

WAKHI AGREEMENT CLITICS

By

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To my wife

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TABLE OF CONTENTS

	<u>page</u>
ACKNOWLEDGMENTS.....	4
LIST OF TABLES.....	7
LIST OF FIGURES.....	8
LIST OF ABBREVIATIONS.....	9
ABSTRACT.....	10
 CHAPTER	
1 INTRODUCTION TO CLITICS.....	11
2 TYPOLOGICAL INTRODUCTION TO WAKHI	14
2.1 Basic Word Order.....	14
2.2 Morphology	16
2.2.1 Nominal Morphology.....	16
2.2.1.1 Plurals.....	16
2.2.1.2 Deverbal nouns.....	17
2.2.2 Verbal Morphology	17
3 DETERMINING HOW SECOND POSITION CLITICS GET THERE	22
3.1 Better Clitic Placement through Phonology	22
3.1.1 Anderson and Optimality Theory	22
3.1.1.1 Pure syntax.....	23
3.1.1.2 Halpern and a little PF movement.....	24
3.1.1.3 Anderson gets optimal	26
3.1.2 Pashto Second Position Clitics Meet Prosodic Structure.....	27
3.1.2.1 The stress of language	27
3.1.2.2 Halpern, again	29
3.1.2.3 Prosodic structure.....	30
3.2 Better Clitic Placement through Syntax (With a Little Phonology)	31
3.2.1 Clitics or Agreement Morphemes	32
3.2.1.1 Distribution of clitics.....	32
3.2.1.2 Coordination of clitics.....	34
3.2.2 Base Position of Clitics	35
3.2.3 Just a Little Phonology	36

4	WAKHI CLITICS	38
4.1	What Wakhi Clitics Are Not	38
4.2	What Wakhi Clitics Are (The Nature of Wakhi Clitics)	39
4.2.1	What They Represent.....	40
4.2.2	Where Clitics Attach	40
4.2.2.1	Allowed hosts	41
4.2.2.2	Disallowed hosts.....	43
4.2.2.3	Disallowed environments.....	46
4.3	The True Nature of Wakhi Clitics	48
4.3.1	Arguments	49
4.3.2	Agreement Morphemes	49
4.3.2.1	Complementary distribution	49
4.3.2.2	Coordination	50
4.3.2.3	Phonological form	51
4.3.2.4	Clitic doubling	51
4.4	A Home for Wakhi Clitics.....	52
5	FUTURE RESEARCH AND CONCLUSION	61
5.1	Dialectical Variation.....	61
5.2	Phrase Structure	62
5.3	Inanimates.....	63
5.4	Conclusion	63
	APPENDIX WAKHI LANGUAGE MAPS	64
	REFERENCES.....	67
	BIOGRAPHICAL SKETCH.....	70

LIST OF TABLES

<u>Table</u>	<u>page</u>
2-1 Present tense agreement morpheme paradigm	20
2-2 Past tense agreement morpheme paradigm	21

LIST OF FIGURES

<u>Figure</u>	<u>page</u>
A-1 Kyrgyzstan and Tajikistan language map	64
A-2 Afghanistan language map.....	65
A-3 Northern Pakistan language map	66

LIST OF ABBREVIATIONS

1	first person
2	second person
3	third person
ACC	accusative
ART	article
COMP	complementizer
CL	clitic
DAT	dative
FEM	feminine
FUT	future tense
IMPF	imperfective aspect
INTR	intransitive
MASC	masculine
NEG	negative
NOMIN	nominalizer
OBJ	object
PAST	past tense
PERF	perfective aspect
PL	plural
PRES	non-past tense/present
PRN	pronoun
SG	singular
TRANS	transitive

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Wakhi past tense agreement clitics are classified as second position, or Wackernagel, clitics, similar to those in Pashto, Tagalog and Ancient Greek. Various approaches in the literature analyze these clitics through phonological, syntactic or hybrid perspectives. In some proposals the clitics are treated as arguments of the verb, while in others as agreement clitics affixed to an element other than the verb. Of particular interest are accounts of Pashto clitics, with which Wakhi has much in common.

In this study Wakhi clitics are analyzed as subject agreement morphemes, rather than phonologically deficient pronominal arguments. The complementary distribution of non-clitic present tense agreement morphemes and the co-occurrence of full subject NPs with subject clitics lead to this conclusion. A proposal is made regarding a base generation site for the clitics. Based on that, certain phrase structure projections and syntactic movement operations are proposed to account for surface structure data.

CHAPTER 1 INTRODUCTION TO CLITICS

According to Payne (1997:22), “a clitic is a bound morpheme that functions at a phrasal or clausal level, but which binds phonologically to some other word, known as the host”. These morphemes are syntactically independent, but must be bound to a phonological host. For example, the French clitic *me* in 1 is not an affix – derivational or inflectional.

(1) Elle me regarde.

3SG.PRN 1SG.OBJ.CL look.at.PRES

‘She is looking at me.’

It is syntactically contentful, but phonologically deficient, requiring a phonological host. One could not, for example, during a night out in a Parisian nightclub answer *me* when asked *Elle regarde qui?* ‘Who is she looking at?’. That would be ungrammatical; it has no host (and might generate a strange look in reaction). Rather, one would answer *moi* ‘me’, a form which is both phonologically and syntactically free.

The nature of clitics, then, is problematic for linguists trying to determine their role in the grammar. This split identity has inspired research going back decades which focuses on the Phonology-Morphology-Syntax interface (Richardson, Marks, and Chukerman 1983).

Among these recent research topics is the study of second position (2P) clitics, also known as Wackernagel clitics (Wackernagel 1892; Cysouw 2004), a phenomenon in which the clitic attaches to either the first phonological word of a clause or the first clausal constituent, regardless of its hosts lexical or syntactic properties. Occurring in a wide variety of languages, including Serbo-Croatian, Pashto, Tagalog and Warlpiri, they

have received much attention in the literature (Zwicky 1977; Anderson 1993; 1996; Bošković 2001; Legate 2008; Tegey 1975; Roberts 1997; 2000).

Serbo-Croatian is one of the most intensely studied languages for the properties of 2P clitics. Its clitics, such as those in the cluster *smo mu je* in 2, always appear after the first phonological word in their clause, whether a full pronoun as in 2a, an interrogative in 2b, or a complementizer in 2c-d.

- (2) a. Mi smo mu je predstavili juče.
we are him.DAT her.ACC introduced yesterday
'We introduced her to him yesterday.'
- b. Zašto smo mu je predstavili juče.
why are him.DAT her.ACC introduced yesterday
'Why did we introduce her to him yesterday?'
- c. Ona tvrdi da smo mu je mi predstavili juče.
she claims that are him.DAT her.ACC we introduced yesterday
'She claims that we introduced her to him yesterday.'
- d. Predstavili smo mu je juče.
introduced are him.DAT her.ACC yesterday
'We introduced her to him yesterday.' (Bošković 2001:8-9)

Most recent analyses follow a variation of one of two paths: phonological or syntactic placement. Bošković (2001) further subdivides these two camps by how strong or weak their adherence is to the chosen approach. A strong syntactic approach, for example, would work to avoid any movement at PF, while a weak approach might allow for highly constrained movement after spell-out for the sake of phonologically

well-formed sentences. Strong and weak phonological approaches would allow, rather than restrict, various amounts of movement in the phonological component of grammar.

This study will analyze pronominal clitics in Wakhi, a southeastern Iranian language native to 32,000 speakers in the Pamir Mountains of Pakistan, Afghanistan, Tajikistan and China (Lewis 2009)¹. While these clitics have been described as second position (Bashir 2009:835; Backstrom 2009:29), the empirical evidence requires a different analysis. Chapter 2 will offer a basic typology of Wakhi syntax, followed by an overview of previous second position clitic research in Chapter 3. In Chapter 4 I will propose a new analysis for Wakhi agreement clitics that rely primarily on syntactic operations but also allow constrained phonological operations, a weak syntactic approach in Bošković's (2001) terms. Conclusions and future research possibilities are discussed in the Chapter 5.

¹ For a more detailed view of where Wakhi is spoken see maps in Appendix A.

CHAPTER 2
TYPOLOGICAL INTRODUCTION TO WAKHI

2.1 Basic Word Order

Wakhi clauses are overwhelmingly head final. This is demonstrated most concretely in basic declarative sentences like 3, which are SOV, in both present and past tenses.

- (3) a. saka yi parinda winetu.
1PL.PRN the bird see.PAST.PERF
'We saw the bird.'
- b. yezi yi ghar yav dietu.
yesterday the rock 3PL.PRN hit.PAST.PERF
'Yesterday the rock hit them.'
- c. Rehberesh parinda wind.
Rehber bird see.PRES
'Rehber sees a bird.'²

While genetically and geographically proximate languages exhibit scrambling tendencies (Toosarvandani 2007:3), and therefore various word orders, Wakhi shows little surface evidence of this. Both matrix and embedded clauses show the same basic word order.

- (4) maj keshen ki sava shapikyikt
1SG.PRN hear.PAST.IMPF COMP 2PL.PRN bread eat.PAST.IMPF
'I heard that you ate bread.'

² Unless cited otherwise, all Wakhi examples are from personal communication with Habiba Begum, a Wakhi speaker. The transcriptions are mine.

The language is strongly verb final, and as such it would be expected that other constructions are also head final. This is not the case, however, with nouns and adjectives. The expected order is adjective-noun, which is attested in Wakhi as in 5a. However, the reverse is also attested as in 5b.³

- (5) a. yezi maja raftch baf shapik xetu
 yesterday 1SG.PRN very fine bread make.PAST.PERF
 ‘Yesterday I made delicious bread.’
- b. yezi maja shapik raftch baf xetu
 yesterday 1SG.PRN bread very fine make.PAST.PERF
 ‘Yesterday I made delicious bread.’

Many verbal forms in Wakhi (all but about 300, according to Bashir (2009:833)) are formed using a nominal followed by “light verbs”.

- (6) yava yark xetu
 they work make.PAST.PERF
 ‘They worked.’
- (7) ya yix hob vite
 the ice melted become.PAST.PERF
 ‘The ice melted.’

As with the above examples, the structure is verb-final. This is the overwhelming tendency in Wakhi. In fact, only one structure has been found which places anything after the verb. This will be discussed in Chapter 4.

³ Lorimer (1958a:para. 202) claims that adjectives always precede their NP except the quantifier *ku x̄t* ‘all’.

2.2 Morphology

This section will examine nominal and verbal morphology, which is central to a study on clitics. Before describing each of those areas, though, it is important to note that Wakhi does not have any gender or noun class distinction.

2.2.1 Nominal Morphology

2.2.1.1 Plurals

Plurals are created by adding one of two suffixes to the noun stem. Plural subjects of both transitive and intransitive verbs take *-isht*.

- (8) a. parind-asht shapik go-en
bird-PL bread make-3PL
'The birds make bread.'
- b. ya kash-isht hob=ov vite
the boy-PL melted=3PL become.PAST.PERF
'The boys melted.'

Plural objects take the other plural marker, *-ov*.

- (9) yava parind-av⁴ winetu
they bird-PL see.PAST.PERF
'They saw the birds.'

There is no difference between animate and inanimate plurals for number agreement.

- (10) kitob-isht tsa mezen raben pervetu
book-PL from table down fall.PAST.PERF
'The book fell off the table.'

⁴ When a stem is vowel-final and a suffix vowel-initial, one vowel deletes. The remaining vowel has the qualities of the stem vowel.

2.2.1.2 Deverbal nouns

Deverbal nouns are formed by adding the nominalizer *kuzg*. Note the verbal form in 6 above, repeated here as 11.

(11) yava yark xetu
they work make.PAST.PERF
'They worked.'

The addition of the nominalizer following the verb changes it to a noun.

(12) yark xek kuzg shapik yitu
work make.PERF NOMIN bread eat.PAST.PERF
'The worker ate bread.'

2.2.2 Verbal Morphology

The discussion of Wakhi verbal morphology will center around present and past tense agreement morphemes.⁵ Present tense forms are made from the present base.⁶ The present base is the second person singular form, which is unmarked. To the base is added a subject agreement morpheme which encodes number (singular or plural) and person (first, second or third), (Table 2-1).

For example, the verb in the sentence below has the third person plural agreement morpheme, *-en*.

⁵ In most of the literature (Lorimer 1958a; Bashir 1986; Backstrom 2009) the past tense agreement morphemes are referred to as pronominal clitics. The use of "agreement morpheme" will be explained throughout Chapters 3 and 4.

⁶ Past tense bases, while not central to a discussion of Wakhi clitics, are usually formed from the third person singular present form.

(13) parindash shapik go-en
birds bread make.IMPF-3PL

'Birds are making bread.'

Past tense agreement morphemes have a similar paradigm, and even show some syncretism with the present tense (Table 2-2).

The past tense agreement morphemes do not typically suffix to the verb. Instead they suffix to other constituents in the sentence, as in 14.

(14) yezi kuie parind=av winetu⁷
yesterday someone bird=3PL see.PAST.PERF

'Yesterday someone saw a bird.'

Only one clitic is allowed per clause. Compare 15 with 14. When I proposed 15 to the consultant, she said it sounded (appropriately) like someone who was trying to learn the language.

(15) *yez=iv kuie parind=av winetu
yesterday=3PL someone bird=3PL see.PAST.PERF

Complex verbal structures, like those in 6 and 7, allow clitics to affix to the nominal element. Since clitics only attach to phrasal constituents, the nominal element is a constituent separate from the verb, rather than part of a phrasal verb.

(16) yezi yark=ov xetu
yesterday work=3PL make.PAST.PERF

'Yesterday they worked.'

⁷ All following transcriptions not attributed to another author will use '=' to show attachment of clitics. Examples from other authors will use original conventions.

Sentences with embedded clauses do not allow clitics to move outside their clause.

- (17) a. maj keshen [ki tou shapikyikt]
1SG.PRN hear.PAST.IMPF COMP 2SG.PRN bread eat.PAST.IMPF
'I heard that you ate bread.'
- b. keshen=om [ki tou shapik yikt]
hear.PAST.IMPF=1SG COMP 2SG.PRN bread eat.PAST.PERF
'I heard that you ate bread.'
- c. maj keshen [ki shaipk=et yikt]
1SG.PRN hear.PAST.IMPF COMP bread=2SG eat.PAST.PERF
'I heard that you ate bread.'
- d. keshen=om [ki shapik=et yikt]
hear.PAST.IMPF=1SG COMP bread=2SG eat.PAST.PERF
'I heard that you ate bread.'
- e. yez=im keshen ki shapik=et yikt
yesterday=1SG hear.PAST.IMPF COMP bread=2SG eat.PAST.PERF
'Yesterday I heard that you ate bread.'
- f. keshen=om ki yez=it shapik yikt
hear.PAST.IMPF=1SG that yesterday=2SG bread eat.PAST.PERF
'I heard that yesterday you ate bread.'

- g. *yez=it maj keshen
yesterday=2SG 1SG.PRN hear.PAST.IMPF
ki shapik yikt
COMP bread eat.PAST.PERF
- h. *yezi keshen=om ki shapik=it yikt
yesterday hear=1SG COMP bread=2SG hear.PAST.PERF

The ungrammatical sentences above, 17g and 17h, demonstrate the limitations of clitic placement. In 17g, =it ‘2SG’ is the agreement marker from the lower clause appearing in the upper clause. The ungrammaticality of 17h is due to the affixation of the clitic to the verb. In 17b and 17d the structure was licit because there was no preceding host, requiring PI to suffix it to the first phonological word, in this case, the verb. It is illicit in 17h because there is a preceding phonological host within the clause, *yezi* ‘yesterday’.⁸

The typological details given in this chapter are sufficient for the analysis offered in Chapter 4. Before that proposal, however, we will look at other treatments of clitics in the literature to gain insight into the nature of Wakhi clitics.

Table 2-1. Present tense agreement morpheme paradigm

<i>person</i>	<i>sg</i>	<i>pl</i>
1	-em	-en
2	-∅	-it
3	-t/-d	-en

⁸ The exact syntactic structure will be outlined more clearly in Chapter 4. At that point the relationship of *yezi* ‘yesterday’ to its clause will be more apparent.

Table 2-2. Past tense agreement morpheme paradigm

<i>person</i>	<i>sg</i>	<i>pl</i>
1	-em	-en
2	-et	-ev
3	-t/-d/-Ø	-ev

CHAPTER 3 DETERMINING HOW SECOND POSITION CLITICS GET THERE

The two broadly competing views of placement for 2P clitics, syntactic or phonological, are rarely held to dogmatically. Most researchers acknowledge that, empirically, neither explanation is sufficient by itself. One recent notable exception to this is Legate's (2008) investigation of Warlpiri 2P clitics. In her paper, she maintains that Warlpiri clitics can be explained almost exclusively by appealing to syntactic movement with only minimal dabbling in morphological functions to produce licit surface order. Importantly, though, she discounts the possibility of movement at PF. As interesting as her "strong syntactic" (Bošković 2001:9) view is, she makes no claims that her analysis is appropriate for other languages.

Fortunately for a study of Wakhi clitics, an examination of both sides of the argument can provide hints that help work out their nature and placement. In this chapter we will look at clitics through a mostly phonological lens based on Anderson (1996) and Roberts (1997). Then, to provide the syntactic perspective, we will turn again to Roberts, whose 2000 dissertation on Pashto reverses his earlier claims.

3.1 Better Clitic Placement through Phonology

3.1.1 Anderson and Optimality Theory

Deviating slightly from his a-morphous framework of morphology, Anderson (1992) suggests that 2P clitic placement is managed by the ranking of specific Optimality Theoretic constraints (as opposed to the Word Formation Rules of his earlier work). Before looking at the constraint system, we must first understand his criticism of a purely syntactic perspective and Halpern's (1992) hybrid treatment of clitics, on which (perhaps against which) Anderson leans heavily for his argument.

3.1.1.1 Pure syntax

To account for 2P clitic placement with syntax alone requires one of two operations: either the clitic is generated in first position and something is then moved to its left, or the clitic is a head and a phrase is then generated to its left, in the specifier position. Both of these can produce a structure in which the clitic occupies the second syntactic position. By this account, then, whatever appears before the clitic must “be something that can be moved, adjoined, or base-generated as a single syntactic constituent” (Anderson 1996:170). This observation is crucial to Anderson’s criticism of purely syntactic points of view.

An issue central to this discussion involves what is meant by ‘first’. Using data from Bošković (1995), 18 shows the different ‘firsts’ that clitics (*će* in 18) can follow in Serbo-Croatian (SC).

(18) a. *Moja mladja sestra će doći u utorak*
my younger sister FUT come on Tuesday
‘My younger sister will come on Tuesday.’

b. *Moja će mladja sestra doći u utorak*
my FUT younger sister come on Tuesday

‘My younger sister will come on Tuesday.’ (Anderson 1996:173)

The first sentence seems compatible with the idea that whatever precedes the clitic must be a syntactic constituent. In this case *moja mladja sestra* ‘my younger sister’ is clearly a well-formed DP. The problem comes in 18b, where *će* follows the first word of the same DP, but with no corresponding change in semantic content. The only response that maintains the syntactic interpretation of this phenomenon is that *moja* ‘my’ is itself a constituent.

Anderson counters with data from Browne (1975) in which a clitic (*je* 'is') separates two parts of a phrase that could not be considered phrases separately.

(19) a. Lav Tolstoi je veliki ruski pisac

Leo Tolstoi is great Russian writer

'Leo Tolstoi is a great Russian writer.'

b. Lav je Tolstoi veliki ruski pisac

Leo is Tolstoi great Russian writer

'Leo Tolstoi is a great Russian writer.' (Anderson 1996:174)

This cannot be satisfactorily explained using only the syntactic tools of base generation and movement.

3.1.1.2 Halpern and a little PF movement

The above conclusion provides the basis for moving away from advocating only syntax to acknowledging some interaction with the phonology, an innovation advocated by Halpern (1992). For the most part, placement of clitics occurs in the syntax module of the grammar. Specifically they are generated or adjoined to the first position of their clause (IP) and "phonologically sub-categorized to attach to something on their left" (Anderson 1996:175). In cases when clitics are base-generated to the left of this position, languages then have one of two rules which can apply to satisfy the sub-categorization. The first simply moves a constituent to a position preceding the clitic. The clitic is then in second position by means of a syntactic operation and all is well. The second rule is Halpern's Prosodic Inversion (PI) (1992:17). Prosodic Inversion moves the clitic only as much as is necessary for phonological well-formedness, specifically one word or one phonologically well-formed unit to the right from its initial position in the clause. Languages which require clitics to follow entire phrases would

appeal to the first rule but lack the second. Conversely, those which define second position as following only the first word would lack the first rule, but employ the second.

Anderson again draws data from Browne (1975) to undermine Halpern and PI. As mentioned above, a language which fronts entire phrases above the clitic should be precluded from also moving the clitic by prosodic inversion. The sentences in 20, however, are examples of both rules applying.

(20) a. *Sovjetske goste je primio i predsjednik Republike*

Soviet guests PAST received also president republic

Austrije Jonas

Austria Jonas

'The president of the Republic of Austria, Mr. Jonas, also received the

Soviet guests.'

b. *Sovjetske je goste primio i predsjednik Republike*

Soviet PAST guests received also president republic

Austrije Jonas

Austria Jonas

'The president of the Republic of Austria, Mr. Jonas, also received the

Soviet guests.' (Anderson 1996:178) (Serbo-Croatian)

The direct object *Sovjetske goste* 'Soviet guests' is not in its canonical surface position but has been fronted, fulfilling the phonological requirements of the clitic. It should not be the case that the clitic could also be moved by PI after a phrase was fronted.

Anderson leaves this as a challenge to proponents of PI.

3.1.1.3 Anderson gets optimal

In response to the perceived inadequacies of these other possibilities, Anderson posits a solution that takes part of his a-morphous morphology and merges it with the tools of Optimality Theory. Word Formation Rules at work in PF can put the phonological form of the clitics in their proper place when the first position (clitic host) is occupied by a phonological word. Otherwise the syntactic rules can move a syntactic phrase into first position. All sentences, therefore, must be interpreted either phonologically or syntactically. This is a weakness for languages similar to SC represented in 20, where, according to this framework, both phonological insertion and syntactic movement is occurring. If a sentence must be uniformly interpreted either phonologically or syntactically, then the sentences in 20 should not be possible.

Anderson (1996) uses ranked constraints to derive the positions of 2P clitics. The output candidates are generated according to Anderson's a-morphous morphology. The most basic constraints at work with all 2P clitics are $EDGE_{MOST}(cl_i, L)$ and $NON-INITIAL(cl_i)$. These express a preference for candidates with clitics at the far left edge of their clause without being in first position, assuming $EDGE_{MOST}(cl_i, L)$ outranks $NON-INITIAL(cl_i)$. To account for the relative position of the clitics with respect to words and clauses another constraints, $INTEGRITY(XP)$ must be considered. This constraint expresses the preference that nothing from outside the XP can be inserted. For clitics that must follow a phrase, $INTEGRITY(XP)$ would dominate $EDGE_{MOST}(cl_i, L)$. Clitics that occur after the first word would rank $EDGE_{MOST}(cl_i, L)$ more highly than $INTEGRITY(XP)$. In all cases $NON-INITIAL(cl_i)$ is undominated due to the requirement that clitics have a host.

In response to the issue proposed with the data in 20, Anderson suggests that the relative ranking of $EDGE_{MOST}(cli, L)$ and $INTEGRITY(XP)$ in some languages (including this SC dialect) is optional. Either constraint can dominate the other.

This analysis is interesting due to its application of phonological tools to syntactic processes. That this application has not been widely extended to other areas within syntax brings doubt as to its universality. While the constraints were derived from similar processes in word formation (specifically addressing infixes with the constraint $INTEGRITY(WORD)$), their response to the problem of clitics that occur in environments with both phrasal fronting and PI is less than fully satisfactory. Anderson leans heavily on optionality in OT to explain what is essentially a syntactic phenomenon. Generativist syntactic frameworks are less amenable to optionality than is OT.

3.1.2 Pashto Second Position Clitics Meet Prosodic Structure

Roberts (1997) proposes a much stronger phonological analysis of 2P clitics. He does this using Pashto data, specifically the interaction between stress patterns and clitics, and comparisons between Pashto and SC clitic structures. Applying an Optimality Theoretic framework to phonological issues makes for a much stronger argument.

3.1.2.1 The stress of language

Pashto clitics are strongly second position. The sentences in 21, taken from Tegey (1977), clearly bear this out. The modal *de* 'should' consistently occurs second position.

(21) a. tor de nən xar nə rawali

Tor should today donkey not bring

'Tor should not bring the donkey today.'

b. nən de xar nə rawali
 today should donkey not bring
 'He should not bring the donkey today.'

c. xar de nə rawali
 donkey should not bring
 'He should not bring the donkey.' (Roberts 1997:371)

This pattern continues until only the verb and clitic remain, in V-O order.

There is some variation, however. In the above examples, the clitic seems to attach to the first word in the clause. The following sentences in 22, however, show clitics following first constituent, rather than the first word, as seen in some of the SC examples above.

(22) a. [_{NP} aya jel kaləna danga aw khaysta peyla] me nən bya wəliða
 that 20 year tall and pretty girl I today again saw
 'I saw that twenty-year-old tall and pretty girl again today.'

b. [_{NP} xufal aw patang] ba ye dər ta raw[ri
 Khosal and Patang will it you to bring
 'Khosal and Patang will bring it to you.' (Roberts 1997:372)

An appeal to syntactic constituents, however, is empirically insufficient. Pashto clitics are also sensitive to stress. In 23 an affix precedes the verb. The main word stress can optionally fall on the penultimate verb root syllable or the prefix. Note the change in clitic placement.

(23) a. a-xistələ me
PREFIX buy I
'I was buying them.'

b. á me xistələ
PREFIX I buy
'I was buying them.' (Roberts 1997:374)

While the clitics can intervene between a prefix and root, they cannot come between syllables of a root, in this case a verb composed of a single morpheme in 24.

(24) a. pərebdə me
beat I
'I was beating him.'

b. pərebdə me
beat I
'I was beating him.' (Roberts 1997:374)

It is apparent that Pashto 2P clitics are sensitive to phonological, specifically prosodic, elements. They are also somewhat sensitive to syntactic structures, as briefly outlined below.

3.1.2.2 Halpern, again

Again referring to Halpern, Roberts focuses on SC subordinate clauses, in which clitics attach to the complementizer introducing the clause. Pashto clitics may not do that. Recalling 19 above, SC clitics can attach either to the first phonological word or the first constituent of the clause, depending on whether the sentence invokes a syntactic or phonological (with PI) ordering of the clitics. Pashto, however, does not have this option. Since Pashto clitics may attach neither to complementizers nor to the

first prosodic word, but rather to the first constituent, pure syntax and PI are unable to account for the pattern.

Roberts suggests that rather than appealing to syntactic operations for clitic placement, a process he contends occurs primarily for phonological purposes, the tools of phonology should be used.

3.1.2.3 Prosodic structure

Having demonstrated both prosodic and syntactic sensitivity, Roberts suggests that Pashto 2P clitic placement is entirely phonological. The syntactic structure is mapped to a prosodic structure as in 25.

(25) a. [_{NP} xofal aw patang] ba ye dər ta rəwʁi

Khosal and Patang will it you to bring

‘Khosal and Patang will bring it to you.’

b. [_{IP} [_{NP} xofal aw patang] [_{VP} [_{PP} dər ta] rəwʁi]]

Khosal and Patang you to bring

c. xofal₁ aw patang₂ dər ta₃ rəwʁi₄

Khosal and Patang you to bring (Roberts 1997:384)⁹

The prosodic structure then provides the skeleton on which clitics can be attached.

Three constraints determine the attachment location.

(26) a. ALIGN (cl,L,PPh,R) aligns the left edge of the clitic to the right edge of a phonological phrase.

b. EDGEST (cl,L) ensures the clitics placement to the far left of the clause.

⁹ This example follows Roberts' formalism. Also in (33) below.

- c. NON-INITIAL (cl), an undominated constraint, precludes a clitic from occupying first position (Roberts 1997:385-386).

In the case of 25, the constituent *xofal aw patang* ‘Khosal and Patang’ is the first prosodic phrase, allowing the clitic to follow. Note that *xofal* ‘Khosal and *patang* ‘Patang’ are considered to be co-occurring for the purposes of prosodic mapping, since they are coordinated DPs. That is, the two are treated as one prosodic unit, ignoring “internal structure of conjoined phrases” (Roberts 1997:384). Otherwise, the clitic could follow *xofal*, which would be ungrammatical.

One weakness of this proposal relates to 23 above, repeated here as 27.

(27) a. a-xistələ me

buy I

‘I was buying them.’

b. á me xistələ

PREFIX I buy

‘I was buying them.’ (Roberts 1997:374)

To account for the grammaticality of 26b, Roberts stipulates that Pashto prefixes can map directly to full prosodic phrases when they bear stress.

3.2 Better Clitic Placement through Syntax (With a Little Phonology)

Because of the above-mentioned weakness inherent in the phonological approach (Roberts 1997), Roberts (2000) re-evaluates his proposal. Rather than advocating an almost totally phonological analysis, he moves to the other extreme, advocating an almost exclusively syntactic approach. The change brings with it two innovations not directly addressed by other linguists. First, he considers clitics not as arguments but

agreement morphemes that do not move, depending on Pashto scrambling for word order effects. The second innovation is discussion of the base position of clitics.

3.2.1 Clitics or Agreement Morphemes

The evidence for Pashto 2P clitics as agreement morphemes rather than a phonologically emaciated argument is strong. I present two components of Roberts' rationale which are salient to our current discussion: distribution and coordination of clitics.

3.2.1.1 Distribution of clitics

Pashto verbs bear agreement morphemes that agree with subject in the present tense as in 28a and object in the past tense as in 28b. These agreement markers occur whether the corresponding DP arguments are full NPs or pronouns as in 28c.

- (28) a. ahmad ghwa lwesh-i
Ahmad(MASC) cow(FEM.SG) milk-3PRES
'Ahmad is milking the cow.'
- b. ahmad ghwa lwash-el-a
Ahmad(MASC) cow(FEM.SG) milk-PAST-FEM3SG
'Ahmad was milking the cow.'
- c. (ze) hara wrez pe baagh kee gerz-em
(PRN1SG) every day at garden in walk-1SG
'I walk in the garden every day.' (Roberts 2000:96)

The overt pronoun *ze* 'I' in 27c is optional because the verbal agreement morpheme licenses *pro*-drop. When the pronoun is present, however, it is located in the same syntactic position as a full NP. Specifically the pronoun is not found in second position, rather it is found where a clitic could never occur, initially. According to Roberts

(2000:98), if clitics were pronouns (arguments), one would expect them to be positioned like pronouns, which they are not. Pronouns also occur with agreement morphology. One would likewise expect clitics-as-pronouns to appear with verbal agreement morphemes, but they do not, as seen below in 29.

Clitics, like *mee* ‘1SG’ and *yee* ‘3SG’ do not co-occur with verbal agreement morphemes indicating the same features.

- (29) a. gad-eed-em (*mee)
 dance-INTR-1SG(PAST.IMPF) 1SG
 ‘I was dancing’
- b. khkol-ew-l mee (*yee)
 kiss-TRANS-3SG(PRES.IMPF) 1SG 3SG
 ‘he is kissing me’
- c. ahmad (*mee) khkol-ew-em
 Ahmad 1SG kiss-TRANS-1SG(PAST.IMPF)
 ‘Ahmad was kissing me’
- d. ahmad (*yee) gad-ig-i
 ahmad 3SG dance-INTR-3SG(PRES.IMPF)
 ‘Ahmad is dancing’ (Roberts 2000:97)

We see from the sentences in 29 that where verbal agreement morphology exists, the corresponding pronominal clitic is ungrammatical, whether subject in present tense or object in past tense. They are in complementary distribution. Agreement suffixes and pronominal clitics also serve the same function. Both mark the argument, either internal or external, for person and number. Roberts sums up the argument this way, “This

complementary distribution between verbal agreement suffixes and 2P pronominal clitics is evidence that both kinds of morphology serve to identify *pro*” (2000:98). To put it another way, the complementary distribution and parallel function of pronominal clitics and verbal agreement markers are evidence that the pronominal clitics are agreement morphemes.

3.2.1.2 Coordination of clitics

Considering additional consequences of the claim that pronominal clitics are pronouns leads to coordination of clitics. Full pronouns can coordinate as in 30, while clitics cannot coordinate as in 31, either with themselves or with DPs.

(30) parun taa aw maa kitab olwelewu
 yesterday PRN2SG and PRN1SG book read
 ‘you and I read a book yesterday’ (Roberts 2000:103)

(31) a. *parun dee aw mee kitab olwelewu
 yesterday 2SG and 1SG book read
 ‘you and I read a book yesterday’

b. *parun Aman aw mee kitab olwelewu
 yesterday Aman and 1SG book read
 ‘Aman and I read a book yesterday’ (Roberts 2000:104-5)

Clitics considered as full arguments should be able to coordinate, just as other arguments do. Agreement markers are not expected to coordinate. The sentences above seem to demonstrate Pashto clitics having more in common with agreement markers than full argument pronouns.

3.2.2 Base Position of Clitics

Having derived the Pashto clause structure in 32 and assuming agreement marker nature of clitics detailed above, Roberts places clitics as the head of a projection below TP, but above AspP. This is based on empirical evidence like the sentences below, as in 33.

(32) [TP ... [AspP ... [NegP ... [VP EXT ARGUMENT [VP INT ARGUMENTS ...]]]]]

(33) tor mee we lid-e

Tor 1SG PERF see-MASC3SG

[CP magari [TP spin mee we ne lid-e]]

but Spin 1SG PERF NEG see-MASC3SG

'I saw Tor, but I didn't see Spin' (Roberts 2000:81; from Tegey 1977:127)

Assuming the perfective morpheme *we* 'PERF' occupies the head of an aspectual phrase (AspP) below TP, the clitic's presence between the head of AspP and *Tor* in spec,TP indicates that its projection must also be between TP and AspP.

Pashto 2P clitics are heads of an agreement projection which Sportiche (1996) calls CliticP. Roberts adopts the more general AgrP, Agreement Phrase, believing that clitics do not actually form a class or group. Different clitics, even within Pashto, play different roles, and in this case, they are serving as agreement morphemes.

Assuming the AgrP is found below TP and above AspP, we can derive for Pashto the clause structure in 34. What follows from this is a natural second position structure for clitics.

(34) [TP ... [AgrP ... [AspP ... [NegP ... [VP EXT ARGUMENT [VP INT ARGUMENTS ...]]]]]

There is no overt subject in 33, leaving spec,TP empty. In order to satisfy EPP, the object moves to spec,TP. The clitic is now just below a DP that can serve as its

phonological host. While AgrP is not a syntactic spot designed for clitics, the role these clitics play put them in the perfect location to nearly always be second position. This is derived through purely syntactic means.

One note before looking at the small role of phonology in this structure: On the surface the clitic is interpreted as the external argument. That is not the case, however, since its base position is the head of AgrP. It has not moved up from spec, ν P. In reality the external argument is the phonologically null *pro*, which is base generated in spec, ν P, and moves to spec, AgrP to be interpreted. The clitic Agrees with *pro*, making it appear to be the overt subject.

3.2.3 Just a Little Phonology

The only phonology Roberts allows is quite familiar by now: Prosodic Inversion, by Halpern. Roberts makes a strong case for a syntactic account of 2P clitics/agreement markers, but realizes that in rare cases syntax might output a derivation that converges at LF, but not PF. Specifically, Pasto's allowance of *pro*-drop makes this a distinct possibility. A simple sentence with only subject pronoun and verb could create a situation in which, after *pro*-drop, only clitic and verb remain, in that order. The clitic would have no phonological host, therefore motivating the call for PI (Roberts 2000:78). Roberts is explicit that this and other phonological constraints that apply at PF only do so as a last resort, although he does not specify the circumstances under which this might be necessary. After PI, the derivation that would converge at LF would also converge at PF.

In this chapter we have seen that although Anderson and Roberts make a compelling case for a phonological analysis of this phenomenon, the syntactic approach is superior with respect to Pashto, a language closely related to Wakhi. While both

Serbo-Croatian and Pashto have strong 2P tendencies, the constraints advocated for a phonological analysis ultimately answer a syntactic question by ignoring what are syntactic processes in Pashto. As will be seen in Chapter 4, Wakhi clitic placement is also syntactic in nature. Considering the above discussions, and applying their ideas to Wakhi data, this project will assume a syntactic approach the best option for Wakhi clitics. We will see in Chapter 4 why that choice is made for this language.

CHAPTER 4 WAKHI CLITICS

There is much in the literature about clitics and we have looked closely at some analyses of 2P clitics in other languages. In this chapter we will examine pronominal clitics in Wakhi. The first task will be to make clear what these clitics are *not*. Once completed, we will take a detailed look at what Wakhi clitics are, giving attention to a comparison with Pashto, presented above. Finally, an attempt will be made to establish where the clitics are generated.

4.1 What Wakhi Clitics Are Not

Wakhi pronominal clitics are not 2P clitics. While there are some Pamiri languages which do have Wackernagel clitics, including Shugni, a dominant language near the Wakhan (Barie 2009), the position of Wakhi clitics in relation to other clausal constituents is less restrictive.

- (35) a. yez=im shapik raftch baf xetu
 yesterday=1SG bread very fine make.PAST.PERF
- b. yezi shapik=om raftch baf xetu
 yesterday bread=1SG very fine make.PAST.PERF
- c. yezi shapik raftch baf=om xetu
 yesterday bread very fine=1SG make.PAST.PERF
- ‘Yesterday I made delicious bread.’

The sentences in 35 show the various hosts which can take the pronominal clitic. In 34a the temporal adverb *yezi* ‘yesterday’ serves as host, while *shapik* ‘bread’ and the AP *raftch baf* ‘delicious’ serve that role in 34b and 34c respectively. Under a 2P analysis, the clitics’ attachment to *yezi* would not be a surprise, and a case could be

made for *shapik* as the host, discounting the temporal adverb. For *-om* to cliticize onto *raftch baf* makes a Wackernagel analysis untenable.

While most examples in this paper give the past tense verb in perfective form, the patterns of agreement clitic placement hold for the imperfective as well, in 36.

- (36) a. yez=im shapik raftch baf goxt
 yesterday=1SG bread very fine make.PAST.IMPF
- b. *yezi shapik=om raftch baf goxt
 yesterday bread=1SG very fine make.PAST.IMPF
- c. yezi shapik raftch baf=om goxt
 yesterday bread very fine=1SG make.PAST.IMPF
- ‘Yesterday I made delicious bread.’

Some linguists treat Wakhi clitics as 2P with idiosyncracies. For example, Bashir writes, “... the pronominal clitics may attach to any constituent in the sentence, but are most often found attached to the first constituent of the clause” (2009:835). Statements like this put Wakhi clitics in the discussion with 2P clitics, but take no firm stand.

Erschler, during a recent presentation, boldly proposed “almost Wackernagel clitics” (AWC), a class of clitics that often appear after the first word or constituent, but can also appear later in the sentence (Erschler 2010:3). By putting aside the intuition that Wakhi clitics are 2P, the discussion and analysis of this phenomenon can be that much freer.

4.2 What Wakhi Clitics Are (The Nature of Wakhi Clitics)

While it is true that Wakhi clitics are not 2P, there is much from the general discussion of 2P clitics that can help in determining their nature in this language.

4.2.1 What They Represent

As mentioned in Chapter 2, Wakhi clitics are only grammatical in past tense. While the present and past tense agreement paradigms exhibit some syncretism, they act differently. Present tense markers must suffix to the verb, but past tense clitics must *not* attach to the verb, although they can suffix to other elements in the clause.

- (37) *kutuək* *škɛnd-ɔm*
fruitstones break-1SG
'I break fruit-stones.' (Lorimer 1958a:no. 9)

- (38) *yez=iṽ* *yava* *yark* *kert*
yesterday=3PL 3PL.PRN work do.PAST.IMPF
'Yesterday they worked.'

Wakhi clitics, unlike Pashto clitics, only express features of the subject, never the object. In 39 the first person singular clitic *=im* represents the *pro*-dropped subject. In 40 the subject is *maja* '1SG.PRN', while the clitic *=iv* '3PL' can only refer to the object *ya kashve* 'the boys', making the sentence ungrammatical.

- (39) *yez=iṽ* *ya* *kashve* *tse* *vinetu*
yesterday=1SG the boys COMP see.PAST.PERF
'Yesterday I saw the boys.'

- (40) **yez=iṽ* *maja* *ya* *kashve* *tse* *vinetu*
yesterday=3PL 1SG.PRN the boys COMP see.PAST.PERF

We see, then, that Wakhi clitics represent subjects of past tense constructions.

4.2.2 Where Clitics Attach

At first glance, pronominal clitics seem to attach to nearly any phrasal constituent in the sentence. Upon closer inspection, though, a pattern emerges. There is a

syntactic basis for cliticization. In this section I will demonstrate the syntactic foundation for clitic location by showing that clitics may only attach to phrasal constituents, except in rare circumstances. This is contrary to Pashto, which allows clitics to intervene within constituents, and even within words, as in 21 and 23.

4.2.2.1 Allowed hosts

Among licit hosts for clitics are objects, both full NPs and pronouns.

- (41) a. kashv=em dietu
 boys=1SG hit.PAST.PERF
 'I hit the boys.'
- b. yav=em dietu
 3PL.PRN=1SG hit.PAST.PERF
 'I hit them.'

Clitics can also attach to adjectival elements as in 35, repeated here as 42 for convenience.

- (42) yezi shapik raftch baf=om xetu
 yesterday bread very fine=1SG make.PAST.PERF
 'Yesterday I made delicious bread.'¹⁰

Note, though, that in this case in 42, *shapik* could not take the clitic. Only *baf* could grammatically host the clitic, as in 43. There is some optionality in the relative order of noun and adjective phrase. There does not seem to be optionality, however, regarding

¹⁰ It is worth noting here that (42) and (43) provide evidence against a phonological analysis of these clitics. It is difficult to conceive of a well-motivated constraint that would preclude (43)(b), but allow the other two sentences. A syntactic view is much simpler.

the clitic's ability to intervene within the NP. Only the final word of the constituent can serve as its host.

- (43) a. *yezi* *raftch baf shapik=om xetu*
yesterday very fine bread=1SG make.PAST.PERF
'Yesterday I made delicious bread.'
- b. **yezi* *shapik=om raftch baf xetu*
yesterday bread=1SG very fine make.PAST.PERF

Another possible host is a temporal adverb such as *yezi* 'yesterday'. This clausal modifier is a phrase, AdvP, on its own, and therefore maintains the proposal that clitics can only suffix to constituents.

- (44) *yez=iy yark xak kuzgve shapik yitu*
yesterday=3PL work make NOMIN bread eat.PAST.PERF
'Yesterday the workers ate bread.'

For each of these positions in the clause, the clitic's presence does not change the meaning. This is not true of all dialects of Wakhi, though. Bashir notes that "different types and degree of emphasis are conveyed by their positioning and optional repetition" (Bashir 1986:16). The lack of semantic effects could be due to dialect differences. Also possible is diachronic change. The data in this study were collected in 2011, while Lorimer's work, published in 1958, is based on data collected at least ten and sometimes twenty years before publication. One of these, combined with the relative dearth of recent data, is likely the source of the differences concerning semantic effects. A larger body of data will clarify this issue.

A study of all the allowed positions reveals a consistent theme. The clitics may only attach to phrasal constituents, rather than individual words. This is consistent with the above data.

One comment is necessary before looking at elements which may not host clitics. In Chapter 2, sentence 17, we saw that clitics may not move out of their clauses. So while clitic attachment is phrasal, it is only for phrases within the clause.

4.2.2.2 Disallowed hosts

While there are a number of acceptable positions for clitics to use as hosts, there are also several illicit hosts, including subjects. Wakhi clitics cannot attach to any overt subject DP, either full NP or pronoun.

- (45) a. Alia ghar winetu
Aliya rock see.PAST.PERF
'Aliya saw the rock.'
- b. *Alia=d ghar winetu
Aliya=3SG rock see.PAST.PERF
'Aliya saw the rock.'

This prohibition also includes interrogative pronouns.

- (46) a. chiz pervetu
what fall.PAST.PERF
'What fell?'

b. *chiz=ov pervetu¹¹

what=3PL fall.PAST.PERF

Neither can clitics attach to articles, which follows from the general prohibition against clitics intervening within constituents.

(47) a. yez=iv Aliat Rehber_e yi parinda winetu

yesterday=3PL Aliya.and Rehber the bird see.PAST.PERF

'Yesterday Aliya and Rehber saw the bird.'

b. *yezi Aliat Rehber_e y=iv parinda winetu

yesterday Aliya.and Rehber the=3PL bird see.PAST.PERF

In the same vein, quantifiers cannot host clitics. As part of a DP, they are internal to their phrase.

(48) a. yezi chok shapik=om winetu

yesterday much bread=1SG see.PAST.PERF

'Yesterday I saw a lot of bread.'

b. *yezi chok=om shapik winetu

yesterday much=1SG bread see.PAST.PERF

Verbs cannot serve as hosts for clitics. Recall 44 above. While the clitic may attach to the temporal adverb, it may not generally attach to the verb, as below in 49.

(49) *yezi yark xak kuzgve shapik yit=uv

yesterday work make NOMIN bread eat.PAST.PERF=3PL

¹¹ While the clitic tested here, =*ov* '3PL' is plural, a singular clitic would not work here either. Wakhi can use 3PL to obtain a general meaning.

yez=*iv* maj dixt
yesterday=3PL 1SG.PRN hit

'Yesterday I was hit.' or 'Yesterday (something) hit me.'

The exception to this prohibition is when the verb is the only other phonologically realized element. The clitic must follow a phonological host. Below we will see that clitics are base generated higher than verbs. When they are the only phonologically realized elements, PI must move the clitic in PF so that it has a host to its left. In this case that host is an element that would otherwise be disallowed, the verb.

- (50) a. maj yit
 1SG.PRN eat.PAST.PERF
 'I ate.'
- b. Yit=om
 eat.PAST.PERF=1SG
 'I ate.'

We saw a similar construction above in 17. Example 17h is repeated here as 51.

Without *yezi* 'yesterday' this sentence would be grammatical, because PI would attach the clitic to *keshen* 'hear'. The presence of *yezi* at the beginning of 51b, a suitable host for the clitic, makes the placement of the clitic clause-finally illicit.

- (51) a. keshen=om [ki shapik=it yikt]
 hear=1SG COMP bread=2SG eat.PAST.PERF
 'I hear that you ate bread.'
- b. *yezi keshen=om [ki shapik=it yikt]
 yesterday hear=1SG COMP bread=2SG eat.PAST.PERF

While clitics can attach to clausal adverbs like *yezi*, they cannot attach to intensifier adverbs, like those that modify adjectives. In 43, the clitic could attach to both *shapik* 'bread' and *baf* 'fine', depending on the configuration of the NP (whether

head-initial or head-final). Here, though, it may not attach to the phrase-internal *raftch* ‘very’.

- (52) *yezi shapik raftch=om baf xetu
yesterday bread very=1SG fine make.PAST.PERF

Nor can clitics attach to verbal modifiers.

- (53) a. yezi shapik=om raftch jald xetu
yesterday bread=1SG very quickly make.PAST.PERF
‘Yesterday I made bread very quickly.’
b. *yezi shapik raftch jald=om xetu
yesterday bread very quickly=1SG make.PAST.PERF

This is consistent with other clitic placements under the assumption that this AdvP adjoins as part of the VP. Since AdvP adjoins to the VP, it is phrase-internal to that VP. It cannot, therefore, be host to the clitic.

The same pattern emerges whether studying allowed or disallowed clitic host positions. Clitics may only attach to phrase-final words (except the VP), and may not attach to phrase-internal elements.

4.2.2.3 Disallowed environments

In addition to restrictions on hosts, clitics are also restricted by environment. For example, co-occurrence of overt subjects and clitics is restricted. Clitics can co-occur in the same clause with an explicit NP subject as in 47 above. They cannot, however, do so with a pronominal subject, as in 54.

- (54) a. yezi maja shapik raftch jald xetu
yesterday 1SG.PRN bread very quickly make.PAST.PERF

- b. yezi shapik=om raftch jald xetu
 yesterday bread=1SG very quickly make.PAST.PERF
- c. yez=im shapik raftch jald xetu
 yesterday=1SG bread very quickly make.PAST.PERF
 ‘Yesterday I made bread quickly.’
- d. *yezi maja shapik=om raftch jald xetu
- e. *yez=im shapik raftch jald xetu

The pronoun is acceptable without a clitic as in 53a, and clitics are acceptable without the pronoun as in 53b-c. To combine them in the same clause is illicit in 53d-e. Clitics and pronouns are in complementary distribution. On the surface this might seem to be evidence that Wakhi clitics are pronouns, but we will see in the next section that this is not the case, based on additional evidence which indicates that these clitics are agreement morphemes.

Clitics are precluded from clauses with inanimate subjects.

- (55) a. yezi parindasht tsa-mezen raben pervetu
 yesterday birds from-table down fall.PAST.PERF
 ‘Yesterday the birds fell from the table.’
- b. yezi parindasht=ov tsa-mezen raben pervetu
 yesterday birds=3PL from-table down fall.PAST.PERF
 ‘Yesterday the birds fell from the table.’
- c. yezi kitobisht tsa-mezen raben pervetu
 yesterday books from-table down fall.PAST.PERF
 ‘Yesterday the books fell from the table.’

- d. yezi kitobisht=ov tsa-mezen raben pervetu
 yesterday books=3PL from-table down fall.PAST.PERF
 # 'Yesterday the books fell from the table.'
 'Yesterday the books.ANTHRO fell from the table.'

The unaccusative subject *parindasht* 'birds' can optionally host the clitic. The normally inanimate *kitobisht* 'books' can also take the clitic, but the meaning changes, as noted with the gloss 'ANTHRO', for anthropomorphized. The subject ceases to be inanimate, becoming intentional or volitional, in a poetic sense. While this construction is possible, it is odd to a native speaker.

There are no agreement morphemes for inanimate subjects in the present tense either.

- (56) a. kitobish ta-mezen raben pervte
 books from-table down fall.PRES
 'The books fall from the table.'
 b. *kitobish ta-mezen raben pervt-en
 books from-table down fall.PRES-3PL

The motivation for excluding inanimate subjects from hosting clitics is not immediately apparent. This is an area for further research.

4.3 The True Nature of Wakhi Clitics

Two issues are now left concerning Wakhi pronominal clitics. In this section we will determine whether they are arguments (phonologically deficient pronouns) or agreement morphemes as suggested by Roberts (2000) for Pashto. In the final section of this chapter we will then turn to their origin, that is, where they are base generated.

4.3.1 Arguments

In this section I will present data which might indicate that Wakhi clitics are arguments. There are two main bits of evidence to support the notion that clitics are arguments. First, and strongest, as mentioned earlier, they are in complementary distribution with full subject pronouns. While clitics may be present in clauses with NP subjects such as *Aliat Rehber* ‘Aliya and Rehber’ in 47 repeated here as 57, they are excluded from clauses with overt pronominal subjects like those in 54.

- (57) a. *yez=iv* Aliat Rehber *yi* parinda winetu
 yesterday=3PL Aliya.and Rehber the bird see.PAST.PERF
 ‘Yesterday Aliya and Rehber saw the bird.’
- b. **yezi* Aliat Rehber *y=iv* parinda winetu
 yesterday Aliya.and Rehber the=3PL bird see.PAST.PERF

The second, albeit weaker, piece of evidence is that NPs and full pronouns appear in the same position in their clauses. If a full NP is inserted into subject position, a subject pronoun is unable to be inserted in the position. In this case, the pronoun still appears, but in phonologically deficient form, as a clitic.

4.3.2 Agreement Morphemes

In this section I will demonstrate that Wakhi clitics are not arguments, but are in fact agreement morphemes. Included will be concepts such as complementary distribution, coordination, phonological form, and a discussion of clitic doubling.

4.3.2.1 Complementary distribution

Just as clitics are in complementary distribution with full pronouns, so too are they in complementary distribution with verbal agreement markers. In this case the division is between present tense, which generally requires verbal agreement markers, and past

tense, which precludes them. Roberts (2000:98) notes that Pashto clitics, if they were arguments, “would be expected to co-occur with verbal agreement morphology”.

Neither Pashto nor Wakhi clitics exhibit this behavior. Because clitics are in complementary distribution with both pronouns and agreement morphology, additional evidence is necessary.

4.3.2.2 Coordination

Among this additional evidence is the fact that pronouns can be part of coordinated constructions, while agreement clitics and agreement morphology cannot. The coordinated structure in 58a is acceptable. The attempt to coordinate clitics, however, as in 58b and 58c is not acceptable. While 58d is grammatical, it does not communicate the same information as 58a. The subject of 58d could be ‘you’ and ‘me’, but could also be understood to be ‘me’ and ‘someone not you’ or even ‘me’ and ‘you’ and ‘someone not you’.

(58) a. to-et maja kitob winetu

2SG.PRN-and 1SG.PRN book see.PAST.PERF

‘You and I saw the book.’

b. *kitob=ov=om winetu

book=2SG=1SG see.PAST.PERF

c. *kitob=ov-t=om winetu

book=2SG-and=1SG see.PAST.PERF

d. kitob=on winetu

book=1PL see.PAST.PERF

‘We saw the book.’

4.3.2.3 Phonological form

Like agreement morphemes, clitics are phonologically weak. They cannot stand on their own as words. Affixes cannot attach to clitics to form words and they must attach to roots or stems.

4.3.2.4 Clitic doubling

Wakhi clitics appear on the surface to act similarly to the phenomenon of clitic doubling (CD). CD “is a construction in which a clitic co-occurs with a full DP in argument position forming a discontinuous constituent with it” (Anagnostopoulou 2007:520). This description of CD seems to refer to sentences such as 59. Here we see the full DP *Aliat Rehber* ‘Aliya and Rehber’ along with the clitic =*iv* ‘3PL’.

(59) yez Aliat Rehber yi parinda=av winetu
yesterday Aliya.and Rehber the bird=3PL see.PAST.PERF
‘Yesterday Aliya and Rehber saw the bird.’

Clitics like this one also look like agreement morphemes that happen to attach to some constituent other than the verb, where agreement markers are often found.

Within the literature on clitic doubling (for example Preminger 2009; Anagnostopoulou 2007) there are three common notions regarding the nature of doubled clitics. The first is that clitic doubling occurs only for non-subject DPs. This is obviously not the case in Wakhi. Only subjects are represented through agreement clitics. There is no agreement marking for other arguments. The second is semantic effects due to the presence and placement of clitics in a clause. Such effects are expected in clitic doubling constructions. Wakhi agreement clitics create no semantic effects, making a discussion of clitic doubling difficult for Wakhi. Third is the notion that clitics absorb case of the related NP, requiring the NP to appear in some other, often

oblique, case. This requirement often manifests as a preposition. This does not occur in Wakhi, where subject NPs that co-occur with agreement clitics are identical to the NPs in clauses without the clitics.

Out of the research of clitic doubling, however, comes an innovation from Sportiche (1996) and Koopman (1996), which provides a mechanism for explaining the optionality of clitics just mentioned. They propose application of the doubly filled voice filter and generalized doubly filled COMP filter, respectively. These filters both seek to shed light on the discussion between whether clitics are base-generated (agreement) or subject to movement (arguments). They argue that clitics are base-generated, with the NP arguments subject to movement when necessary. We will examine the COMP filter in more detail below.

The evidence indicates that Wakhi clitics are not arguments, but rather non-verbal agreement morphemes. In the final section of this chapter I will offer a proposal of where these agreement clitics are base generated and the mechanism that accounts for their various surface positions.

4.4 A Home for Wakhi Clitics

The determination that clitics are not arguments, but rather agreements, eliminates much of the clause structure as a possibility for where they are generated. Borrowing from Roberts (2000), we will assume that these clitics, like their Pashto counterparts, are heads. As such, they almost certainly have to be generated above *vP*. A look at the data shows us how far above *vP* to look. While sentences like 60 might suggest that they are generated low in the sentence (just above the verb), movement could easily account for that construction as we will see below.

(60) *yezi* *shapik=ov* *raftch jald* *xetu*
 yesterday bread=3PL very quickly make.PAST.PERF
 ‘Yesterday they made bread quickly.’

We have established the clitics’ identity as agreement markers. It seems reasonable, then, to posit that clitics are base generated in an Agreement Phrase (AgrP) above TP, à la Pollock (1989). The adverb *yezi* could then adjoin within that projection (or any place above it, as will be apparent in a moment), and serve as the clitic host if necessary.

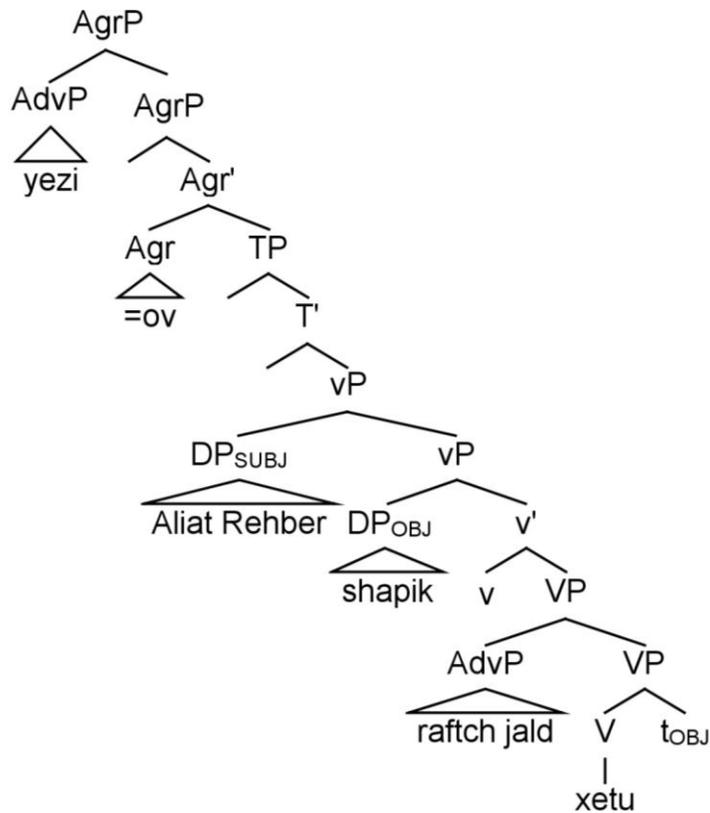
Some possible evidence for base generation high in the tree is the ability of *yezi* to host the clitic above the subject (61 and its syntactic tree in 62 below). In this example, the object undergoes object shift and raises to spec,vP, thus producing the correct surface order for the AdvP and the verb. The subject, base generated in another specifier of vP, deletes a weak uninterpretable feature (that is, one which does not require movement) on Agr through AGREE, by virtue of the c-command relationship between the two. Thus the clitic =*ov* ‘3PL’ is licensed. *Yezi* adjoins above Agr. The derivation converges.

Unlike Pashto syntax (Roberts 2000:84,88), Wakhi does not have an EPP feature to attract the subject to spec,TP. The scrambling that is apparent in Pashto occurs because of a strong feature on T. This movement allows an analysis of Pashto that independently derives the 2P structure. Because the clitic projection is below TP, the subject raising to spec,TP places it above the clitic. The clitic is thus located in the second position of the clause through standard syntactic operations rather than a separate clitic movement operation.

The lack of an EPP feature in Wakhi partly explains the difference between Wakhi and Pashto clitic positions. In Wakhi, the movement (or not) of arguments above the clitic in its base-generated site is more complicated. As seen in the following examples, the position of the clitic depends on movement operations which can render a 2P clitic in the surface structure, but can also find the clitic following the third element in the clause.

- (61) yez=iy Aliat Rehbere shapik
 yesterday=3PL Aliya.and Rehber bread
 raftch jald xetu
 very quickly make.PAST.PERF
 'Yesterday Aliya and Rehber made bread quickly.'

(62)



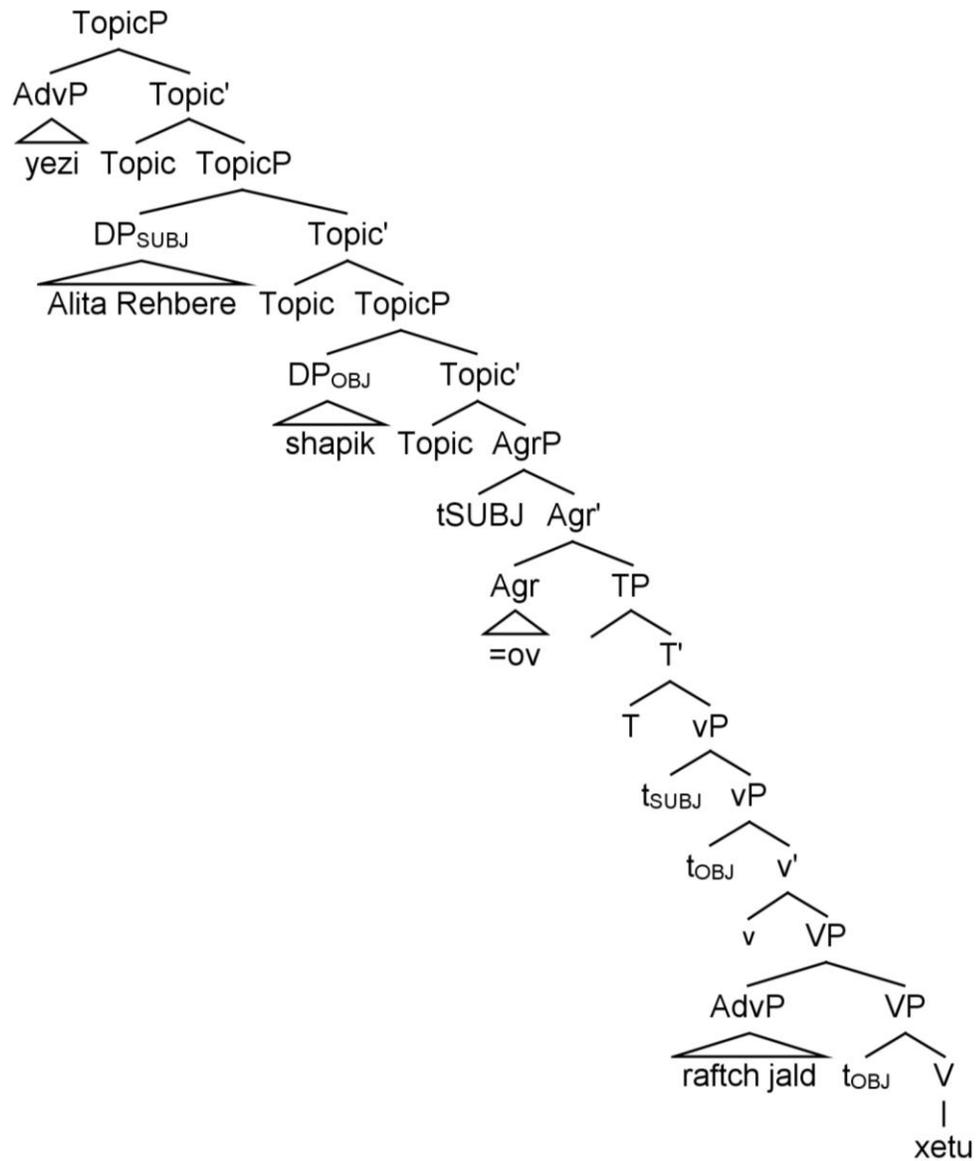
Working with the clitic base generated high in the tree, we can evaluate that claim by examining other structures and at the same time provide insight into the larger picture of “how subjects, subject pronouns, clitics, and agreement work in the language” (Brent Henderson, p.c.).

Consider 63 and 64, for example. As before, the object shifts to vP. Unlike the previous sentence, however, the subject moves to spec,AgrP to check a strong uninterpretable feature. The object moves again, to spec,TopicP. To avoid violation of the generalized doubly filled COMP filter (DFCF), discussed in greater detail below, the subject moves out into spec,TopicP. *Yezi* adjoins above the subject and the derivation converges. The object is in position to serve as clitic host.

(63) *yezi* *Aliat* *Rehber shapik=ov* *raftch jald* *xetu*.
 yesterday *Alia.andRehber* *bread=3PL* *very* *quickly* *make.PAST.PERF*
 ‘Yesterday Aliya and Rehber made bread quickly.’

Koopman’s (1996) DFCF is derived from the Linear Correspondence Axiom (LCA) by Kayne (1995). Similar to the doubly filled Voice filter by Sportiche (1996), the DFCF allows a language to have an overt head and silent specifier in a given projection, or vice versa. Both of them cannot be overt. Based on the premise that there must be asymmetric c-command to have linear order, Koopman derives the filter by allowing segments (X') to participate in c-command. The subject in sentence 63, having moved to spec,AgrP (t_{SUBJ} in 64), is not in asymmetric c-command relationship with Agr', removing the possibility of determining linear order. In order to avoid crashing, one of the elements in the derivation must be covert (silent) or one of them must move, as happens here, when the subject moves to spec,TopicP.

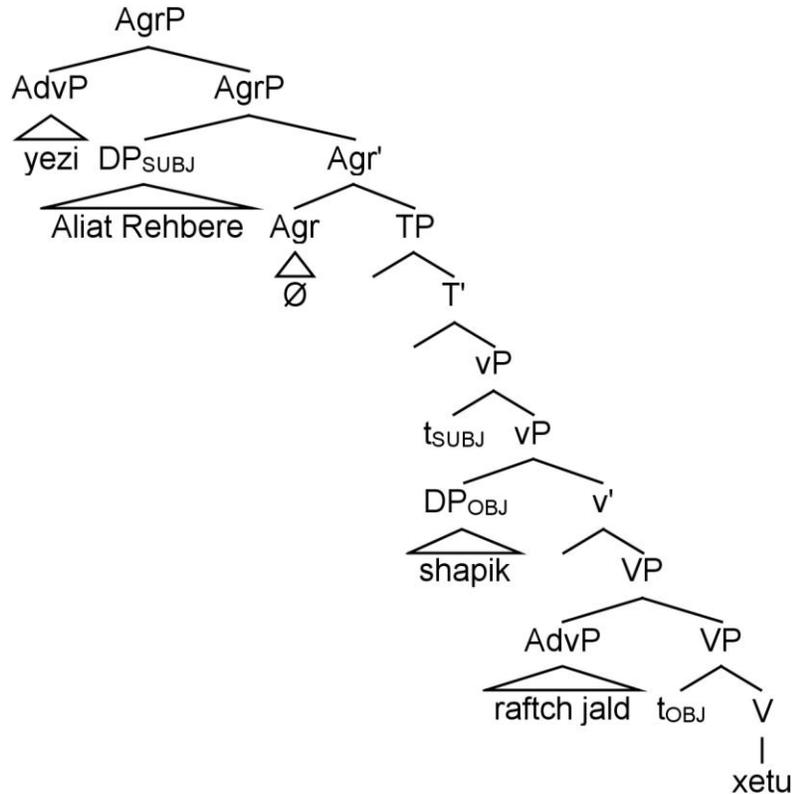
(64)



The DFCF accounts for many of the structures common to Wakhi clitics. The following sentence, 65, has no clitic. This is easily explained by the subject raising to spec,AgrP to discharge a strong uninterpretable feature. There is no Topic feature to motivate another movement, leaving two phonologically overt elements in the specifier and head position, as in 66. The DFCF violation must be dealt with for the derivation to converge, so the head is phonologically covert, leaving a sentence with no clitic.

(65) yezi Aliat Rehber shapik raftch jald xetu
 yesterday Aliya.and Rehber bread very quickly make.PAST.PERF
 ‘Yesterday Aliya and Rehber made bread quickly.’

(66)



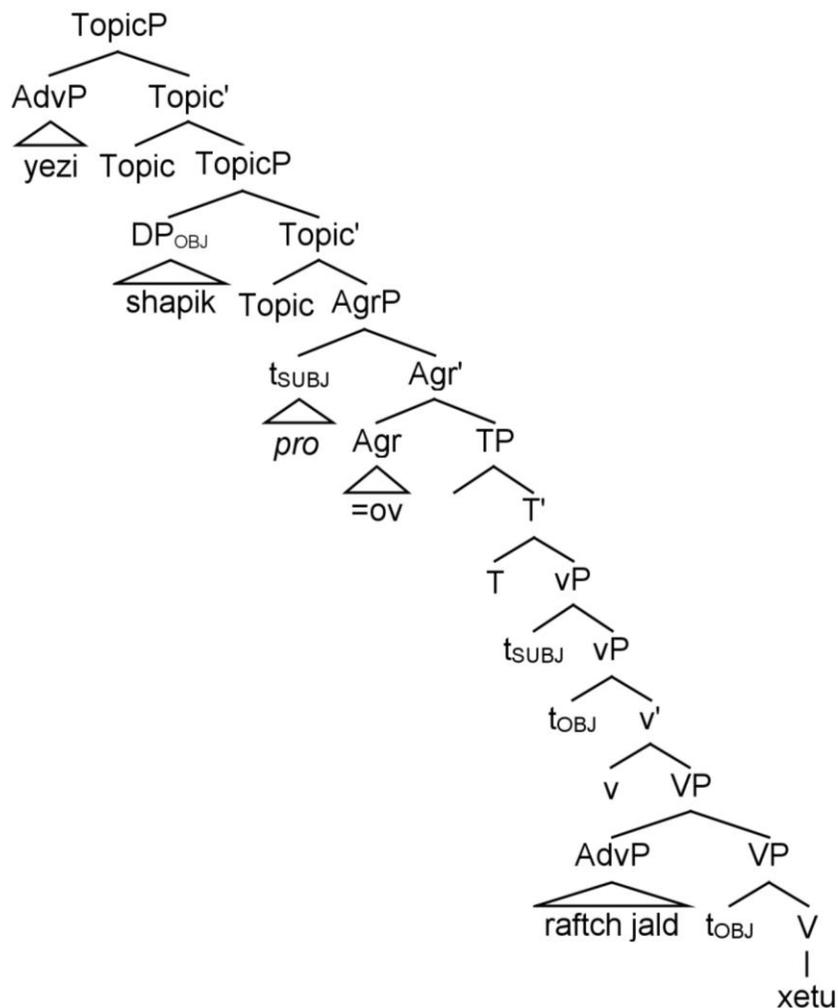
Pashto clitics, however, occur whether the subject is overt or not. Both NPs and pronouns can co-occur with agreement clitics, as in 28. Because subjects move to spec,TP in Pashto, above the agreement projection which is the clitic’s base-generated location, there will not be DFCF violations, allowing both overt subject and clitic.

Sentences without any overt subject, like 67, are also easily understood in light of DFCF. Because of the agreement system, Wakhi is a *pro*-drop language. In this case, *pro* moves to spec,AgrP to delete a strong uninterpretable feature, but because it is phonologically null, its co-occurrence with the clitic in the projection does not violate

DFCF, as in 68. The object moves to spec,TopicP, allowing it to host the clitic. *Yezi* adjoins above the object and the derivation converges.

- (67) *yezi shapik=ov raftch jald xetu*
 yesterday bread=3PL very quickly make.PAST.PERF
 'Yesterday they made bread quickly.'

(68)

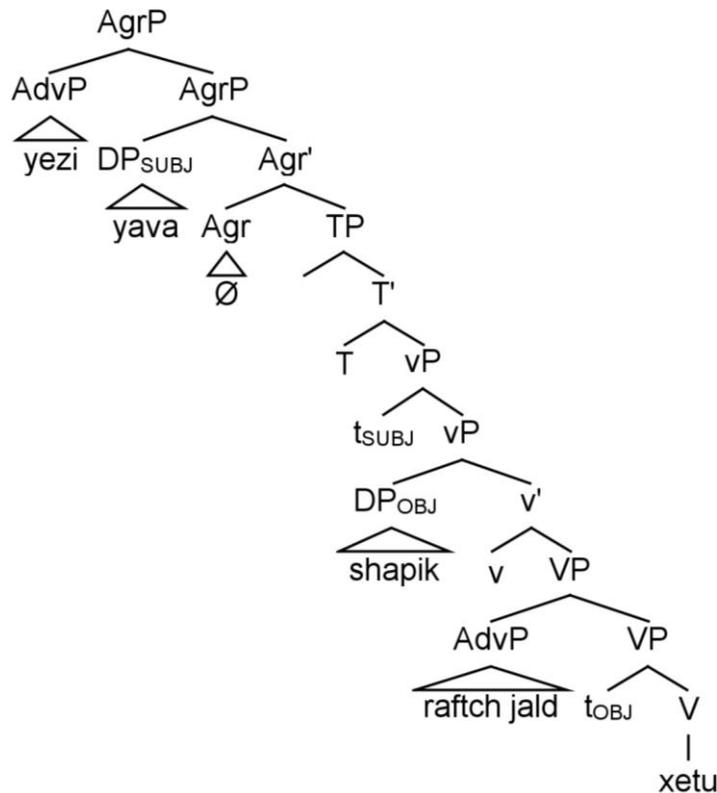


Overt pronouns are in complementary distribution with agreement clitics. While on the surface this might lead one to claim the clitics are pronouns, DFCF provides an analysis that accounts for an absent clitic. In 69 the subject pronoun's presence

precludes the appearance of an agreement clitic. The pronoun moves to spec,AgrP to delete a strong uninterpretable feature as in 70. Wakhi subject pronouns do not move out the projection to avoid a DFCF violation. The head must be silent when a pronoun is present, therefore deriving the complementary distribution of overt subject pronouns and agreement clitics.

- (69) yezi yava shapik raftch jald xetu
 yesterday 3PL.PRN bread very quickly make.PAST.PERF
 ‘Yesterday they made bread quickly.’

(70)



These sentences and their syntactic trees present a clear explanation for the varied agreement structures in Wakhi. An analysis following DFCF accounts for the data.

Only one issue is left unsatisfied at this point. What to make of a sentence like 71 which has only two phonologically realized components: verb and clitic. Wakhi is strongly verb-final. But clitics must have a host to their left. There is no motivation for V to raise above Asp, leaving no satisfactory syntactic solution.

(71) yit=om

eat.PAST.PERF=1PL

'We ate.'

Since syntax cannot account for the grammaticality of 71, the only recourse is to appeal to phonology. Like many other treatments of clitics, Prosodic Inversion (Halpern 1992) will come to the rescue. This 'last resort' operation will move the clause-initial clitic right-ward until it finds a suitable host, in this case the verb itself.

While Wakhi agreement clitics are not second position, the understanding of their nature, base generated position and position relative to other constituents, benefits from the study of true 2P clitics in other languages. Much more needs to be done, however, to fully understand this phenomenon. Future research will give greater enlightenment.

CHAPTER 5 FUTURE RESEARCH AND CONCLUSION

Wakhi clitics are complex. To understand them is to understand many aspects of the grammar beyond clitics. Their study is enriched by the study of other similar structures within languages genetically and geographically near (Shugni and Pashto, respectively), and those more removed (ancient Greek and Serbo-Croatian, to name two). Wakhi also opens the possibility that second position clitics are less frequently found than first thought, leading to a more improved understanding of this phenomenon in which syntactically free elements are not free phonologically and must rely on a host for expression.

While the present study addresses some theoretical questions, it is still less than wholly satisfying. More research is needed to better understand the phenomenon. Three areas have emerged from the current research that would be promising veins for further investigation: dialectical variation, understanding of phrase structure on a more detailed level, and a specific question about why inanimates are precluded as clitic hosts.

5.1 Dialectical Variation

The vast majority of Wakhi data in this paper came from one speaker, Habiba, originally from northern Pakistan, currently living in the United States with her Wakhi husband and children. Other than this consultant the only available Wakhi data were from a grammar written by a British linguist, D.L.R. Lorimer, in 1958 (Lorimer 1958a; 1958b), and another grammar written by Soviet linguists in 1976, then later translated into French (Grunberg and Steblin-Kamensky 1988a; 1988b). Lorimer did field work in northern Pakistan, the Soviets in Tajikistan.

Since Lorimer gathered data in the same area that my consultant was from, I was often surprised at the differences between the grammatical structures represented in his work and those derived from recent elicitations. Most noticeable was the number of times a clitic could appear in a clause (multiple times for Lorimer, but only once for Habiba). This and other variations were puzzling, and I have no explanation, but only suppositions. It is most likely that in the sixty intervening years between Lorimer's field research (which took place more than a decade before his grammar was published) and the recent elicitation sessions, significant diachronic change has occurred.

There were also differences between the Pakistan data that from Soviet Tajikistan. Bashir, one of the few linguists to study Wakhi, has documented some differences in her writings (Bashir 1986; 2009), but there is still little with which to compare these differences.

Only field work in Tajikistan, Pakistan and Afghanistan¹² can remedy the dearth of modern data availability.

5.2 Phrase Structure

The least satisfying component of this study is the treatment of movement operations to account for various surface structures. This weakness came from a lack of suitable data from which to derive the underlying phrase structure. While the available data were marginally suitable for an M.A. thesis, beyond that much more is needed.

One possible solution was to use data from Lorimer (1958a) and Grunberg-Stebelin-Kamensky (1988a). Their data were so suspect compared to the more recent

¹² I am unaware of any linguistic research on Afghan Wakhi.

data (for reasons mentioned above), that any conclusions drawn from those data would not have been compatible with conclusions drawn from the recently elicited data.

5.3 Inanimates

While the two issues mentioned above for further study are broad, there is one topic for which I have no satisfactory answer. Why are inanimate NP subjects unable to host clitics, while animate subjects are able to do so? The pattern does appear in at least one other part of Wakhi grammar, verbal agreement markers in the present tense. I am unable to hazard even a guess regarding the reason behind this difference. For now it is sufficient to say that inanimate subjects in Wakhi do not trigger agreement. The answer will likely come from an intimate knowledge of the language gained by a linguist spending a great deal of time in the field.

5.4 Conclusion

In this study I take useful innovations from previous studies, some phonological and others syntactic in their framework, and propose a nearly syntax-only approach to Wakhi clitics, based on empirical evidence. This approach eliminates all but the most necessary phonological operation. The resulting proposal outlines the syntactic nature of Wakhi agreement clitics. This includes their base generated location in the phrase structure, then continues that notion by outlining syntactic operations that derive the placement of the clitic in relation to other constituents in the clause, something not always undertaken in studies of clitics in other languages.

APPENDIX A
WAKHI LANGUAGE MAPS

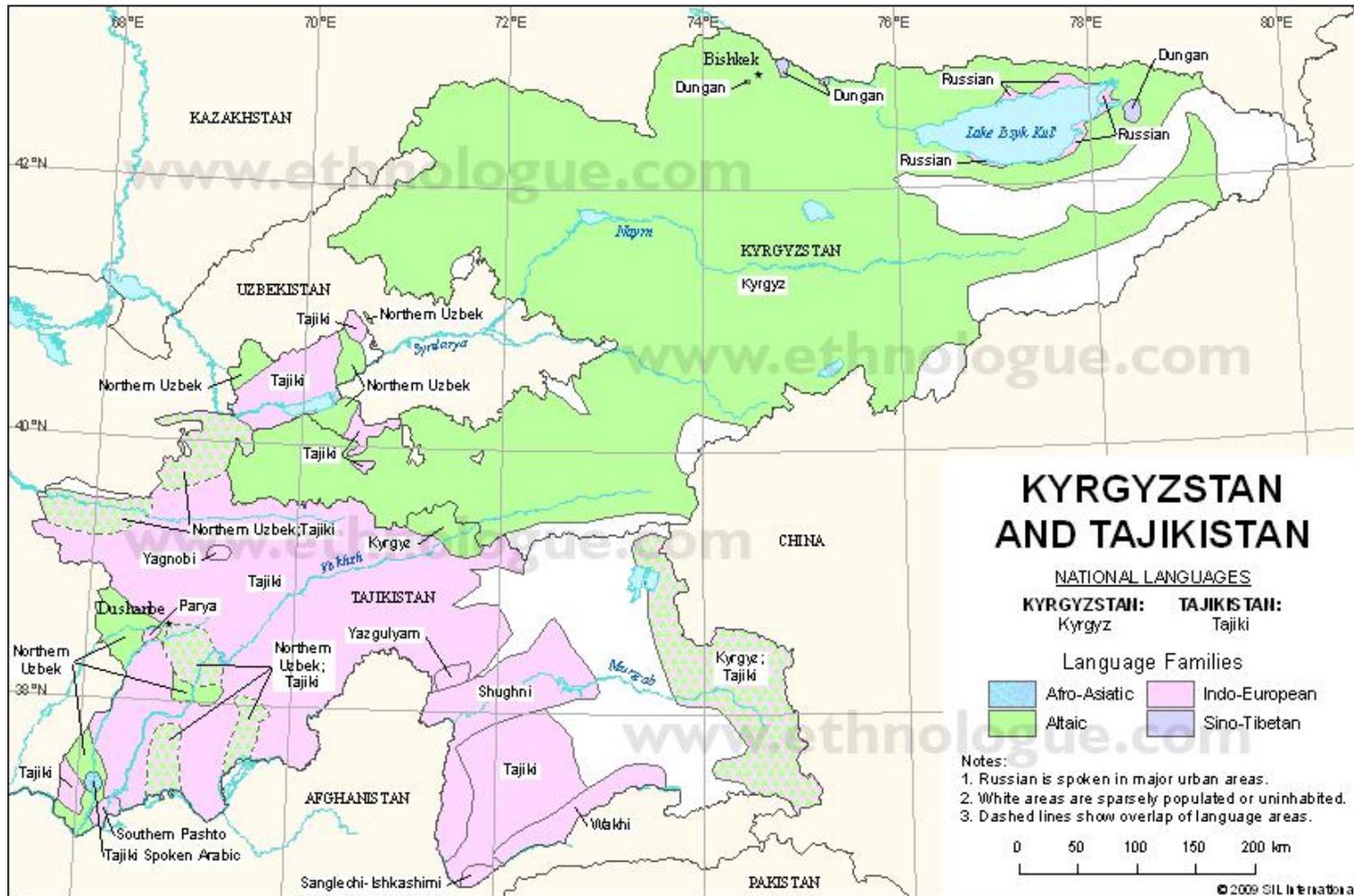


Figure A-1. Kyrgyzstan and Tajikistan language map. [Reprinted with permission from Lewis, M. Paul (ed.). 2009. *Ethnologue*, 16th edition. Dallas: SIL International. Online version: <http://www.ethnologue.com>.]

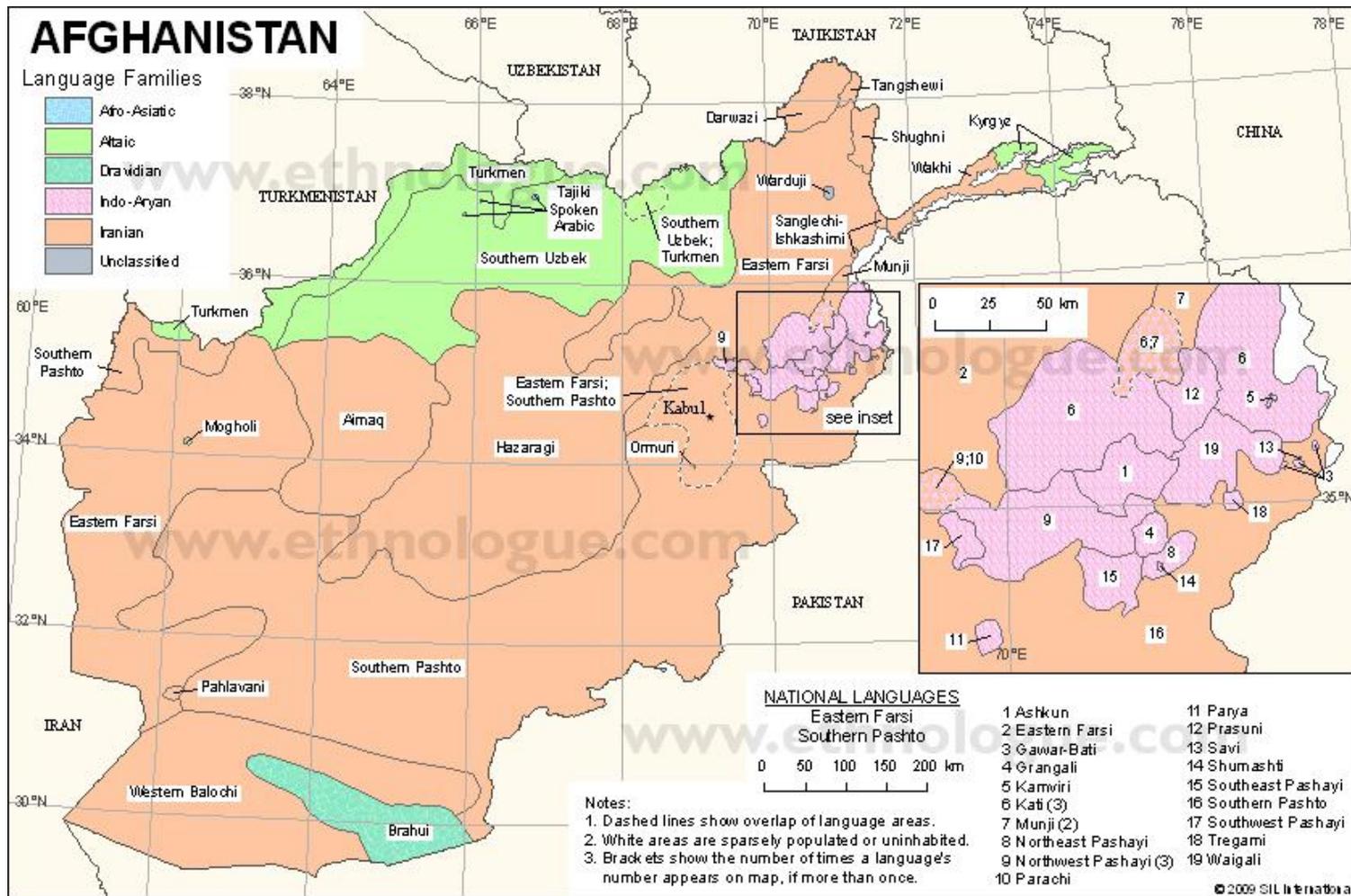


Figure A-2. Afghanistan language map. [Reprinted with permission from Lewis, M. Paul (ed.). 2009. *Ethnologue*, 16th edition. Dallas: SIL International. Online version: <http://www.ethnologue.com>.]

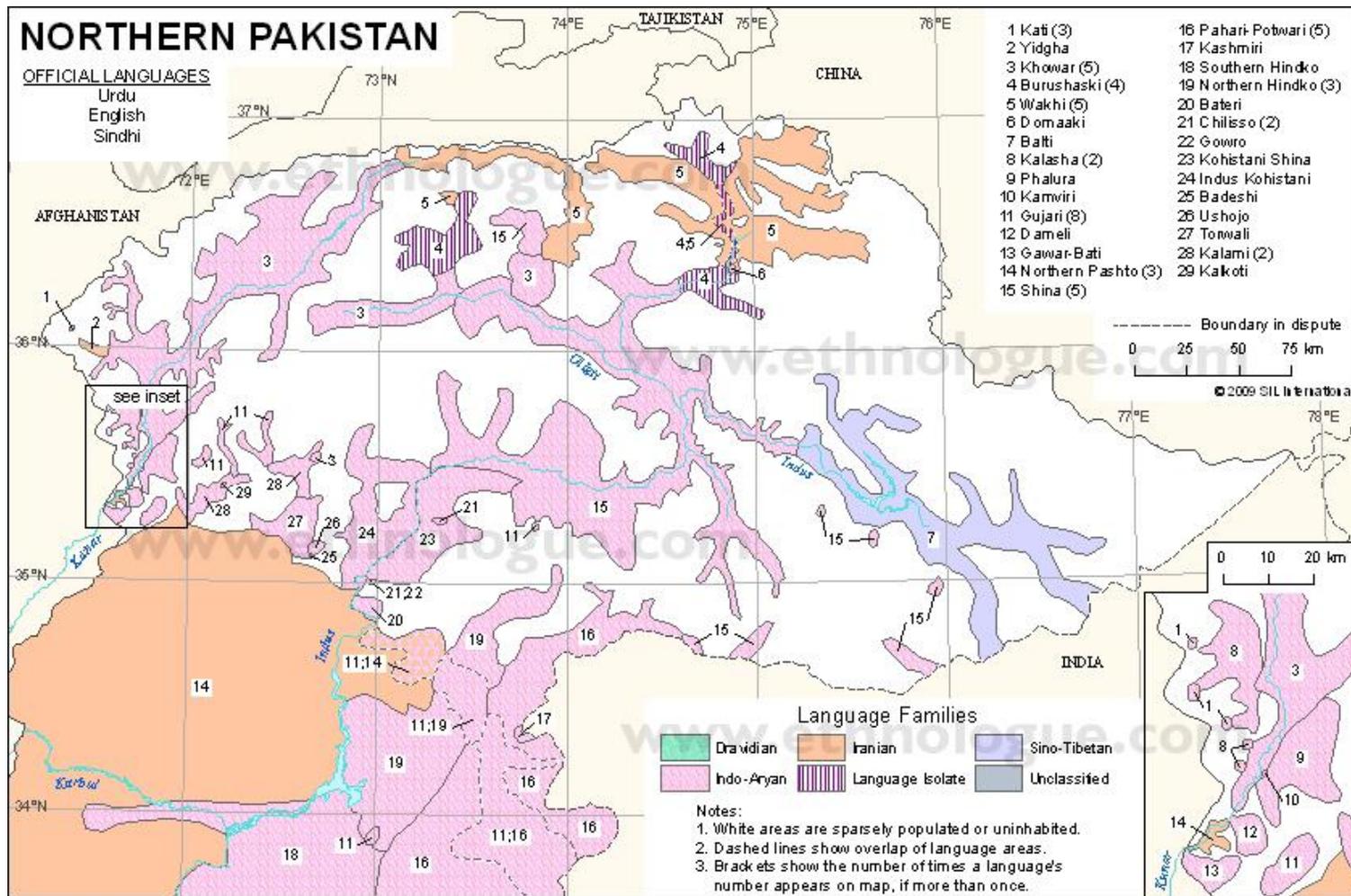


Figure A-3. Northern Pakistan language map. [Reprinted with permission from Lewis, M. Paul (ed.). 2009. *Ethnologue*, 16th edition. Dallas: SIL International. Online version: <http://www.ethnologue.com>.]

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BIOGRAPHICAL SKETCH

Todd R. Hughes was born in Ohio. After living in Ohio, Kentucky and Texas, Todd's family eventually settled in Jacksonville, Florida, where he graduated from Stanton College Preparatory School. Following high school, he earned a B.A. in History at Cumberland College in Williamsburg, Kentucky. As a graduate student Todd earned separate M.A.s in Education and Linguistics from the College of William and Mary in Williamsburg, Virginia and the University of Florida in Gainesville, respectively.

Building on a summer spent in West Africa during college, Todd left Virginia and moved to Abidjan, Côte d'Ivoire, initially to run a guest house. During four years in West Africa, his jobs were varied, from logistics coordination in Burkina Faso to roving photographer. These tasks took him from the west coast of Africa to the Plateau of Nigeria, and most places in between. In 2003 he was dispatched to northern Iraq to document projects in a small town west of Mosul during the aftermath of the U.S. invasion of Iraq. For a few weeks in 2004 he found himself in Khorog, Tajikistan, introducing him to the beautiful Pamir Mountains and the Wakhi people who call them home.

Upon returning to the U.S., Todd was asked to give back to his high school alma mater by teaching U.S. History and French, which he did for four years. During that time he spent two summers at the University of North Dakota, studying at the Summer Institute of Linguistics. It was there he met Dr. Sarah Titkemeier, whom he eventually married.