-PL   wash.IPFV-1SG

　　b-ayam.   **n-u-páalt-in** ,   phar   man-áam-ar

　　be-1SG.PAST]   CON-3PL-wash-PTCP   return become-1SG-DAT

　　[a] I was washing clothes, outside in the sun. **After washing** these, when I returned....

b. hilés-an   **n-é-sqan-in**   **b-am**

　　boy-SG.IND   PASS-3SG-kill-PTCP   be-3SG.PAST

　　 [b] a boy **was killed**.

(84a) begins with a transitive sentence. The next sentence (84b) begins with a converb [n-

u-paáltt-in], the single form with converb markers, and then the sentence ends with the passive

verb. The CONVERB only serves to link the previous sentence with the next sentence. I

illustrated four points with examples: 1) position {-2} in the Burushaski verb template is the

voice marker; 2) the dd- prefix marks middle voice and the n- prefix marks passive voice; 3) the

passive participle verb always followed by an auxiliary verb; 4) the converb is like the passive

participle (non-finite verb form) but is only used to link the sentences in the narratives and comes

in single word form. In the next section, I talk about the Dd-prefix verbs and Converbs.

6.1.1 Marking Patterns for the Bound Stem dd-prefix Verbs and Passives

 I discussed bound stem dd-prefix verbs in chapter 4 section 4.2.1. These dd-prefix verbs

are derived from Adjectives and Nouns. I explored examples where these two voices appear in

direct contrast with the same verb and discuss the different marking patterns. It is expected that

the dd-prefix as a bound morpheme in these verbs do not drop and the marking pattern has its

own semantics.

85. Bound-stem Dd-prefix verbs and Passives

> **a.** cyhap   dd-i-r-íla   **(Middle)**
>
>   meat   MM-U-cook-3
>
>   'The meat cooked'.
>
> b. ja-a   cyhap   dd-é-cir-am   **(Active)**
>
>   1SG-ERG meat   MM-3SG-cook-1SG
>
>   'I cooked the meat'.
>
> c. cyhap   dd-é-cir-in   b-ilum   **(Passive)**
>
>   meat   MM-U-cook-PTCP   be-3.PAST
>
>   'The meat was cooked'.

The sentence (85a-c) shows sentences in all three voices of a bound stem d-prefix verb.

(85b) is a prototypical transitive event involving two two-participants. It was mentioned in the

previous section that the dd- prefix or the middle marker of the bound-stem middles doesn't drop

during further morphological operations on the verb. The passive verb becomes a participle modifying the Noun Phrase. The most striking marking pattern in (85c) is that the bound stem dd-prefix verb with PARTICIPLE suffix followed by an auxiliary is used for passive voice construction.

6.1.2 Marking pattern for Inflected dd-prefix Verb and Passive Voice

The inflected dd-prefix verbs were discussed in chapter 4 section 4.2.2. In this class of middles, the transitive or intransitive verb is inflected with the dd-prefix through inflectional morphological processes for middle voice morphology. I provide examples below to compare inflectional dd-prefix verbs with passives and discussion on the marking pattern of those verbs follow.

86. Marking Pattern of Inflected dd-prefix verbs and Passives [//i-phátar//>eé-patar]

    a. a-skil   dd-u-phátar-ila   (Middle)

       1SG-face   MM-U-come.off-3U

       'The skin came off of my face'.

    b. ja-a   ghasrún-an   i-phátar-am   (Active)

       1SG-ERG carrot-SG.IND   3SGC-peel-1SG

       'I peeled a carrot'.

    c. ghasrún-an   n-í-patar-in   b-im   (Passive)

       carrot-SG.IND   PASS-3SGC-peel-PTCP   be-3SGC

       'The carrot was peeled'.

In (86a), the dd-prefix is attached to the transitive verb [i-phatar-as] 'to peel' and the semantic of the dd-prefix verb takes two semantic macroroles: EFFECTOR and LOCUS. (86b) is

prototypical transitive verb, the subject is ACTOR and the direct object is UNDERGOER. (86c) is passive voice construction as it was expected it gets its regular marking in position {-2} and participle the [-in] marking in the suffix position. These examples clearly prove my hypothesis that the position {-2} in Burushaski verb template is the slot for the VOICE MARKER. The next section concludes the findings of my thesis.

6.3 Conclusion

The thesis began with the claim that the [dd-] verbal prefix is the morphological marker of middle voice in Burushaski. A simple reason for that claim was that the inflected or bound stem verb attached to the [dd-] prefix had all the defining characteristics of middle voice systems, which are attested in the typology. For example, the most popular definition of this phenomenon by Lyons, who defines that middle voice morphology applies when the "action or state affects the subject of the verb or his interest" (1968:373). In the view of that definition when I looked at the verb [ddasin dd-i-yárarw-umo] 3SGF MM-3SG-warm-3SGF 'The girl warmed herself' or [dasin ddumú-yararw-umo] 'The girl became warm' That bound stem dd-prefix verbs (first one accent marking on stem and the second one accent marking on pronominal prefix) is the epitome of that definition. The semantics of the dd-prefix bound stem verb takes two semantic macroroles: EXPERIENCER and STIMULUS—the subject is highly affected and the same subject controls the verbal action. The EXPERIENCER gets regular subject marking and the STIMULUS of the event provokes semantic marking on the pronominal prefix of the verb. In addition to that the semantics of the dd-prefix verbs perfectly expressed a range of situation types identified by Kemmer (1993) as a typical of middle-system (discussed in section

80

4.3). Therefore, the verbs like that convinced me to pursue my research on the middle voice in Hunza Burushaski.

In order to provide facts to support that claim, I analyzed the corpus of 120 dd-prefix verbs for this study guided by my linguistic training and my native speaker's intuition. The claim did not seem to be easy as it appeared because the dd- verbal prefix puzzles Burushaski linguists for more than a century now. The analysis of the corpus raised puzzling questions and revealed convincing answers. I addressed all those questions in detail above. I provide a brief summary of those questions and their answer. I noticed most of the questions were syntactic, the semantic of the verbs fit in so well with all the middle situation types identified by Kemmer (1993). The questions below have been ordered in terms of their complexity.

6.3.1 Questions and Answers

1) **Why does the verbal dd- prefix verb form transitive and causative sentences of the language? For example:**

87. Ja-a   chil   **dd**-é-s-kararw-am

      1SG-ERG   water   MM-3C-CAUS-heat-1SG

      'I heated the water'.

(For details, see chapter 4 sections 4.2.1 and 4.2.2.) I provide a brief answer here: The middle morphology in the verb involving two well-differentiated participants, the subject, ACTOR and the direct object, UNDERGOER absolutely contradicts the defining characteristics of the middle voice. And the largest percentage (52%) of my corpus had these verbs. The most striking pattern that I observed in the data was all these verbs were derived from nouns or adjectives. I call them "bound stem dd-prefix verbs". The semantic structure of all basic bound

stem dd-prefix such verbs is always middle, but further morphological operation on the verb

does not drop the verbal dd-prefix—these derived verbs became bound stem dd-prefix verbs.

They are in direct contrast with the inflectional dd-prefix verb Transitive > dd-prefix+verb >

Causative . That the inflected middles contrast with bound-stem middle proves that the verbal

dd-prefix in question [dd-e-s-kararw-imi] above does not carry the semantic meaning of middle

but it became a part of the bound stem dd-prefix verbs.

2) **Question: Why then does the inflected dd-prefix verb [chu] 'take' > [dd-u-c-am]**
   'brought' form transitive sentences? For example:

88. ja-a   in-ar   baáltt-an   dd-í-c-am

     1SG-ERG   3SG-DAT   apple-SG.IND MM-3SG-bring-1SG

     'I brought an apple for him'. (for my benefit)

These situation types are defined as "those involving a coreference between the Initiator

and some non-Patient participant in the event" (Kemmer 1993: 74). In a situation when the actor

necessarily performs an action for his/her own benefit, that situation is called Indirect Middle

Situation (1993: 78). The event expressed in (88) is necessarily done for one's own benefit-agent

is also the recipient of the verbal action. The sentence like this below without verbal dd- prefix if

the action is done for the object's benefit—the actor and recipient are different. For example:

89. ja-a   in-ar   baáltt-an   chú$_w$-am

     1SG-ERG   3SG-DAT   apple-SG.IND take-1SG

     'I took him an apple'. (for his benefit)

The dd-prefix verbs like [dd-á-ghurus-imi] 'He asked me' [dd-á-mar-imi] 'He borrowed

from me' [dd-umóo-r-imi] 'He sent her' (for his benefit) contrasts with [moó-r-imi] 'He divorced

her'/'He sent her away' (not for his benefit) More examples and explanation of this puzzle is in 4.3.2.

3) **Question: Why does the pronominal prefix followed by the dd-prefix, n-prefix show variation in some verbs? For example:**

90. balas   dd-u-wal-imi

bird   MM-U-fly-3

'The bird flew'.

91. xatt   n-u-kirmin-in   b-ilum

letter   PASS-U-write-PTCP be-3.PST

'The letter was written'.

92. u   gucyha-man,   n-u-kucya-n-in .....

3PL   sleep-PL,   CON-U-sleep-PTCP

'They slept'. After sleeping....

It is one of the main arguments in this thesis that the semantics of the dd-prefix verb takes two semantic roles. The suffix agrees with the actor on the verb and the Undergoer provokes semantic marking on the pronominal prefix in the verb. If it is argued that that suffix agrees with the subject, ACTOR and the UNDERGOER evokes semantic marking on the verb then why the pronominal prefix does not agree in the examples above with the UNDERGOER.

In (90) the bird is a discrete noun-class and why it evokes a plural [u-] prefix. A simple answer to this puzzle is that the pronominal prefix is determined by the semantic structure of the dd-prefix verb. The result of the verbal action in (90) is non-discrete or repetitive actions so it decided to take the plural marker [u-] in the pronominal prefix. The variation on pronominal prefix is due to the semantic structure of the verbs.

In (91), the pronominal prefix on the passive subject is also plural. Again the semantic structure of the verb determines the object marking in these cases. The actor, CREATOR is not specified in the passive structure in Burushaski and the object of the verbal action is not discrete noun or countable noun but CREATION. The plural marking on the pronominal prefix is not syntactic but semantic marking. The same is the case is in (93), the plural object marking on the converb is also semantic.

A detailed discussion on this is in chapter 2 section 2.3.1 and 2.3.3.

4) **Question: The Middle marker is often equated with reflexive marker. How is the middle marker (dd- prefix) similar to or different from the reflexive marker in Burushaski?**

Answer: On typological grounds, Kemmer (1993, 1994) observed that middle situations are closely related to reflexive and reciprocal and the middle marker in most languages evolves from transitive verb via reflexive construction. But Burushaski has a reflexive marker [-khar] REFL distinct from the middle marker, the dd- prefix. The middle marker is not historically related to the reflexive marker. The middle marker is a semantic category of its own in Burushaski. Chapter 5 answers this question in detail.

5) **Question: How do you compare middle voice with passive voice? Does Burushaski, an ergative-absolutive language, have passive voice constructions?**

Answer: My second claim in this study which evolved from the first claim is that position {-2} on the verb template in Burushaski is occupied by voice-markers. The same position {-2} on the verb template shows two prefixes: the dd- prefix and the n- prefix, which are in complementary distribution. Section 6.1 of this chapter is dedicated to this topic. Burushaski is

superficially an ergative absolute language (Smith, 2012) which forms passive constructions unlike prototypical ergative language and there are are many examples in that section.

6) **Question: Does the middle-marked verb in Burushaski occur in the "middle situation types" identified by Kemmer (1993) where middle verb morphology occurs cross-linguistically?**

Yes, in fact, looking for the inventory of the middle situation types was the starting point of this study. First, I started comparing the middle marked verbs with the middle situation types. It occurred in all the middle situation types which helped to resolve other morphological complications connected with the middle voice morphology. A detailed analysis of the middle situation types in Burushaski can be seen in chapter 4 in section 4.3.

My findings that the dd- verbal prefix is the middle marker in Burushaski showed that position {-2} on the verb template is occupied by voice-markers. The two markers which appear in position {-2} position are voice markers. The dd- prefix marks middle voice and the n- prefix verb followed by an auxiliary verb marks passive voice. I showed that the middle marker is a semantic category of its own and that it is clearly distinguished from the reflexive marker. I hope this study contributes to the understanding of the scope of voice system in Burushaski. The analysis of the phenomenon comes from the dialect of Hunza Burushaski, so a lot of research remains to be done on the other three dialects of Burushaski: Yasin Dialect, Nagar Dialect and Srinagar Dialect.

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