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TOPICS IN KALASHA SYNTAX:

AN AREAL AND TYPOLOGICAL PERSPECTIVE

by

Elena L. Bashir

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
(Linguistics)
in The University of Michigan
1988

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        Professor Peter Hook, Chairman
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This dissertation is dedicated to

my husband, Muhammad Bashir, my

children Shaista, Khurram and Neena,

and to the people of Pakistan.

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at the University of Michigan.

A study like this is impossible without the active help and cooperation of the speakers of the languages of study. Here I would like to express my tremendous gratitute to those people who worked with me in my study of the Kalasha and Khowar languages. The following persons have spent many hours with me patiently answering countless, often repetitious, questions about their languages. For Kalasha I wish to acknowledge the contributions of my main helpers in Bumburet, Bumbur Khan and Multan Bibi of village Brun. I am particularly grateful to Multan Bibi for her meticulous concern for accuracy on the transcriptions of my taped texts. Mr. Jinnah of Brun also provided me with some examples. In Rumbur I worked with Saifullah Jan of village Balanguru, and with Engineer Khan of Batet. I would also like to thank Kazi Khosh Nawaz for the stories which I have collected from him. Numerous other people have also contributed texts from which many of the examples in this study are drawn.

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Strand, and Ron Trail for informative and stimulating discussion which I have had with them on the languages of my area of specialization. I am grateful to Peter Parkes and Ron Trail for their permission to cite examples from their unpublished texts.

It goes without saying that none of the above-mentioned persons are in any way responsible for any misunderstandings or mistakes that appear in this dissertation. These are entirely due to me.

Finally, and most important, this work and the long years of preparation for it could not have been undertaken without the unique understanding and encouragement of my husband, Muhammad Bashir of Lahore.

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TRANSCRIPTION SYSTEM

The transcription system used in this dissertation for Kalasha and Khowar data is phonemic. For Kalasha I follow the phonological analysis in Trail and Cooper (1985) which is summarized in Chapter 1. For Khowar I follow the analysis summarized in Chapter 1. Shina data are also presented in phonemic transcription, based on the work of Georg Buddruss and Muhammad Amin Zia (Zia 1986). Data from other languages are presented either in broad phonetic transcription when based on the author's own field work, or retain the original transcriptions when cited from earlier published works.

Vowel length is indicated by doubling the vowel symbol, e.g. aa represents "long a". Retroflexed vowels are capitalized, and nasalization is represented by a tilde (~) above the vowel.

Consonant gemination is indicated by a doubled letter symbol, retroflexion (retraction) by capitalization of the corresponding non-retroflexed consonant (except in the cases of Khowar <L> and <G>), and palatalization by a lower-case y following the consonant symbol. Aspiration is represented by lower-case h following the consonant.

Stress is indicated by an apostrophe following the

stressed syllable. In numbered examples, morpheme breaks
are represented by hyphens.

High tone is indicated by <'> over the vocalic syll-
able nucleus, and low tone by <`>.

ABBREVIATIONS

Abbreviations used in this dissertation are the following:

A	actual	NOM	nominative
ABL	ablative	NS	non-specific
ACC	accusative	OBL	oblique
AN	animate	p	plural
CAJ	cajolative	P	present
COMP	complementizer	PERF	perfect
COND	conditional	PFV	perfective
CP	conjunctive participle	PPL	participle
Cs	causative	PRMT	presumptive
CTF	contrary to fact	PS	pronominal suffix
DAT	dative	PST	past
EMPH	emphatic	PURP	purpose
f	feminine	Q	question
F	future	s	singular
HORT	hortative	S	specific
hf	human female	SUBJ	subjunctive
hm	human male	TOP	topic marker
I	inferential	x	x gender
IMP	imperative	y	y gender
IMPFV	imperfective	1	first person

INAN	inanimate	2	second person
INF	infinitive	3	third person
INST	instrumental		
LOC	locative	T:	text
m	masculine	M:	Morgenstierne
NEC	necessitative	E:	elicited
		S:	spontaneous

CHAPTER 1

INTRODUCTION

1.1. Purpose and plan of the dissertation

This dissertation is intended as a theory-neutral
discussion of selected features of Kalasha syntax. My aims
are: (1) to make accessible to a wide audience of linguists
hitherto unavailable data on this little studied language,
(2) by focusing on syntactic features which have been iden-
tified as especially relevant to the study of the South
Asian linguistic area, to characterize Kalasha with respect
to this linguistic area; and (3) to work toward sharpening
the distinction between areal and typological causal fac-
tors in explaining the observed similarities among South
Asian languages.

In this introductory chapter I shall (1) describe the
methodology employed, (2) discuss some theoretical con-
siderations relevant to (a) the concept of linguistic area
and (b) the structuring of conceptual space inherent in
tense-aspect-modality systems, (3) review previous scho-
larship on Kalasha and Khowar, and (4) present some basic
facts about Kalasha as background for the reader approach-
ing this language for the first time.

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1.2. Methodology

This study is based on field work carried out mainly
during the period October 1986 through November 1987 in the
Chitral District of northern Pakistan. During the course
of my research on Kalasha I lived in a Kalash home while
working on specific questions with several informants. My
Kalasha data are of several types: (1) spontaneous utter-
ances recorded by the author on the spot with as much of
the context preserved as possible, (2) elicited sentences,
(3) examples drawn from longer texts, both from my own
materials and from those of other researchers. My Khowar
data were gathered in Chitral town, and represent elicited
sentences. Cited examples will be coded as follows.

S[initials of informant(s)]: spontaneous utterances
E[initials of informant(s)]: elicited sentences
T[initials of informant/source]: examples from texts

Elicitation (as opposed to working with spontaneous
utterances) presents some potential problems. One such
problem concerns the choice of contact language. Kalasha is
a minor language which is subject to influences from both
Urdu and Khowar because of universal bilingualism among
Kalasha speakers. If sentences to be elicited are
presented in Urdu, there is every likelihood that the
informant will give a sentence influenced in some way by
Urdu, either in choice of lexical items, word order, or
expressive strategy. The same problem would arise if Kho-
war were to be used as the contact language. In order to
minimize effects of the culturally dominant languages on my

materials, I adopted two strategies. The first was to
learn to understand and speak Kalasha so that as much of my
work as possible could be done directly in that language.
The second was to seek out the few Kalasha speakers who
know English, and work with them directly in English, which
is sufficiently different from Kalasha to minimize
potential interference effects.

A second weakness of the elicitation technique is that
it often fails to capture categorial distinctions or
expressive strategies unique to or characteristic of a
particular language. For example, the category of
evidentiality (direct vs. indirect knowledge) is central to
the morphology and semantics of the Kalasha and Khowar verb
systems; if, however, one were to present a sentence with
the category of indirect knowledge analytically expressed
(as one would have to do in Urdu or English in order to get
the desired meaning), he would be likely to elicit a
sentence with the category analytically encoded in a sort
of calque on the presentation sentence.

1.3.   Theoretical Considerations

1.3.1.   The concept of linguistic area

The importance of the concept of linguistic area or
sprachbund for South Asian language studies was given
prominence by Emeneau in his classic 1956 paper, where he
defines a linguistic area as "an area which includes lan-
guages belonging to more than one family but showing traits
in common which are found not to belong to the other

members of (at least) one of the families." Some well-
studied linguistic areas in this sense are the Caucasus,
the Balkans, Southeast Asia (Henderson 1965), and South
Asia (Masica 1969, 1972, 1974-a, 1974-b, 1976, 1983), (Hook
1982, 1985, 1987). The Balkan sprachbund, for example,
meets this definition in that it encompasses languages from
the Greek, Albanian, Italic, and Slavonic branches of I.E.
and marginally Turkish, and that the common Balkan traits
are not shared by the other members of the Slavonic and
Italic branches, or by all dialects of Turkish.[1] It is
characterized by several syntactic isoglosses: suffixation
of the definite article to the noun, the replacement of
infinitival complement constructions by subordinate clauses
introduced by a complementizer and having a (subjunctive)
finite verb; phonologically by the development in Romanian
under the influence of Slavic Bulgarian of a series of
palatalized consonants; and lexically by the existence of
idiomatic expressions which are more or less morph-by-morph
calques of each other. (Bynon 1977:246-7)

For purposes of this dissertation, I shall adopt the
following definition of areal features. Areal features
shall be those which (a) are shared by a geographically
contiguous group of languages belonging to different gen-
etic groupings but do not belong to the other members of
(at least) one of the groups, and (b) for which the com-

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[1]Greek and Albanian are the sole representatives of
the Greek and Albanian branches.

monality does not arise because of independent parallel development, common origin, or typological harmony. Thus if a given feature can be demonstrated to be present independently in several languages because of typological or genetic considerations, it shall be excluded from the inventory of areal features of these languages.

There are two major theoretical problems in defining (i.e. establishing the geographical limits of) a linguistic area: (1) how to discriminate areal from non-areal phenomena, and (2) how to decide where to draw the boundaries. Then, once areal phenomena are isolated, and boundaries defined, the independent problem of identifying the source of the shared phenomena arises. That is, does the shared feature originate (a) in one or the other of the contiguous language families or (b) in a shared sub- or superstratum.[2]

The first question is analogous to the problem faced by historical linguists in establishing genetic relationships in order to define language groupings and sub-groupings. The historical linguist's task is to isolate the effects of common genetic heritage from those of chance, geographical proximity (convergence), and typological harmony. He attempts to find regular predictable patterns of change in a given feature over time

---

[2]Other questions central to convergence theory concern the mechanisms of convergence, the relation of convergence to creolization, and the question of whether long-term convergence eventually culminates in the emergence of a new language family (Andronov 1968), which in turn is related to the issue of relict effects of former linguistic areas.

which can be used to infer that one stage is a lineal descendant of an earlier. At the current state of understanding, this has been most feasible at the level of sound change - hence judgements on genetic relationships are based on sound correspondences among semantically simi-lar lexical items across languages which are candidates for genetic relationship. The areal linguist's challenge is to isolate the effects of geographical contiguity/proximity from those of chance, common genetic inheritance, and typo-logical feature clustering. The basic methodology is the same--to find predictable patterns of change over space.

Several aspects of this question must be addressed: (a) What are the observable effects of transmission over space in general, and (b) how can they be distinguished from the effects of chance resemblance? (c) How can convergence and typological effects be discriminated, and how do they interact? (d) What, if any, linguistic features are more (or less) susceptible to transmission resulting from spatial contiguity, i.e. language contact?

With regard to the first aspect, change propagated over space, like wave motion, has the characteristic of being most intense closest to its source, and fading regu-larly with distance from the source (unless reinforced or interfered with in some way). Thus, if a gradation in the intensity of some phenomenon is due to some factor in which spatial location/proximity is the most important operant causal element (e.g. proximity to the equator, or altitude

in the case of temperature), then we should expect a regu-
lar pattern, in which the most intense manifestation of the
phenomenon (e.g. in the context of language contact ef-
fects, the highest frequency of occurrence of the feature),
is closest to its source. Conversely (in the context of
language contact), the appearance of "a regular correlation
with distance . . . especially if this correlation is inde-
pendent of genetic groupings and subgroupings" (Hook 1985)
establishes a strong case for spatial contiguity
(specifically, convergence because of language contact)
rather than chance as the operative causal factor.

One method which can discriminate between chance re-
semblances and those attributable to convergence is based
on (a) the general characteristics of spatially transmitted
phenomena, and (b) treating the occurrence of a linguistic
feature as a scalar quantity, rather than a simple two-
valued presence vs. absence judgement. Data resulting from
treating frequency of occurrence as a scalar quantity
consist of a set of frequencies of occurrence of a given
feature (for each location sampled), rather than simple
present vs. absent data points. Two-valued data points
result in iso-lines (like the isoglosses of early dialect
geography) that partition a region into an area having a
feature and an area not having it. To look for the bounda-
ries of a linguistic area one then looks for bundles of
isoglosses. Isopleths drawn on the basis of scalar data
connect points having an identical numerical value for some

variable, like, for example, isotherms in the physical
sciences. Measurements in this form would yield a series
of isopleths for a given linguistic feature. The
expectation under this approach is that such isopleths
will, in the case of location-related phenomena, form a
regular pattern of gradation from lower to higher values.

An early attempt at applying such a methodology to the
study of the phonological systems of the languages of a pu-
tative "Central Asian Linguistic Union", which includes the
Nuristani, Dardic and Pamir languages, Tajik Persian, Indo-
Aryan Domaki, and Burushaski, is that of Toporov (1965).
He establishes a set of nine abstract phonological opposi-
tions characterizing the consonantal phonemes of these
languages and then computes the percentage of consonant
phonemes characterizable by each opposition for each of the
languages in question. He finds a diminution in the impor-
tance of the oppositional factors of voice vs. voiceless-
ness, along a west-northwest to east-southeast axis.

Hook (1985) discusses a study of a syntactic trait
along these lines. He reports the results of a survey
covering the area from south India through parts of Sind
and Baluchistan in Pakistan. These results are based on a
standardized set of sentences elicited from a relatively
large number of informants over an extended geographical
area, including Dravidian, Indo-Aryan, and Iranian
languages. The results are presented in terms of
percentage of occurrence of the feature in question, namely

the positioning of the subordinate clause relative to the
main clause in the two sentences: 'Wait here until he gives
you the letter.' and 'I was afraid that you might give him
the letter.' Mapping of the percentage results shows a
regular frequency increment (or decrement depending on the
point of view) with distance, of the type argued above to
be a clear indiction of spatial factors as a causal
element. In the southernmost part of India, where
Dravidian languages are spoken, the subordinate clause
preceded the main clause 100% of the time in both
sentences, while in the part of Pakistan surveyed by Hook,
0% of the time. This result pointed to an areal effect
such that decreasing proximity to the Dravidian or Iranian-
speaking core areas correlated respectively with decreasing
or increasing frequency of subordinate clause preceding
main clause. This is particularly telling in the case of
Brahui, genetically a Dravidian language but surrounded by
western Indo-Aryan and Iranian languages.

Another recent study of this type is that of Abbi and
Mishra (1985). The authors identify twenty semantic fea-
tures that are signalled by the formal device of reduplica-
tion in various languages of India. The number of these
features realized by reduplicative structures for each lan-
guage under study is computed, and the number (out of 20)
of features plotted on a map. This summary map shows a
clustering of languages having nineteen or twenty features
in the central region of India, flanked on the south, east,

and north by a zone of sixteen to eighteen feature langua-
ges. Farthest to the south is a zone of twelve to fifteen
feature languages. These results display the spatial grad-
ation characteristic of convergence features, and also lead
the authors to propose the Munda languages as the source of
the spread of reduplication.

Let us now examine more closely the third aspect of
the problem--that of distinguishing the effects of typo-
logical harmony from those of convergence. Typological
clusterings of features presumably result from system-
internal properties of the grammar(s) of human language(s).
Thus if we find a potential candidate for the status of
linguistic area characterized only by a cluster of typolo-
gically related properties (e.g. GN, AN and postp. vs.
prep. order) we cannot simply invoke convergence. For ex-
ample, Masica (1983) and Hook (1985) discuss the case of
Ecuadorian Quechua, which has five of the characteristics
considered to define the South Asian linguistic area: (1)
SOV, Adj N, S M Adj comparative phrases, and relative
clause NP word order patterns; (2) derived causatives and
transitives, (3) conjunctive participles, (4) compound
verbs, and (5) dative-experiencer constructions. It also
employs the conjunctive participial form of SAY as a com-
plementizer as do many South Asian languages. Ecuadorian
Quechua is thus very similar to the South Asian type, yet
the question of convergence in this case does not arise.

When features are known to pattern together in a typo-

logical constellation (e.g. word order patterns), they can-
not be treated as independent, and the value of their co-
occurrence as evidence for convergence needs to be adjusted
on the basis of a weighted formula designed to eliminate
the effects of typological harmonics (Hook 1985). The ex-
tent to which different word-order features do correlate,
however, is not as simple as it has sometimes been taken to
be. For example, Masica (1983) points out that SOV and AN
order are not predictable one from the other. Also, al-
though typological harmony and contact effects are concep-
tually independent, they interact in the real world in ways
which we have hardly begun to understand. Suppose, for ex-
ample, that language contact has brought about change in a
particularly crucial (i.e. determinative) linguistic pro-
perty which is implicationally related to a set of other
properties. This initial change due to contact will then
induce a syndrome of other changes by system-internal
mechanisms. We thus have a situation in which the effects
of both causal factors are intertwined. Recent work by
Dryer (1985) has shown that there is no evidence for a uni-
versal relationship between the order of object and verb
and the order of noun and adjective, and in fact that "the
order of adjective and noun among OV languages exhibits a
strong areal pattern, the OV languages of Eurasia tending
toward Adj-N order, those outside Eurasia tending toward
the N- Adj order" (1985:10). This (unexpected) discovery
of an apparent areal effect influencing a correlation pre-

viously thought to be purely a matter of typology raises
new questions about the relationships of distant genetic
relationships, long-term convergence effects, and typology.
Thus, though the effects of (partial) predictability of co-
occurrence due to typological harmony must be factored out,
it is by no means clear yet how this is to be done.

This leads directly to the fourth aspect of our
question: Are properties which can be shown to be more
predictive of other properties more or less susceptible to
convergence effects than more "inert" traits? Or is there
any relationship at all of this nature? For example,
Hawkins (1983:297) finds that prep. and postp. are more
predictive of AN and GN order than the SVO, SOV, etc.
orders of major constituents. If this is so, then a
specific question can be framed and investigated: "Is the
change from prep. to postp. or from postp. to prep. order
less frequently attested than the change from, for example,
SVO to SOV constituent order?"

With regard to the question of which linguistic
features are more readily transmitted by contact, it used
to be thought that language contact did not result in the
transmission of syntactic features or of grammatical
morphemes. But in the face of massive evidence to the
contrary that view has now been abandoned in favor of one
according to which phonology, lexicon, syntax, and
semantics are all subject to convergence effects. Mbugu,
for example, though not a Bantu language, seems to have

acquired the grammatical morphology of the contiguous Bantu
languages, long thought to be impervious to contact trans-
mission (Bynon 1977:253-4). Phonetics, lexicon, syntax,
morphology, and semantics can converge separately or toge-
ther. Consider the textbook case of Kupwar in Central
India studied in Gumperz and Wilson (1971), in which con-
vergence among Urdu, Marathi, and Kannada has produced a
situation where, in effect, three lexicons are attached to
a single syntax and phonology. The lexicons of the sepa-
rate languages have persisted, while phonology and syntax
(and probably semantics also), have converged. Such consi-
derations lead to the possibility of establishing a typo-
logy of convergences, such as that sketched by Hymes
(1971:75), in which A represents persistence and B
convergence. His typology is reproduced here, with
additional suggestions by this author:

	Phonetics	Lexicon	Syntax	Semantics	Example
1.	B	A	A	A	North Pacific Coast
2.	A	B	A	A	Relexification
3.	A	A	B	A	Mbugu(? eb)
4.	A	A	A	B	European inter-translatability
5.	B	B	A	A	
6.	B	A	B	A	
7.	B	A	A	B	
8.	A	A	B	A	
9.	A	B	A	B	
10.	A	A	B	B	Balkans (? eb)
11.	B	B	B	A	
12.	B	B	A	B	
13.	B	A	B	B	Kupwar, Island Carib men's speech SE Asia (? eb)
14.	A	B	B	B	Anglo-Indian English

The type AAAA does not appear because that would be no convergence; one wonders, though, what type BBBB would represent. To the extent that there is a great deal of shared lexicon and dialect borrowing among the languages of South Asia, it seems that BBBB may describe the situation between, say, Urdu and the Panjabi of Pakistan, or Hindi and the Panjabi of India.[3]

Such a typology also invites the question of what types of socio-linguistic interaction lead to what types of convergence. Gumperz and Wilson, for example, suggest that the resistance of the lexicon to change in the Kupwar situation reflects the strict separation of the sphere of home life from that of everything else.[4]

Considering the possibility of such a variety of convergence types in relation to the question of how to define a linguistic area, we see that the most likely case is that

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[3]Regarding phonetic convergence, one hears a distinct Panjabi "accent" in the Urdu of many Pakistani Panjabi speakers when they speak Urdu; conversely Ashok Kalra (p.c.) notes that in India Panjabi speakers who have moved to Delhi begin (fairly rapidly) to lose tonal distinctions.

[4]Thurgood, in a very interesting paper (ms), identifies three distinct types of language contact situation--partial bilingualism by some speakers of a language with the primary language remaining the principal means for social and economic interaction; complete multilingualism resulting from exogamous marriage patterns; and situations where "large groups of people . . . have been displaced, moved to a new location and forced to learn a second language in order to survive" (p. 4)--and correlates the first type of language contact with a tendency to lexical borrowings (e.g. the borrowing of numerals along with their tones from Thai into T'in), and the third type with pidginization and creolization. (A correlation for the second type is not specified.)

the convergence of syntax, semantics, phonology, etc., will
only sometimes co-occur. The question then is: is any one
type of convergence criterial for assigning the status of
linguistic area? Or does there have to be a critical num-
ber of convergence manifestations, or a critical intensity,
perhaps, in order to establish the existence of a sprach-
bund? And if so, how does one measure intensity of conver-
gence? Or, should each component of the grammar be consid-
ered separately and should we then talk about phonological
convergence areas, or syntactic or semantic convergence
areas. Or is the nature of the whole phenomenon such that
it can only be accurately or insightfully described by
establishing a continuum of sprachbund types and strengths?

   Given the insight that convergence does not affect the
several components of the grammar in the same manner or de-
gree, we must further recognize that each component itself
is not monolithic. In considering the relation of syntac-
tic and semantic convergence, for example, each syntactic
construction needs to be considered individually. Hook
(1982), treating the relation betwen syntactic (formal) and
semantic convergence between Hindi and Marathi, and between
Hindi and Godwari, demonstrates that it may be the case
that for construction A, syntax and semantics do converge
together in the same construction (as in the "dative sub-
ject" construction). But in other cases formal convergence
may not be accompanied by full semantic convergence for a
given construction. Hook discusses the case of the com-

pound verb which is found in both Hindi and Marathi—formal
convergence. While the compound verb expresses both the
meanings of anteriority/posteriority and of perfectivity in
Hindi, it does not express perfectivity in Marathi.

Nor is semantic convergence necessarily accompanied by
formal convergence. For example, in Godwari, the same set
of semantic contrasts (perfectivity and anteriority) which
are expressed in Hindi by the compound verb are expressed
by the appearance of an "ergative adverb" po (Hook
1982:33). It is significant to note, though, that in this
case, the same semantic distinctions seem to exist; the
difference is that they are not grouped in the same way in
both of two languages under consideration. In some cases
they are mapped onto the same syntactic form in two langua-
ges, and in other instances onto different syntactic forms.

With regard to the second major problem—where to draw
the boundaries of a prospective linguistic area—Masica's
basic method (1976) is to trace the presence of a feature
until a point is reached where an opposing feature is
reached, and to draw the boundary for that feature at that
point. The expectation is that a genuine linguistic area
will be defined by a bundle of such iso-featural lines.
This is essentially the two-valued approach. If one ap-
plies a scalar rather than a presence/absence mapping pro-
cedure, the boundary of a linguistic area will be estab-
lished by locating a zone in which a (critical) number of
features show an abrupt diminution in frequency. A practi-

cal requirement for either approach is the availability of
comparable data for all the languages in question for the
feature in question. It may turn out that the boundaries
of linguistic areas are not as sharply definable as we have
thought.

Consider the discussion in Heston (1980, 1983) of
several features considered to characterize the South Asian
linguistic area--dative construction, reduplicative stru-
ctures, and echo-words (Masica 1976:189-90). These are
shown by Heston to be present also in various Iranian
languages. What we will probably find, as anticipated by
Ramanujan and Masica (1969:576-7) is that there will be a
number of (sub-)sprachbunds within any larger linguistic
area, which may also share in features characterizing more
than one sprachbund. Thus languages in the eastern part of
the South Asian area share features of the Southeast Asian
linguistic area.[9] Bengali, Assamese, Oriya, and Maithili,
for example, have well developed systems of numeral
classifiers (Emeneau 1956, Masica 1976:11), and a
substantial number of South Asian languages share the

---

[9]Southeast Asian areal features are summarized in
Matisoff (1988, handout) as follows: "(a) Phonological:
monosyllabicity and tone, devoicing of *voiced obstruents
and tonal splits, the compounding prefixing cycle; (b)
Morphological: compounding, elaboration; (c) grammatical:
classifier systems (not plural markers on common nouns),
topic prominence (not subject prominence), aspect (not
tense), verb serialization and verb concatenation,
sentential nominalizations (not embedded); (d) semantic:
sentence-final emotive particles, situational formulas
'Have you eaten yet?' 'Where are you going?', parallel
lexicalizations and intertranslatability."

feature n/ng opposition with S.E. Asia (Ramanujan and

Masica 1969:560).

Kalasha and Khowar, belonging to a sub-group of Indo-

Aryan which has (until very recently) been isolated from

most other Indo-Aryan languages, and situated on the

periphery of the South Asian subcontinent, are particularly

likely to provide evidence bearing on these questions.

1.3.2. Windfuhr's tense-aspect-mood model

In analyzing the verb systems of Kalasha and Khowar I

apply the spatial model developed by Windfuhr to "map the

networks of both morphology and categorial functions of the

verb forms simultaneously and synoptically" (1985:424). By

mapping form and categorial function simultaneously, the

model "allows for the synoptic and comprehensive comparison

of the forms and their function at two different stages of

the same language or of different dialects thereof, or of

different languages, or their dialects" (1987:1). It is

also envisaged that it will constitute a means "which al-

lows for the reinterpretation of assumptions about the in-

terrelationships and the differentiation of the categories

involved" (1985:416).⁴ In the process I both characterize

the systems of these languages and explore the potential of

the model. I first summarize Windfuhr's conceptualization

of the model and then in Ch. 2 discuss the somewhat

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⁴Note that the model deals with these categories as
they are expressed in basic verb morphology, either
derivational or inflectional. Thus if a language, for
example, expresses a category only by analytic/syntactic
means this category will not be represented in the model.

modified interpretaion which I employ in my analysis.

The most salient features of this model are its
treatment of the category of tense, and the "reinstatement
of the aorist as distinct from the perfective" (1985:415).
Whereas most models of verb systems treat present and past
as two (primitive) points on a single temporal dimension,
Windfuhr's analysis began by treating past and present as
values located on two intersecting axes. The original
motivation for this was to reflect the behavior of the
Persian aorist forms (usually called the "simple past"),
which function in both the present and the past systems;
that is, the aorist participates in verbal constructions
which encode events with present and future time reference
as well as those with past time reference.[7]

Windfuhr's framework postulates four mutually
intersecting dimensions in that part of the conceptual
space of verb systems reflected in the grammatical
categories of tense, aspect, and mood.[8] In their most
general conceptualization, the four axes of the model are

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[7]Windfuhr uses the term "aorist" in the sense of a
tense and aspect-neutral verb form, which encodes the bare
occurrence of an action. Friedrich (1974) characterizes
the Homeric Greek aorist as the least marked form, neither
durative nor perfect, which gives it the most tense
functions. The characterization of the aorist is central
to Friedrich's work, as it is in the development of
Windfuhr's model. Menges (1968:128) characterizes the
aorist in Turkic languages similarly: "The aorist does not
have any tense-connotation, it just expresses the action as
such, going on at present or in the future, or pictured as
such; the aorist is, in fact, the 'timeless tense'."

[8]The reader will notice that the categories of voice
and person-number are not addressed.

ASPECT, REALITY, EXPERIENCE, and NARRATION.[7]

The model does not advance a universal definition for aspect, working rather with the idea that, in the spirit of Friedrich (1974), "aspectual distinctions are language-specific and may oscillate between durative: non-durative, completive: non-completive, and stative: non-stative", and concluding that "the aspectual distinction is not necessarily binary, but may be ternary as in Persian and . . . in those languages which have the equivalent of the Persian aorist" (1985:429).

The axis of REALITY is a continuum where "the location of a lateral plane to the left relative to another indicates 'more real' and location to the right indicates 'less real'." More and less "real" refer to the degree to which an event is represented as realized in the world "out there".[10] Examining the cross-linguistic interpretation of the axis of REALITY, Windfuhr finds, based on comparison of the verbal systems of French, Persian, Russian, Arabic and Turkish, that

_____

[7]Terminological note: "axis" is normally synonymous with "dimension", but in order to avoid confusion the two terms are discriminated in the following way. "Axis" shall refer to the component of the model represented by lines drawn on paper, and "dimension" shall refer to the aspect of conceptualization being represented.
   For the development of this conceptualization from its concrete roots in the problem of analyzing the Persian verbal system to its generalized version the reader is urged to consult Windfuhr (1985 passim).

[10]For another interesting treatment of degrees of reality or "realizability", but as a function of the presence or absence of detached (Reichenbachian) temporal reference points, see Magier (1985).

> "there appear to be at least five degrees of reality,
> rather than oppositions of real and non-real. . .
> Subjunctive can be seen as expressing potential
> reality; future as expressing predictive reality;
> general and assertion as expressing structural
> reality; the 'basic' plane as expressing deictic
> reality; and progressive as expressing phenomenal
> reality . . ." (1985:447)

Emergent relations between the values of REALITY and other

verbal categories are characterized as follows:

> "the progressive plane is the plane foregrounding
> aktionsart. The deictic plane is the plane
> foregrounding tense: its top level foregrounds
> present; its definite non-actual level foregrounds
> past; and its indefinite non-actual level foregrounds
> the occurrence of a situation at least once in the
> past. The structural plane is the plane foreground-
> ing aspect: its top level foregrounds the imperfec-
> tivity of an action; its definite non-actual level
> foregrounds the instantaneity of an action; and its
> indefinite non-actual level foregrounds the per-
> fectivity of an action. The predictive plane is the
> plane foregrounding real mood; the potential plane is
> the plane foregrounding non-real mood." (1985:447-8)

These relations are summarized as follows (adapted from

Windfuhr 1985:448):

Degree:	Phenomenal	Deictic	Structural	Predictive	Potential
Fore-grounds:	aktionsart	tense	aspect	real mood	non-real mood

The discrimination of values along the axis of

EXPERIENCE depends on an extension to verbal conceptions of

the referentiality distinctions definite/indefinite and

specific/non-specific which are usually applied to nominal

concepts. Thus, for Persian for example, Windfuhr

identifies two degrees on this axis: a "definite non-

actual", (i.e. aorist ["past tense"] forms), and an

"indefinite non-actual" (i.e. inferential past forms)

(Windfuhr 1985:423).[11]   He further differentiates

indefinite experience into "specific indefinite" and "non-

specific indefinite" (1987:5). For example, (in Persian),

"the 'present perfect' expresses specific indefinite

experience, i.e. the speaker knows about the result of the

action and the process that led to it" (emphasis mine).[12]

Such is not the case with the 'inferential past' which

expressed non-specific experience, by the use of which the

speaker "communicates his experiential distance from the

action, be it hearsay, conclusion, or reminiscence, etc."

(emphasis mine) (1987:5)

Since the categorial dimension which Windfuhr grades

into generic, definite: indefinite, and specific: non-

specific pertains to how an action or state impinges on an

experiencer, this axis is called the axis of EXPERIENCE.[13]

The axis of NARRATION is the axis which, according to

Windfuhr, "effects a 'present' determination at generic,

mostly 'past' at definite, and 'present perfect' at

indefinite" (1985:448). In a more recent characterization

---

[11]Windfuhr's use of "actual" here is different from my
use of actual (as opposed to inferential) in Ch. 2.

[12]Notice that Windfuhr has here identified the
speaker's knowledge of the process that led to the result
as crucial to the difference between his categories of
"specific" and "non-specific" experience. This is the
point independently emphasized in the work of DeLancey
based on his causal-chain explanation of inferentiality.
(DeLancey 1985-a, b, 1986)

[13]My characterization of the values of this axis in
Ch. 2 depends on the notion of specificity rather than
definiteness.

of this axis, Windfuhr considers it as accomplishing the discoursal function of foregrounding and backgrounding.

The four mutually intersecting axes of the model are schematized in Fig. 1.

ASPECT

EXPERIENCE   Imperfective   Perfective

REALITY →

NARRATION
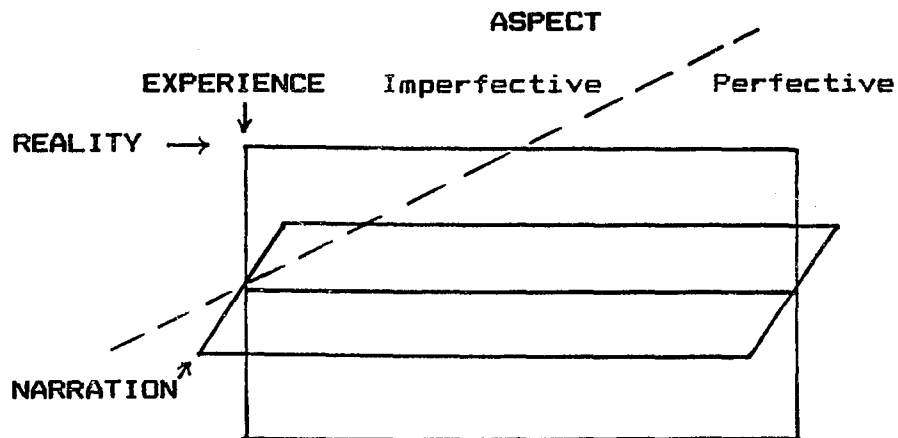
Fig. 1. Schematization of Windfuhr's Model

How, then, is tense treated in this model? The category of tense no longer appears as a primary axis. Tense values emerge as derivative categories resulting from the intersection of axes representing more fundamental parameters. Specific temporal (i.e. tense) interpretations result from the intersection of the axes of REALITY, EXPERIENCE, and NARRATION. Thus, for the Persian aorist,

> "its interpretation differs according to the
> degrees of reality. The deictic aorist narrates
> definite, and thus past action. The structural
> aorist describes an action simply as structural
> definite, which results in its interpretation as
> occurring at the point of speaking. The predictive
> aorist predicts a definite, and thus likely future
> action. And the potential aorist expresses not the
> assumed completion of an action prior to another,
> but the simple possibility of an action." (1985:449)

Other scholars have noted that tense (in the sense of a grammatical category referring to real-time location) is

not necessarily a primitive category of natural language.
Windfuhr notes Lyons' treatment of tense (1977:819-20), in
which the value "present" is the realization of the
intersection of "non-remoteness" with factivity, and "past"
is the interpretation of the intersection of "remoteness"
with factivity. Compare also Friedrich's similar observa-
tion about the secondary status of tense in Homeric Greek:

> "Tense operates only in the indicative mood, and
> even then its association with the basic theme
> is a matter of tendency, or degree of probability;
> the aorist indicative, for example, is past in
> tense most of the time, but not inevitably. . . .
> In some cases, a feature is the product of two
> (or more) inherent features. For example, the
> feature of past is a statistically probable
> product of the interaction of the aorist and
> indicative . . . ." (1974:S24)

The present model makes specific and offers a
theoretical explanation for the conditions under which each
tense interpretation arises.

My reasons for employing this model to systematize and
compare the Kalasha and Khowar verb systems are the
following. (1) It has the potential to represent the
interacting categories in a verb system in a single multi-
dimensional structure in which the axes are conceptualized
in terms general enough to allow language-specific
differences to be expressed, and yet remain within a single
unified framework. (2) The model has the potential for
application to questions of language change resulting from
language internal and/or external causes. The originator
of the model has already applied it with interesting
results to such questions in Windfuhr (1987).

This is a study of the representations of the verb systems of standard Persian and Talyshi (Iranian), and Turkish and Azari (Turkic). Standard Persian (taken as representative of an Iranian-type system) has three degrees of REALITY, while Azari (representing Turkic systems) has seven degrees along the REALITY axis. These two situations are represented schematically in Figures 2 and 3 which are adapted from Windfuhr (1987).

PROGRESSIVE	BASIC (DEICTIC)	POTENTIAL
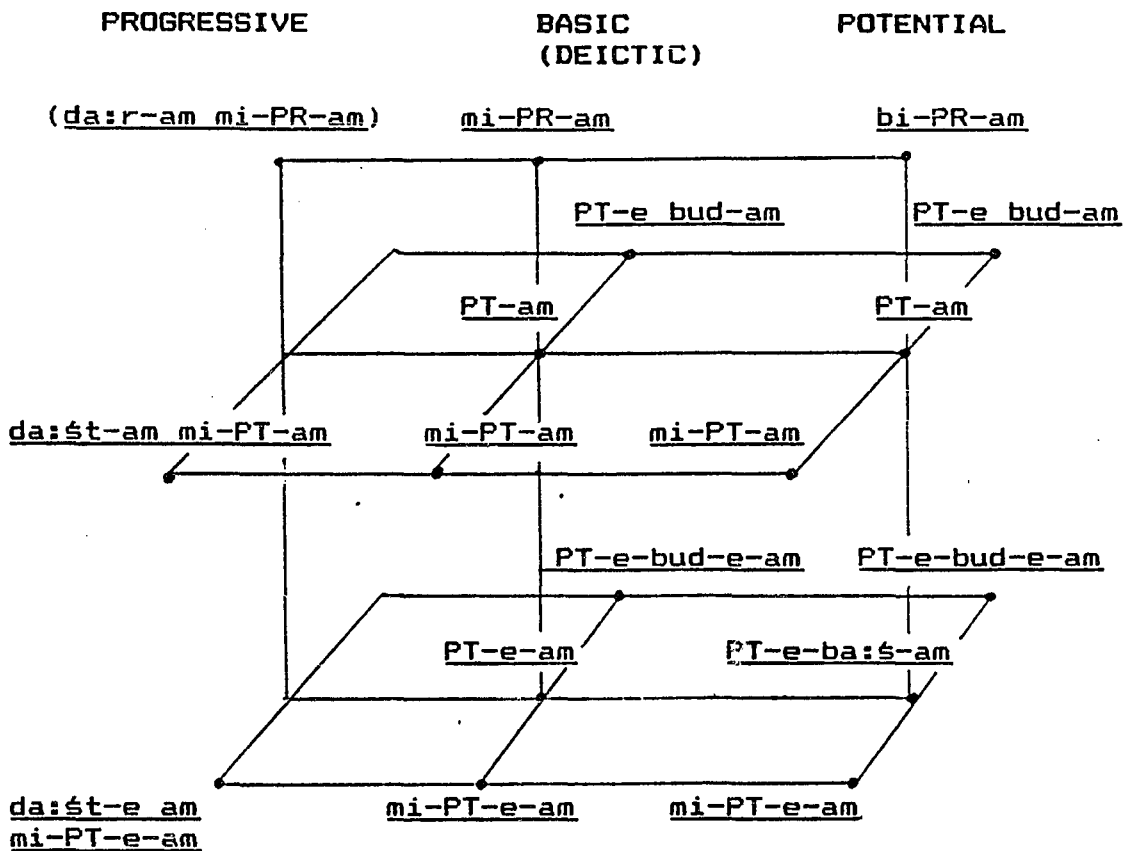
Fig. 2. Persian (Iranian pattern)[14]

_____

[14]Adopted from Windfuhr (1987) Figs. 4 and 5. The occurrence of a given form at more than one point reflects its functioning with differing semantic values at various

DEICTIC   STRUCTURAL   PREDICTIVE   POTENTIAL

ir   ar   ajaq   a

—   miš-di   miš olajaq-di   sa-ydi

di   miš olajaq   sa

ir-di r-di   ajaq-di   a-ydi

—   miš   miš olajaq   sa

—   miš-miš   miš olajaq-miš   ← ?

miš   miš olajaq   sa-ydi

ir-miš? ar-miš?   ajaq-miš?   a-ymiš?
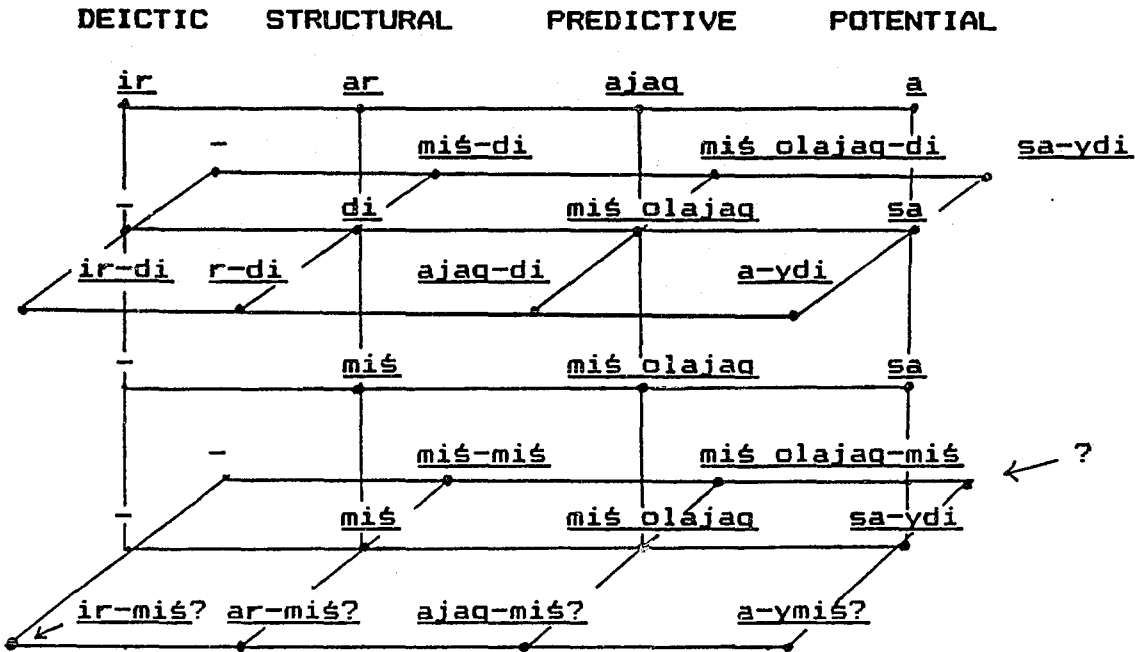
Fig. 3. Azari (Turkic pattern)

Northern Talyshi, an Iranian dialect spoken in Soviet

Azerbaizan, has been in contact with Azari Turkish for

several centuries (Windfuhr 1987). This language, in

contrast to standard Persian, has five degrees of REALITY,

a difference which is attributed to convergence effects

with Azari. Windfuhr schematizes the Northern Talyshi verb

system as in Fig. 4 (below), concluding that "the axes

postulated do seem to represent the historically observed

changes more comprehensibly than the traditional time-line

model, by seeing those changes as developing within a

multi-dimensional network. . ." (1987:21)

points in the system.

PROGRES- SIVE	DEICTIC	STRUCT TURAL	POT./COND.	OPTA- TIVE
PT-e-da-m	PT-e-da-m	b-a-PT-e-m a-PR ni-m	bi-PR-ym	bi-PR-o-m

PT-a bi-m   PT-a bi-m   PT-a ba-i-m

PT-ym   PT-ym   PT-ym

PT-e-da bi-m a-PR-i-m   a-PR-i-m   (b-)a-PR-i-m

PT-a -m   PT-a -m   PT-a b-o-m
                                    PT-a b-o -m
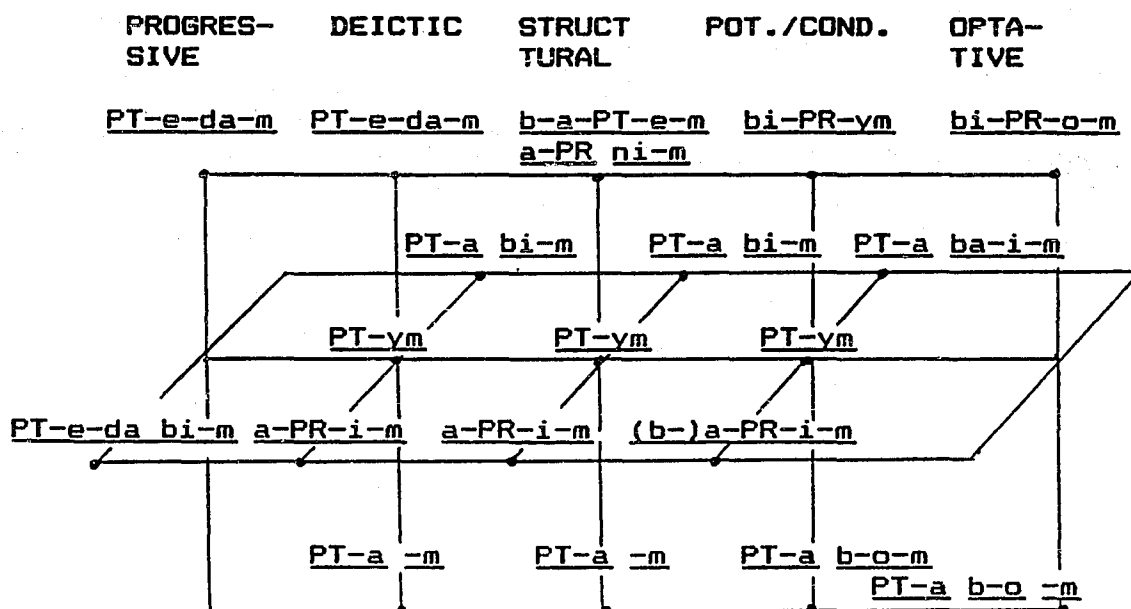
Fig. 4. Northern Talyshi system

Given that the model assumes that the four dimensions
are related in a dynamic unitary system, one can predict
that if a change is introduced on one semantic dimension it
will have repercussions throughout the system. Thus the
generalization or expansion of a form's range of use along
dimension x will displace any previous forms occupying that
semantic niche, either causing them to change their
function (represented by displacement along one of the
axes), or to be lost.

(3) My final reason for utilizing this model is that
it provides a principled way to deal with categories
observed to be central to the Kalasha and Khowar verb
systems.

In Ch. 2, I first catalogue the verbal formations of
Kalasha and Khowar, giving the range of uses I have

identified for each form, and then correlate the forms and
their attested functions with the dimensions of the model.
This yields representations comparable with those already
available for Persian, Turkish, Arabic, Russian, and
French. I then compare the schematized verb system of
Kalasha with those of Khowar (northwest Indo-Aryan
(Dardic)), Hindi (Indo-Aryan, central group), Persian
(Iranian), and Turkish (Turkic). From this we obtain
observations based on which we can frame statements of the
form: "The verb system of Kalasha is more like that of x
than that of y". Such results yield an interesting
contribution to the typology of verb systems but still not
conclusions about the position of Kalasha vis-à-vis the
South Asian linguistic area. In order to be in a position
to make statements of this nature based on representations
employing this model, it is necessary to have comparable
characterizations of the verb systems of a great many
languages belonging to the South Asian linguistic area,
including at least one language from each genetic stock
represented. Then we may be able to say whether or not the
dimensions of verb systems captured by this model have been
subject to the same sorts of convergence effects as have
other formal and semantic features in South Asian
languages. As this task is beyond the scope of the present
research, the contribution of this work will be to suggest
this as a fruitful line of inquiry, and to make a start
toward that end.

1.4. Previous research

1.4.1. Kalasha

The Kalash people have been the subject of many
anthropological studies, among them Snoy (1962), Siiger
(1963 and 1967), Darling (1973), Wutt (1976), Parkes
(1984), Jettmar (1975) and Loudé and Lievre (1976 and
1984).[19] So far, however, the only linguistic works
published on Kalasha are Leitner's pioneering sketch (1880)
upon which the Linguistic Survey of India (1919) drew
heavily, and Morgenstierne's "Notes on Kalasha" (1973).
More recently Trail and Cooper have an unpublished paper on
the phonological system (1985), and a pre-publication
version of a Kalasha dictionary (1987). Work in progress
by Georges Lefeuvre in France including syntactic studies
and an etymological dictionary should become available to
scholars in late 1988. Turner's Comparative Dictionary of
the Indo-Aryan Languages incorporates Morgenstierne's and
Leitner's Kalasha materials, as does Fussman's Atlas
linguistique des parlers Dardes et Kafires (1971). Both of
these are basic research tools for the Dardic scholar.

1.4.2. Khowar

An exhaustive survey of Khowar studies up until 1981
is available in Endresen and Kristiansen (1981). This
article lists and describes extant Khowar texts, most of

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[19]Jones (1966 and 1969) are exhaustive annotated
bibliographies on the anthropology and social and political
history of the peoples of Nuristan and Chitral. Jettmar
and Edelberg (1974) is an important collection of articles
on the region and languages under study.

which are quite fragmentary or unpublished. The most important of the linguistic works on Khowar are (1) Biddulph's initial sketch of the grammar with three short texts and a glossary (1880); (2) O'Brien's *Grammar and Vocabulary of the Khowar dialect (Chitrali)* (1895), which includes a very brief grammatical sketch, 256 example sentences, fifteen short texts, and a glossary; and (3) Morgenstierne's three articles "Some Features of Khowar Morphology" (1947), "Iranian Elements in Khowar" (1936), and "Sanskritic Words in Khowar" (1957).

Since 1981, Buddruss has published *Khowar-Texte in arabischer Schrift* (1982), with chapters on the Khowar writing system and rhyme and meter in Khowar poetry, twelve texts in the original Arabic script with transliterations, grammatical notes and translations, and a glossary; and a short monograph (1983) on the recent development of Khowar as a literary language. Other recent work includes a popularly oriented dictionary compiled by Sloan (1981), many of the entries in which unfortunately do not reflect important phonological distinctions; a dictionary in preparation by Munnings (1987); and a grammar intended for use by Urdu speakers learning Khowar by Inayatullah Faizi working with the Anjuman-e-Taraqqi-e-Khowar, a recently formed literary and cultural society. Faizi also has an unpublished manuscript on "Different Dialects of Kohwar (sic)".

1.5.   Basic facts about Kalasha

1.5.1.   Genetic and geographical relationships

Kalasha's closest genetic relationship is with Khowar, both of which belong to the group of languages usually called "Dardic". Morgenstierne (1973:188) considers the following unique similarities between the two languages to be the result of a period of uniquely shared development. (1) Retention of the OIA augment with some verbs, e.g. Kal. 'awis 'I drank', ak'a:ris 'I did', Kho. ośoi 'it was'(<aśayat) , obestam 'I could', obristam 'I died'.[16] (2) The possibility of reconstructing common Kalasha-Khowar forms in some cases, e.eg. *jhu:ð > N. Kal. chu:(l), S. Kal. jhu:r, Kho. żur 'daughter' (with probable intervocalic t > *ð > r/l). (3) Similar systems of demonstratives with three degrees of distance. (4) Formation of the past participle: *karitaka > *kardau > Kho. kardu, Kal. kada. (5) Numerous lexical correspondences, (but the problem of recent borrowings clouds this issue).

In his genetic classification of the Dardic languages, Grierson (1919) grouped them with the Nuristani (formerly called "Kafiri") languages as a third branch of Indo-Iranian, along with Iranian and Indo-Aryan. In the LSI he stated that

> ". . . the Dardic languages possess many char-
> acteristics which are peculiar to themselves,
> while in some respects they agree with Indo-
> Aryan, and yet in other respects with Eranian
> languages. They do not possess all the char-
> acteristics of either Indian or of Eranian. We
> must assume that at the time when they issued
> from the Aryan language, the Indo-Aryan lan-

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[16]These forms are given as cited by Morgenstierne and retain his transcription system.

guage had already branched off from it, and
that the Aryan language had by that time developed
further on its own lines in the direction of
Eranian." (LSI VIII:8)

Schematically the relationship he proposes is:

Aryan
Indo-Aryan
Eranian   Dardic
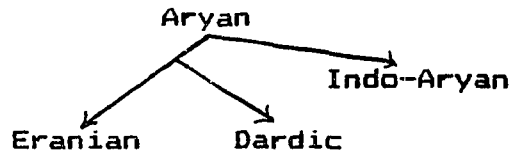
According to Morgenstierne, however, (1929, 1974) the
"Dardic" languages are unquestionably Indo-Aryan. Their
unique features are the result of a long history of isola-
tion in the mountain valleys on the borders of the IA area.
The Nuristani languages, however, do constitute a separate
sub-group of Indo-Iranian. In 1929, Morgenstierne said:

> "The Kafir languages undoubtedly present se-
> veral features which separate them from the
> true Dardic and the other Ind. languages. But
> the only sound change which they share with
> Ir. is the early disaspiration of mediae, and
> this characteristic may have developed quite
> independently in Kaf. and Ir. On the other
> hand, Kaf. is more conservative than any Ir. or
> Indo-Aryan language in one point, viz. the re-
> tention of affricates developed from I.E. k'."

By 1974 he is still not certain as to whether the "ur-
Kafirs" separated from the Indo-Aryan branch in pre-Vedic
times or whether they had branched off already before the
separation of Indic from Iranian--schematized, whether (a)
or (b) represents the historical situation better.

Indo-Iranian   Indo-Iranian
                Rig Veda   (1974:9)
                                     or
Iranian Kafiri Indic   Iranian Kafiri Indic
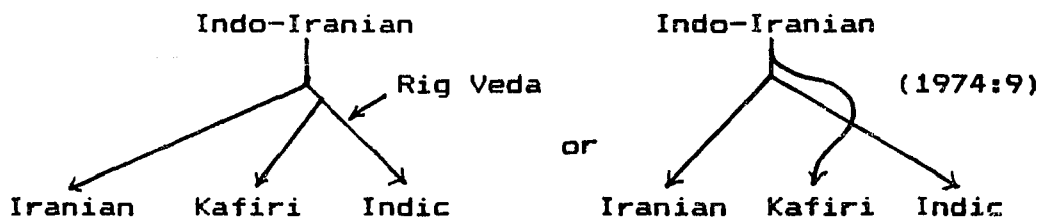
I shall use the term "Dardic" as a geographical cover-term, referring to the northwest Indo-Aryan languages spoken in northwest Pakistan and the extreme northwest parts of India.[17]

In 1929 Morgenstierne found two dialects of Kalasha--a northern variety spoken in the valleys of Birir, Bumburet, and Rumbur, and a southern variety spoken in the Urtsun valley (1973:188). Today still, Northern Kalasha is spoken in Birir, Bumburet, and Rumbur, in the Chitral District of the Northwest Frontier Province in Pakistan. According to local sources some speakers can also probably be found in the Jinjiret Valley, south of the three valleys mentioned. There is some dialectal variation even within northern Kalasha, although the speech varieties of all three valleys are entirely mutually intelligible. The dialects of Rumbur and Bumburet are closest to each other, while that of Birir is somewhat more divergent. According to Peter Parkes (p.c.), the speech of Birir combines retention of some features lost in the other two valleys (e.g. certain consonant clusters), and introduction of considerable numbers of Urdu loan words. Southern Kalasha is still spoken in Urtsun, where Morgenstierne recorded some forms in 1929.[18] The present dissertation is based on the speech

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[17]For an authoritative current discussion of the grouping and subgrouping of the Dardic and Nuristani languages, see Strand (1973).

[18]My thanks to Richard Strand for confirming this point (p.c.).

of Bumburet and Rumbur.

Formerly the extent of the Kalasha speaking area was
much greater. Until the early 14th century Kalash kings
ruled in Lower Chitral from Ashret just below the Lowari
Pass, to as far north as either Reshun, the boundary
between Upper and Lower Chitral, or according to another
tradition, the present village of Kari.[17] Kalasha's
present linguistic neighbors are the eastern dialect of
Kativiri (Nuristani) on the west, and Khowar on the north,
east, and south (see Appendix, map 1).[20]

The total number of Kalasha speakers is probably
between 3,000 and 4,000. According to everyone I have
consulted, all Kalasha speakers are bilingual in Kalasha
and Khowar. This includes old people, women, and children
depending on their age. Many, especially in the villages
at the heads of the valleys, also speak Kativiri.

1.5.2. Phonological system

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[17]The _Tarikh-e-Chitral_, quoted by Darling (1979:161)
gives Reshun as the northernmost extent of Kalash rule.
Another tradition considers the village of Kari, a few
miles north of Chitral town as the northernmost limit.
This second tradition was rejected by Schomberg (1938:209),
who was of the opinion that the Kalash once ruled in all of
Chitral. Kari, however, is the extent quoted by Rahmat
Karim Beg lecturer at the Government Degree College,
Chitral.

[20]Khowar is currently spoken throughout Chitral
District, serving as the lingua franca of the district, in
a few villages in Swat, where it is referred to as
Qashqari, and in the Yasin valley in Gilgit Agency.
According to all sources, the "purest" form of Khowar is to
be found in the Turkho and Mulkho areas of Upper Chitral.
Within the Khowar-speaking area there is also some
dialectal variation. Faizi (1988) identifies five dialect
areas, mainly on the basis of lexical variation.

In this section I present the phonological analyses of Kalasha and Khowar adopted for this work. For Kalasha I employ the analysis proposed by Trail and Cooper (1985) with minor additional comments. These concern (1) the status of vowel length, and (2) the phonetic characterization of the two "l" phonemes.

With regard to the status of vowel length, in many cases I have recorded unmistakeably long vowels, whereas Trail and Cooper have analyzed the vowel as a stressed short vowel. For example, they treat aaya 'mother' as a'ya. In this word and in words like baaba 'sister', baaya 'brother', there is definitely something other than stress operating in the first syllable.[21] Since I am not ready to discuss the phonemic status of length, I will assume vowel length and stress to be independent in Kalasha and record length where I hear it and stress where I hear stress.

Trail and Cooper have an /l/ and an /ʟ/ phoneme and an /n/ and an /ɳ/. They describe /l/ as a "voiced dental lateral articulated with the tongue tip" (1985:20), and /ʟ/ as a "voiced alveolar lateral articulated by the blade of the tongue." They then describe the difference between these two sounds as being "close to the difference in English between clear and dark 'l', the /ʟ/ being clear and the /l/ being dark" (ibid.:21). Based on my hearing of these sounds, which agrees with the "clear l, dark l"

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[21]Although these words have a very distinctive pitch contour, I an not able now to argue for or against the existence of contrastive tone in Kalasha.

distinction, it seems one should characterize the /l/ as velarized and the /ĺ/ as palatalized. A similar distinction applies to /ñ/, which I hear as palatalized and /n/ which is not. I have transcribed these sounds with /ly/ and /ny/ for the palatalized sounds and /l/ and /n/ for the velarized or unpalatalized sounds (cf. fn. 21).

With these modificatory comments, the consonant system of Kalasha is given in Table 1 (based on Trail and Cooper 1985).[22]

	Bilabial	Dental	Alveolar	Palatal	Alveo-palatal Retroflex	Velar	Glottal
Stops							
Vl.unasp.	p	t			T	k	
asp.	ph	th			Th	kh	
Vd.unasp.	b	d			D	g	
asp.	bh	dh			Dh	gh	
Affricates							
Vl.unasp.		ts	c		C		
asp.		tsh	ch		Ch		
Vd.unasp.		dz	j		Z		
asp.		dzh	jh				
Fricatives							
Vl.			s	ś	S		h
Vd.			z	ź	J		
Nasals	m	n		ny			
Laterals		l		ly			
Flaps			r				
Semivowels	w			y			

Table 1. Kalasha Consonant Phonemes

The vowel system has five vowels, plus the phonemic

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[22]With regard to the phonemes /ź/ and /j/ Masica (p.c.) notes that in other Dardic languages they are often free-variant allophones. In Kalasha, however, these are definitely in contrast, viz. ja 'wife', źa 'until, up to'; juk 'louse', źuk 'to eat'; ubujik' 'to be born', suźik' 'needle'.

features of nasalization and retroflexion. Table 2 gives
the basic Kalasha vowel system. Nasalized and retroflexed
versions of these are contrastive.

	Unrounded Front	Central	Rounded Back
High	i		u
Mid	e		o
Low		a	

Table 2. Kalasha Vowel Phonemes

For Khowar I will employ the phonemic analysis upon
which Munnings (1988) has based his lexicographical work.
This analysis is essentially the same as that presented in
Endresen and Kristiansen (1981) following Morgenstierne.
It differs in identifying three additional consonant
phonemes: /J/ voiced retroflex affricate, /tsh/ voiceless
aspirated denti-alveolar affricate, and /dz/ voiced denti-
alveolar affricate. I differ from Endresen and Kristiansen
and from Munnings in the phonetic characterization of the
phoneme /L/. Endresen and Kristiansen classify this as a
retroflex sound; and while Munnings does not present a
phonetic description of this sound, he symbolizes it with-
out comment in the same way as other retroflex counterparts
of denti-alveolar consonants are symbolized. It should be
noted that the Khowar writing system does the same thing.
This sound, however, is in fact a velarized rather than a
retroflexed lateral. It is the same sound as Kalasha /l/,

but the velarization seems even stronger in Khowar.[23] The

consonant system of Khowar is given in Table 3.[24]

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[23]I have also found it in Dangarikwar (cf." Phalura")
spoken in Lower Chitral.
The decision to transcribe Kalasha velarized "l" with
<l> and the same sound in Khowar with <L> is based on
discussions with Richard Strand, who points out that Khowar
/L/ developed from original retroflexed *D, e.g. <u>kuL</u> 'well'
< *<u>kuDya</u> 'well' (T3251), <u>loLik</u> 'to look at' < <u>laDati</u>
'sports' (T10922), while the reflexes of *l have the
palatalized /l/. In Kalasha, on the other hand, original
*l has developed into the velarized phoneme (e.g. <u>lui</u>
'blood' < *<u>lo:hi</u> 'red, blood' (T11164), <u>lac</u> 'shame' < the
root <u>laji</u>- (T10970), while palatalized /ly/ appears to
occur (mainly/only?) in loan words from Khowar. Thus <l>
represents the phoneme which is a reflex of original *l in
each language.

[24]For typographical reasons, to avoid confusion
between underscored forms of <g> and <q>, I have chosen to
transcribe the postvelar stop with (upper case) <Q> instead
of the usual <q>. As a matter of interest, it should be
noted that in Khowar the phonemes /Q/, /x/, /G/, and /f/,
often confined in other IA languages to Perso-Arabic loan
words, occur in both these loans and in native Khowar
words. For example: <u>DaQ</u> 'boy', <u>Qaf</u> 'claw', <u>Qure'ik</u> 'to
snore', <u>frosk</u> 'straight, right', <u>roxtsik</u> 'to forget', <u>śax</u>
'vegetable', <u>śuGur'</u> 'sand', <u>SadaG'</u> 'third month in Khowar
system', <u>GaL</u> 'game (like hockey)'. (Examples from Munnings
1987)

	Bilabial	Labio-dental	Denti-alveolar	Apico-alveolar	Palatal	Retroflex	Velar	Uvular	Glottal
Stops									
Vl.unasp.	p		t			T	k	q	
asp.	ph		th			Th	kh		
Vd.unasp.	b		d			D	g		
asp.									
Affricates									
Vl.unasp			ts		c	C			
asp.			tsh		ch	Ch			
Vd.unasp.			dz		j	J			
asp.									
Fricatives									
Vl.		f	s	ś		S	x		h
Vd.			z	ź		Z	G		
Nasals	m		n						
Laterals			L		l				
Taps				r					
Semivowels	w				y				

Table 3. Khowar Consonant Phonemes

The vowel phonemes of Khowar are given in Table 4.[28]

	Unrounded		Rounded
	Front	Central	Back
High	i		u
Mid	e		o
Low		a	

Table 4. Khowar Vowel Phonemes

1.5.3. Morphology

1.5.3.1. Nouns.

Kalasha has lost the inherited category of gender, but has innovatively grammaticized an

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[28]Vowel length is not contrastive, and the distinctive retroflexion of Kalasha vowels is not present. Both Morgenstierne and Buddruss have found that Khowar has phonemic tone. I am grateful to Richard Strand for the following minimal triplet which illustrates this point: gol 'valley', góL 'gully', and gòL 'front part of the neck'.

animacy distinction. The finite verb agrees with the
subject of its sentence in person, number, and animacy.
The verb 'be' has separate forms for animate and inanimate
entities, and since of the nine basic finite verbal forms,
five are formed from a participle plus a finite form of
'be', this distinction is central to the semantics of the
verb system.

Most Kalasha nouns distinguish the category of number
only in the non-nominative cases. A few nouns referring to
specific categories of humans sometimes take a NOM plural
in -aan, e.g. gaDer'ak-aan 'elders'. A very small class of
kinship terms has a specialized plural form -autr'--
bayautr' 'brothers of each other', baabautr' 'sisters of
each other. Adjectives are invariant in form.

Case suffixes for inanimates, animate common nouns and
proper names (of animates?) are as follows:

		Sg.	Pl.
INANIMATE	NOM:	Ø	Ø
	OBL:	-as	-an/-in
	INST:	-an	?
ANIMATE	NOM:	Ø	(-aan), (-autr')
	OBL:	-as	-an/-in/-on'
PROPER	NOM:	Ø	Ø
NAMES	OBL:	-as	?
	DAT:	-a	?

Various local cases are also recorded. The particular case
ending assigned to express a particular local relation
depends both on the specific semantics of the temporal or
spatial relation involved, and on the declension class of
the noun involved. These case desinences include:

ABL: -au, -ani, -ei

LOC (spatial):   -a, -ai, -una

LOC (temporal):   -asa, -ano

In Kalasha both case-marking and verb-agreement are
NOMINATIVE-ACCUSATIVE. That is, the subjects of both
transitive and intransitive sentences are marked in the
same way (NOM) in all tenses, and the verb invariably
agrees with the subject in person, number, and animacy.[26]
Examples (1-4) illustrate these basic cases.

1) Intransitive - past tense
    a   peśa'ur   hat'ya par-a'
    I(NOM) Peshawar to   go(PST-A)-1s

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[26]The same is true for Khowar, with the exception of
constructions of the type bap-o rardu 'the old man said',
in which the verb rardu 'said' is a past participial form.
See Ch. 2, section 2.2.3. These two languages contrast in
this respect with other New Indo-Aryan languages, all of
which (to my knowledge) show or showed some degree of split
ergativity along tense lines. In Urdu, for example, in the
simple past tense of transitive verbs, the subject receives
the "ergative" marker -ne, and the finite verb agrees in
number in gender with the direct object. For example, (a)
    (a)   maĩ-ne   kitaab   paRhii
         I   -ERG book(fs) read(PST-fs)
         'I read the book.'
The reason for this, as proposed by Morgenstierne
(1947:8) is that among the Indo-Aryan languages, Kalasha
and Khowar alone have retained the finite OIA preterital
forms. In all the other IA languages the old finite past
tenses were entirely replaced by forms based on the past
participle; and, according to most scholars, a reanalysis
of the passive construction into an active one took place.
This is evidenced by the fact that in Kalasha (with a large
group of verbs) and Khowar (with fewer verbs) an augmented
past tense has been retained. For example, in Kalasha from
naś'ik 'to die', we have a-naś'-au 'he died', and in Khowar
from brik 'to die' we have obritai 'he died'.
Among the Nuristani languages, Prasun has a NOM-ACC
case marking system. Edelman (1983:56) implies former
geographical contiguity as the reason for this common
feature; saying that Prasun, Kalasha, and Khowar used to
constitute a compact block prior to "the relatively recent
immigration of Kati speakers into the area."

'I went to Peshawar.'

2) <u>Intransitive - non-past tense</u>
   a   peśa'ur hat'ya par-im'-dai[27]
   I(NOM) Peshawar to   go(P/F-S)-1s
   'I am going to Peshawar.'

3) <u>Transitive - past tense</u>
   a   krom   śuruk'   ar'-is
   I(NOM) work(NOM) beginning do(PST-A)-1s
   'I began the work.'

4) <u>Transitive - non-past tense</u>
   a   Sula'   on'-im
   I(NOM) firewood bring(P/F-NS)1s
   'I will bring firewood.'

Direct objects take the NOM case (e.g. 3). If a

singular direct object is marked with a deictic adjective,

i.e. 'this' <u>ama</u> or 'that' <u>ala</u>, the deictic takes its ACC

case form.[28]

1.5.3.2. <u>Pronouns</u>. The personal pronouns are:

		Sg.	Pl.
1)	NOM:	a	a'bi
	OBL:	mai	ho'ma
2)	NOM:	tu	a'bi
	OBL:	tai	mi'mi

The demonstrative pronouns also serve as personal

pronouns in the third person. There are three degrees of

distance. The paradigm is as follows.[29]

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[27]<u>dai</u> is the marker of the present/future-specific
(P/F-S) tense form.

[28]Whether or not NP's marked with these deictics are
the only ones that can be considered definite in Kalasha is
a question which I am not prepared at this point to answer.

[29]In non-careful speech the intervocalic /s/ is often
lost, and the forms <u>a'sa</u>, <u>ta'sa</u>, <u>ta'si</u>, and <u>a'si</u> are often
heard as [<u>a'a</u>], [<u>ta'a</u>], [<u>ta'i</u>], and [<u>a'i</u>].

	Present-near		Present-far		Absent	
	sg.	pl.	sg.	pl.	sg.	pl.
NOM:	(ś)i'ya	e'mi	(ś)a'sa	e'li	(śa)se'	te
ACC:	a'ma	e'mi	a'la	e'li	to	ta
OBL:	i'sa	i'si	a'sa	a'si	ta'sa	ta'si

Notice that in the singular the present-near and the absent categories have three distinct forms--NOM, OBL, and ACC--, while for the present-far category, NOM and OBL are homophonous. In the plural, only NOM and OBL forms are distinct.

An emphatic form of each of these pronouns can be constructed by prefixing ś(a)-. The use of the forms in ś(a)- entails that the referent has been mentioned or is tacitly assumed to be present in the discourse context; these forms convey the sense of 'this/that very one'.

Kalasha has a set of pronominal suffixes, which are suffixed to kinship terms to indicate possession. This is their only function. They do not cliticize to verbs and they do not encode any of the core arguments (subject, direct object, indirect object).[30] Their agreement pattern is unusual; they agree in person with the possessor and in number with the possessed (kin term). The paradigm is as follows.

	Sg.	Pl.
1.	-a	-ai
2.	-au	-ali
3.	-as	-asi

An example of the use of the first person plural suffix is

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[30]See Emeneau (1965), for an identification of six functions which pronominal suffixes in various Indo-Aryan and Iranian languages fulfill.
Khowar does not have pronominal suffixes.

given in (5).

5) te   mai   putr-ai (*putr, *putr-a) roksat'
    they I(OBL) son-PS1p (*Ø, *1s)   departure
    pron [E:mb, bk]
    give(PST-A-3p)
    'They sent off my sons.'

Notice that the pronominal suffix -ai agrees in person

(1st) with the possessor ('I'), but in number with the

possessed ('sons'). In this sentence (1st person pl.

pronominal suffix and direct object possessed NP) the

clitic is obligatory.

The occurrence or non-occurrence of the pronominal

suffix depends on several variables: (a) person-number,

(b) syntactic context, and (c) presupposition of the

existence of the possessed NP. For example, the first

person singular pronominal suffix does not appear in

nominative contexts, either as predicate nominal (6-a) or

as subject (6-b).

6-a) iy'a hom'a   baaba/*baaba-a   [E:bk, mb]
     this us(OBL) sister/sister-*PS1s
     'This is our sister.'

b) mai   chu/*chul-a   cei kar'-iu-dai
   I(OBL) daughter/daughter-PS1s tea make(P/F-S)-3s
   'My daughter is making tea.' [E:mb, bk]

Nor does it appear when the possessed NP is the direct

object (6-c).

c) as'a   mai   chu/*chul-a   troel'-lai
   he(NOM) I(OBL) daughter/*daughter-PS1s cry-CS-P/F-S-3s
   'He is making my daughter cry.'

But it is obligatory when the modified NP is in an OBL

context (6-d).

d) ho'ma   chul-a/*chu   hatya ki'ya
   we(OBL) daughter-PS1s/*daughter for   what

on'i a'-as [E:mb, bk]
bring(P PERF)-2s
'What have you brought for our daughter?'

The third singular pronominal suffix behaves

differently.   It appears in all syntactic contexts, even

nominative (7-a, b).

7-a) iy'a salyim'-a baaba/baaba-s [E:mb]
     this S.-OBL   sister/sister-PS3s
     'This is Salim's sister.'

b) salyim'-a aaya-s/*aaya   payranak'
   S.-OBL   mother-PS3s/*mother across the river
   pai a'-au [E:mb]
   go(P PERF)-3s
   'Salim's mother has gone across the river.'

c) tas'i daada-s/*daada/*daad-asi   hatya kagas'
   they(OBL) father-PS3s/*father/*father-PS3p for   letter
   dai a'-am [E:mb]
   give(P PERF)-1s
   'I sent a letter to their father.'

The use of the pronominal suffix presupposes the

existence (in the appropriate possession relation) of the

possessed NP.   Thus in (8), which is reporting the coming

into existence of the son, the pronominal suffix is not

used.

8) tas'a   pi   ek   putr/*putr-as haw'-au [S, E:bk]
   she(OBL) from one son/*son-PS3s become(PST-A)-3s
   'One son was born from her.'

while in (9), which refers to an already existing son, the

pronominal suffix appears.

9) iy'a kawi'ki-a putr-as [S:bk]
   this K.-OBL   son-PS3s
   'This is Kawiki's son.'

1.5.3.3. Verbs. The following person-number endings

in the present/future and past-actual tenses have been

identified to date.

Person-number endings
Conjugational classes

	Class 1	Class 2	Class 3	Class 4	Class 5
PRES:					
1sg:	'-im	'-am	-em'	-im'	-em
2sg:	'-is	'-as	-es'	-is'	-es
3sg:	'-iu	'-au	-el'/-al'	-iu'	-al
1pl:	'-ik	'-ik	-ek'	-ik'	-ek
2pl:	'-a	'-a	-a'	-a'	-et
3pl:	'-an	'-an	-en'-an'	-in'	-en
PAST:					
1sg:	'-is	'-is	-es'	-a'	-a
2sg:	'-i	'-i	-es'	-a'	-a
3sg:	'-au	'-au	-au'	-au'	-au
1pl:	'-imi	'-imi	-e'mi	-o'mi	-o'mi
2pl:	'-ili	'-ili	-a'li	-a'li	-a'li
3pl:	'-an	'-an	-an'	-on'	-on

	Class 6	Class 7	Class 8
PRES:			
1sg:	'-am	-im'	-im'
2sg:	'-as	-is'	-is'
3sg:	'-au	-iu'	-iu'
1pl:	'-ik	-ik'	-ik'
2pl:	'-a	-eu'	-a'li
3pl:	'-in	-in'	-in'
PAST:			
1sg:	'-es/'-is	-a'	'-is
2sg:	'-i	-a'	'-i
3sg:	'-es/'-is	-au'	'-au
1pl:	'-imi	-o'mi	'-imi
2pl:	'-ili	-a'li	'-ili
3pl:	'-ini	-on'	'-an

Rows indicate person-number categories; columns refer to conjugation classes. This classification is quite preliminary and doubtless incomplete. It incorporates classes identified by Morgenstierne (1973), in Trail (ms), and my own materials.[31] Examples of verbs belonging to

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[31]Trail's classification formulates classes by considering present and past tense forms together, while Morgenstierne considers the present endings separately from the past series. The two schemes are compared below.

Trail's class	M's present class	M's past class
1 (parik')	1 (parik')	1a (ka'rik)

each of these classes follow.

Class 1: kar'ik 'do'
Class 2: ma'ik 'to say'
Class 3: jagek' 'to look at'
Class 4: parik' 'to go'
Class 5: dek 'to give', tyek 'to beat'
Class 6: sǎga'ik 'to hear, feel'
Class 7: ik 'to come', nisik 'to sit down'
Class 8: hik 'to become'

Some verbs have past tense conjugations in which the

OIA augment is preserved. Classes 1 and 2 include verbs

2 (mǎ'ik)	2 (sǎga'ik)	1a (pik)
3 (sawzek')	3 (jagek')	1b (jagek')
4 (parik')	1 (parik')	3 (parik')
5 (dek)	1b (dek)	3 (dek)
	2 (sǎga'ik)	2 (sǎga'ik)

My classes are compared with Trail's and
Morgenstierne's in the following summary table.

Bashir	Trail	Morg.(pres.)	Morg.(past)
1	1	–	1a
2	2	2	1a
3	3	3	1b
4	4	1	3
5	5	1b	3
6	–	2	2
7	–	–	3
8	–	–	1a

My class 7 is the same as Class 4 with the exception of the
2nd pl. present. Class 7 verbs appear to be undergoing
regularization to the Class 4 paradigm. Class 8 includes
to my knowledge only the verb hik and appears to represent
a contamination of the 2nd pl. present with the 2nd pl.
preterite ending represented in Classes 3, 4, and 5.
Morgenstierne also noted a preterital class 1c, but only
for one verb in the Urtsun dialect (1973:227).
Morgenstierne (1973:228) notes a PST-A 3s form adu'is
with 3p. adu'ini (< duik 'to burn'), with the gloss 'it
ached'. Noting several other forms: bilis' 'it melted',
sathis' '(the rain) stopped', di witraz'is 'the sky
brightened', aśis' 'it was', tsatsir'is 'it (the belly)
became satisfied', and (LSI) śuru'is 'it fell', he comments
that all these have inanimate subjects. Now in my
materials I have adu'au 'it burned' with the inanimate
subject 'bread'. This may indicate that in M's time (1929)
the distinction between animate and inanimate subjects was
also marked in verbs other than 'be', by an alternation
between the 3rd person endings -is/-ani for inanimates and
-au/-an for animates.

with augmented past tense conjugations. The forms of the verb ka'rik 'do' exemplify these verbs.[32]

	Sg.	Pl.
1.	a ar'-is	a'bi ar'-imi
2.	tu ar'-i	a'bi ar'-ili
3.	se ar'-au	te ar'-an

Past-inferential forms are past participles used as finite verbs. These participles terminate in -u'na (e.g. nisu'na 'sat down', -(a)'la (e.g. gala 'went'), -da (e.g. ka'da 'did'), -ila (e.g. chin'ila 'broke').[33] Person-number marking in first and second persons sg. and pl. is achieved by appending the present-future forms of hik 'to become', the paradigm for which follows. Third person is unmarked for person and number.

Paradigm of hik 'become'

Present

	Sg.	Pl.
1.	h-im	h-ik
2.	h-is	h-al'i
3.	h-iu'	h-in

Past-Actual

	Sg.	Pl.
1.	haw'-is	haw'-imi
2.	haw'-i	haw'-ili
3.	haw'-au	haw'-an

Past-Inferential

	Sg.	Pl.
1.	hu'la him	hu'la hik
2.	hu'la his	hu'la ha'li
3.	hu'la	hu'la

---

[32]These are the N. Kalasha forms. Morgenstierne recorded akar'is 'I did', akar'i 'you (sg.) did', akar'er 'he did', akar'imi 'we did', akar'eri 'you(pl.) did', akar'en 'they did' in Urtsun in 1929. When I tested the form akar'is 'I did' with a Bumburet informant, it was not accepted.

[33]See Morgenstierne (1973:231) for historical discussion of these forms.

The paradigms of the auxiliaries 'be' as'ik (animate) and śik (inanimate) are given below. 'Be' also functions as a finite verb in existential sentences, i.e. those affirming the existence, in general or in a specific location, of an entity. Equational sentences, however, are nominal constructions, e.g. iya may chu (*aau). 'This my daughter (*is).'

Paradigm of as'ik, śik 'be'(animate/inanimate

Present
	Sg.	Pl.
1.	a'-am (as'-am)	a'-ik (a'-sik)
2.	a'-as (as'-as)	a'-a (a'-sa)
3 an.	a'-au (as'-au)	a'-an (as'an)
inan.	śi'-u	śi'-an

Past-actual
	Sg.	Pl.
1.	ay'-is (as'-is)	ay'-imi (as'-imi)
2.	ay'-i (as'-i)	ay'-ili (as'-ili)
3. an.	ay'-is (as'-is)	ay'-ini (as'-ini)
inan.	aś-is'	aś-i'ni

Past-inferential
	Sg.	Pl.
1.	as'ta him	as'ta hik
2.	as'ta his	as'ta ha'li
3 an.	as'ta	as'ta
inan.	śia'la	śia'la

The [y] in the PST-A forms represents a glide which develops with the loss of intervocalic /s/. The forms given in parentheses are alternate pronunciations, heard occasionally in Bumburet today. Morgenstierne (1973) based on field work done in 1929 gives these as the normal forms. As with other verbs, the first and second persons of the PST-I paradigm are constructed with the present tense of the auxiliary hik 'become'.

1.5.3.4. Discourse particles. A particle mi, which

can suffix to any type of constituent, and is always

stressed, functions as an exclusive emphatic, very much

like the exclusive <u>hi</u> of Urdu. For example (10).

10) i'ya mai—mi'   kitap' [S]
     this I(OBL)—EMPH book
     'This is my book (and not someone else's)'

     The particle —<u>ta</u>, which is never stressed, serves as a

topicalizer, as in (11) and (12).

11) phu'ci—ta   a'—am   [S:bkw]
     ask(CP)—TOP   be(AN—P/F)—1s
     'I <u>have</u> asked' (In reply to question 'Why don't you
      ask?')

12) tai—mi'   taada—ta śi'u   [S:z]
     you(OBL) near—TOP be(INAN—P/F)—3s
     'It is right by (near) you (and nowhere else).'

     The particles —<u>mi</u> and —<u>ta</u> can co-occur, as in (13).

13) śatra'—mi'—ta   thai   a'—am [S:bkw]
     EMPH—there—EMPH—TOP put(CP) be(AN—P/F)—1s
     'I put it right there!'

—<u>mi</u> can also occur between the verb <u>bha'ik</u> 'to be able' and

its infinitival complement, as in (14).

14) maska' źuk—mi'   na bha'—am [S:bkw]
     butter eat(INF)—EMPH NEG be able(P/F—NS)—1s
     'I can't eat butter at all!'

     The particle —<u>o</u> is multifunctional; one meaning it

conveys is of contrast with a previously mentioned entity

or situation, or with an implied situation. Consider the

sentences in (15) and (16).

15) mic aś'—is   maza'—o   ne ar'—au [S:mb]
     only eat(PST—A)—1s enjoyment not do(PST—A)—3s
     'I only ate, but didn't enjoy it.'

16—a) a paś'—i—o   ne a'—am   [S:bs]
       I(NOM) see(CP)—o not be(AN)—1s
       'I haven't <u>seen</u> it (only heard about it).'

   b) thai'—o   kawai' a'—as [S:bk]

```
        put(CP)-o where   be(AN-P/F)-2s
        'Where did you put it?'
```

Notice that in (16-a and b) -o intervenes between the

participial and the finite elements of the participial

present perfect tense forms.   -o can also intervene along

with an adverb between the finite element and the

specificity marker of the P/F-Specific tense, as in (17).

```
17) par-is'-o  kawai' dai   [S:bkw]
    go(P/F)-2s where   specificity marker
    'Where are you going?'
```

With the conjunctive participle, -o emphasizes the meaning

of temporal sequentiality: Compare (18-a and b, and c).

```
18-a) żai            kai   uk    halim'-dai [E:bk, ek, mb]
      water channel do(CP) water bring(P/F-S)-1s
      'By making a water channel I am bringing water.'
```

```
b) żai            kai-o    bo   uk    i-u [E:bk, ek, mb]
   water channel do(CP)-o much water come(P/F-NS)-3s
   'When/if (we) make a water channel, a lot of water
    will come.'
```

```
c) te     śerau      że uk    tha'i-o   ban kai-o
   those dry bread.and water put(CP)-o close(CP)-o
   ga'la [T9:kn]
   go(PST-I)-3s
   'He left those pieces of dry bread and water, locked
    (him up) and left.'
```

In (18-a) the interpretation of the conjunctive participle

is of a manner or reason adverbial, while in (18-b), with

-o, the sense of sequentiality is emphasized. Similarly,

(18-c) stresses the sequentiality of the three actions

mentioned.

The particles -ta and -o often function together to

show topicality and contrast, giving -o the sense of 'but':

19) ś-a´si   istriża´-an moc´-ai du´-ta   mai
    EMPH-those(OBL) women-OBL among   two-TOP   my
    dust   du´-o mai duśman´   [E:bk]
    friends two-o my enemies
    ´Two of those women are my friends but two are my
    enemies.´

The enclitic -tik conveys a presumptive meaning,

similar to the function of the Urdu presumptive

construction with the future of honaa ´become´. Compare

(20-a and b).

20-a) aap ke beTe   kii abhii tak   śaadi   nahīī
      you of son(OBL) of now   until   wedding(fs) not
      hu-ii   ho-gii
      become(PST)-fs become(FUT)-fs
      ´Your son is probably not married yet.´

b) tai putr ja   ne kai   a´-au   tik   [S]
   your son wife not do(CP) be(AN-P/F)-3s PRMT
   ´Your son is probably not married.´

But, in contrast to Urdu hogaa, this particle can

cliticize to constituents other than the verb, emphasizing

the constituent which it follows, as in (21).

21) se peśa´ur hat´ya tik   par-au´
     he Peshawar to   PRMT go(PSTa)-3s
     ´He probably went to Peshawar.´

A "cajolative" particle naa/nee is also found, which

is illustrated in (22).

22-a) sak   kimat´ hu´la neé ghôi mai´la [T :]
      very much price   became CAJ COMP say(PST-I)-3s
      ´"The price is (surprisingly) very high - (really)",
      he said.´

  b) tu-ta   aset´   thi   a´-as-e   neé
     you-TOP ruined become(CP) be(AN-P/F)-2s-Q CAJ
     ´You are (already) ruined (yourself) - aren´t you!´
     [T2:bkw]

  c) ś-al-ai´   gô´gur-ai ati´   luhi´-as   naa
     EMPH-there-LOC hole-LOC   enter(CP) hide(IMP2s) CAJ
     ´Just get into that hole and hide.´ [T2:bkw]

It functions sometimes (22-b) like the English tag

questions, 'aren't you, didn't I', etc., or the Urdu <u>hai-na</u>
'Isn't it so?'.

With the exception of the cajolative, all these
particles form phonological units with the constituents to
which they attach.

CHAPTER 2

STRUCTURE OF THE VERB SYSTEM

In this chapter I first discuss the Kalasha verb
system, summarizing stem-formation processes, and giving a
brief overview of non-finite and finite forms. I
provisionally characterize the Kalasha verb system with
reference to the informally defined semantic parameters of
TENSE, ASPECT, MODALITY, SPECIFICITY, and INFERENTIALITY,
and show how they interact in this language. Then I apply
Windfuhr's model and specific terminology as introduced in
Chapter 1 to the analysis of the Kalasha verb system.
Repeating the process for Khowar, I draw a comparison
between the systems of Kalasha and Khowar. Finally, I
formulate a similar representation for Urdu/Hindi and refer
to Windfuhr's schematizations of the Iranian and Turkic
verb systems in an attempt to arrive at some historical,
areal, and typological inferences.

2.1. Kalasha

2.1.1. Stem-formation

With regard to stem formation, Kalasha verbs can be
divided into two classes: those for which all forms,
finite and non-finite, are formed on a single stem, which

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consists of verb root + -i or -e (< -ai), and those in

which the (non-inferential) past stem consists of root +

stem formant vowel + a- augment.[1] Stems in -ai-/-e- are

usually transitive.[2]

2.1.2. Non-finite verbal formations

Non-finite forms are defined to be those which are not

specified for person and number. They may, however, be

specified for tense and/or aspect.[3]

Kalasha has the following non-finite forms: (1)

perfective participle, consisting of (stressed) stem plus

-i. żu'-i 'having eaten' (<żu-) exemplifies the regular

---

[1]A few of the most frequently used verbs are irreg-
ular: par- 'go' with past participle ga'la, perfective
participle pai; i- 'come', perfective participle ita and
past participle ala; h- 'become', perfective participle
thi, past participle hu'la; d- 'give', past stem pr-.
A partial catalogue of verbs with augmented past stems
includes: pi- 'drink', kar- 'do', paś- 'see', SaT- 'be
attached to', gr- 'seize', żu 'eat', buj- 'wake', bom-
'vomit', brīk- 'sell', bas- 'spend the night', chīk-
'sneeze, bhon- 'tie', du- 'milk', bhin- 'knit', ghaT- 'ask
for', hØc- 'pull', jhon- 'know', kral- 'laugh', kuT-
'break', li- 'lick', mar- 'kill', niq- 'wash', naś- 'die',
pal- 'fall', piS- 'grind', phuc- 'ask', tro- 'weep', żal-
'arrive, reach', żaw- 'copulate', krat- 'laugh', mā-
'speak', praZm- 'forget', waż- 'bathe'. (Morgenstierne,
1973:227)
It may be that the process of past stem formation by
augmentation remains, or has remained until fairly recent-
ly, productive. One piece of evidence is suggestive: the
usual past tense first person singular form from żu- 'eat'
is aś'-is 'I ate'. There is, however, an alternate past
tense form ażu-is meaning 'I ate up (all of something)'.
The interesting point is that aside from the initial a-
augmentation, the rest of the formation is regular.

[2]These stems in -ai/-e appear to be lineal descendents
of Skt. -aya- causatives. (Cf. Ch. 3 below.)

[3]See Bashir (1986) for a discussion of this point in
relation to Kashmiri infinitives.

pattern. A few of the most common verbs have irregular

forms: i'ta 'having come' (<i-), kai 'having done' (<kar),

thi 'being, having become' (< h-), which functions as the

perfective participle for as- 'be(ANIMATE)', ś-

'be(INANIMATE)', as well as h- 'become'.

The perfective participle has the following

functions. (a) It serves as a base for the perfect tenses,

which consist of perfective participle plus finite forms of

as- 'be(AN)', or ś- 'be(INAN)'. For example, present

perfect kai a'-am 'I have done', du'i śi'u 'it is burned';

past perfect-ACTUAL kai av'is 'I did/had done', du'i aśis'

'it was burned'; past perfect-INFERENTIAL kai as'ta him 'I

had done (reportedly)', du'i śia'la 'it was (inferential)

burned'[4]

(b) The perfective participle plus finite forms of

parik 'to go', possibly dek 'to give', thek 'to put' form

compound verbs in the sense commonly used in South Asian

studies. (See Hook 1974, 1976; Masica 1976.) For example,

au' du'i par-au' (bread burn go) 'the bread burned'.

(c) It functions as a conjunctive participle

("absolutive" in some literature), again in the sense well

understood in South Asian studies. In this function it

conveys meanings of anteriority, manner, circumstance, and

cause or reason, and is used as a generalized

adverbializer. When it is used in this function I shall

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[4]The range of meanings of the INFERENTIAL forms will
be discussed in section 2.1.3.

refer to it as the "conjunctive participle" (CP).

(d) Followed by piST'au 'after', it is used to construct subordinate temporal clauses. (e) It expresses the complement of the phasal verb khuly'ek 'to finish', e.g. niveś'i khuly-em' 'I will finish writing'.

(f) It cannot be used attributively or to form participial relative clauses.

(2) The imperfective participle consists of stem, with stress on the formant vowel, plus -man. This formation is entirely regular, e.g. kar-i'-man 'doing'(<kar'-ik 'to do'), par-i'-man 'going' (<par-ik' 'to go'), sawz-a-i'-man 'making, constructing' (<sawz-ek' 'to construct, make').

The imperfective participle has the following functions. (a) In construction with the past-ACTUAL and past-INFERENTIAL forms of as- 'be(AN)' and ś- 'be(INAN)' it forms the past imperfective-ACTUAL and past imperfective-INFERENTIAL tenses. For example, a krom kar-i'man ay'is 'I was working (direct knowledge)'.

(b) It is used adverbially, e.g. tro-i'man par-au' 'He/she went, crying', but not adjectivally: *tro-i'man su'da 'crying child(ren)'.

(c) In construction with finite forms of i- 'go', it forms a compound verbal construction with quasi-aspectual functions: chak d-i'man iu'-dai '(Evening) shade is in the process of falling'.⁹

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⁹Since the forms consisting of the imperfective participle plus finite forms of 'come' seem less well integrated into the Kalasha system than their Khowar

(3) Kalasha verbs fall into four classes with regard
to past participle formation.[4] (a) stem plus -ta/-da, di-
'ta 'given', ka'da 'done'; (b) in '-(i)la, ga'la 'gone',
hu'la 'become', phaź'ila 'distributed, divided', phuc'ila
'asked'; (c) in -a'lya, e.g. nisa'lya 'made sit down,
seated', sawza'lya 'constructed'[7]; (d) stem plus -u'na,
nisu'na 'seated', prasu'na 'asleep'. Verbs belonging to
class (c) are basic transitives or -a- causatives, and
those in class (d) are usually intransitive.

The past participle is (a) the base for the PAST-
INFERENTIAL tense. In the first and second persons,
specification for person and number of the agent is
achieved by attaching the Present/Future-NON SPECIFIC forms
of h- 'become'(cf. 1.5.3.3.). For example se ga'la 'he
went', a ga'la him 'I went (without realizing it)'.

(b) It functions as an attributive adjective, e.g.
ni'gila pyala' 'washed cup'. (c) It also forms participial
relative clauses, e.g. tai ka'da krom bo pruST 'the work
you did is very good'.[8]

---

counterparts in imperfective participle plus 'come', I have
not included them in the basic system or represented them
on the schematic representation of the Kalasha verb system.

[4]See Morgenstierne (1973:231) for historical
discussion of these forms.

[7]In these transitive/causative formations the
palatalization has developed as follows: -a'-ila > -aly'a,
in which the [+ high] feature moves from the stem formant -
i, which is subsequently lost, to the following consonant.

[8]It is important to note, vis-à-vis the question of
split ergativity in South Asian languages, that, although
Kalasha's case marking in matrix sentences is completely

(4) The Kalasha infinitive formant is -k, e.g. par-ik'
'to go', kar'-ik 'to do'.[7] The infinitive functions as a
noun, and takes the same case endings and postpositions as
other inanimates, e.g. ik'-as pati 'for the sake of
coming'. (a) Thus used, it forms the base of many subject
and object complement structures. (b) The abilitative
construction, INF plus bha'- 'be able', e.g. (a) a'ma krom
kar'-ik bha'-am 'I can do this work', and a necessitative,
INF(-as) baS, e.g. mai catrau' parik-baS' 'I have to go to
Chitral', utilize the infinitive. (c) In an inflected
form it is used to construct infinitival relative clauses.
(See Ch. 6.) (d) Coupled with ghŏan (say(P/F-NON-
SPECIFIC-3p) 'it is said', it yields a construction with
present/future-non specific time reference and inferential
semantics. This is discussed in Section 2.2.4.1.2. (e)
Compounded with -wew 'time of (V-ing)' it forms temporal
subordinate clauses.

(5) There is a non-finite form in -un , e.g. sapra'-
un 'found', umra'-un 'opened', which I shall provisionally
call the passive participle. This parallels the Khowar
forms in -in and -onu in form, but seems more restricted in
function, being but infrequently encountered. In construc-

NOM-ACC, when the past participle functions to form
participial relative clauses, the agent is encoded with an
OBL form, e.g. mai ni'gila pyala' 'the cup I washed'.
Participial relative clauses are treated in Ch. 6.

[7]Infinitives in -k also characterize the Dardic
languages Khowar, Gawar-bati (southwest), Paśai, and Gilgit
Shina, the Nuristani Prasun, and Iranian Wakhi. See Ch. 7
for discussion of this as a sub-areal feature.

tion with par- 'go' it forms a kind of "passive". The

meaning of this "passive" is the (negative) abilitative one

often encountered in other South Asian languages, e.g. iy'a

darwaza' ne umra'-un par-iu' 'this door can't be opened

(because it is stuck too tight, or the wood is swollen)'.

(6) **Necessitative (participle):** A form consisting of

verb root plus -e'lyi expresses necessity or compulsion,

e.g. kar-e'lyi 'must be done, must do'.

Deverbal nominal formations include (7) an agent noun

in -aw, e.g. jan chalawaw' 'one who takes lives', and (8) a

quasi-desiderative form in -a'lyak with the meaning 'desire

to V, feeling of V-ing', e.g. žua'lyak 'desire to eat',

pia'lyak 'desire to drink'.

2.1.3. Indicative system

2.1.2.1. Basic tense-aspect-mood forms.

Kalasha has nine basic tense-aspect forms in the

indicative. They are exemplified here for the verb par-

'go' in the first person singular.

1) PRESENT/FUTURE-NON-SPECIFIC: (henceforth P/F-NS)
   par-im' 'I go, I will go'

2) PRESENT/FUTURE-SPECIFIC: (henceforth P/F-S)
   par-im'-dai 'I am going, I will be going'

3) PAST-ACTUAL: (henceforth PST-A)
   par-a' 'I went'

4) PAST IMPERFECTIVE-ACTUAL: (henceforth PST IMPFV-A)
   pari'man ay'is 'I was going'

5) PAST IMPERFECTIVE-INFERENTIAL: (henceforth PST IMPFV-I)
   pari'man as'ta him 'I was going'

6) PRESENT PERFECT (henceforth P PERF)
   pai a'-am 'I have gone'

7) PAST PERFECT-ACTUAL: (henceforth PST PERF-A)
   <u>pai ay'-is</u> 'I had gone'

8) PAST PERFECT-INFERENTIAL: (henceforth PST PERF-I)
   <u>pai as'ta him</u> 'I had gone'

9) PAST-INFERENTIAL: (henceforth PST-I)
   <u>qa'la him</u> 'I went'

   (1) The P/F-NS forms consist of the verb stem plus

present system personal endings (see 1.5.3.3.). They have

the following range of functions. In matrix clauses they

are used for (a) generic statements - general truths (1),

(b) habitual present (2), (c) non-specific future (3), (d)

habitual or iterative future (4), and (e) in negative

statements about the future (5). In subordinate clauses

they appear (f) in either the protasis (6-a) or apodosis

(6-b) of realis conditionals[10], (g) in the apodosis of

irrealis conditionals (7), and (h) in complement clauses of

verbs of fearing (8-a) and in "until" clauses (8-b).

1) nyu   au' . bo   źu-el' [S:mb]
   buttermilk bread very eat(Cs)(P/F-NS)-3s
   'One feels like eating a lot of bread with buttermilk'
   (Lit: 'Buttermilk makes one eat a lot of bread')

2) ki'ya galak'se paś'-iu   aś'i-ai   dy-el [S:bkw]
   whatever   see(P/F-NS)-3s mouth-LOC put(P/F-NS)-3s
   'Whatever she sees she puts in her mouth.'

3) A: saif'ulla kawa' [S]
       S.   where   'Where is Saifullah?'
   B: iu' iu'   [S:sw]
       come(P/F-NS)-3s   'He'll come; he'll come'

In (3) the second speaker does not know when the subject is

coming; contrast this with (11) below, in which the

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[10]Out of a corpus of 120 conditional sentences,
gathered from at least four sources, in 103 of them the
verb in the apodosis is in this form.

specific time of action is known by the speaker.

4) atrek' mastruk'-asa te   har   ad'u-a in [E:bk]
   next   month-LOC   they every day-LOC come(P/F-NS)-3p
   'Next month they will come every day.'

5) a co'po So baja' ne im [E:bk]
   I(NOM) morning six o'clock not come(P/F-NS)-1s
   'I won't come tomorrow at 6 o'clock'

6-a) tu peśa'ur pe par-is'   a tai   taada ta'sa
     you P.   if go(P/F-NS) I you(OBL) with him(OBL)
     hat'ya paysa' anz-em' [E:bk, mb]
     for   money send(P/F)-1s
     'If you go to Peshawar I will send money for him with
     you.'

b) rat   baS'ik prau   pe haw'-au
   night rain   fall(PST-A)-3s if become(PST-A)-3s
   jowari' xarap' hin/*hin-dai [E:bk, mb]
   maize   spoiled become(P/F-NS)-3p/*P/F-S
   'If it rains tonight the maize will be spoiled.'

Notice that in this case the specific form is not

appropriate, since if the event in a condition is

uncertain, the possible event in the consequence clause

cannot be specific.

7) a ne   kas'ik · bha'-am   dya'pa   a
   I not walk(INF) be able(P/F-NS) otherwise I
   i-m [S:bkw]
   come(P/F-NS)-1s
   'I can't walk, otherwise I would come.'

8-a) a   bihim'-dai   ki   mai A'gu   oś
     I(NOM) fear(P/F[S])-1s that my fingers cold
     thi   trup-en' [E:bk]
     become(CP) hurt(Cs)(P/F-NS)-3p
     'I am afraid that my fingers will get frostbitten'
     (Lit: 'I am afraid that my fingers will get cold and
     hurt.')

b) aya' apau' de tai   xat   del   śamon'
   here wait(IMP) you(OBL) letter give(P/F-NS)-3s until
   'Wait here until he gives you the letter'[11] [E:bk, mb]

     (2) The P/F-S forms consist of the P/F-NS forms plus

_____

[11]This sentence is one of Hook's (1978) diagnostic
sentences for the perfective.

the specificity marker -dai. They express: (a) ongoing

present action (present progressive), (b) iterative

(specific) present, (c) specific immediate future, (d)

specific non-immediate future, (e) a present-perfect

progressive sense, and (f) are used in sentences which

question or challenge the ability or reason for doing a

specific action. These uses are illustrated in examples

(9) - (14) respectively.

9) kawai' par-is'-dai [S]
   whither go(P/F-S)-2s
   'Where are you going?'

10) ö'je se har   a'du-a iu'-dai [S:bk]
    now he every day-LOC come(P/F-S)-3s
    'Now he comes every day.'

11) tai   putr ubuj-u'-dai   rat [Morg.1973:17]
    you(OBL) son be born(P/F-S)-3s night
    'Your son will be born tonight.'

12) co'po   pu'ra So baja'-an   iu'-dai [E:bk]
    morning exact six o'clock-OBL come(P/F-S)-3s
    'Tomorrow morning he is coming at exactly 6 o'clock'

13) cop'-au   and-ei' tro'-iu-dai [E:bk]
    morning-ABL here-LOC cry(P/F-S)-3s
    'She has been crying since morning.'

14) khyê kar'-is-dai . . . tu kawalyi'ek
    how do(P/F-S)-2s   you alone
    'How (can) you do (it)?! You are alone.

    (3) The forms of the PST-A consist of a- augmented or

unaugmented stem plus the preterital personal endings.

They are used in the following meanings: (a) recent or

immediate past action (15), (b) immediate future (16-a, b),

(c) in the protasis and apodosis of both realis and

irrealis conditional sentences (17-a, b, c), (d)

instantaneous punctual present (18), (e) with verbs

denoting durative actions or states, to mean the inception

of the action/state (19-a, b).

15) ŏ'je-mi'   par-au'   [S]
    now EMPH go(PST-A)-3s
    'He just left.'

16-a) kaw-ai' par-a'   [S]
      whither go(PST-A)-2s
      'Where are you going?' (uttered just as the addressee
      is leaving)

b)   a'bi   par-o'mi [S]
     we(NOM) go(PST-A)-1p
     'We are just leaving' (uttered just as the speakers are
     going out the door)

17-a) bitr   pe haw'-al-au'   jahas' iu'[12]   [E:mb]
       clear sky if become(PST-A)-3s plane come(P/F-NS)-3s
       'If it is clear, the plane will come'

b)   talei-o   wehäk'   ik   ne abha'-imi
     there-ABL-o upstream come(INF) not be able(PST-A)-1p
     dya'pa   ab'i as'ta wě'a   kai o'mi   dya
     otherwise we   also upstream to come(PST-A)-1p CTF
     'We weren't able to come upstream to the cattle house
      from there; otherwise we too would have come upstream.'
     [T:O:sj]

c)   a daulatman' pe haw'-is   a to   zamin'
     I rich   if·become(PST-A)-1s I that(ACC) land
     agr-is'   dya [E:bk, mb]
     take(PST-A)-1s CTF
     'If I were rich I would have bought that land.'

18) o, arzan' ama'-an [S]
     oh azan   say(PST-A)-3p
     'Oh, they are giving the call to prayer'[13]
     (uttered just as the prayer call had begun)

_____

[12]The form haw'-al-au' consists of //haw'-au + haw'-
au// which in normal speech is reduced as seen. The rule
l > -w/__ # is explained by the velarized character of this
sound in Kalasha. I have considered /l/ as the underlying
form on the basis of forms like chu 'daughter (NOM)', chul-
as 'daughter'(OBL), which Morgenstierne derives from a form
like *jhu:ð, with ð > r/l.

[13]The form arzan' (<azan' a recent borrowing meaning
the Muslim call to prayer) is interesting in that it
illustrates the tendency in Kalasha to create consonant
clusters from simple consonants.

19-a) su'da aDuD'-au [S]
    child sleep(PST-A)-3s
    'The child went to sleep.'

  b) su'da atro'-au [S]
    child cry(PST-A)-3s
    'The child began to cry.'

    (4) The PST IMPFV-A forms consist of the imperfective

participle plus the PST-A form of animate or inanimate

'be'. They carry (a) past habitual (20-a) and iterative

(20-b), (b) past progressive (21), and (c) past conative

(22). They also seem to occur (infrequently) in the

protasis of realis (23-a) or irrealis (23-b) conditionals,

or the apodosis of irrealis conditionals (23-c).

20-a) japani' bo   DAu' tu-i'man ay'-is [S:bk]
    japanese much beans eat(PST IMPFV-A)-3s
    'The Japanese man used to eat a lot of beans.'

b)   par   tu   har   a'du-a   dawtar'-e
    last year you(NOM) every day-LOC office-LOC
    par-i'man ay'-i [E:bk]
    go(PST IMPFV-A)-2s
    'Last year you went to the office every day.'

21) a   sabak' may-i'man ay'-is [E:bk]
    I(NOM) lesson read(PST IMPFV-A)-1s
    'I was studying.'

22) a   draZn-i'man ay'-is   ajo'na on[14] [E:bk]
    I(NOM) go out(PST IMPFV-A)-1s guests come(PST-A)-3p
    'I was about to leave/leaving (when) guests came.'

23-a) se-mi   pe ne bhai'man ay'-is   .
    he-EMPH if not be able(PST IMPFV-A)-3s
  ha'-au warek' kas kiraye'-an hiu' [T&C 1987:207]
  become(PST-A)-3s other someone hired become(P/F-NS)-3s
  'If they aren't able to (do it) themselves, some-
  one else will be hired.'

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[14]Trail and Cooper (1987:142) give what I have as
draZnik', a simple verb meaning 'to go out', as draS nih-
ik', two words meaning 'to go out quickly'. I am not sure
which is the correct analysis. Peter Hook (p.c.) adds that
in Kashmiri dr- is the past stem of nyeer- 'go out'.

b) tu   pe peśa'ur pari'man ay'i dyapa a as'ta
   you if P.   go(PST-A)-2s CTF   I also
   a   dya [E:mb]
   come(PST-A)-1s CTF
   'If you had been going to Peshawar, I would also have
   gone.'

c) as'a ấgar'-ei Sula' chal-au'   dya   au'
   he fire-ABL wood pul(PST-A)-3s otherwise bread
   dui'man aśis' [S:bk, E:mb]
   burn(PST-A)-3s
   'He pulled some wood out of the fire, otherwise the
   bread would have burned.'

   (5) The PST IMPFV-I consists of the imperfective par-

ticiple plus the PST-I forms of animate or inanimate 'be'.

It is used for (a) continuous actions unseen by the speaker

taking place in the recent (24) or distant (25) past, and

(b) in the apodosis of contrafactual conditionals (26).

24) a   ồj-o re'Dio kố ar'-is   doS   peśa'ur
    I(NOM) now-o radio ear do(PST-A)-1s yesterday Peshawar
    bo   baS'ik d-i'man śia'la [E:bk]
    much rain   fall(PST IMPFV-I)-3s
    'I just listened to the radio. Yesterday it was
    raining a lot in Peshawar.'

25) a'sa   bo   Sumber' lahur' apau' d-i'man as'ta
    he(NOM) very before Lahore stay(PST IMPFV-I)-3s
    'A long time ago he lived/was living in Lahore.' [E:bk]

26-a) ś-ate'   pai dayi'milyi hat'ya ne las-a'lya
      EMPH-they goats D.   to   not let go(PST-I)-3p
      'They₁ didn't let the goats go to Dayimili;
      dya   n-i'man-o as'ta [TO:sj]
      otherwise take(PST IMPFV-I)-3p
      'otherwise they₃ would have taken (them there).'

b) a tara' ne par-a'   tara' pe para'   a
   I there not go(PST-A)-1s there if go(PST-A)-1s I
   lAi' gi'ri hi'man as'ta him [S:bk, E:mb]
   beaten   become(PST IMPFV-I)-1s
   'I didn't go there. If I went/had gone (?) there I
   would be/would have been (?) beaten.'[18]

---

[18]The form lAi gi'ri hi'man as'ta him 'I would have
been beaten' is the only occurrence in my corpus or which I
have been able to elicit of the (passive?) form in V(CP)-

In sentence (24) we have a situation in which the speaker did not previously know that it had been raining in Peshawar, and only learned this after listening to the radio. Reporting information just found out is one of the most typical semantic functions of the inferential forms. Compare (24) with (27) in which the state of affairs described is the speaker's own bodily sensation of cold.

27) doS   mai   bo   oś   kar-i'man
    yesterday I(OBL) very cold do(PST IMPFV-A)-3s
    aś-is'/✗śi-a'la [E:bk, mb, sj]
           /✗PST IMPFV-I
    'Yesterday I was feeling very cold.'

The inferential form <u>śi-a'la</u> is not possible here since if the speaker was feeling cold yesterday he would have realized it at that time. One's own physical sensation is not something that could be learned about only later.

(6) The **PRESENT PERFECT** is formed from the perfective participle plus present tense forms of 'be', animate or inanimate. It can convey at least three types of meanings. (a) With verbs denoting durative actions, it expresses a state (28); while with non-durative verbs it expresses past actions with present relevance (29). (b) The "experiential perfect" sense (cf. Comrie, 1976:58ff) is also conveyed by this form (30).

28) drami'y-a tik Du'Di a'-an [S:bkw]

<u>giri BE/BECOME</u>, which was cited in <u>LSI</u> (VIII.2:76) as the "passive" construction. It appears that it is (now) a lexical survival only.

```
roof-LOC  PRMT sleep(P PERF)-3s¹⁴
'They must be asleep on the roof.'
```

29) ek   mastruk' Sumber' mai   baaya   peśa'ur-ei
    one month   before I(OBL) brother Peshawar-ABL
    i'ta a'-au [E:bk]
    come(P PERF)-3s
    'One month ago my brother came from Peshawar.' (and he
    is still here).

30) a   pбj So chaT jahas'-una nisi' a'-am [S:mb]
    I(OBL) 5 6 times plane-LOC sit(P PERF)-1s
    'I have ridden (lit.'sat')in a plane five or six times.'

(7) The PST PERF-A is constructed with the perfective

participle plus the PST-A forms of animate or inanimate

'be'. It is used for (a) with durative/stative verbs to

describe states which obtained in the past (31, 35) and (b)

with non-durative verbs to report past actions either with

(32-a) or without (32-b) continued relevance. The PST

PERF-A forms can also appear in the apodosis of realis

conditionals (33).

31) a   Du'Di ay'-is   hEy'ru a'la [E:bk]
    I(NOM) sleep(PST PERF-A)-1s thief come(PST-I)3s
    'I was asleep/sleeping (when) a thief came.'

32-a) doS   par-im'   ghбi   mai ay'-is [S]
      yesterday go(P/F-NS)-1s say(CP) say(PST PERF-A)-3s
        'Yesterday she said she would come.'(but so far she
         hasn't)

b) źo'śi banda-ik'-a   krAkA' pai ay'-is [S]
   Zhoshi instruct(INF)-PURP K.   go(PST PERF-A)-3s
   'He went to Karakal to call them to participate in
   Zhoshi.'

33) baza' pe uśluha'i ay'-ini   ha'au
    arms if bruise(PST PERF-A)-3p become(PST-A)-3s
    mum khaS'-an [T&C:226; E:mb]
    was rub(P/F-NS)-3p
    'If they have bruised their arms, they rub wax (on

_____

¹⁴The verb as- 'be' (ANIM) has only one form in the
P/F tense. Hence the specific/non-specific opposition is
neutralized with this verb.

them).'

(8) The PST PERF-I consists of the perfective participle plus the PST-I forms of animate or inanimabe 'be'. It is used to express (a) past actions not witnessed by the speaker (34), and (b) past perfect unwitnessed action--that is, action which happened prior to a reference point (in the Reichenbachian sense) which is itself in the past (35). (c) PST PERF-I forms can also appear in the protasis of realis conditionals, e.g. (36).

34) to   moc ku'ra pa'śi as'ta   [E:bk]
    that(ACC) man who   see(PST PERF-I)-3s
    'Who saw that man?'

35) phäD   chi'ni   mizok' guum żu'la
    storage bin break(CP) mouse wheat eat(PST-I)-3s
    a jag-es'   guum żu'i aś-is'
    I look(PST-A)-1s wheat eat(PAST PERF-A)-3s
    mizok' Zot   guum żu'i as'ta   [S:bk]
    mouse   already wheat eat(PST PERF-I)-3s
    'A mouse/mice broke the storage bin and ate the
    wheat. (When) I looked, the wheat was eaten. The
    mouse had already eaten the wheat.'

36) tu   pe talai whäi asta-his   haw'-au
    you if there fit(PST PERF-I)-2s become(PST-A)-3s
    toa is'a   insan'-as mon sahi' [T5:fs]
    then this(OBL) human-OBL word right
    'If (it turns out that) you fit into there, then this
    human's word is correct.'

(9) The PST-I tense is based on the past participle. Person and number marking in 1st and 2nd persons are supplied by appending the PST-I forms of hik 'become' to the past participle; there is no overt indication of person/number for 3rd sg. and pl. The PST-I has a variety of functions, all of which relate to the basic semantic distinction between the inferential and the actual forms-- that of action directly known vs. action not directly known

by the speaker. This, and not time depth, is the operative
semantic parameter. Thus the PST-I forms can be used for
reporting actions taking place in both the recent and more
distant past, provided that the speaker learned about them
other than by direct observation. (a) Example (37)
illustrates its use to report an action in the recent past.

37) a   aya' a   ăgar' Zot   ka'da [S:bk]
    I(NOM) here come(PST-A)-1s fire already do(PST-I)-3s
    'I came here. (Someone) already made the fire.'

    (b) PST-I forms also occur when a speaker observes a
state resulting from an event which took place in his
absence, as in (38-a and b):

38-a) payp'-una uk   CuCu' hu'la [S, E:mb]
     pipe-LOC water dry   become(PST-I)-3s
     '(I see that) the water has dried up in the pipe.

b) aj'ab   krom ka'da his [Trail, unpublished text]
    remarkable work do(PST-I)-2s
    'You have done a remarkable job!'

(38-a) was uttered when the speaker walked up to the water
pipe and was surprised to find that there was no water in
it; (38-b) conveys a sense of pleasurable surprise, and is
intended as a compliment.

    (c) These forms also carry the main burden of
narration in storytelling, whether about the real world to
relate actions unseen by the speaker, or about the imagin-
ary world. Example (39-a) is from a story about the real
world, and (39-b) is about the realm of legend and myth.

39-a) tara' para'-e   te-o   pai   tara' ne
     there go(PST-A)-when they-ọ goats there' not
     ni'la   [TO:sj]
     take(PST-I)-3s
     'When I went there, (I found that) they hadn't taken
     the goats there.'

b) ek   kursi'-una Sa   nis-u'na [T4:fs]
   one chair-LOC king sit(PST-I)-3s
   'The king sat down on one chair.'

(d) PST-I forms can appear in the protasis of realis

conditionals, as in (40) and (88) below.

40) ki mai   mon galyat' śial'a   haw'-au
    if I(OBL) word wrong be(PST-I)-3s become(PST-A)-3s
    tu   mai   źu [T5:fs]
    you I(OBL) eat(IMP2s)
    'If my word turns out to be wrong, you eat me!'

   (e) With first person agents, the inferential form

gives a sense of unconscious or inadvertent action.

Consider examples (41-a,b,c), all of which are actual

utterances recorded in context.

41-a) atra' thai a'-am   åga' ne   thi
      there put(PRES PERF)-1s aware not become(CP)
      phato' ga'la-him [S:bk]
      then   go(PST-I)-1s
      'I put it there. Then without remembering (it), I
       left.'

b) a   åga' ne hu'la-him [S:bkw]
   INOM) aware not become(PST-I)-1s
   'I didn't remember (unintentionally) (to get up and
    make your breakfast).'

c) tai   Tayp   atra' as'ta thay-o   [S:sjf]
   you(OBL) tape recorder there also put(CP)-o
   DuD'-ila-him
   sleep(PST-I)-1s
   'I must have put your tape recorder there and gone to
    sleep (without realizing it).'

d) mai   chu   tai   ja di'-ta-him-e
   I(OBL) daughter you(OBL) wife give(PST-I)-1s-when
   źåg kar'-iu [Morg. 1973:22]
   war do(P/F-NS)-3s
   'When I give my daughter to you as wife, he will make
    war (on me).'

In (41-a) the speaker took off his watch and put it on a

rock to wash his face. Then he accidentally got up and

left without remembering to put it back on. In (41-c) the

speaker, having gone to sleep inadvertently, experienced surprise when he realized upon awakening where he had put the tape recorder. The force of the inferential with first person agent can also extend to unwillingness, as in (41-d).[17]

This development with first person agents is also noted in Lhasa Tibetan by DeLancey (1985-a:59). With first-person (and with second person subjects in yes/no questions) the choice of direct experience or new/indirect knowledge auxiliary forms reflects volitionality: "-gyi-'dug and -gi-red occur with non-volitional actors, and -gyi-yod and -gi-yin with volitional actors". Precisely the same semantics is also noted in Turkish. Aksu-Koc and Slobin (1982:172) have an example almost identical in context and semantics to (41-c), which I reproduce here: uyu-muş-um (sleep-mIş-1sg) 'I must have fallen asleep,' which a speaker might say upon awakening sprawled over his books.

2.1.3.2. The inferential/actual opposition in non-past tenses. The inferential/actual opposition is morphologically coded only in the past-tense basic forms. The opposition, however, functions as well in the non-past

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[17]In this connection, note the following commentary on Panini's rule III.1.115, referring to the Sanskrit perfect, which is established to have had inferential (in the sense being used here) meaning: "The perfect in the first person can be used only when the speaker was in a distracted state of mind or was unconscious when the event took place or when he wants utterly to deny something that he has done." (Meenakshi 1983:162). This describes precisely the same semantics as that attested for the Kalasha inferential forms with first person subjects.

tenses. Coding of the inferential is achieved in two different ways, which are distinct in function.

2.1.3.2.1. The use of hu´la. The first strategy involves the use of hu´la, the PST-I 3rd person form of hik 'to become'. In addition to its regular function in the Kalasha verb system, this form functions to extend the inferential vs. actual experience opposition into the non-past tenses. When it so functions in normal discourse and conversation, or in narration of directly experienced events, the general meaning generated is that the speaker has just found out about (i.e. was not aware of before) the content of the assertion. The specific shades of meaning can range from simply new information, hearsay, to mild surprise, regret, or annoyance. These meanings are almost identical to the senses identified by Slobin and Aksu (1982 passim) for the Turkish evidential particle -miš-. They find that -miš- conveys inference, i.e. information conclu-ded on the basis of indirect evidence, hearsay, surprise, irony, and compliments. The same complex of meanings is discussed for the inferential members of actual/inferential pairs in Lhasa Tibetan by DeLancey (1985-a, b, 1986).[18]

I give here examples of each of these shades of meaning in constructions with hu´la.

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[18]The category of "consciously known but unassimilated information" is also grammaticized in Korean with the particle -kun (Lee 1985). Thurgood (1986:216-7) refers to the grammaticization of a similar category in Akha (Tibeto-Burman). See also Bashir (1988-b) for more discussion of this in Kalasha and Khowar.

42) <u>new information</u>
    se peśaur jel-una a'-au   hu'la   [E:bk]
    he P.   jail-LOC be-AN(P/F)-3s become(PST-I)-3s
    'He is in jail in Peshawar.' (I just found out.)

43) <u>inference</u>
    se ne i-u'   hu'la [E:bk]
    he not come(P/F-NS)-3s become(PST-I)-3s
    (It seems that) 'He won't come'

Sentence (43) could be uttered in a situation when B₁ has

told A that he₁ or someone else won't come. A, the speaker

of (43), then tells this to C, using <u>hu'la</u> to indicate that

this is second-hand information.

44) <u>surprise</u>
    mo'-ta   rageS'Ti nis'-dai   hu'la
    no(IMP)-TOP early   take(P/F-S)-2s become(PST-I)-3s
    'You don't say! You are taking them out (too) early'
    (T: Trail)

45) <u>regret</u>
    a   galyati' kai a'-am   hu'la [S]
    I(NOM) mistake do(P PERF)-1s become(PST-I)-3s
    'I have made a mistake.'

46-a) <u>annoyance</u>
    ko Dud'-iu   hu'la [S]
    why sleep(P/F-NS)-3s become (PST-I)-3s
    'Why is he sleeping?'

b) tai   bo ta'sa   paysa' di-ely'i
    you(OBL) much he(OBL) money give(NEC)
    hu'la   mai   bo   afsus' [S:bk]
    become(PST-I)-3s I(OBL) very sorry
    'You have to give him a lot of money. I am sorry (to
    learn of it).

In (46-a) the sense conveyed is that the person mentioned

shouldn't be sleeping--that it is an inappropriate time for

sleeping.

Co-occurrence possibilities of <u>hu'la</u> with the nine

basic tense forms are very instructive. With the exception

of one or two examples on which informants disagree, the

pattern of my data shows that <u>hu'la</u> can oc-occur with all

the tense forms except the PST IMPFV-A, the PST PERF-A, and

the PST-A. Examples (43) and (46-a) above show hu'la with

a P/F-NS verb, (44) with a P/F-S form, and (45) with a P

PERF form. Now in (47) we see it co-occurring with a PST

PERF-I verb.

```
47) du    kaw    Sumber' ek   dur    kai
    two years before  one house do(PERF PPL)
    śia'la                hu'la [E:bk, mb, sj]
    be-INAN(PST-I)-3s become(PST-I)-3s
    'Two years ago a house was built.'
```

In (48) it is found with the PST IMPFV-I.

```
48) se prehăk       par-i'man as'ta     hu'la [E:bk]
    he downstream go(PST IMPFV-I)-3s become(PST-I)-3s
    'He was going downstream.'
```

Example (49) shows that hu'la can co-occur with the PST-I

tense, but not with the PST-A.

```
49) mai daada  a'ma       krom ka'da/*ar'-au
    my  father this(ACC) work do(PST-I)/(*A)-3s
    hu'la  [E:mb, bk, sj]
    become(PST-I)-3s
    '(It turns out that) my father did this work.'
```

Informants' comments about why hu'la does not sound

right with the PST PERF-A and PST IMPFV-A, demonstrated in

(50) and (51), are revealing.

```
50) *du kaw Sumber' ek dur kai aśis' hu'la  [E:bk, sj]
    two years ago one house do(PST PERF-A)-3s hula
    *Two years ago a house was made (and I just found
     out about it).
```

```
51) *se prehăk par-i'man ay'-is    hu'la
    he downstream go(IMPFV-A)-3s hula
    *'He was going downstream (and I just found out about
     it.)
```

Speakers are reluctant to combine hu'la with forms in aś-

is' 'be-INAN(PST-A)-3s' and ay'-is 'be-ANIM(PST-A)' because

these two forms carry a strong sense of actuality. That

is, if a speaker uses these forms it is implied that he

already knows about the content of the utterance.

The explanation for this lies in the fact that the

opposition INFERENTIAL/ACTUAL is morphologically indicated

only in the past tenses. Thus in these tense forms the

actual and inferential forms are equipollently marked for

actual and inferential meaning respectively. hu'la can

combine with any of the non-past forms, which indicate but

are not marked for actual as opposed to inferential

semantics, because a corresponding basic [+INFERENTIAL]

form is not available. Thus hu'la combines with the P PERF

tense to yield an inferential interpretation since for the

present perfect tense there is no basic INFERENTIAL form

available. But with the PST-A , PST PERF-A, and PST IMPFV-

A, since the corresponding inferential forms do exist,

hu'la is not admissible. These ACTUAL forms are sharply

differentiated in meaning, expressing only firsthand

experience. Thus the marked meaning of direct experience

is incompatible with the inferential meaning added by

hu'la. Where only one form exists for a given tense, that

form is not specified for actuality vs. inferentiality and

allows hu'la with the accompanying meaning differentiation.

This is the case with the P/F-S, P/F-NS, and P PERF forms.

In this aspect of its use, hula can be seen to complete the

paradigm with regard to the inferential/actual opposition.

In the context of storytelling, i.e. narration of

events not directly known by the speaker, hu'la has another

function. For story events with past time reference and
the vantage point of the narrator conceived of as outside
the story, the PST-I tense is regularly used. When the
narrator wants to use a narrative present—a form whose
reference point is for stylistic reasons shifted so that
the time of narration is conceived of as being within the
story (which by definition does not belong to the realm of
direct experience), he can do this by using hu'la to
achieve an inferential version of the narrative present.
This usage occurs quite frequently in (legendary/mythical)
storytelling. For example, (52):

```
52-a) pha'to beru'-as      mru'-an par'i
      then   husband-PS3s hunting go(P/F-NS)-3s
      hu'la¹⁹               har   copa  [T3:fs]
      become(PST-I)-3s every morning
      'And then her husband would go hunting every
       morning.'
```

```
b) tara' pai    halyin'-dai    hu'la [T2:bkw]
   there go(CP) bring(P/F-S)-3p hula
   'They would go there and bring them.'
```

```
c) cewbew' as'ta khuly thi śi'an    hu'la [T2:bkw]
   clothes also  finish(P PERF)-3p hula
   '(Her) clothes were also (completely) worn out.'
```

In the (a, b, and c) sentences we have the P/F-NS, P/F-S,

and P PERF plus hula respectively.

2.1.3.2.2. The infinitive + ghδan construction.
Another way of achieving a specific kind of inferential
meaning in the non-past tenses is to employ a construction
which consists of the infinitive of the verb expressing the

---

¹⁹The form par'-i hu'la is equivalent to par-iu'
hu'la, and means something like 'And then her husband goes
hunting every morning.' (narrative present usage)

semantic core of the assertion, and ghõ'-an, the P/F-NS 3rd

pl. of the verb ghõik 'to say'. The tenses where one would

thus expect to find this formation are the P/F-NS, P/F-S,

and P PERF. Now since the P/F-S consists of the P/F-NS +

-dai which attaches only to finite forms in that tense, the

P/F-NS and P/F-S fall together in the infinitive. The P

PERF, however, consisting of the PFV PPL + a finite form of

'be', has an infinitive of the form PFV PPL + 'be(INF)'.

As expected, we do have INF + ghõan constructions with

present and present perfect interpretations, as in (53-a,

b) and (54-a, b).[20]

53-a) Present-Animate agent
      se/*to   miSTeri' kar'-ik ghõ'-an   [E:bk]
      he(NOM/*ACC) teaching do(INF) say(P/F-NS)-3p
      '(I hear that) he is a teacher.'

b)   Present-Inanimate agent
      ne śik   ghõ'-an   mai putr [S:bk]
      not be-INAN(INF) say(P/F-NS)-3p my son
      '(I hear that) there isn't any, my son.'

54-a) Present Perfect-Animate agent
      se miSTeri' bo   wat kai   ayik   ghõ'-an
      he teaching much time do(CP) be-ANIM(INF) say(P/F)-3p
      '(I hear that) he has been a teacher for a long
      time.'   [E:mb, bk]

b)   Present perfect-Inanimate agent
      krAkA uk   chi   śik   ghõ'-an [E:mb, bk]
      K.   water cut(CP) be-INAN(INF) say(P/F-NS)-3p
      '(I hear that) the water is cut off in Karakal.'

It is significant that these constructions are not accepted

for the imperfective tenses, viz. (55).

_____

[20]Formally, PFV PPL + be(INF) represents a falling
together of both P PERF and PST PERF forms. I do not have
information, however, on whether (54-a, b) can also have
past perfect readings, e.g. '(I hear that) he had been a
teacher for a long time.'

55) *par   se miSTeri' kar-i'man   ay'-ik ghÕ'-an
        last year he teaching do(IMPFV PPL) be-AN   say(P/F)-3p
        *'(I hear that) last year he was teaching.' [E:mb, bk]

This is consistent with the fact that in both the imperfec-

tive tenses, which are [+PAST], the inferential/actual

opposition is expressed morphologically.

    This construction is highly specific; that is, the

only form of 'say' which is used is the third person plural

of the P/F-NS tense, ghÕ'-an, without overt expression of

an agent.   Other tense forms of ghÕ-ik 'say', as in (56)

are not acceptable.

56) se miSTeri' kar'-ik *aghÕ'-an/*ghÕi'man ay'ini
        he teaching do(INF) say(*PST-A/*IMPFV-A)
        *'(I heard that?) he is teaching.'

The PST-A form, aghÕ'-an, is not acceptable in any sense,

and ghÕ-i'man ay'ini (PST IMPFV-A), though not strictly

ungrammatical, gives a sense different from the one we are

investigating.   Instead of a general hearsay meaning

translatable as a vague 'I hear that', it means something

like 'the people say', in which the agents who say, though

not mentioned, are part of the conceptual framework.[21]   The

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    [21]Notice that in (53) and (54-a) the case of the
subject of the infinitive is nominative, with accusative
ungrammatical.   This fact would appear to pose a problem
with respect to one of the concepts of the government-
binding framework.   That is, in this scheme, infinitives
are considered to be [-INFL] (inflection), and it is INFL
which is considered to assign nominative case to the
subject of a sentence.   If this is so, then the question
is: how does se get its indisputably nominative case? If
to (ACC) were grammatical, one might argue that this was a
case of "S-bar deletion", and that ACC case was assigned by
the matrix verb, ghÕ'-an in this case, but this avenue is
not open.   One other possibility sugggests itself. Perhaps
it might be argued that this should be considered a passive
construction despite the active appearance of the verb

INF + _ghŏan_ construction conveys inferential (specifically

hearsay) information, and is a non-factive mode of

expression. That is, the speaker is not committed to the

truth of the assertion.[22]

2.1.3.3. _Presumptive construction_. Recall from Ch.1

that the particle -_tik_ conveys a presumptive meaning,

something like 'According to the current state of my

knowledge and experience, I presume that/it must

be/probably is the case that [S]. See examples (15-17) in

Ch. 1. Since this construction is part of the system

pertaining to the epistemological status of assertions in

Kalasha, it is treated here as a category of the same

nature as the inferential/actual opposition.[23] The -_tik_

construction conveys direct experience/knowledge, but is

non-factive.[24]

---

ghŏan. Then _ghŏan_, as a passive verb, would assign NOM
case to _se_ much as in the English construction 'He is said
to be a teacher.' This is an interesting possibility in
view of my informant's insistence that _ghŏ'-an_ does not
mean 'they say', but something more like 'I hear that'.

[22]This turn of phrase is due to Vijayarani Fedson.

[23]Interestingly, Nichols (1986) finds that in Chinese
Pidgin Russian the meanings which are here differentiated
as "hearsay", "inference", "surprise", "new information",
and "presumption" are all encoded by a single marker. I
take this as independent support for the grouping of these
categories together on the epistemological axis.

[24]It seems to me that -_tik_ may be a reflex of Skt.
iti. Other attested reflexes of _iti_ include Pali _iti_, _ti_,
icc; Prakrit _ii_, _i_, _ti_, _itti_, _tti_; Aśokan _iti_, _ti_. Sinhala
_yi_, a "particle indicating the end of direct speech or
added to a predicative noun in a statement (e.g. _uu hora yi_
'He is a thief.')" (Turner 1562). The fact that _tik_ can
occur following any sentence constituent would continue the
multi-functional aspect of _iti_; and the presumptive meaning

2.1.4. Non-indicative system

In this section I discuss the following verb forms:
(1) imperative, (2) interrogative, (3) hortative, (4)
optative (5) subjunctive, and (6) necessitative. The
semantic commonality of these forms is that they all
pertain to the "reality status" of the action--that is to
the possibility/probability/necessity (i.e. existential or
deontic modality) of its realization.

2.1.4.1. Imperative. Second person singular

imperatives are formed in several ways. (i) The imperative
form consists of the verb root, e.g. źu 'eat!' (<źu-), pi
'drink!', de 'give!', dye 'put!', tye 'beat!'. This class
consists of monosyllabic vowel-final roots. (ii)
Imperative forms are identical with the verb stem (root +
formant vowel): par'-i 'go!', kar'-i 'do!', upr-ai' 'pick
up!', chal-ai' 'take out!'. Verbs with stem formant -ai-
(>-e- in NOM form of INF) are either basic transitives or
transitive/causative derivatives of basic intransitives,
viz., naś'-i 'die!', and naś-ai' 'kill!' Types (i) and
(ii) are the regular formations. (iii) A small class of
verbs forms the second person sg. imperative in -Vs. These

could develop as a specialization of iti's function of
marking "mental speech". The semantic contribution of [S]
tik is: "According to my current knowledge and experience,
I presume that [S] is the case". The fact that the usual
quotative functions (direct and indirect speech,
complementizer, naming, etc.) are fulfilled by ghõi (CP
from ghõik 'to say') would force any reflex of iti to find
another semantic niche. Also, the fact that marking of
inferentiality status is so central in Kalasha would make
retention of a particle likely to participate in this
system likely.

include upaC'-as 'open (your) eyes!' (< upaC'-), sambi'-es

'put on (item of clothing)!', sáqa'-as 'hear!', má'-as

'speak!'.[25] (iv) The verb h- 'become' forms its second

person singular imperative irregularly: ha 'become!'[26]

The second person plural imperative of all verbs is

identical in form with the second person plural of the P/F-

NS form. For verbs in types (i) and (ii) above, this form

regularly ends in -a, e.g. par'-a 'you people go!' From

class (i) the verbs dek 'to give', tyek 'to beat', and dyek

'to place' take det, tyet, and dyet respectively. These

are the P/F-NS 2p forms for these verbs also (cf.

conjugation class 5).

Morgenstierne (1973:22) based on forms recorded in

1929, has a small set of verbs with P/F-NS-2p in -ou'/-eu'

(cf. conjugation class 7 in Ch. 1). These are par- 'go',

i- 'come', kar- 'do', nis- 'sit', bih-'fear', h- 'become'.

At that time he also notes, however, that par- 'go' and

kar- 'do' also have alternate forms in -a. Today (1987)

the -eu forms appear to survive only with i 'come' and nis-

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[25]Other forms recorded by me are: niunj'-as <
ni(h)unj'- 'settle down'), pad'-as (< pad'- 'break wind'),
luhi-es' (< luhi'- 'hide (intr.)), sawz-es' (< sawz-
'build, make', pala'-as (< pala'- 'run away'). According
to Trail (ms) the verb upaC'- 'open eyes' can also be used
with the regularized formation upaC'i, as in type (ii).
From this it appears that these irregular forms are giving
way to the regular pattern of (ii). See also Ch. 1 above
on the shift of Class 7 verbs to Class 4. Morgenstierne
(1973:222) gives qre'-as 'take!', as in type (iii),
whereas during my fieldwork I have heard only the
regular(ized?) qri 'take!' which falls in type (i).

[26]hik also constitutes an (exceptional) finite
conjugation class. Cf. 1.5.3.3. above.

'sit' from this group, par-, kar-, and h- forming their
P/F-NS-2p forms regularly. I am not sure of the position
of bih- 'fear'.

At the same time, Morgenstierne noted what he called
an irregular imperative formation eu 'you people come!'.
However, in view of the above generalization, this is not
irregular, as it is identical to the P/F-NS-2p form of the
same verb. In my field work I have noted that some second
person pl. imperatives in -eu still exist. I have recorded
the following (quite frequent) forms: pre (sg), and preu
(pl.) (< par- 'go' ?). Their use is illustrated in (57).

57) pre   žu   / pre'u   žu'-a
    go(IMP-s) eat(IMP-2s)/ go(IMP-2p) eat(IMP-2p)
    'Come (with me) and eat!'

The meaning of this form is something like 'Come with me'
and it might be used, for instance, when taking a small
child by the hand and coaxing him to eat. Perhaps these
are ultimately traceable to a transitive/causative
derivative from the root par- 'go'.[27]

A first person plural imperative is also encountered,
e.g. parik' 'let's go!', nisik' 'let's sit down!'. This is
identical to the P/F-NS-1p form.

The negative particle used with imperatives and
hortatives is mo, distinct from ne in indicative sentences,
e.g. mo cuT'i 'don't touch (it)'.

2.1.4.2. Interrogative. An indicative sentence can

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[27]Trail (1988:72), making a similar suggestion, lists
an infinitive prek, but I have heard only the forms pre and
preu.

be turned into a yes-no question by suffixing the particle

-a or -e to the finite verb. This -e or -a is always

unstressed, but sometimes lengthens the vowel of the

immediately preceding syllable. See (58 - 60).

58) a'sa istri'ža tai   jaa-(y)a²⁸   [E:bk]
    that woman   your wife-Q
    'Is that woman your wife?'

59) tu to   istri'ža gU'ak jhon'-is-e   ne'[E:bk]
    you that(ACC) woman   child know(P/F-NS)-2s-Q not
    'Do you know that girl?'

60) payp'-una uk   i-u'-daay-e [S:z]
    pipe-LOC water come(P/F-NS)-3s-Q
    'Is water coming in the pipe?'

The interrogative particle also appears with substantive

questions, as in (61).

61) khyě his-daay-e   [S:z]
    how become(P/F-S)-2s-Q
    'What are you doing?!'

Sentence (61) is said by an annoyed elder sister to a

crying baby; the implication is 'How badly you are

behaving!'.

     2.1.4.3. Hortative. A form which I am labelling

"hortative" is constructed by suffixing -or'i to the finite

verb form.²⁹ For states or actions that have not yet been

realized, this form indicates the speaker's wish that a

certain situation obtain; for those that have already

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     ²⁸The [y] glide represents the consonantal quality
developed in final /i/ because of lengthening before a
following vowel.

     ²⁹Morgenstierne calls this form "optative", and gives
it as -uri. He has one or two examples from the P/F-NS
tense (his "aorist"). This form may be cognate to the
Khowar form šiu:r cited by Morgenstierne (1947:25)for 3s of
'be-INAN'.

happened, it conveys a sense of satisfaction. Sometimes
its force is like that of an optative; sometimes closer to
that of an imperative. Its use with the P/F-NS tense is
illustrated in (61) - (68). It can co-occur with first,
second, and third-person verb forms (cf. 66).

61) atra' śi'u-or'i   [S:mbg]
    there be-INAN(P/F-NS)-3s-HORT
    'Let it be there/leave it there.'

62) se   par-iu'-or'i   [S:mb]
    he(NOM) go(P/F-NS)-3s-HORT
    'Let him go/he should go.'

63) mai hardi' phat h-iu'   mai baaya-a
    my heart half become(P/F-NS)-3s my brother-PS1s
    xat   żar   iu'-or'i [S:mb]
    letter quickly come(P/F-NS)-3s-HORT
    'I am feeling lonely. (I wish that) my brother's letter
    would come soon.'

64) ǎgar'-una baza' mo żal'-iu-or'i
    fire-LOC arm   not reach(P/F-NS)-3s-HORT
    'Don't let her arm get in the fire!' [S:bk, E:mb]

65) rakmat'-as kai mǎ-as   du ser   alyu'
    R.-OBL   to speak(IMP2s) two seers potatoes
    on'-iu-ori   [E:j]
    bring-INAN(P/F-NS)-3s-HORT
    'Tell Rahmat to bring two seers of potatoes.'[30]

66-a) a cit'-im-dai   (ki)   mai putr skul-una
      I(NOM) think(P/F-S)-1s (that) my son school-LOC
      hat'ya par-iu'-or'i [E:j, mb]
      to   go(P/F-NS)-3s-HORT
      'I want my son to go to school.'

b) śuru'-am-or'i   ghǒi cit'-is-dai [S:bkw]
   fall(P/F-NS)-1s-HORT COMP think(P/F-S)-2s
   'You want to fall/You are looking for a fall.'

c) tu and-ai' is'-or'i   ghǒi cit'-im-dai
   you here-LOC come(P/F-NS)-2s-HORT COMP think(P/F-S)-1s
   'I want you to come here.' [E:mb]

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    [30]The verb <u>on'ik</u> 'to bring' is used with inanimate
patients only. For animate patients the appropriate verb
is <u>halyik'</u> 'to bring'.

d) iślyeg'i śuru'-as-or'i [S:mb]
   slip(CP) fall(P/F-NS)-2s-HORT
   'May you slip and fall!' (imprecation)

e) ogoeg'-in   sum mo SaT'-an-or'i   ghôi
   each other-OBL with not fight(P/F-NS)-3p-HORT COMP
   koś-iś' ar'-is [E:mb, bk]
   attempt do(PST-A)-1s
   'I tried for them not to fight with each other.'

67) mai   hat'ya cir hiu'-dai   moTer' żar
    I(OBL) to   late become(P/F-S)-3s jeep   quickly
    iu'-or'i [E:bk, mb]
    come)P/F-NS)-3s-HORT
    'I am getting late. (I wish that) the jeep would come
    soon.'

68) mai ja   warek' badśa-as di'ta
    my wife another king-OBL give(PST-I)-3s
    tayar' hiu'-or'i (Morg. 1973:23)
    ready   become(P/F-NS)-3s-HORT
    'He gave my (promised) wife to another king; let him
    be ready (for war).'

    With the PST-A tense, we have examples like (69) and

(70).

69) haw'-al-or'i [S:bk] (<haw'-au + ori)
    become(PST-A)-3s-HORT
    '(I am glad that) it has happened.'

70) A: ko par-au' [S:bk]
       why go(PST-A)-3s   'Why did he go?'

    B: par-au'-or'i
       go(PST-A)-3s-HORT 'He has gone! Good, so be it!'

    Apparently it is possible for -or'i to co-occur with

the PST PERF-A verb, as in se pay ay'is-or'i 'He has gone,

good', which is accepted by both of my main informants, but

I have no examples of this combination from texts or actual

utterances. My informants are all in agreement that this

form does not co-occur with the P/F-S, the PST IMPFV-A, and

the PST IMPFV-I forms. Thus (71), (72) and (73) were all

unacceptable.

71) *par-in'-dai-or'i [E:bk, mb]

72) *par-i'man ay'-is-or'i [E:bk, mb]

73) *par-i'man as'ta-or'i [E:bk]

They differ on the acceptability of -or'i with the PST

PERF-I, the PST-I, and the PRES PERF. Since it belongs to

the same semantic dimension, i.e. modality, as the

imperative, necessitative, and the subjunctive forms, it

cannot co-occur with any of these. Thus, *pa'ri-or'i (go-

IMP2s-HORT), *par'ik-baS-ori (go-NEC-HORT), *pariely'i-ori

(go-NEC-HORT), *(pe) par-au' haw'-au-ori (go-SUBJ-HORT). It

also does not co-occur with hu'la, since the meanings are

incompatible. hu'la says that the speaker has just found

out about the existence of a state of affairs, while -or'i

expresses the speaker's desire that a certain state be

realized, or satisfaction that it has occurred.

2.1.4.4. Optative. A construction formed with the

particle pe 'if' and the P/F-NS expresses a meaning which

is closer to the 'wish' than the 'exhortation' end of the

semantic scale. Its closest English rendering is something

like 'would that . . .', or "I wish (mildly) that . . .'

Its use is illustrated in (74) and (75).[31]

74) bo   hu'luk kar'-iu-dai źar   pe chak
    very heat   do(P/F-S)-3s quickly if evening shade
    dyel [S:bk, mb]
    fall(P/F-NS)-3s

_____

[31]These sentences, with implied verbs of 'wishing',
which, in the same way as verbs of 'fearing', take
complements with [-DURATIVE] verb forms, suggest by
extension that the possibility of adding complements of
verbs of 'wishing' to the diagnostic battery for
perfectivity begun by Hook (1978) is worth investigating.

'It is very hot. (I wish that) evening shade would fall
soon.'

75) żar   pe mai baaya   i-u'   [E:bk, mb]
    quickly if my brother come(P/F-NS)-3s
    '(I wish that) my brother would come quickly.'

   2.1.4.5. Subjunctive. Subjunctive forms typically

are used for those situations which are reported as not

fully realized; they comment on the possibility status of

the action or state referred to. Subjunctive force is

achieved in the Kalasha verbal system with the form haw'-au

'became' (PST-A-3sg < hik 'to become'), which follows the

finite verb at the end of the sentence. Finite verbs of

any tense can be given subjunctive force by adding haw'-au.

Conditional sentences are also formed with haw'-au, plus

the particle pe 'if', which is a special case of its

general subjunctivizing function. In the next set of

examples, (76) - (85), all of which involve matrix or

embedded questions, haw'-au imparts a sense of the

speaker's tentativeness, uncertainty, or puzzlement about

some aspect of the action or state of affairs being

referred to. This will be made clear by the examples.

76) P/F-NS, present time reference
    a   ne jhon'-im   se kawa' apau' del
    I(NOM) not know(P/F-NS)-1s he where stay(P/F-NS-3s)
    haaw[32] [E:mb, bk]
    become(PST-A)-3s
    'I don't know where he lives.'

77) P/F-NS, future time reference
    mai   hat'ya ki'ya mahalyum' cop'o   ku'ra
    I(OBL) to   what knowledge morning who
    in   haw'-au [E:bk]
    come(P/F-NS)-3p become(PST-A)-3s

_____

   [32]haaw = haw'-au in rapid speech.

'How should I know who will come tomorrow?'

78) P/F-S
    kaw-ei'   śamon' aśrafi'   i'ya har'-iu-dai
    where-ABL so much gold coins he take(P/F-S)-3s
    haw'-au [T13:]
    become(PST-A)-3s
    'From where could he be taking so many gold coins?'

79) PST-A
    to   ś-aya'   thai aś-is'   θ'je mahalyum' ne
    it(ACC) EMPH-here put(PST PERF-A) now knowledge not
    se khyë haw'-al-hau (<haw'-au haw'-au) [S:bk, mb]
    it how become(PST-A)3s become(PST-A)-3s
    'It was put right here. Now I don't know what
     happened to it.' (what could have happened to it)

80) PRES PERF
    a   cei kΩDok'   ne sapr-em'-dai   se kawa'
    I(NOM) tea container not find(P/F-S)-1s she where
    thai-al-hau (<//thai a'-au haw'-au//) [S:bk]
    put(PRES PERF)-become(PST-A)-3s
    'I can't find the tea container. Where could she
     have put it?'

81) PST IMPFV-A
    se ki'ya kar-i'man ay'-is   haw'-au   se
    he what do(PST IMPFV-A)-3s become(PST-A)-3s he
    mai   kai ne mai a'-au [E:mb, bk]
    I(OBL)to not say(PRES PERF)-3s
    'Whatever he was doing, he hasn't told me.'

82) PST IMPFV-I
    ki'ya jhon'-ik   se kawai' par-i'man as'ta
    what know(P/F-NS)-1p he where go(PST IMPFV-I)-3s
    haw'-au [E:bk, mb]
    become(PST-A)-3s
    'Who knows where he was/had been going?'

83) PST PERF-A
    a   mai   galyi' ne sapr-es'   ki'ya
    I(NOM) I(OBL) watch not find(PST-A)-1s what
    jhon'-ik   ku'ra to   hai ay'-is
    know(P/F-NS)-1p who   it(ACC) take(PST PERF-A)
    haw'-au [E:mb, bk]
    become(PST-A)-3s
    'I couldn't find my watch. Who knows who took it?'

84) PST PERF-I
    ki'ya jhon'ik   se kawai' pai as'ta
    what know(P/F-NS)-1p he where go(PST PERF-I)-3s
    haw'-au [E:bk, mb]
    become(PST-A)-3s
    'Who knows where he went/had gone?'

85) <u>PAST-A</u>
    a mai galyi' ne sapr-es'   ki'ya jhon'-ik
    I my watch not find(PST-A)-1s what know(P/F-NS)-1p
    ku'ra to   ha'da   haw'-au [E:mb, bk]
    who it(ACC) take(PST-I)-3s become(PST-A)-3s
    'I couldn't find my watch. Who knows who took it?'

The subjunctive also appears in expressions other than questions, like (86) indicating probability but uncertainty, (87) with an indefinite quantity, and (88) conditional sentences.

86) tre caw bojei' bribo' hin
    3   4   bags   walnuts become(P/F-NS)-3p
    haw'-au [S:bkw]
    become(PST-A)-3s
    'There will probably be three or four bags of
    walnuts.'

87) ki'ya ajat' aal(h)au'[33]   ajat'
    what use come(PST-A)-3s-become(PST-A)-3s use
    kar'-i [S:bk]
    do-IMP2s
    'Use whatever you need.'

88) a'sa pruST pe śia'la   haw'au
    that good if be(INAN)(PST-I)-3s become(PST-A)-3s
    a   on'im [S:bk]
    I(NOM) bring(P/F-NS)1s
    'If that turns out to be good, I will bring it.'

    2.1.4.6. <u>Necessitative</u>. The necessitative mood is represented by two distinct constructions, which, according to all my informants, have very similar semantics. The first construction involves the morpheme -<u>e'lyi</u> which is suffixed to the verb stem, e.g. <u>kar-e'lyi</u> (<<u>kar-</u> 'do') 'one must do; (it) must be done', <u>karawa(y)'-e'lyi</u> 'one must have s.o. do; one must get s.t. done' (<<u>kar-aw-a'-</u> 'do-CS').

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    [33]<u>aal(h)au'</u> = //<u>a'-au</u> + <u>haw'-au</u>//.

The -e'lyi form of the verb is invariant for person
and number; when an agent, i.e. the person by whom the
action is to be done, is expressed, it is in the OBL case.
There is no verb agreement with the agent, (or with the
object), the auxiliary always taking the 3s INAN form.

89) tai/*tu   bo   paysa' ta'sa   di-e'lyi [E:bk, mb]
    you(OBL/*NOM) much money   he(OBL) give-NEC
    'You have to give him a lot of money.'

Since -e'lyi does not carry tense specification, in
order to use it with past time reference, a finite
auxiliary must be pressed into service. It can occur with
the P/F,[34] PST-A, and PST-I forms of 'be-INAN', as
demonstrated in (90) - (92) respectively.

90) tai   bo   paysa' di-e'lyi (śi'u) [E:bk, mb]
    you(OBL) much money give-NEC (be-INAN(P/F)-3s)
    'You have to give a lot of money.'

91) ś-a'sa   krom hi-e'lyi   aś-is'   [S:mb]
    EMPH-that work become-NEC be-INAN(PST-A)-3s
    'That work should have been done.' (implied that
    it was not.)

92) tai   bo   paysa' di-e'lyi śia'la   [E:bk, mb]
    you(OBL) much money give-NEC be-INAN(PST-I)-3s
    'You had to give a lot of money (and I just learned
    about it).'

Since the paradigm of śik 'be-INAN' is defective,
containing only P/F, PST-A and PST-I forms, the remaining
tense forms and meanings are supplied by employing the
forms thi (PFV PPL) and hi'man (IMPFV PPL) from the
paradigm of h- 'become'. Thus, P PERF di-e'lyi thi śi'u,
PST PERF-A di-e'lyi thi aśis', and PST PERF-I di-e'lyi thi

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[34]P/F-S and P/F-NS are not differentiated for śik and
asik. In the P/F, the auxiliary śi'u 'is' is not normally
used, but it is not ungrammatical.

śia'la. They differ on the acceptability of the PST IMPFV-
A and the PST IMPFV-I forms with -e'lyi, that is on (?) di-
e'lyi h-i'man aśis' 'It was becoming necessary to do it',
and (?) di-e'lyi h-i'man śia'la 'It was becoming necessary
to do it (and I just found out about it)'(?).

The P/F-NS and PST-A of hik are also employed as
auxiliaries. Thus we can also have a form with unambiguous
future meaning, as in (93):

```
93) mai     dus     wakhily' him               ghθi
    I(OBL) friend lawyer   become(P/F-NS)-1s say(CP)
    cit'-iu            ta'sa    bo    talyim'  kar-e'lyi
    think(P/F-NS)-3s him(OBL) much studying do-NEC
    h-iu'  [E:bk, mb]
    become(P/F-NS)-3s
    'My friend wants to become a lawyer.  He will have to
     study a lot.'
```

The PST-A form of hik 'become' also occurs quite frequently
in the e'lyi construction.

```
94) tok thi aśis'               chala-e'lyi haw'-au [S:mb]
    wet become(PST PERF)-3s pull-NEC    become(PST-A)-3s
    'It had gotten wet; it had to be taken out.'
```

The most frequently encountered forms in actual discourse
are the P/F, without auxiliary, the PST-A of hik, haw'-au
'became', and the PST-A of śik, aśis' 'was'.

Necessitative constructions with -e'lyi can, however,
combine with the subjunctive mood, especially in
conditional sentences. For example (95) and (96):

```
95) mai     bo    krom śi'an               a       ne
    I(OBL) much work be-INAN(P/F)-3p I(NOM) not
    jhon'-im         ki'ya krom Sumber' kar-e'lyi
    know(P/F-NS)-1s what  work first    do-NEC
    haw'-au [E:mb, bk]
    become(PST-A)-3s
    'I have a lot of work. I don't know what I should
     do first.'
```

96) tai   paysa' ta'sa   pe di-e'lyi haw'-au
    you(OBL) money   he(OBL) if give-NEC become(PST-A)3s
    źar   de [E:bk, mb]
    quickly give(IMP-2s)
    'If you have to give him any money, give it quickly.'

The second type of necessitative construction consists

of the infinitive, either in the NOM or OBL form, followed

by the morpheme baS.[35]   (97-a, b) illustrate this double

possibility.

97-a) mai   par-ik-baS'
      I(OBL) go-INF-NEC
      'I have to go.'

b)   mai   par-ik'-as baS
      I(OBL) go-INF-OBL NEC
      'I have to go.

In this construction also, the agent, if expressed, is

(usually) in the OBL case.[36]   baS may also appear with

other tense forms of 'be' or 'become'. (98) and (99) show

the PST-A of 'become', and (100) the PST-A of 'be'.

98) te   par-ik-baS' haw'-an [S:mb]
    they(NOM) go-INF-NEC   become(PST-A)-3p
    'They have to go.' (i.e. have entered into the state
     of having to go.)

99) cewbew' mƏD-ik-baS' haw'-an [E:mb]
    clothes wash-INF-NEC become(PST-A)-3p
    'The clothes need to be washed.' (have entered into
     the state of needing to be washed.'

100) ta'sa   śehƏ ne kar-ik-baS' aśis' [E:bk, mb]
     he(OBL) so   not do-INF-NEC be-INAN(PST-A)-3s
     'He shouldn't have done like that.' (but he did)

It will be noticed that the INF-baS construction is

_____

[35]The question of why both INF(NOM) and INF(OBL) can
occur is explored later.

[36]But see example (98) below.   Notice also that in
(98) and (99) the finite verb haw'-an (3p) agrees in number
with the (NOM) subject.

often the semantic equivalent of the Urdu or Panjabi

INF(OBL)-waalaa construction. For example (99) above is

the exact equivalent of the Panjabi kapRe tòn-wale ho gae

'The clothes need to be washed.' It also often gives the

sense of 'worth V-ing', or 'fit to V', as in (101) and

(102).

```
101) żuk'-as      baS ne' [S]
     eat-INF-OBL NEC not
     'It is not worth eating'/*'One should not eat it.'
```

```
102) a       ki'ya Sa   hik'-as           baS moc ne'
     I(NOM) what  king become-INF-OBL NEC man not
     a       garip' moc  [T15:  ]
     I(NOM) poor    man
     'I am not a man fit to be king; I am a poor man.'
```

It also conveys the sense of 'about to V', as in (103):

```
103) se       bo   lehas' naśik-baS'  [S:bk, mb]
     he(NOM) very sick   die-INF-NEC
     'He is very sick — about to die.'
```

The word baS in Kalasha has two poles of meaning,

which may or may not be derivable one from the other. In

one usage baS is a noun meaning 'share' or 'portion'. In

the other it is the modal particle indicating necessity.

Under one hypothesis, these can be considered to be the two

extremes of a continuum of meanings, and it is possible to

see how the meaning of 'necessity' could develop from the

more concrete meaning of 'share'. The following examples—

(104 - 112) are given in order of decreasing concreteness.

If the hypothesis suggested above is correct, they would

then show various stages of the shift in meaning toward the

more abstract 'necessity' pole.[37]

104-a) te   tan moc'-una zamin' du baS   ka'da
       they(NOM) own among   land   two shares do(PST-I)3p
       'They divided the land into two shares among .them-
       selves.'   (T&C 1987:22)

b) gog'-as   baS [S:bkw]
    snake-OBL share
    Lit. 'the snake's snare'; (Id. refers to the last of a
    clutch of baby birds; a runt, weak and unable to take
    care of itself; fit (only) to be eaten by a snake.)

105-a) ko ta'sa   hat'ya dur'-a   baS [S:bk]
       why he(OBL) for   house-LOC share
       'Why should (we keep) a share in the house (i.e.
    food and lodging) for him?'

b) tro'-ik tai   hat'ya baS thi śi'u [S:bkw]
    cry-INF you(OBL) to   NEC be-INAN(P PERF)-3s
    'You are always crying' (said when scolding a child)
    (Lit. 'It has become necessary for you to cry.' or
    'Crying has become your share/lot.'

106-a) ja-baS' 'one who is like a wife, a female paramour'
        [E:mb]

b) se   bo   lehas' - naś-ik-baS' [S:bk]
    he(NOM) very sick   die-INF-NEC
    'He is very sick - about to die.' (=91 above)

107) żuk'-as   baS ne' [S:mb, bk]
     eat-INF-OBL NEC not
     'It is not fit to eat.'

108) muT'-a   hA   bo   śi-an   ki'ya ajat'-as
      tree-LOC knots much be-INAN(P/F)-3p what   need-OBL
      baS ne'   [T&C 1987:289]
      NEC not
      'On the tree there are many knots; they are of no
      use.'

---

[37] Peter Hook (p.c.) points out that in Marathi the
word bhaag 'share, portion, part' shows a similar relation
to a necessitative construction. It is also possible that
the more concrete meaning of 'share' evolved from the less
concrete meaning of 'necessity'. The foregoing discussion
is based on one possible hypothesis about the origin of the
necessitative meaning of the particle baS in Kalasha. In
the concluding chapter, I discuss another historical
scenario for this particle.

109) i'ya (d)za cru'ka thi śi'u   a'la
      this curry sour   become(PRES PERF)-3s it(ACC)
      uzak-ik'-as   baS [S:bk, mb]
      spill-INF-OBL NEC
      'This curry is spoiled; it should be thrown away.'

b) cewbew' saw mθD-ik'-as   baS [S:mb]
   clothes all wash-INF-OBL NEC
   'The clothes all need to be washed.'

110) mai   par-ik'-as baS [S]
     I(OBL) go-INF-OBL NEC
     'I have to go.'

In many situations involving the concepts of necessity

and compulsion, the semantics of -e'lyi and baS overlaps.

In my Kalasha materials baS occurs more frequently than

-e'lyi, and with a wider range of meanings. When I have

asked various informants about the difference in meaning

between -e'lyi and baS, I have had the following replies:

(a) "There is no difference"; (b) "If I were angry I would

be more likely to use -e'lyi than baS;" (c) in a contrast

like that in (111)

111) ajon-on'   pruST au'   di-e'lyi/dik baS'   [E:bk]
     guests-OBL good   bread give-NEC/NEC
     'One should give good food to guests.'

di-e'lyi means right now, immediately, while dik baS' means

in general, not urgently or specifically now. If you were

saying that we must give a good meal to the guests right

now, you would be likely to use di-e'lyi, but dik baS if

you were explaining that this is a practice to be followed

in general. This example in (112) is consistent with this

distinction; the context is that a father is scolding his

son after seeing the son roaming around idle not doing any

work.

112) tai   śehẽ   ne hi-e´lyi   tai   ho´ma
     you(OBL) like this not become-NEC you(OBL)   we(OBL)
     mon kờ kar-e´lyi a´bi tai   aaya   źe daada
     word ear do-NEC   we   you(OBL) mother and father
     warek´-o ku´ra tai   daada ne   hin [T:Trail]
     other-o who   you(OBL) father not become(P/F-NS)-3p
     'You shouldn't do like this. You should listen to
     what we say. We are your mother and father. No one
     else is going to be your parents.'

I am not sure how far the comment in (c) can be general-

ized, but if it turns out that it can in fact be applied to

most situations, it may represent a differentiation of

these two forms in terms of specificity, a semantic

dimension which we have already seen to be operative in the

verb system of Kalasha. This hypothesis, however, requires

further investigation.

Thus in my materials there is some indication that

when the necessity involved arises purely from outside

objective causes and when no emotional investment in the

outcome is involved, or when there is no sense of urgency,

then INF(-as) baS is more likely to be selected. If there

is a sense of urgency or of internal moral or emotional

necessity, then the probability of the occurrence of -e´lyi

increases. Again, however, this suggestion is provisional.

With regard to the syntax of baS constructions and the

question of why sometimes the INF is in its NOM form and

sometimes OBL, I offer the following observations. (1)

The INF(NOM)-baS and the INF(OBL) baS patterns have

different stress contours. In the INF(NOM)-baS pattern,

the string constitutes a single phonological unit with the

primary stress on baS´. The verb retains only secondary

stress on the root. In the INF(OBL) ba_S construction, on

the other hand, the verb stem has the primary stress, on

its final syllable, and ba_S an independent, secondary

stress. The verb and ba_S do not constitute a phonological

unit. Thus INF(NOM)-ba_S' appears to constitute a compound

word, as it does in jaba_S' 'female paramour'. Such an

analysis would make it exactly parallel to compounds of the

type INF(NOM)-wew', meaning 'at the time of V-ing'.

INF(OBL) ba_S would have the structure of a NP, with the

INF(OBL) modifying the noun ba_S.

This analysis may also contribute to an explanation of

why the object (patient) of the infinitivized verb can

sometimes appear in the NOM and sometimes in the ACC,[30] as

shown in (113) - (115).

113) i'ya   histik-baS'   ho'ma   ajat' ne'   [S:bk]
     this(NOM) throw-INF-NEC we(OBL) need   not
     'This is to be thrown away; it is of no use to us.'

114) a'ma   as'ta gaSTr-o   karik-baS'   [T&C 1987:230)
     this(ACC) also   quickly-o do-INF-NEC
     'This also must be done quickly.'

115) i'ya/a'ma   piran' mÖdik-baS'   [E:mb]
     this(NOM)/ACC shirt   wash-INF-NEC
     'This shirt needs to be washed.'

In (113) and the NOM patient version of (115) the

construction appears to be that of an equational sentence,

in which both constituents are conceived of as purely

nominal. In (114) and the ACC patient version of (115), on

the other hand, the structure appears to be different. The

---

[30]Recall that NOM and ACC can only be distinguished if
the present-near or distant demonstrative in the singular
is present in the phrase.

structure of the nominal sentence type is represented in

(116-a) and that of the verbal type in (116-b).

116)   (a)   (b)
             S   S
        NP   NP   NP   VP
      i'ya piran' mØDik-baS   (agent)   NP   V
                                        a'ma piran' mØDik baS
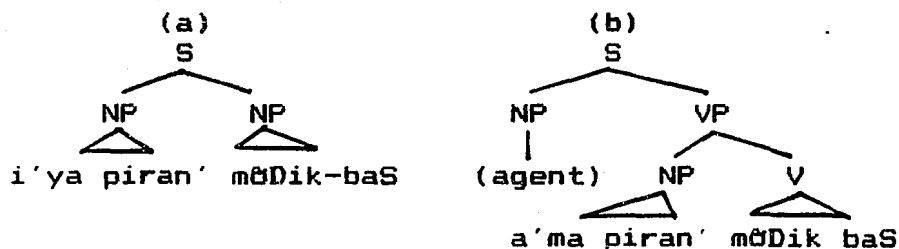
In other words, it appears that the conceptualization

varies from nominal to verbal sentence type. Perhaps this

syntactic wavering is a result of the transitional nature

of the construction, i.e. is symptomatic of a noun in

transition to becoming a modal particle.[39]

2.1.5. Semantic oppositions

The Kalasha verb system can be informally described

with reference to the semantic parameters of ASPECT

(durative or non-durative, and perfect or non-perfect);

TENSE (past or non-past), SPECIFICITY (specific or non-

specific), INFERENTIALITY (inferential or actual), and

MODALITY (=REALITY, referring to indicative vs. various

kinds of non-indicative meanings). The nominal category of

ANIMACY intersects each of these dimensions.

Terms related to aspectuality will be used as follows.

For the general definition of aspect, I adopt Comrie's

(1976:3) statement; thus "aspect" will refer to "different

ways of viewing the (internal) temporal constituency of an

event". For the categories and markedness relations found

---

[39]Or vice versa. Anther hypothesis is discussed in
7.2.3.

in Kalasha, the analysis in Friedrich (1974) is more
immediately relevant. Thus the basic opposition in Kalasha
is between durative and non-durative aspectual categories.
Non-durative forms are further subdivided into perfect and
non-perfect categories. "Perfect" is a complex category
that "combines aspect, tense, and yet other domains"
(Friedrich 1974:S16). Rather than referring to the
(internal) structure of an event, the perfect category
looks at the relation of "a state to a preceding state"
(Comrie 1976:12)--to the external relations of an event.[40]

Oppositions can be characterized as privative or
equipollent. In a privative opposition one member of the
opposition is marked, the other unmarked. The marked pole
can be used only in its own meaning, while the unmarked
member in addition to conveying its own meaning can
(sometimes) take on the meaning of the marked pole. In an
equipollent opposition, on the other hand, both members of
the opposition are equally marked and neither can be used
in the meaning of the other pole. In a discussion of
markedness, it is important to distinguish two different
meanings of "marked". "Marked"$_1$ refers to the
distributional pattern of a feature (semantic features in
the present discussion) within a system, and is the basis
for the definitions of privative and equipollent
oppositions. "Marked"$_2$ often means something like "bearing

---

[40]"Prospective" is a mirror-image of "perfect", in
that it looks at the relation of a state to a future state.
It often has the translation 'to be about to V'.

morphological material which specifically encodes a given

feature". Though a given form is often marked in both

sense 1 and sense 2, this is not necessarily the case. In

this discussion I shall use "marked" in sense 1 only, and

for sense 2 I shall use the phrase "morphologically coded".

The aspectual system of Kalasha is schematized as

follows. Categories are assigned <+> or <-> values in

terms of the marked category.

```
        +DUR                              -DUR
- - - - -^- - - - - - - - - - - - - - - -^- - - - - - - - -
                        +DUR
                 _____|_____
              PAST                  NON-PAST
          _____|_____                  |
      +INFER.      -INFER.          (P/F-S)
         |            |             parim-dai
         |            |
    (PST IMPFV-I)  (PST IMPFV-A)
    pariman asta him  pariman ayis
```

```
                        -DUR
           _____|_____
        +PERF                          -PERF
     ____|____                      ____|____
   PAST    NON-PAST              PAST    NON-PAST
  __|__       |                 __|__       |
+INFER. -INFER. (PRES PERF)  +INFER. -INFER. (P/F-NS)
  |       |     pai aam         |       |     parim
  |       |                     |       |
(PST PERF-I) (PST PERF-A)    (PST-I)  (PST-A)
pai asta him  pai ayis       gala him  para
```
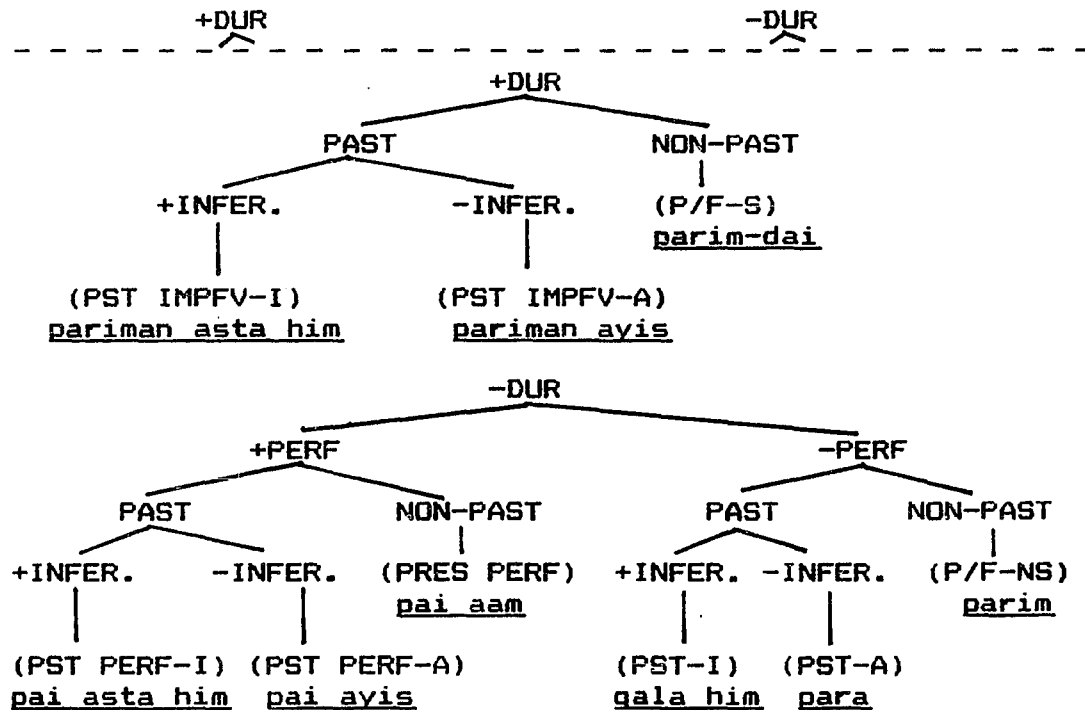
Durative is the marked member of a privative basic

aspectual opposition.[41] This means that [+DURATIVE] forms

---

[41]It is possible to make a very similar analysis cast
in terms of a marked imperfective and an unmarked non-
imperfective pole. But because of (a) the terminological
convolutions caused by doubly negative category names like
[-IMPERFECTIVE], which is not equivalent to "PERFECTIVE',
and (b) the importance of stressing the difference between
the Kalasha system and a Slavic-type system, I have chosen

are specifically marked for durativity, while with [-

DURATIVE] forms no reference is made to the durativity

status of the action encoded. Consider the [+DUR] PST

IMPFV-A and PST IMPFV-I forms, which can only be used in

the durative past progressive, habitual, iterative or

conative meanings.[42]

The clearest example of this is perhaps the P/F-NS [-

DUR] forms, which are used both with non-durative meaning

in general truths/timeless statements,[43] complements of

'fear' verbs, and in subordinate 'until' clauses,[44] and

with the potentially durative present habitual sense.

The P/F-S forms, classified here as [+DUR], present an

_____

to work with the Friedrichian terms durative and non-
durative. Note that the category [-DUR], [-PERF]
corresponds structurally to Friedrich's aorist. It
includes the P/F-NS, which was called "aorist" by
Morgenstierne, the PST-A, which corresponds to the Peresian
form Windfuhr discusses as "aorist", and the PST-I.

[42]Hook's (1978:99-100) observation that in Hindi,
Russian, Modern Greek, and Pashto verbs with a conative
sense must be in their imperfective forms can, given the
conceptual overlap between "durativity" and
"imperfectivity", be seen as relevant here.

[43]Imperfective is considered by some to be the
unmarked member of the aspectual opposition in Russian
(Comrie 1976:112). It has been observed that in Russian
and Urdu, general/timeless truths are expressed with
imperfective forms (Masica, p.c.). What this suggests to
me is that general/timeless statements will tend to be
expressed with the unmarked member of an aspectual
opposition, whether it is perfective or imperfective,
durative or non-durative.

[44]Hook (1978) points out that clauses dependent on
verbs of fear and "until" clauses in Russian, Hindi, Modern
Greek and Pashto take verbs in their perfective forms.
Adapting this observation to the durative/non-durative
opposition, we find that in Kalasha 'fear[S]' and
'until[S]' constructions take [-DURATIVE] verbs.

interesting situation. With present time reference, these forms convey progressive (durative) meaning (cf. 9, 10, 13); but with future time-reference (cf. 11, 12) the meaning of the -dai marker is specificity, rather than durativity. This apparent counter-example to my claim for the marked status of DURATIVE is probably indicative of shifting categorial alignments within the Kalasha verb system. That is, the -dai marker may be in the process of shifting from marking durativity to marking specificity, or from marking specificity to marking durativity.[45]

Comrie (1976:114) points to a "greater likelihood of morphological irregularity in the unmarked forms." As noted above, the [+DUR] forms are completely regular, while in the unmarked [-DUR] forms, particularly PST-A and PST-I, and also forms constructed with the perfective participle, irregularities do occur.

The durative also qualifies as the marked member on the morphological criterion of quantity of phonological material (Comrie 1976:114). According to this criterion, unmarked categories are likely to have less morphological material than marked. Comparing the [+DUR] and the [-DUR] forms in Kalasha, e.g. pari'man [+DUR] and pai [-DUR] we see that the [+DUR] forms are indeed longer.

The PAST/NON-PAST morphological opposition conditions the distribution of the SPECIFIC/NON-SPECIFIC and ACTUAL

---

[45]It appears that in the Khowar system the structurally analogous marker -an marks durativity more often than specificity.

INFERENTIAL oppositions. The PST PERF-A and -I, the PST

IMPFV-A and -I and the PST-A and -I are marked for past,

and the P/F-S and -NS and PRES PERF for non-past.

The SPECIFICITY/NON-SPECIFICITY opposition is marked

only in the [-PAST] forms. The [+SPECIFIC] P/F tense, e.g.

a kar'-im-dai 'I am doing, I will do' can only be used when

the meaning is specific. Its direct counterpart, the

[-SPECIFIC] P/F tense, e.g. a kar'-im 'I do' is only used

for non-specific meanings. All the other tense forms, are

undifferentiated for this parameter.[46]

With regard to the parameter of INFERENTIALITY (with

actual and inferential poles), Comrie (1976:108) defines

inferential forms as indicating "that the speaker is

reporting some event that he has not himself witnessed, but

---

[46]The distinction which I am calling specific/non-
specific was noted by Morgenstierne, who refers to my P/F-S
tense as the 'definite present' (1973:228). I consider the
distinction to be one of specificity rather than
definiteness for the following reasons. The primary
semantic distinction is between specific and non-specific
expressions. A specific expression is one for which the
speaker knows or has in mind a particular referent, and a
non-specific expression one for which he does not. For
example, the sentence 'I am looking for a book' can mean
that I am looking for a particular book (specific) or that
I am just looking for any book, perhaps some light fiction
to pass the time on a journey. (non-specific). Notice that
the specificity/non-specificity distinction involves only
the speaker. Specific expressions in turn can be either
definite or indefinite, depending on whether the particular
referent has been previously identified or introduced
into the discourse. If it has, the expression is definite,
e.g. 'I am looking for the book' (definite) implies that
the hearer knows which book is being referred to, while 'I
am looking for a book' (specific, non-definite) does not.
Since the distinction between the P/F-S and P/F-NS forms in
Kalasha is one which is relevant only to the speaker's
state of mind, I consider it one of specificity rather than
of definiteness.

about whose occurrence·he has learned at second-hand
(though without, incidentally, casting any doubt on the
reliability of the information)". While in the context of
Kalasha this is not incorrect, it is by no means a complete
characterization of the range of functions of inferential
forms. We shall see that the inferential forms convey a
range of meanings, which may originally have evolved from
the single semantic distinction of seen/unseen, but which
have differentiated into a complex of related but distinct
meanings, so much so that the inferential range of the axis
of EXPERIENCE has differentiated into two distinct levels.

INFERENTIAL and ACTUAL forms are not differentiated in
the NON-PAST forms, which are coded for specificity. In
the past tenses actual and inferential forms are sharply
differentiated in meaning, and not substitutable for each
other. Thus the INFERENTIAL/ACTUAL opposition is an
equipollent one, and it is morphologically expressed (only)
in the past tense forms.

Notice that the coding of the ACTUAL/INFERENTIAL and
the SPECIFIC/NON-SPECIFIC oppositions is in complementary
distribution across tense; the SPECIFIC/NON-SPECIFIC
opposition is coded in the non-past and the
ACTUAL/INFERENTIAL opposition in the past tenses. This
suggests the proportional relationship:
inferentiality:past :: non-specificity:present. It is for
this reason that I consider both of these semantic

parameters to participate in the axis of EXPERIENCE.[47]

To summarize the semantic featural specifications for

the nine basic verb forms:

Morphologically Coded Semantic Parameters

Informal Name	Aspect +/-DUR	+/- PERF	Tense	Inferentiality	Specificity
P/F-NS	-DUR	-PERF	NON-PAST	Ø	-SPECIFIC
P/F-S	+DUR	-PERF	NON-PAST	Ø	+SPECIFIC
P PERF	-DUR	+PERF	NON-PAST	Ø	Ø
PST-A	-DUR	-PERF	PAST	+ACTUAL	Ø
PST-I	-DUR	-PERF	PAST	+INFEREN	Ø
PST PERF-A	-DUR	+PERF	PAST	+ACTUAL	Ø
PST PERF-I	-DUR	+PERF	PAST	+INFEREN	Ø
PST IMPFV-A	+DUR	-PERF	PAST	+ACTUAL	Ø
PST IMPFV-I	+DUR	-PERF	PAST	+INFEREN	Ø

2.1.6. Application of Windfuhr's tense-aspect-mood model

In this section I locate the Kalasha verbal formations

with reference to the semantic axes of the tense-aspect-

mood model developed by Windfuhr (1985, 1987) (cf. 1.3.2.

above). This is a conceptual structure in which the

dimensions of human cognition reflected in the grammatical

categories of aspect, mood, and tense are given a

geometrical representation.

The model postulates four mutually intersecting

semantic axes, along which points representing specific

---

[47]This fact about Kalasha lends independent support to
the direction of analysis adopted in Windfuhr (1985, 1987),
in which the gradations of the EXPERIENCE axis are
conceived of as analogous to referentiality distinctions.
As noted above (n.) my (re-)interpretation of this
strategy involves the notion of specificity rather than of
definiteness.

values can range. These are the axes of (1) ASPECT,[40] (2)
REALITY, (3) EXPERIENCE, (4) NARRATION. In the following
characterization of these axes, which is based on my
understanding of the motivation for, aims of, and potential
value of the model, I have departed somewhat from the
original conceptualization by Windfuhr.

The axis of ASPECT refers to the ways in which the
internal temporal structure of an event is referred to
(Comrie 1976, passim). Cross-linguistically, typical basic
values for this axis are imperfective and perfective or
durative and non-durative.

The axis of REALITY pertains to the degree to which an
action or state is represented as realized in the world,
i.e. whether or not it has come to pass, and if not, the
degree of probability or necessity that it will. This axis
thus relates to the dimensions of meaning referred to as
existential and deontic modalidy (cf. Lyons 1977:681-2).
Typical values for this axis in the verb systems of many
languages are indicative and subjunctive, denoting actions
or states that are either asserted to have taken place or
be certain to occur, or presented as more or less probable.

The axis of EXPERIENCE refers to the relation of the
referent event to the experience or knowledge state of the
speaker. It is thus an axis along which the values range

---

[40]The reader should note that this discussion is
conceptually independent of the preceding discussion of the
markedness status of the formal oppositions. Thus the
terminology employed here is not necessarily identical to
that in the preceding section.

over differing epistemological statuses. It encodes

different values of epistemic modality. Typical values

along this axis are actual as opposed to indirect or

hearsay knowledge. Involved in the category of epistemic

modality as coded on the axis of EXPERIENCE are matters of

(a) the speaker's committment to the truth of the

assertion, (b) the source of evidence for the assertion

(e.g. visual/aural, hearsay), (c) the type of evidence for

an assertion (direct/indirect), (d) the specificity or non-

specificity of the conceptualized action/event, and (d) the

degree of integration of the assertion into the speaker's

existing knowledge and belief system.

The axis of NARRATION can be best described at this

point as an axis encoding the relation of the narrated

event to other events (speech act or other narrated

events), along which values range in respect of their

relation to these event-external reference points. In the

model as it applies to Kalasha, this axis turns out to

reflect the continued relevance/non continued relevance

distinction associated with the concept of PERFECT vs. NON-

PERFECT. This reflects the common insight that PERFECT

embodies characteristics both of deictic and aspectual

categories.

It is profitable to examine the categories represented

in this model in terms of Jakobson's (1957) taxonomy of

verbal categories. In that schema, verbal categories are

distinguished by their reference to (a) a narrated event,[49] (b) a speech event, (c) a participant in the narrated event, and (d) a participant in the speech event.

The dimensions of this model can be characterized in terms of Jakobson's distinctions. Thus ASPECT and REALITY refer to the narrated event alone; while EXPERIENCE and NARRATION involve the relation between the narrated event and other entities. Aspectual categories encode only the internal structure of the event itself. Categories on the axis of REALITY refer only to the ("objective") existence-status of the event, while the axis of EXPERIENCE includes categories referring to the existence of the event in relation to the ("subjective") world of the speaker (i.e. his system of knowledge and beliefs and thought processes).

Taken together, the categories represented on the four axes of the model partition the subset of verbal "function-space" dealt with as follows:

	Connecter	Non-connecter
Structure	NARRATION	ASPECT
Existence Status	EXPERIENCE	REALITY

The functional commonality of ASPECT and REALITY—that they are both non-connecter categories—may explain why some categorial values, e.g. the progressive, possess characteristics of membership in both types of categories.

---

[49]Since all categories are concerned with narrated events, they may be subdivided into those which do and those which do not involve the participants of the narrated event.

Fig. 1, which is slightly modified from Windfuhr's original version, schematizes the four axes of the model.[30]
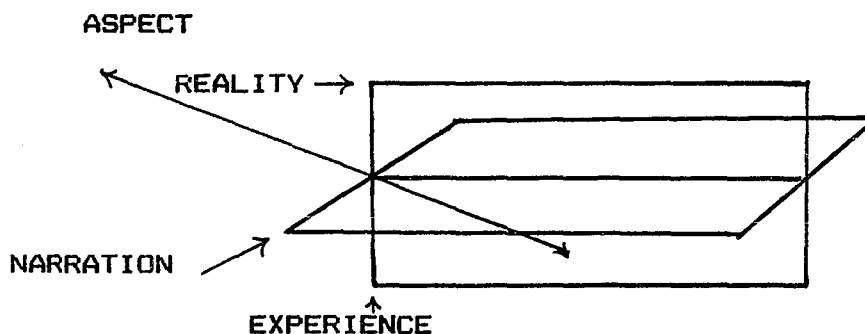
ASPECT

Fig. 1. Tense-aspect-mood model (modified)

The specific structure of the Kalasha verb system is represented in Fig. 2 below.[31]

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[30]In Windfuhr's (1985, 1987) diagrams the lines referring to REALITY, NARRATION, and EXPERIENCE refer to axes while that pertaining to ASPECT represents a boundary. In this diagram, all the lines on the paper represent axes.

[31]In Figures 2, 3, 4, and 5, solid circles represtnt the present location(s) of attested forms, while an empty circle represents the reconstructed location of the original position of a form within the system. Dashed lines represent motion within the system, the arrow indicating its direction. The appearance of a given form at more than one point signifies its multi-functional value within the system.

Note also that the axis of ASPECT in my diagrams (this chapter) is perpendicular to the aspectual axis in Windfuhr's diagrams (Figs. 2, 3, 4 in Chapter 1).

Fig. 2. –

– Kalasha Verb System

HORTATIVE   NECESS₁   NECESS₂   IMPERATIVE

pariu-ori   parielyi   parik baS   pari

parielyi ašis   parik baS ašis

parau-ori   parielyi hawaw   parik baS hawaw

parielyi thi šiu   parik baS thi šiu

parielyi hula   parik baS hula
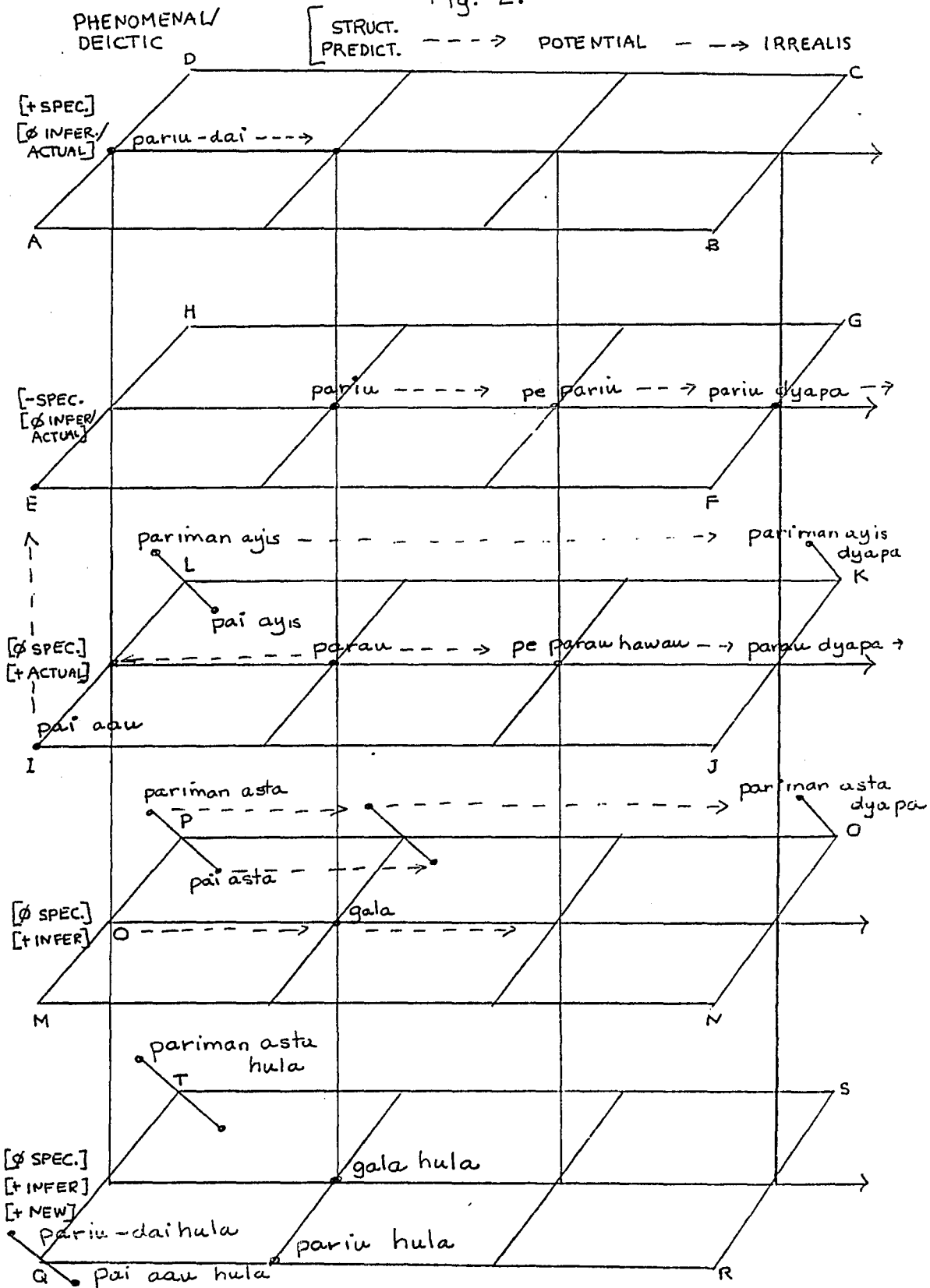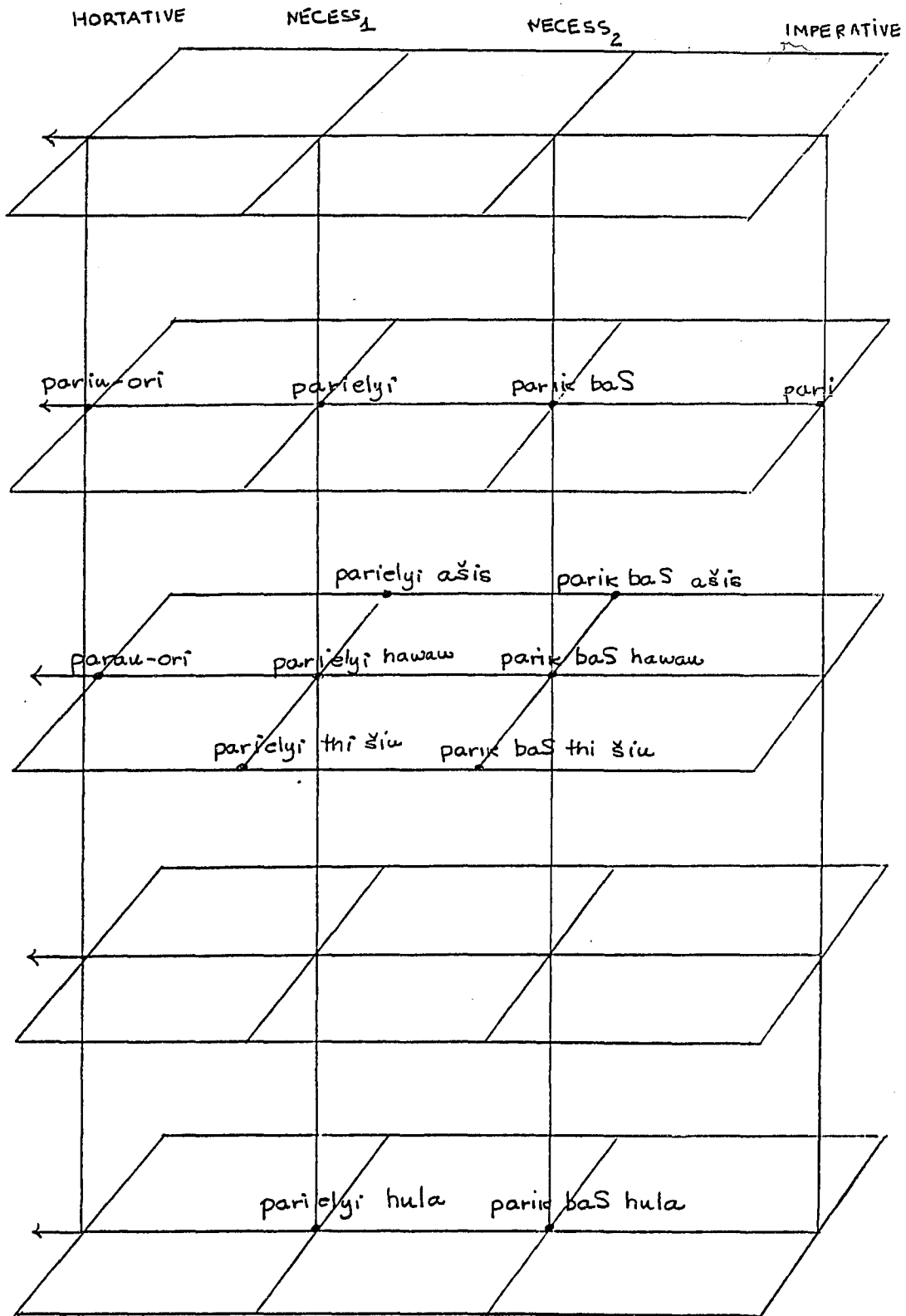
When referring to these diagrams, I shall use the term "level" to refer to the horizontal planes which intersect the vertical axis of EXPERIENCE, (e.g. the plane defined by points ABCD). To refer to vertical planes intersecting the horizontal axis of REALITY I shall use the term "degrees" (e.g. plane BFGC). Values along the the ASPECTUAL axis shall be called "aspects".

Examining the diagram, we see that five epistemological levels can be defined along the axis of EXPERIENCE.[52] They are: (1) the [=SPECIFIC] [ØACTUAL/INFERENTIAL], level (plane ABCD). This level contains the P/F-S forms in -dai, and is assigned the highest value for actuality because it requires that the utterance be the product of both direct knowledge and reference to a specifically known event. (2) On the SECOND level (plane EFGH) the forms are [ØACTUAL/INFERENTIAL] and [-SPECIFIC]. (3) The third level (plane IJKL) contains forms which are [+ACTUAL] and [ØSPECIFIC] (4) At the INFERENTIAL level (plane MNOP) verb forms are specified [+INFERENTIAL], [Ø SPECIFIC]. (4) The "lowest" level (plane QRST) represents the formations with hula. This level represents a differentiation of the inferential range corresponding to the development of the

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[52]The constructions with -tik and INF qhŏan also function as values of the axis of EXPERIENCE, but since they are achieved by syntactic means rather than constituting basic morphology, for the sake of achieving cross-linguistic comparability I have not included then in this diagram of the (morphological) verb system.

semantics of the "unprepared mind"[53] At this level a new

feature, which for lack of a better name I call "new

information" is generated.[54]

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[53]Cf.Slobin and Aksu 1982 and DeLancey 1985-a, b, 1986, Bashir 1988-a for discussion of the "unprepared mind" concept.

[54]The recognition of the _hula_ form as occupying a distinct plane of EXPERIENCE taken together with the formal combinatory properties of _hula_ suggest that the set of _hula_ forms may be in the process of evolving to occupy a position leftward of the PHENOMENAL/DEICTIC degree on the axis of REALITY. This situation is represented in Fig. 3.
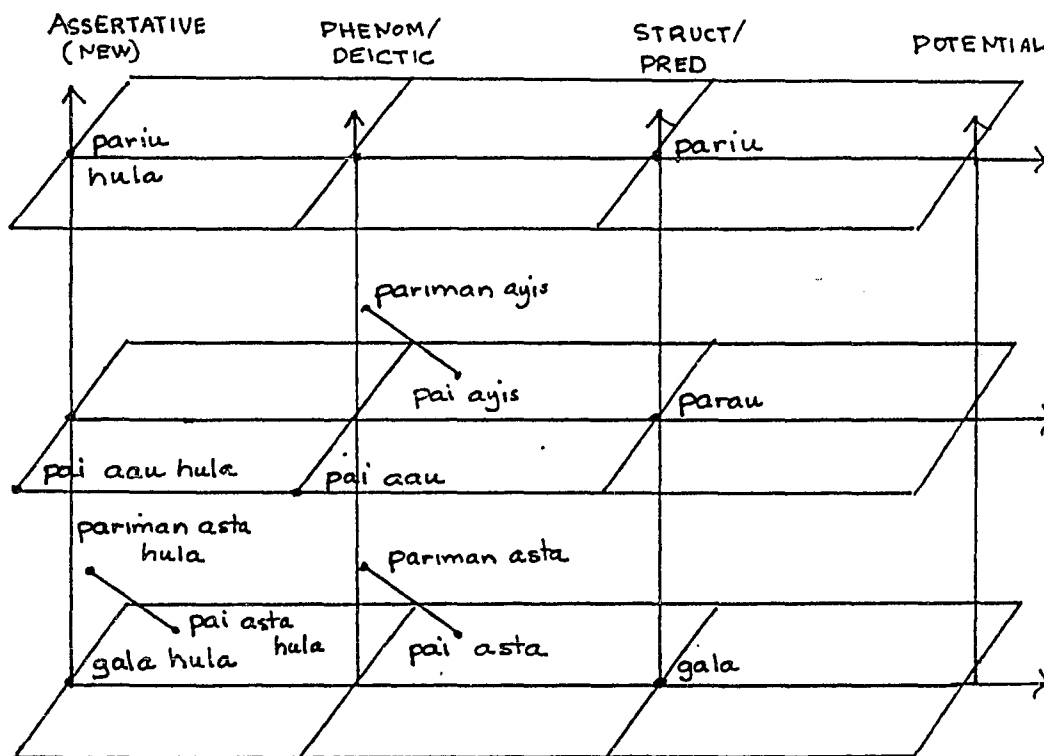
Fig. 3. Future(?) of Kalasha Verb System

This in turn suggests that sets of forms (or, in terms of this model, "planes") can shift in function from one axis to another. If this diachronic hypothesis turns out to be correct, it would result in a new opposition—between (subjunctive) forms in _haw'au_ (<PST-A) and (new information) forms in _hula_ (<PST-I)—in which the forms originating in the inferentials acquire the semantics of assertion while those derived from the non-inferential forms have the semantics of dubitativeness.

Along the axis of REALITY Kalasha has eight degrees.
I shall discuss them in order of decreasing reality (as
defined above). (1) The leftmost degree is the
PHENOMENAL/DEICTIC (plane AEHD). At this degree are found
the progressive and the perfect forms. Classifying the
progressive as a degree of reality may require a bit of
explanation, but the evidence for its validity is compel-
ling. The characterization of the progressive as repre-
senting "phenomenal" as opposed to "structural" reality is
originally due to Goldsmith and Woisetschlaeger (1976,
1982). Analyzing the English progressive, they demonstrate
convincingly that the progressive expresses an event as
phenomenal, that is happening during a (bounded) interval
of time; a structural description of an event, on the other
hand, captures its permanent "structural description".
Discussing Teheran Persian, Windfuhr (1985:421) notes that
the normal imperfective forms may express habitual or
progressive action, but that a new periphrastic progressive
construction has developed, which is affirmative only, and
is confined to the indicative. It is thus a subset of or a
"disambiguation of the indicative," and represents a
further differentiation along the axis of reality.

In my own work on Kalasha, I have noted that the
[+DUR] forms in V-_iman ayis_ and -_dai_ carry a strong sense
of reality with them. Note first that the PST IMPFV-A and
PST IMPFV-I forms do not co-occur with -_ori_, the hortative
marker. Examples (72) and (73) are repeated here.

72) *par-i'man ay'-is-ori *'He was going - good'

73) *par-i'man as'ta-ori *'He had been going - good'

Nor does the P/F-S, one of the functions of which is to encode progressive meaning in the present, seem to co-occur with -or'i. Example (71) is also repeated here for reference.

71) *par-in'-dai-or'i *'They are going - good.'

Second, the IMPFV-A and -I tenses do not co-occur with the INF + qhŏ'an construction (55 above). Third, the co-occurrence of [+IMPFV] forms with -e'lyi was accepted by only one of my informants, rejected by the other. Fourth, although I have no statement definitely rejecting the possibility, the necessitative construction with baS does not occur with the imperfective in any of my materials.

(2) The second degree on the REALITY axis is the STRUCTURAL/PREDICTIVE/(OPTATIVE) degree, in which we find the P/F-NS, PST-A, and PST-I forms of the indicative. These forms are the aspectually least-marked ([-DUR], [-PERFECT]) forms, which give the structural description of an event in terms of the essence of the actions involved. They acquire past, present, and future time reference by virtue of their function in a discourse situation.

(3) The POTENTIAL/CONDITIONAL degree is that at which some aspect of the realization of an event is represented as uncertain. (4) Irrealis forms are distinct from POTENTIAL/CONDITIONALS, although constructed on the base of the STRUCTURAL degree. (5) Next to the right on the

reality axis is the hortative degree. At this value we find the forms in -or'i, which express the speaker's wishing/urging that a situation come about.

(6) The next degree is that represented by the -e'lyi forms, expressing what I will call "subjective deontic necessity". Since there is some indication that the speaker appears to have more emotional investment in the realization of the action, and since the morphology is different, I have differentiated it from degree (7), that of "objective deontic necessity", expressed in the INF-as baS construction. (8) Finally we find the imperative forms.

Along the axis of ASPECT Kalasha distinguishes DURATIVE and NON-DURATIVE poles. On this diagram, the aspectual axis is represented by the line running NW<-->SE. The forms in -iman + 'be' and the P/F-S in -dai are marked [+DURATIVE], all others being unmarked.

The axis of NARRATION (running SW<-->NE) can be considered as an axis of relation. Relative position on this axis can be interpreted as differing values of either anteriority/posteriority, or continued relevance. The points I, U, and V represent the forms marked [+PERFECT], those which encode a past action with continued relevance. These are a subset of the aspectually unmarked [-DURATIVE] class.

To summarize: Kalasha formally distinguishes eight values along the axis of REALITY. Furthest to the left is

the progressive, the most "real" of all. Moving rightward
the values decrease in reality from definitely realized to
potentially realized, to unrealized with differing degrees
of probability or necessity of realization. Along the axis
of EXPERIENCE there are five levels; along the ASPECTUAL
axis two values, and along the axis of NARRATION there seem
to be three values.

2.2. Khowar

2.2.1. Stem-formation

As in Kalasha a basic distinction can be made between
classes of verbs for which all the forms are constructed
regularly on a single stem, and those whose past stem
includes the relic of a historical _a-_ augment. The list of
verbs with these augmented past stems is much shorter than
it is in Kalasha.[33] For regular verbs, stems consist of
root + -_i_ for intransitives, and root + -_e'i_ for
transitives and causatives.

2.2.2. Non-finite verbal formations

Khowar has the following non-finite verbal forms.
(1) The perfective participle regularly consists of root
plus -_i_, e.g. _kor-i_ 'having done', or (for a few, very
common verbs,) -_ti_, e.g. _bi-ti_ 'having become'[34]. The

_____

[33]These include _kor-_ 'do', past stem _ar-_; _ś-_
'be(inanimate)', past stem _oś-_; _br-_ 'die', past stem _obret-_
; _žib-_ 'eat', past stem _oyo-_.

[34]Other past participles in -_ti_ are _qiti_ 'having
come', _angi'ti_ 'having brought', _diti_ 'having given', _žuti_
'having eaten'. See Morgenstierne (1947:27) for historical
discussion. The perfective participle of _rek_ 'to say' is
irregular: _re_ 'having said'.

perfective participle has the following functions. (a)
The three perfect tenses, present perfect (<u>kori asum</u>' 'I
have done'), past perfect-actual (<u>kori asitam</u>' 'I had
done'), and past perfect-inferential (<u>kori asak bire'tam</u> 'I
had done/did (reportedly)' consist of this participle plus
finite auxiliary elements. (b) The perfective participle
in construction with the explicators 'go', 'leave/release',
or sometimes 'sit' forms a compound verb in the usual South
Asian sense. For example, <u>tu puli' bis</u> (you burn will-go)
'You will get burned (be careful).' (c) It functions as a
conjunctive participle (CP), linking two clauses or
imparting various adverbial meanings. (d) As in Kalasha,
with the verb <u>khulye'ik</u> 'to finish' it forms the complement
of the phasal conception 'to finish V-ing'. (e) With
'come' it apparently can form a continuative, assertative
form parallel to that constructed with the imperfective
participle (cf. (g) below). e.g. <u>kori hat'am</u> 'I have been
doing continuously (starting in the past and continuing to
the present)'.

(2) An **imperfective participle** is formed from root
plus -<u>au</u>', e.g. <u>kor-au</u>' 'doing'. The imperfective
participle occurs in the following constructions. (1) It
is the base of the imperfective tenses: (a) past
imperfective-actual, <u>korau' ośotam</u> 'I was doing', (b) past
imperfective-inferential <u>korau' asitam/astam</u>' 'I was doing
(reportedly), (c) present perfect progressive <u>korau' asum</u>'
'I have been doing (intentionally), (d) past continuous

imperfective-inferential <u>korau' asak' bire'tam</u> 'I was doing (mistakenly)', (e) past habitual <u>korau'tam</u> 'I used to do'. (f) It can be used adverbially, e.g. <u>DaQ keLau baGai</u> (child cry(IMPFV PPL) go(PST-A)3s) 'The child went away crying'. (g) With 'come' and 'go' it forms a type of compound verb construction, with quasi-aspectual force, e.g. <u>korau'</u> <u>ha'tam</u> 'I continued to do (starting in the past and continuing into the present)'. These forms thus constitute an ASSERTATIVE degree of reality, stressing the ongoingness and durativity of the action. Aside from locating them in the schematic diagram of the Khowar verb system, I do not discuss them at length in this work.

(3) A second form of what appears to be the imperfective participle consists of verb root plus -<u>a'wa</u>, e.g. <u>kor-a'wa</u>. According to my informants the two forms <u>kor-au'</u> and <u>kora'wa</u> are interchangeable only in certain situations. The second imperfective participial form (a) forms a second past imperfective-inferential tense: <u>kora'wa bire'tam</u> 'I was doing (wrongly)'. (b) It can also be used adverbially: <u>boGa'wa ta-t paysa' dom</u> 'As (i.e. when) you/I are/am going, I will give you some money.' (c) It can be used to form participial relative clauses: <u>tu</u> <u>ra'wa kitab-o tonje'itam</u> (you(NOM) read(IMPFV PPL₂) book-OBL lose(PST-A)-1s) 'I lost the book which you used to read.'

(4) The regular formation of the past participle is in -<u>iru</u> e.g. <u>gan-iru</u> 'taken' (,<u>gan</u>-). Some verbs have a PST

PPL in -rdu, e.g. ka-r'du 'done, did' (<kor-), ra-r'du 'said' (<rek 'to say'). The past participle is (a) the base of the following tenses: (i) the past-inferential, e.g. boGdu 'he went away' (unseen by me), (ii) the past perfective-inferential kardu' bire'tam 'I did (reportedly)', (iii) past counterfactual-actual kardu' oṡotam 'I would have done (intentionally), (but didn't)'. (b) It is used as a substantive, e.g. birdu 'dead person'. (c) It is used attributively, e.g. haya' chir'du iṡnya'ri 'This is a broken thing'. (d) Participial relative clauses can be constructed with this form, e.g. tu fuTu' paṡe'iru DaG 'the boy to whom you showed the photograph'.

(5) One passive participle is made from verb root plus -o'nu, e.g. koro'nu. The passive participle in -o'nu is (a) the base of the passive voice: boxt-o haya' lyakho'nu boy-an' 'The stone is being placed here'; (b) Some relative clauses can be constructed using this form, e.g. ta fuTu paṡe-o'nu biru' DaG (you(OBL) photo show(PASS PPL) become(PST PPL) boy 'The boy who was shown a photograph by you'.

(6) An alternate form of the passive participle is in -in, e.g. niveṡin' 'written' (<niveṡ- 'write'). The form in -in also participates in formation of the passive voice: boxt-o haya' lyakhin' boy-an' 'The stone is being placed here.'

(7) The infinitive is formed from stem plus -k, e.g. korik 'to do', kore'ik 'to have someone do'. It

participates in many subjective and objective complement
structures: (a) the expression of ability--INF plus bik 'be
able'[57] , e.g. hes haya' korm-o korik'-o boi ' 'He can do
this work', and (b) the expression of obligation or
necessity--INF(OBL plus baS, e.g. ma peśa'ur-o-t bik-o baS
(I(OBL) Peshawar(OBL)-DAT go(INF)-OBL NEC. 'I have to go to
Peshawar.'

Deverbal nominals include (7) an agent noun in -ak,
e.g. kor-ak' 'a doer, one who is able to do'. The agent
noun in -ak (a) participates in a series of tense aspect
forms which, in addition to their tense aspect marking,
carry the additional meaning of 'being a V-er, i.e. one who
is able to V.' These forms are: (i) past habitual-
inferential korak' bire'tam 'I was habitually doing/a doer
(without realizing it), (ii) past habitual-actual korak'
ośotam 'I used to be a doer/able to do (but no longer),
(iii) present habitual/abilitative-actual korak' aśum' 'I
am a doer/can do', (iv) present habitual/abilitative-
inferential korak' asak' bire'tam '(I just realized that) I
am a doer/able to do', (v) presumptive korak' boi 'He must
be a doer'. (b) It is also used to form some types of
relative clauses, e.g. rah-en boGak' mos 'the man walking
in the road'.

(8) The deverbal nominal in -a'ru, e.g. piya'ru
'desire to drink' is cognate in form and function with the

---

[57]bik 'be able' is homophonous with bik 'become' in
some tenses.

Kalasha quasi-desiderative construction in -a'lyak. For

example, ma paloG' oce' draC źiba'ru ɢɔyan' 'I feel like

eating apples and grapes.' (Lit. 'to me apples and .grapes

desire to eat is coming.')

2.2.3. Indicative system

Khowar's basic set of indicative tense-aspect forms

are described and illustrated here. There are three simple

forms, i.e. those consisting of verb stem plus personal

endings. These are:

(1) Present/future-non specific: (P/F-NS)ᵖᵐ
    kom 'I do, will do'

The P/F-NS is formed from the verb stem plus the following

person/number suffixes:

	Sg.	Pl.
1.	-m	-si
2.	-s	-mi
3.	-r	-ni

P/F-NS forms are used both with future meaning (117), and

in the sense of a generic/habitual present (118 - 119).

117) hase' peśa'ur-o-te no bir [if]
     he   P.-OBL-DAT   not go(P/F-NS)-3s
     'He will not go to Peshawar.'

118) puśi no waxir [sn]
     cat not bark(P/F-NS)-3s
     'A cat doesn't bark.'

119) awa hamiś chuc-o   Choi baja   riphom'   [wur]

ᵖᵐThe decision to call this form "present/future-non
specific" was made on the basis of the following
considerations: (a) Morgenstierne (1947:21) calls this
form an "aorist", which "is used as an indefinite present
and as a future". (b) In order to preserve legitimate
parallelism with the Kalasha tense names. I note, for the
record and for future consideration, however, that my
informants consistently refer to this form as the "future".

I   always morning-OBL six   o'clock get up(P/F-NS)
'I always get up at six o'clock in the morning.'

(2)   Present/future-specific: (P-S)[37]
      koman 'I am doing'

The specific present/future consists of the P/F-NS forms

plus the suffix -an, analogous to the Kalasha P/F-S forms

in -dai. (120-a, b) are an examples of its use.

120-a) ta   brar   hani'se kyaaG koy-an [wur]
       you(OBL) brother now   what do(P/F-S)-3s
       'What is your brother doing now?'

b) chuci   sot   baja   mehtar broz-ote rahi boyan
   morning seven o'clock Mehtar B.-to   leave(P/F-S)-3s
   'The Mehtar is leaving for Broz tomorrow morning at
   7 a.m.' [O'Brien 1895:47]

(3)   Actual Past: (PST-A)
      are'tam 'I did'

PST-A forms consist of the past stem plus the marker //-

ist-//[40] plus the preterital personal endings:

	Sg.	Pl.
1.	-am	-am
2.	-au	-ami
3.	-ai	-ani

Examples follow in (121).

121-a) awa   hatoGo   sum   just hot-am   [wur]
        I(NOM) he(OBL) with met become(PST-A)-1s
        'I met him (just a few minutes ago).'

---

[37]Although I have found (in older texts) a few
examples of this form with future time reference, its use
with future meaning seems less frequent than the use of the
comparable Kalasha forms in -dai with future time
reference. This suggests to me that the categorial
distinctions in Kalasha and Khowar may not be entirely
identical. This perceived difference on my part is
reflected in the different treatment of the P/F-S forms in
the model diagrams of the Kalasha and Khowar verb systems.

[40]In normal speech //-ist-// is reduced by varying
degrees, becoming -st, or -t- in some words. The degree of
reduction also varies from dialect to dialect.

b) hase' lahur-o-te baGai [ys]
   he   L-OBL-DAT go(PST-A)-3s
   'He went to Lahore.'

   Participial tenses consist of the perfective,

imperfective, or past participle plus finite forms of 'be'

and/or 'become'.[61] Forms constructed on the perfective

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[61]Paradigms of 'be' and 'become' are given here for
reference.
              Paradigm of as'ik 'be(ANIMATE)'
Present
              Sg.   Pl.
    1.   asum'   asus'i
    2.   asus'   asum'i
    3.   asur'   asun'i

Past
    1.   asitam   asitam
    2.   asitau   asitami
    3.   asitai   asitani

              Paradigm of śik 'be(INANIMATE)'
Present
    1.   —   —
    2.   —   —
    3.   śer   śeni

Past-Actual
    1.   ośotam   ośotam
    2.   ośau ([ośo])   ośotami
    3.   ośoi   ośoni

Past-Inferential
    1.   —   —
    2.   —   —
    3.   śirai'   śira'ni

    The past-actual paradigm of śik requires further
comment. Obviously, since if 1st and 2nd person forms
exist, these forms are no longer restricted to inanimate
subjects. (Interestingly, O'Brien (1895) listed no 1st and
2nd person forms.) These forms are regularly used as
auxiliaries in forming participial tenses, and can also
appear as finite verbs with animate subjects, viz. awa i
waxta i Sapik paciak-o qo'na Sadar' ośotam (I one time one
bread baker with servant was) 'At one time I was a servant
with a baker.' (Endresen and Kristiansen 1981:223) This is
further illustrated by the following sentence: awa juwan
ośotam/*asitam 'I was a young man' [rkb]. According to my
informant, asitam is not correct in this sentence, and is

participle are the following:

(4)   Actual Present Perfect: (PRES PERF-A)
      kori asum´ ´I have done´

This form consists of PFV PPL plus present tense forms of

as´ik ´be´.

122) awa   hatoGo´ sum   just biti asum [wur]
     I(NOM) he(OBL) with met   become(P PERF)-1s
     ´I have met him (so I know him).´

(5)   Actual Past Perfect: (PST PERF-A)
      kori asitam ´I had done´

The PST PERF-A is formed from the PFV PPL plus past tense

forms of ´be´.

123) angi´ti asitam [rkb]
      bring(PST PERF-A)-1s
      ´I had brought it.´/*I had been bringing it/*I used
      to bring it.´

(6)   Inferential Past Perfect: (PST PERF-I)
      kori asak biretam ´I had done (without realizing it)´

This form consists of PFV PPL plus agent noun of asik ´be´

plus PST-I forms of bik ´become´.

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used only by non-native speakers, especially in a mixed
language environment like Chitral town.
     Some speakers also have a (regularized?) 3rd sg. form
o**ś**otai, but this is not considered acceptable by all
speakers.

Paradigm of bik ´become´

Present/Future-Non specific

	Sg.	Pl.
1.	bom	bosi
2.	bos	bomi
3.	boi	boni

Past-Actual

1.	ho´tam	ho´tam
2.	hou	ho´tami
3.	hoi, hor	ho´ni

Past-Inferential

1.	bire´tam	bire´tam
2.	birau´ (biret´au)	bira´mi (biretami)
3.	birai´	bira´ni

124) kori   asak'   bire'tam [rkb]
     do(PFV PPL) be(AG NOUN) become(PST-I)-1s
     '(It (has) turned out that) I did it (mistakenly).'
     'I had done it (and didn't know/remember it at the
     time, but now I do).'

Forms constructed with the imperfective participle

are:

(7) Present Perfect Habitual: (P PERF HAB)
     korau asum' 'I have been doing'

The P PERF HAB is formed from the IMPFV PPL + present tense

forms of 'be'.

125) awa   hatoGo' sum   just bau asum' [wur]
     I(NOM) he(OBL) with meet(P PERF HAB)-1s
     'I have been meeting him/have met him often (up till
     now).'

(8) Past Habitual₁: (PST HAB₁)
     korau tam 'I used to do'

This form is constructed from the IMPFV PPL plus the

following endings.[62]   It is illustrated in (126-a).

	Sg.	Pl.
1.	-tam	-tam
2.	-tau	-tami
3.	-tai	-tani

126-a) hase' noGor'-a payra' korau' tai [rkb]
       he(NOM) fort-LOC watch do(PST HAB₁)-3s
       'He used to do sentry duty at the fort (and no longer
       does).'

(9) Past Habitual₂: (PST HAB₂)
     koraur/korauni 'He/they used to do'

126-b) hase' noGor'-a payra' kora'ur [rkb]
       he   fort-LOC watch do(PST HAB₂)-3s
       'He used to do sentry duty at the fort.'

This form appears to be an isolated relict, existing only

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[62]These endings incorporate a reduced form of the
preterite marker //ist// plus the preterital person/number
suffixes. Whether or not they should be analyzed as
reduced forms of the past tense of 'be', (i.e.
ośotam/asitam > -tam) is not clear.

for the third person singular and plural.

(10) Actual Past Imperfective: (PST IMPFV-A)
      korau' ośotam ' I was doing'

The PST IMPFV-A consists of the IMPFV PPL + past tense

forms of the inanimate form of 'be'.

127) hase   gyaw'a   awa niveśau' ośotam [if]
     he(NOM) come(IMPF PPL₂) I   write(PST IMPFV-A)-1s
     'When he came I was writing.'

(11) Inferential Past Imperfective₁: (PST IMPFV-I₁)
     korau asitam   'I was doing(reportedly)/would have
     done'

This form is made from the IMPFV PPL + past tense forms of

'be(ANIMATE)'. Its indicative use is exemplified in (128-

a), and in (129-b) it appears in an irrealis conditional.

128-a) hase' gyaw'a   a'wa niveśau' asitam' [if]
        he   come(IMPFV PPL₂) I   write(PST IMPFV-I)
        'When he came I was writing (reportedly).

b)   tu   hani'se no giru'-a   awa Galat'
      you(NOM) now   not come(PST CTF) I   mistake
      kor-au' asitam [if]
      do(PST IMPFV-I)
      'If you hadn't come now, I would have done it wrong.'

The difference between (127) and (128-a) is that (127)

reports a situation in which the speaker was aware at the

time he was writing that a visitor had come, while in (128-

b) he found out later that a visitor had come while he (the

speaker) was writing.

(12) Inferential Past Imperfective₂: (PST IMPFV-I₂)
      korawa biretam 'I was doing (mistakenly)'

PST IMPFV-I₂ forms are constructed from the IMPFV PPL₂ plus

the PST-I forms of bik 'become'.

129-a) awa Galat' koraw'a bire'tam [rkb]
       I   wrong do(PST IMPFV-I₂)-1s
       'I was doing (it) wrong (and didn't realize it at
       the time but found out when someone told me).'

b) awa poraw'a bire'tam [rkb]
   I   sleep(PST IMPFV-I$_2$)-1s
   'I would have gone to sleep (e.g. if I hadn't found out
    that there was something I had to do).'

c) awa plyakh-o   nuroGi'   Chake'awa bire'tam
   I   spark plug-OBL upside down put in(PST IMPFV-I$_2$)-1s
   jam belut' misri'   payda' hoi [rkb]
   fortunately mechanic appear(PST-A)-3s
   'I was about to put the spark plug in upside down, when
    fortunately a mechanic appeared.'

(13)   Inferential Past Imperfective$_3$: (PST IMPFV-I$_3$)
       korau asak biretam 'I was doing (mistakenly)'

The third PST IMPFV-I form consists of the IMPFV PPL$_1$ plus

the agent noun of asik 'be'(ANIMATE) plus the PST-I forms

of bik 'become'.

130) awa korau' asak' bire'tam [rkb]
     I   do(PST IMPFV-I$_3$)-1s
     'I was/have been doing it (mistakenly/unwittingly)
      (and just found this out).'

     Forms built with the past participle (and the agent

noun) are:

14) Past-Inferential (PST-I)
    boGdu 'he/they went'

This form, consisting of the past participle without any

person/number markers, appears to occur with all persons

and numbers. I give examples for 3rd sg. and pl. and 2nd

sg.

131-a) tet-an   angar' boGdu   diga angar no
       they-OBL fire   go(PST-I) again fire   not
       lardu [Morg 1947:27]
       find(PST-I)
       'Their fire went out; they couldn't find a fire
        again.'

b) ju   rafeq-an   bira'ni bathan'-ari boGdu
   two companions were   country-ABL go(PST-I)
   safar'-o-te   pon-a   bi   boh xezmat biru'
   journey-OBL-DAT road-LOC going very tired become(PST-I)
   'There were two companions. They left their country on

a journey. (While they were) going on the road, they
became very tired.' [Endresen and Kristiansen 1981:221]

c) śer-żeri bodol' ma żan-e tu kuri' boGdu
   lion-cub B.   my soul you where go(PST-I,
   'My lion-cub, Bodol, my soul, where have you gone?'
   [Wazir Ali Shah and Morgenstierne 1959:56]

With transitive verbs, the subject takes either NOM (132-a)

or OBL (132-b) case.[63]

132-a) hase'   rardu [if]
       he(NOM) say(PST-I)
       'He said.'

b) hatoGo' rardu [if]
   he(OBL) say(PST-I)
   'He said.'

(15)   Past Perfective/Contrafactual: (PST PFV/CTF)
       kardu ośotam 'I had done, would have done'

This form consists of the PST PPL plus the past tense forms

of 'be(INANIMATE)'.

133)   awa hatoGo' diru ośotam [rkb]
       I   him(OBL) beat(PST PFV/CTF)-is
       'I was about to beat him (but I didn't--either
       because of internal change of mind or because of
       receiving some external information).'

---

[63]The OBL subject is semantically different from the
NOM subject usage. According to one informant, the
difference between (132-a) and (132-b) is that (132-b)
stresses what is said, while (132-a) stresses the agent.
The following pair further illustrates the point:
a) bap rardu   ki   thii   niśe [rkb]
   old man say(PST-I) COMP stay(CP) sit(IMP2s)
   'The old man said, "Sit quietly".'

b) bap-o   rardu   ki kuche'i   kucha'i [rkb]
   old man-OBL say(PST-I) COMP stratch(CP) boil
   'An old man said, "From scratching you have a boil".'
   (Proverb meaning, "You have created trouble for
    yourself.")
In other words, the OBL subject construction is more
patient-oriented, or "like a passive" than the NOM subject
construction. It may be that this construction represents
the relic of a former incipient ergative-like development
which stopped before reaching the stage of those NIA
languages with (tensually/aspectually) split-ergativity.

(16) Past Perfective-Inferential: (PST PFV-I)
      kardu biretam 'I did (reportedly)'

This form is made from the PST PPL plus PST-I forms of bik

'become'.

134-a) hase'   paLoG-o   żurdu birai' [rkb]
       he(NOM) apple-OBL eat(PST PFV-I)-3s
       '(I just learned that) he ate the apple.'

b) oho' tonje'iru bire'tam [rkb]
   oh   ruin(PST PFV-I)1s
   'Oh, I have ruined it (and I just discovered this after
   seeing the bad results).'

(17) Inferential Structural: (STRUCT-I)
      korak birai 'He is a doer/can do (I just realized
      it); he will do (I just realized it); he used to do
      (I just realized it).'

This form is the agent noun plus PST-I of bik 'become'.

135-a) awa jam korak' bire'tam [if]
       I   good do(STRUCT-I)-1s
       '(It turns out that) I am doing well.'

b) peśa'ur-o-te no boGak' birai' [if]
    P.-OBL-DAT   not go(P/F-I)3s
    'He is not going to Peshawar (reportedly)'

c) har   wezen-a   hase nahang' i   moś-o   i   pay-o
   every evening-LOV that ogre   one man-OBL one goat-OBL
   randeżu korag biray
   kabab   do(STRUCT-INF)-3s
   'Every evening the ogre used to make kabobs from one
   man and one goat.' [Endresen & Kristiansen 1981:222][44]

(18) Inferential Perfective: (PFV-I)
      kardu asak biretam 'I have done it (wrongly)'

The PFV-I is constructed from the PST PPL plus the agent

noun of asik 'be(ANIMATE)' plus the PST-I of bik 'become'.

_____

    [44]In this example the original transcription has been
retained. The form korag' is certain to be the agent noun
with phonetic voicing before a voiced consonant. Note that
(135-b) is an instance of the narrative present in an
inferential (not directly experienced) context (cf. Kalasha
example 52 above).

136) awa kardu asak' bire'tam   [rkb]
     I   do(PST PFV-I)-1s
     '(It turns out that) I (am one of those who) have done
     it (mistakenly).'

In addition to this basic set of tense-aspect forms,
there are three more partially parallel sets of what are
functionally tense-aspect forms. One is constructed from
the agent noun in -ak plus finite forms of 'be' or where
necessary to fill out the paradigm 'become'. These forms
in general add the meaning of 'to be a V-er', or 'to be
able to V'. For example (137):

137) awa   khowar' lyu dyak   asum'[rkb]
     I(NOM) K.   speak(AG NOUN) be-ANIM(P)-1s
     'I am a Khowar speaker (i.e. I am able to speak
     Khowar.)'

A second set of forms consists of the imperfective and
perfective participles plus forms of gik 'to come'. (cf.
above for the corresponding Kalasha forms.) One such pair
of forms is illustrated in (138).[48]

138-a) awa   korau'   gom-an [if]
       I(NOM) do(IMPFV PPL) come(P-S)-1s
       'I have been doing it for some time (and will
       probably go on doing it).

b) awa hatoGo sum   mulaQat hamiśa kori go'man [sn]
   I   him   with meeting always do(PFV PPL) come(P/F-S)1s
   'I have been meeting him (on a regular basis) in the
   past (and now also).'

---

[48]These forms in gik 'come' and bik 'go' are
comparable in both form and (aspectual) function to the
Urdu and Hindi forms kartaa aaya and kartaa gaya
respectively. The range of gik forms appears in Fig. 3,
but a full illustration and discussion of them is beyond
the scope of the present work.
     It would appear that there may also be a parallel set
of forms in PFV PPL plus bik as in (?) awa mulaQat kori bim
'I will go on (regularly) meeting him', but I have no
example of such a form.

Yet a third set of forms consists of the imperfective
participle plus finite forms of bik 'go', e.g. (139).

139) (awa) korau'   boGak'   bire'tam [if]
     I(NOM) do(IMPFV PPL) go(AG NOM) become(PST-I)-1s
     '(It turns out that) I have been doing it for a long
        time.'

The Khowar verb system can be informally described in
terms of a tensual opposition between PAST and NON-PAST; a
basic aspectual opposition between DURATIVE and NON-
DURATIVE, with further differentiation of the DURATIVE into
habitual, progressive, and assertative continuative, and
with a crosscutting distribution of PERFECT and NON-
PERFECT; and an epistemological opposition between the
direct experience ACTUAL and the INFERENTIAL categories.
Progressive is treated as it is for Kalasha, both as an
aspectual category and as a degree of reality, for much the
same reasons.

2.2.4. Non-indicative system

Khowar has five morphologically distinct non-
indicative forms. (1) Immediately to the right of the
STRUCTURAL/PREDICTIVE degree on the axis of REALITY are
found the sets of forms employed in irrealis conditions.
The true subjunctive forms are used in the apodosis of
contrary to fact conditional sentences at the level of
direct (non-inferential) experience, illustrated in
(140).⁴⁴

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[44]The characteristic subjunctive suffix is -es-. The
paradigm is illustrated for korik 'to do'.
                    Sg.   Pl.
     1.   koresam   koresam'

140) ta   ban   no diru'a   sabaq-o-te   no
     you(OBL) punishment not give(CTF) lesson-OBL-DAT not
     boGe'su [if]⁴⁷
     go(SUBJ)-2s
     'If you had not been punished you would not have gone
     to school.'

Forming a minimal pair with this sentence is (145), in

which the PST IMPFV-I form of the type korau asitam is used

to represent the same situation, but at the inferential

level.

(141) ta   ban   no diru'a   sabaq-o-te   no
      you(OBL) punishment not give(CTF) lesson-OBL-DAT not
      boGau' asitau [if]
      go(PST IMPFVₓ)-2s
      'If you had not been punished you would not have gone
      to school.'

The difference between (140) and (141) is that in the

former, with the subjunctive in the apodosis, the speaker

knew that this would be the consequence at the time of

punishment, while in (141), with the inferential form in

the then-clause, he only realized that this consequence

resulted from his action afterwards - on the basis of some

information acquired after administering the punishment.

The form consisting of past participle plus -a, e.g.

kardu-a, is used in the protasis of both actual and

inferential irrealis conditionals. This use can be seen in

(140) and (141) above. It can also convey the sense of an

unfulfilled wish, as in (142).

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     2.   koresu'.   koresi'mi
     3.   koresir'   koresi'ni

⁴⁷I am most grateful to Inayatullah Faizi for this
minimal pair, which illustrates the meaning difference
between these two forms so nicely.

142) awa hataGo'   kardu'a [rkb]
     I   that(OBL) do(CTF)
     'Would that I had done that!'

(2) The imperative/hortative degree is represented by

a suppletive paradigm with forms functioning as imperatives

for all persons except first singular.[48]

(3) An optative form exists, but so far as I have been

able to determine, only for the verb bik 'to become' (bai

3sg, bani 3pl.). This form occurs in the complement

clauses of verbs of wishing, requesting, and ordering; and

in matrix clauses with an optative sense. These usages are

illustrated in (143) and (144) respectively.

143) hokumat'   hokum prai   ki   ta
     government order give(PST-A)-3s that you(OBL)
     bandi'   koro'nu   bai [rkb]
     arrested do(PASS PPL) become(OPT)
     'The government ordered that you be arrested.'

144) chuci-o Tem-a   igan'   ay'kun saf-o-t
     morning time-LOC one each egg   all-OBL-DAT
     di(y)o'nu   bai [rkb]
     give(PASS PPL) become(OPT)-3s
     'In the morning time one egg should be given to each
     one.'

As in Kalasha, there are two types of necessitative

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[48]The personal endings used with imperative-
hortatives are:
	Sg.	Pl.
1.	Ø	-si
2.	-e(h)	-ur'/-or/-awer'
3.	-ar'	-a'ni
According to Morgenstierne (1947:21-2), the first plural
form is homophonous with the "aorist" (=my P/F-NS). The
3rd sg. and pl. forms are historically descended from
ancient subjunctives. He also notes a 3rd sg. hortative
form śiur', in the sentence Quwatin-o-te śiur' ke . . .'
'It behooves the rich that . . .' (attested in the
translation of the Ganj Pakhto by Khan Sahib Abdul Hakim
Khan. Calcutta, 1902). This form may be cognate with the
Kalasha hortative forms in -ori, which, however, are much
more fully developed (preserved?).

constructions--(4) one in INF-o baS, and (5) a second in

-eli(k). Their use is illustrated in (145) and (146).

145) ma   peśa'ur-o-t bik-o   baS [rkb]
     I(OBL) P.-OBL-DAT   go(INF)-OBL NEC
     'I have to go to Peshawar.'

146) puśur' nig-e'li(k) [rkb]
     meat   wash-NEC
     'The meat needs to be washed.'

When asked about the difference in meaning between the

forms in -eli(k) and those in baS my informant said that

there was no difference, both forms applying equally well

in situations involving either internal or external

compulsion. Further textual study may shed light on the

distribution of these forms. Regarding the alternation of

-eli and -elik, the historically prior form seems to be

-elik. This variant is more common in Upper Chitral,

considered to be the Khowar-speaking heartland, than in

Lower Chitral.[69]

Applying the tense-aspect-mood model to the Khowar

verb system, we obtain the structure represented in Figure

4.

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[69]This form appears to be borrowed from Turkic. For a
discussion of this point, see 7.2.3. below.

Fig. 4. —

ASSERTATIVE   PHENOM/ DEICTIC   STRUCT/ PREDICT

[-SPECIFIC] [-INFERENT]   koman   kom

(koraur)

korau gyek ošotam   korau-tam

korau gyau ošotam (-tam)   korau giti asitam   korau ošotam   kardu ošotam

korau hatam   korau asum   kori asitam   aretam

[+SPECIFIC] [-INFERENTIAL]

korau goman   kori asum

korau giti asum

kori goman

korau asitam

[+SPECIFIC] [+INFERENT]   kardu

(korau gyawa biretam?)   kardu asak biretam   kardu biretam

korau giru biretam   korau asak biretam   korak biretam

[∅ SPECIFIC] [+INFERENT]   korau gyek biretam   kori asak biretam

Khowar Verb System

2.3. Comparison of the Kalasha and Khowar systems

Let us compare the Kalasha and Khowar verb systems, considering each of the conceptual axes in the model. We note that the axis of REALITY shows eight morphologically distinguished degrees in both Kalasha and Khowar.[70] The epistemological axis of EXPERIENCE has five levels in Kalasha, and four in Khowar.[71]

With regard to ASPECT, Kalasha has a two-way privative opposition between marked durative and unmarked non-durative, with a further differentiation of the non-durative into perfect and non-perfect forms. Khowar has a basic two-way opposition between durative and non-durative with further differentiation of the durative into habitual, progressive, and continuous categories. In Khowar the PERFECT/NON-PERFECT opposition cuts across both durative

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[70]Degrees of reality for purposes of analysis in terms of this model are defined as morphologically, rather than semantically distinct. The consequences of this decision are as follows. Since future meaning in Kalasha is represented by the P/F-S or P/F-NS forms, a separate degree for FUTURE is not established. On the other hand, since there are two distinct necessitative morphemes in both Kalasha and Khowar, there are two degrees for NECESSITATIVE in both languages. In Khowar, since realis conditionals are expressed with forms identical to the simple PST-A, a separate degree is not established for CONDITIONAL reality. In Kalasha, on the other hand, since conditional forms are expressed with the subjunctive, they do occupy a position distinct from the structural degres.

[71]If the distinction between Khowar kom with present time reference and koman were taken (as for Kalasha) to be one of specificity, then the number of levels of EXPERIENCE would be four. If it turns out to be better analyzed as an aspectual difference, or a progressive marking as I have considered it here, then the number of levels in Khowar is three. This question requires further research for a more definitive resolution.

and non-durative aspects (viz. the P PERF HABITUAL forms).

Thus we see that in Kalasha the epistemological axis of EXPERIENCE is somewhat more elaborated than that of Khowar, while in Khowar the aspectual axis, particularly in the durative range, shows greater differentiation. The following tabular comparison of the basic forms of both languages reveals the elaboration of the Khowar aspectual system. In the left-hand column are given the basic Kalasha forms. Directly opposite each, in the right-hand column, is given the semantically corresponding Khowar form. It will be seen that there are eight basic Khowar forms for which there are no corresponding simple Kalasha equivalents.

	Kalasha	Khowar
Actual level		
P/F-NS	kar'-im	kom
P/F-S	kar'-im-dai	kom-an
PRES PERF	kai· a'am	kori asum'
PRES PERF HAB	–	korau' asum'
PAST-A	a'ris	are'tam
PAST HAB$_1$	–	korau' tam
PAST HAB$_2$	–	koraur/korauni
PAST PERF-A	kai ay'is	kori asitam
PAST IMPFV-A	kari'man ay'is	korau' ośotam
PST PFV-A	–	kardu ośotam

Inferential level		
STRUCTURAL-I	–	korak' bire'tam
PAST-I	ka'da him	kardu
PAST IMPFV-I$_1$	kari'man as'ta him	korau' asitam
PAST IMPFV-I$_2$	–	korau' asak' bire'tam
PAST IMPFV-I$_3$	–	koraw'a bire'tam
PAST PERF-I	kai as'ta him	kori asak bire'tam
PAST PFV-I$_1$	–	kardu bire'tam
PAST PFV-I$_2$	–	kardu asak bire'tam

With regard to degrees of reality, an important difference between the development of the REALITY axis in

Kalasha and in Khowar is that in Khowar the IRREALIS degree
is more sharply differentiated from the POTENTIAL-
HYPOTHETICAL: the subjunctive forms are used almost
exclusively in contrafactual situations. In Kalasha the
situation can be described as follows: the forms which
express the POTENTIAL/HYPOTHETICAL degree of reality and
the IRREALIS are both (semi-agglutinative) developments of
the basic structural degree. The POTENTIAL/HYPOTHETICAL
degree ("subjunctive" and "optative" consist of the
structural degree plus pe for the optative, pe hawau for
the conditional or hypothetical; and the irrealis degree is
constructed from the structural forms plus dya/dyapa. The
status of these particles is midway between analytic and
morphological accretion.

A particularly interesting comparison can be drawn
between the full range of constructions used in Kalasha for
inferential meanings and those used in Khowar for the same
semantic range. First, we saw above that Kalasha verbs are
morphologically specified for inferentiality-actuality only
in the past tenses. The semantic distinction between
inferential and non-inferential meanings, however, is
maintained throughout the whole system. Recall that the
means employed to do this was to append hula, the PST-I 3rd
sg. of hik 'to become' to non-past finite forms. Turning
to Khowar, we see that of the eight [+INFERENTIAL] forms,
six of them are constructed with participle, agent noun, or
participle plus agent noun plus the PST-I of bik 'to

become' in all persons and numbers. The PST IMPFV-I$_1$, korau' asitam, acquires its [+INFERENTIAL] meaning by contrast with the [+ACTUAL] korau' oṡotam.[72] The eighth, the PST-I, consists of the past participle, and acquired its inferential semantics from the old parokSa meaning of the OIA perfect (see below).

Thus we have complete semantic parallelism, in that the direct/inferential opposition is maintained throughout the tenses in both languages, with the same range of possible meanings, but formal non-parallelism. The formal non-parallelism consists in the fact that in Kalasha

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[72]In contrast to the situation in Kalasha, the verb as'ik 'to be-animate' has only one past tense form, i.e. asitam 'I was', for both actual and inferential meaning. ṡik 'to be-inanimate' also has only one past tense form, viz. oṡoi 'it was', for both actual and inferential meaning. The uses of these past tense forms and the system of oppositions have readjusted themselves so that the past tense forms of ṡik have become applicable to animates. That is to say, in the case of the PST IMPFV-I korau oṡotam, a form originally marked for the animacy/inanimacy opposition has switched its function to operate within the actual/inferential opposition. This makes two forms—asitam and oṡotam available for the past auxiliary. Where a pair of forms exists, one in asitam and one in oṡotam , as with the pair korau asitam/korau oṡotam the form in asitam has taken on inferential meaning. This semantic change is indicated on the verb system diagram by a dashed line showing the reconstructed diachronic movement of the form korau asitam from its position of (formal) systemic origin to the (semantic) niche it now occupies. It appears that korau oṡotam has "displaced" korau asitam, forcing it into what appears to be the closest available semantic niche in the verb system, and thus filling a gap in the system at the inferential level. Where such a pair does not exist, as with kori asitam/*kori oṡotam, asitam retains its actual experience semantics. The gap in the system, that is, the inferential counterpart of kori asitam, is filled by a form constructed from the agent noun of asik and the PST-I form of bik, in this case kori asak biretam. See note 61 above also.

inferentiality is encoded both by full paradigms employing the forms of 'be' marked for [+INFERENTIAL] and [+ACTUAL] meaning, and by hula, the PST-I form of 'become', while in Khowar, (with the exception of the PST-I and the PST IMPFV-I), bir-, the PST-I form of 'become', is the sole means of coding inferentiality.

This raises interesting diachronic questions: Is the present shape of the Kalasha PST-I the result of a (recent) collapsing of PST-I forms which formerly included the PST-I of hik 'become'? That is, are forms like asta-him, gala-him, in which him appears to be the P/F-NS-1s of hik 'become', perhaps collapsed versions of *asta hula-him or *gala hula-him?[73] There are some indications that this could be the case. First, such a change would involve only loss of redundant morphology. Since the PST-I form is already marked for [+INFERENTIAL] by virtue of its stem selection, the morpheme hula would not serve any essential function. What is not redundant, however, is the person and number marking supplied by the -him component. So, possibly the PST-I was originally of the form *gala hula-him, and the 1st and 2nd persons have subsequently lost the morpheme hula. A second consideration arises from comparison of the set of sentences displayed in (146).[74]

146) a dita him (*hula)   a gala him (*hula)

---

[73]Here the asterisk <*> indicates hypothetical reconstructed forms.

[74]In (146) the <*> indicates forms not accepted by informants.

'I gave (reportedly)'   'I went (reportedly)'

mai daada ama krom kai asta hula
mai daada ama krom kada   hula
'My father had done/did this work (reportedly)'

Notice that in the first person hula may not follow the

finite form, while in the third it may. This may reflect a

situation reconstructable as:

    *gala hula him > gala him[75]
    *dita hula him > dita him
    *dita hula   > dita (hula)

Unfortunately I do not have any evidence, positive or

negative, as to whether forms like (?) gala hula him are

acceptable as alternate forms of gala him.[76]

Even if this hypothesis is correct, the non-

parallelism remains, since Kalasha but not Khowar has both

[+INFERENTIAL] and [+ACTUAL] forms of 'be' (cf. 1.5.3.3.

for the paradigms).

The historical development seems to be as follows.

The seen/unseen distinction was present in OIA. Deshpande

(1981:62) based on analysis of Panini's rules P.3.2.111,

and P.3.2.115, concludes that in Vedic Sanskrit the three

preterital tenses were specified as follows:

aorist	imperfect	perfect
+past	+past	+past
+recent	-recent	-recent
+/-seen	+seen	-seen

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[75]<*> in this paradigm indicates hypothetical
reconstructions.

[76]This gap can easily be remedied by further
fieldwork. One possibly relevant bit of information is a
form cited by Trail and Cooper (1987:301), hula hik, which
is glossed as an "alternate pronunciation of hula". There
is, however, no illustrative sentence for this form.

The +/-seen distinction, in the absence of any mention of
it, appear not to have existed in the non-past tenses; In
later Sanskrit, however, and in MIA and NIA, this
distinction is lost.[77]   In Kalasha the old -ta participles
(>PST-I forms) took on the parokSa (unseen>inferential)
value, while the finite preterite (PST-A) which developed
from the aorist and imperfect retained the [+seen]
(>+ACTUAL) specification. Thus it appears that in Kalasha
the (basic) actual/inferential distinction is inherited
from OIA, while its later development and the proliferation
and elaboration of its semantics has taken place under the
influence of Turkic (or, less probably, Tibeto-Burman).
The hula 'become' morphological stratum with its associated
semantics thus seems to be a later accretion.

Since most of the function of marking inferentiality
in Khowar is accomplished by the PST-I of 'become' bir-,
the question of the historical relationship between Kalasha
hula and Khowar birai presents itself. In Khowar, bik
'become' appears to be the only verb for which complete
person-number paradigms for both actual and inferential
past tenses is coded in basic morphology (biretam   PST-I
vs. hotam PST-A). Other PST-I forms employ the bare past

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[77]Emeneau (1966:124) says, ". . . the general equation
in meaning of the three past tenses, imperfect, perfect,
and aorist in classical and epic Sanskrit is certainly
different from the Rigvedic state of affairs."
Meenakshi's observation (1983:162) that "a few instances
are available in the Epics where the perfect is used in the
first person, but none of them (satisfies the condition in
Panini III.2.115)" (cf. note 17 above) is consistent with
this.

participle in all persons and numbers. Further
actual/inferential contrasts are accomplished by appending
bir- to non-finite forms. Now bir- appears to be formed
from the past participle (cf. OIA -ta participle) plus
preterital person-number endings, in the same way as
Kalasha PST-I forms consist of the past participle plus
personal endings (for 1st and 2nd persons). The fact that
bir- is the only form so constructed in Khowar suggests its
acquisition as a result of influence from Kalasha hula.
Once the PST-I form bir- had entered the language,
inferential counterparts for all tense-aspect forms could
be constructed regularly from it. This regularity, both of
the bir- forms themselves and of the paradigms constructed
with them, also points to the more recent (re-?)
introduction and spread of inferentiality marked forms in
Khowar as compared to Kalasha.

2.4. Comparison of Kalasha and Khowar with other verb
systems

Juxtaposing the diagrams representing the Kalasha and
Khowar systems with those for prototypical Turkic and
Iranian (Ch. 1, Figs. 3 and 4), we note that for Persian
there are two levels of EXPERIENCE, and three DEGREES on
the axis of REALITY. For Turkic, two levels of EXPERIENCE
are identified, and in a complete representation of Azari
Turkic there would be seven positions along the axis of

REALITY.[78]

Now let us examine a representation of the verb system of Urdu and Hindi, using the same model. This is displayed as Figure 5 below.[79]

A few comments on the treatment of various categories are in order. First, in this analysis the forms based on the -ta participles, variously called in the literature "present" or "imperfective" participle, have (a) because of their participating in a full set of forms parallel to those formed on the -ya participles (cf. "past" or "perfective" participle), and (b) because the distinction between the -ta and the -ya forms is neither only tensual nor only aspectual, I have considered the -ta forms as [-specific] and the -ya forms as [+specific].

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[78]Windfuhr (1987:14) lists these as: Progressive, Deictic, Structural, Predictive, Necessitative, Adhortative, and Optative. Figure 2 in Ch. 1, based on his Figure 6 (1987) shows only four of these.

[79]This diagram originated in a list of verb forms supplied by Peter Hook to Gernot Windfuhr, to whom I am grateful for sharing them with me. This schematization, however, includes additional forms supplied by me, and differs considerably from a suggested draft version prepared by Windfuhr.

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Fig. 5. —

Urdu Verb System

POTENTIAL/ HYPOTHETICAL	PREDICTIVE	NECESS/ PREDICT	IMPERATIVE

āe

ātā rahegā
āegā

ātā rahā
āhā
ātā rahā karo

ā jae

ātā ho

āyā ho

āyā karegā
āj āyā karega

ā gayā ho

ā jāega

āewālā ho

ānewālā hai

āne wāla hota thā
ānewālā thā
āya karo

āo

āne wālā
ānewālā hotā

ā jāyā karo

ā jāo

ānewālā hogā
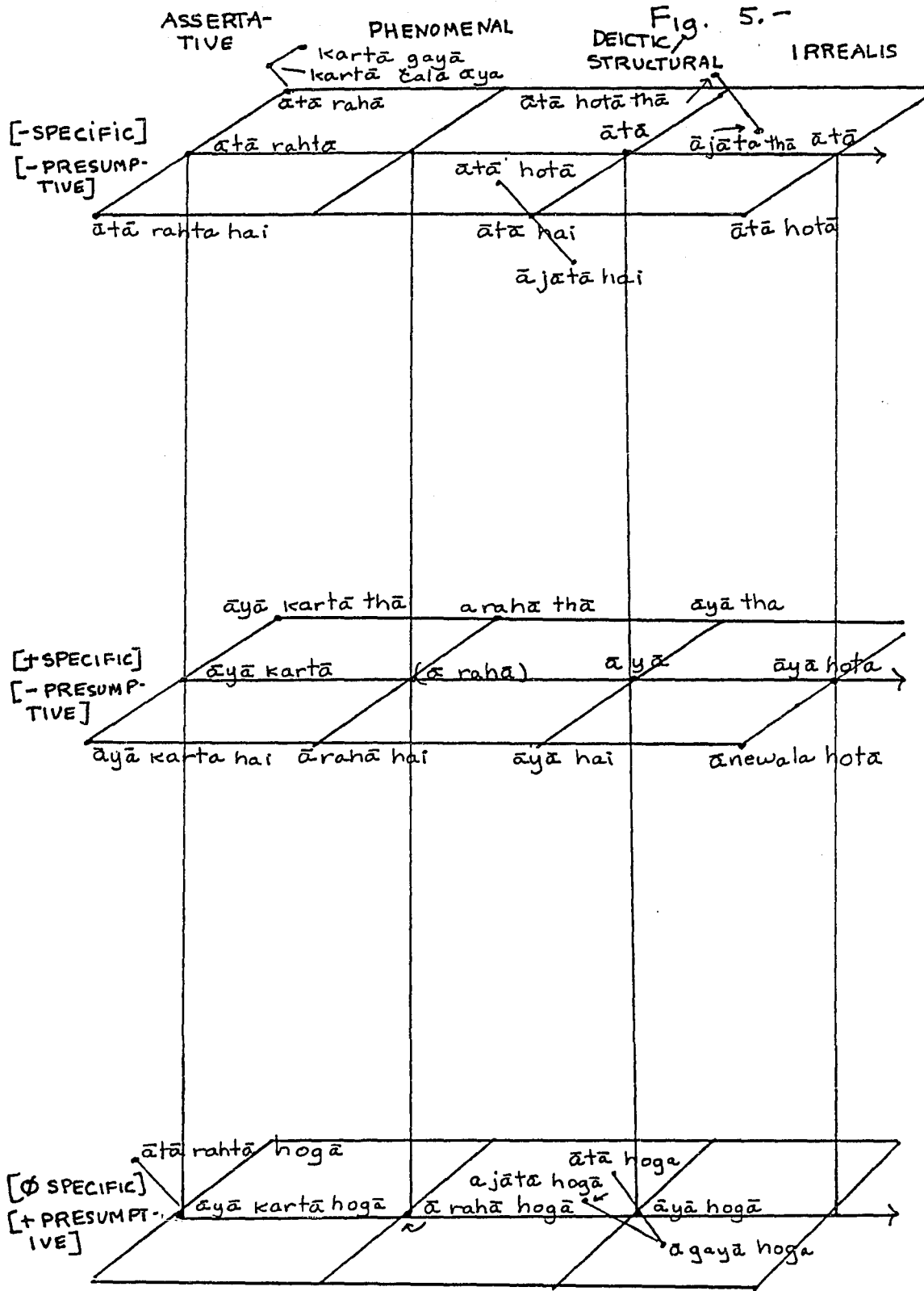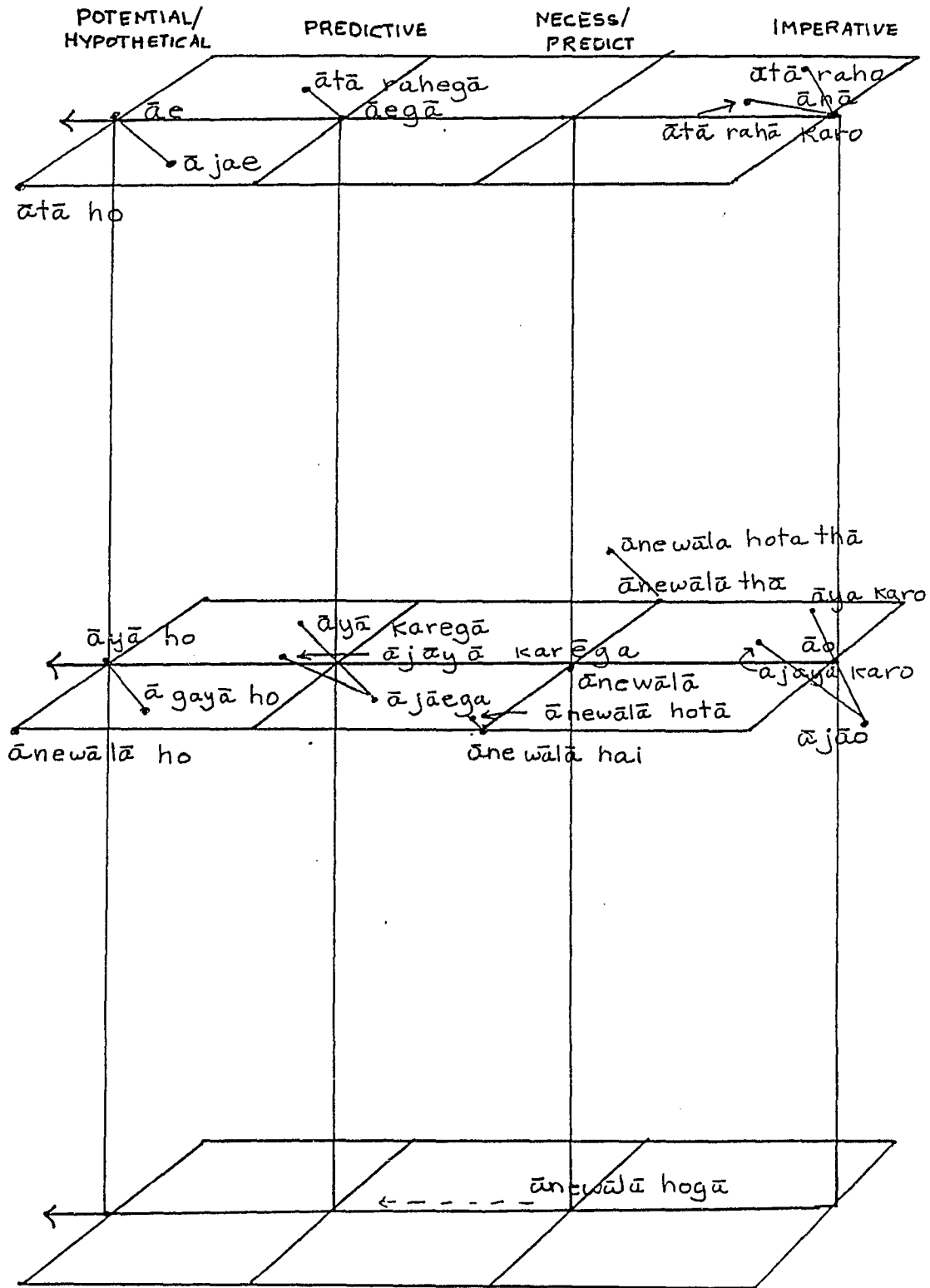
Second, since the INF(OBL)-__waalaa__ forms in Urdu have
two distinct though related semantic functions—they encode
both a necessitative meaning, e.g. __yeh kapRe dhonewaale hàÎ__
'These clothes need to be washed', and a predictive-
prospective meaning as in __màÎ peśawar jaanewaalaa hÛÛ__ ' I
am about to go to Peshawar'—they appear at at the
PREDICTIVE (the prospective meaning) and the NECESSITATIVE
values on the axis of REALITY.

In terms of the axes of the model, the salient
features of the Urdu system are summarized here. On the
axis of REALITY Urdu has eight degrees: ASSERTATIVE,
PHENOMENAL, DEICTIC/STRUCTURAL/(REALIS)CONDITIONAL,
IRREALIS, POTENTIAL/HYPOTHETICAL, PREDICTIVE,
NECESSITATIVE/PREDICTIVE, and IMPERATIVE. Note that the
left side of the REALITY axis is highly differentiated,
having both distinct PHENOMENAL and ASSERTATIVE degrees.

The aspectual axis is also highly differentiated.
There are several degrees of imperfectivity: the unmarked
imperfective constructed with the -__ta__ participle;
iteratives consisting either of the -__ya__ participle plus the
imperfective of the verb __karnaa__ 'to do' plus a finite form
of 'be', or or the -__ta__ participle plus finite forms of
__rahnaa__ 'stay'; and the progressive formed from the verb
root plus a finite form of the verb __rahnaa__ 'to stay,
remain'. I have ranged the perfective compound verb forms
in verb root plus finite form of 'go'/'give' along this
axis also because in Hindi and Urdu these must be

considered central to the morphology of the verb system.[80]
Note that some of this extreme differentiation has been
assigned to the asix of REALITY and some to ASPECT. . It is
possible also that the difference between the -ta and the -
ya forms could be located on the ASPECTUAL axis.

On the axis of EXPERIENCE there are three levels: [-
specific] [-presumptive], [+specific] [-presumptive], and
[0 specific] [+presumptive]. The presumptive meaning is
seen in a sentence such as woh aa rahaa hogaa 'he must
be/is probably coming'. Inferentiality is not coded in
basic verb morphology in Urdu and Hindi.

The axis of NARRATION, which reflects relations of
events to other events, reflects the opposition between
continued relevance to present and past situations.

Comparing the structure of Kalasha's verb system with
that of Urdu, we note striking differences. The most
noticeable is the absence in Urdu of the morphological
category of inferentiality which is so pervasive in both
the Kalasha and the Khowar systems. A second difference is
the greater elaboration of the left sides of the axis of
REALITY in Urdu than in either Kalasha or Khowar. A third
noticeable difference between Kalasha and Urdu is the
greater elaboration of the aspectual axis in Urdu,
especially in the imperfective area. Khowar's position
with respect to this is intermediate between Kalasha and

[80]For discussion of the perfective nature of these
compound verb forms see Hook (1978, 1985).

Urdu.

Comparing the structures of the verb systems of all
these five languages, we notice several things: (1) The
axis of REALITY shows differing segmentation and degrees of
differentiation in these languages. The proliferation of
forms at the left end of this axis is unique (among these
languages) to Urdu, (unless the Khowar forms in IMPFV PPL
plus gik 'come' and bik 'go' are truly comparable in
importance to the corresponding Urdu forms). It may be
also that these Khowar forms represent some influence from
Urdu. The fact that these forms are less integrated into
the verbal system in Kalasha than in Khowar would seem to
suggest such a hypothesis. The treatment of IRREALIS
differentiates Kalasha from Khowar. Figure 6 schematically
compares the partitioning of the axis of REALITY for these
five languages.

Kalasha	PHENOM-ENAL / DEICTIC	STRUCTURAL/ PREDICTIVE	POTENTIAL	IRREALIS	HORTATIVE	NECES-SITATIVE$_1$	NECES-SITATIVE$_2$	IMPERATIVE
Khowar	ASSERTA-TIVE	DEICTIC/ PHENOMENAL	STRUCTURAL/ PREDICTIVE/ POTENTIAL/	IRREALIS	OPTATIVE	NECES-SITATIVE$_1$	NECES-SITATIVE$_2$	IMPERATIVE
Urdu	ASSERTA-TIVE	PHENOMENAL	DEICTIC/ STRUCTURAL	IRREALIS	HYPOTHET-ICAL	PREDICTIVE	NECES-SITATIVE	IMPERATIVE
Persian	PHENOMENAL	DEICTIC			POTENTIAL			
Turkic	(PHE-NOME-NAL)	DEICTIC	STRUCTURAL	PREDICTIVE	HORTATIVE / IMPERATIVE	NECESSITA-TIVE	OPTATIVE	

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Fig. 6. — Comparative Partitioning of REALITY Axis

Kalasha and Khowar are similar in the pervasiveness of
inferentiality in the system. In Persian the category of
inference is confined to the past tenses whereas in Turkic
languages it is generalized "to express what may be called
relative evidence."[81] In this respect, both Kalasha and
Khowar are closer to the Turkic pattern than to either the
Iranian or that variety of Indo-Aryan exemplified by Urdu
or Hindi. It is a matter of historical record that various
groups of Turkic-speaking peoples have migrated into the
Chitral area at various times. Given that history shows
long proximity between speakers of Turkic languages (e.g.
Kirghiz, Uighur) with the Wakhi and Khowar speaking areas,
it seems that convergence phenomena involving Turkic
languages and Wakhi, Khowar and Kalasha are worth closer
study.

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[81]Windfuhr (1985:431) referring to Haarmann (1970) on
the Turkic languages.

CHAPTER 3

TRANSITIVITY AND CAUSATIVITY RELATIONS

3.0. Theoretical background and plan of chapter

Transitivity and causativity relations formally marked
on the verb, in particular morphological causatives, have
attracted much attention from South Asianists. Their
salience in the morphology of the better studied languages
of the area, for example Urdu kaTnaa 'to be cut', kaaTnaa
'to cut', katwaanaa 'to have (s.o.) cut' has led Masica
(1976, Chapter 3) to examine these constructions as
potential defining features for the South Asian linguistic
area. He finds (ibid.:103) that while these constructions
are not uniformly distributed in the languages of the area,
and morphological causative development is not an area-
defining feature, the "Indian subcontinent is one of the
main centers for the development of causative morphology in
the Old World." (ibid.:100) As such it is one of the core
areas of the most intensive development of causative
morphology, i.e. the development of second causatives (e.g.
Urdu khilaanaa 'to feed', khilwaanaa 'to have s.o. feed; to
have fed').

How do the relatively less studied NWIA ("Dardic")

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languages fit into this larger picture? These languages
are represented in Masica's study only by relatively
limited data on Kashmiri and Shina. Based on these data,
the situation with respect to causatives in the NWIA
borderland region is unclear. For example, the Shina data
would seem to put NWIA into the anti-causative area which
includes almost all of northern Eurasia, but outside of the
second causative region. Kashmiri, on the other hand, has
second causatives but no synchronic anti-causatives. More
recent research indicates, however, that the Shina
situation is more complex, and that formally double
causative forms do exist.[1]

Before proceeding further, let me specify the senses
in which I shall be using the key terms in this chapter.
Following Masica, and to facilitate integration of these
data into the discussion begun by him, I shall also use the
set of terms and symbols which he has adopted from the work
of Nedyalkov and Silnitsky[2]. Recapitulating Masica's
summary, (ibid.:55-6), the key terms are:

   V_1 = non causal verbal base (transitive or

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[1]Forms in which the causative morpheme -ar- is doubled
are exemplified by marararoiky 'to have s.o. killed by
s.o.'. Compare (a) and (b).
a) mas   dono maaréegas (<//mararoiky// 'to kill') [maz]
   I-ERG bull die-Cs-PST-1sg
   'I killed the bull.'
b) mas -- dono maarréegas (< //marararoiky//) 'to have [maz]
   I-ERG bull die-Cs-Cs-PST1sg   killed by s.o.')
   'I got the bull killed (by s.o.)'

[2]Originally published in Kholodovic (1969) and
subsequently revised and republished in Kiefer (1973:1-32).

intransitive)

   V_j = a derivative of V_i; first degree causative

   $V_{\bullet}$ = a derivative of V_j; second degree causative

in which subscripts indicate the derivational degrees. The

superscripts ^{in}, ^{tr}, $^{k'}$, $^{k''}$, and ^{ak} indicate "intransi-

tive", "transitive", "first causative", "second causative",

and "anti-causative" respectively.[3] An anti-causative

derivative is an intransitive verb which is derived from a

basically transitive verb base. Anti-causatives thus have

lower valence but are (morphologically) more complex than

the basic transitives from which they are derived. So, for

example, anticausative derivation is symbolized by $V_i{}^{tr}$ >

$V^{ak}{}_j$.

   One of the objectives of this chapter is to make a

contribution toward filling out the picture for the NWIA

languages by enabling data from Kalasha and Khowar to be

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[3]In this discussion "transitive" and "intransitive"
refer only to valences, i.e. the number of participant
roles in the case frame of a verb: an intransitive verb
has valence 1, a transitive valence 2, a ditransitive
valence 3, etc. Conceptual refinements of the type
discussed first by Hopper and Thompson (1980) are not
considered here.
   The term "causative" will be used to refer to matters
of form or morphology—either to derivational stage, e.g.
"first causative", or to the morphemes -a'- and -aw-. Thus
a given form may sometimes be referred to by either "first
causative" (a morphological/formal description) or "derived
transitive" (a term referring to valency), depending on the
exigencies of the context. To refer specifically to the
semantics of cause and effect relations I will use
capitalized "CAUSATIVE". It will often be the case,
however that a given form is both "causative" and
"CAUSATIVE". The reader should note that in my discussion
neither "causative" nor "CAUSATIVE" is assumed to be
synonymous with "valence-adding".

taken into consideration. A second aim is to point out
some of the unique fine-grained features of Kalasha
causative constructions. Given that the "Dardic" region is
linguistically so complex, both genetically and
geographically, identification of some of these more fine-
grained features may prove helpful in teasing out the
characteristics of this transitional zone with respect to
larger sprachbund configurations.

In the first section I discuss the morphology of
Kalasha transitivity-causativity sets. The second section
deals with syntactic points, the third with some semantic
and diachronic questions, and the fourth with areal and
typological ramifications.

3.1. Morphology

3.1.1. Derivational processes

3.1.1.1. -a'- causatives. There are two causative-
derivation processes in Kalasha. The first-level process—
addition of a transitivizing morpheme -a'- (< OIA -a'ya)—
operates on both intransitive and transitive roots. With
most intransitives, e.g. verbs of motion like uST'- 'rise,
get up' -a'- can be added, creating a transitive stem,
uST-a'- 'to raise, lift'.* Transitive roots, e.g. hﻩD-
'skin (an animal)' or pi- 'drink' may or may not allow the
valence increasing morpheme, depending on further semantic
subclassification. The verb hﻩD- 'skin', for example, does

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*There may be a small class of intransitives which do
not allow transitivization with -a'-; cit- 'think' may be
one such verb.

not allow this derivational step, so we do not get *hǒDek'
(< *hǒD-a'-ik), but the verb pi- 'drink' does, giving the
pair pik and piek' (< pi-a'-ik) 'to cause to drink'.[5]

Transitive roots which allow this valence-increasing
derivation with -a'- fall into two sub-types. One is a
class of verbs denoting actions performed on the exterior
surface of the human body; the other refers to actions
performed on the interior of the body, either physically or
mentally. With the first subset of verbs the meaning of
the basic form is to perform a given action on one's self,
while the derived form means to perform that same action on
another person. This is the "anti-reflexive" semantics
noted by Nedyalkov and Silnitsky (1973:18). The
prototypical example of this class is sǎbi'ik 'to put on

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[5]At this point the reader may be wondering why I have
chosen to describe this first-level valence adding
derivation as the affixation of -a'- rather than simply in
terms of infinitives in (')-ik(') and those in -ek'. The
reason is that the -a'- shows up in several places in the
surface morphology of Kalasha. First, there are a few
transitive verbs which have two alternate forms in the
infinitive, e.g. Zǐga'ik/Zǐgek', both forms of which mean
the same 'to smoke (pipe or hookah)', of khoša'ik/khosek'
'to choose, like, love'. Second, there are a few
transitives which have only an infinitive in -a'ik-, e.g.
sǎga'ik 'to hear, feel' or hara'ik 'to swallow'. Third,
when the infinitive of transitive verbs in -ek' appears in
its oblique form or in certain compounds, the -a'- shows
up. For example: from naš- 'die', we have nas'ik 'to
die', and našek' 'to kill'. But in the oblique INF in the
postpositional phrase našai'k-as pati 'for the sake of
killing', or in the compound naša'ik-wew 'time of killing',
the -a'- shows up. When the infinitive of thek 'put' is in
NOM form it appears as thek, as in: bo moc alyu' thek ne
jhon'an [S:mb] 'Not many people know how to store
potatoes', but in OBL form as tha'ik as in alyu' thaik'-as
tarika' šehǎ ši'u [S:mb] 'the method of storing potatoes is
like this'. It also shows up regularly in the second (-aw-
causatives.

(one's own clothes)', and sǎbiek' 'to put clothes (on someone else)'. The second sub-type includes the class of verbs called "ingestive" by Masica (1976:58). With this set of verbs the meaning of the basic form is to do the action oneself, e.g. 'to drink', and that of the derived form either to help or make someone else do the action by contactive causation, e.g. piek' 'to make drink', or 'to help to drink', or Cic'ik 'to learn' and Cicek' 'to teach'.

Conjunct verbs--those consisting of a nominal or adjectival element with the semantically bleached verbs 'become' creating intransitives and 'do' creating transitives--achieve this first level of causativization in several ways. (1) N hik > N -ek', e.g. Duk hik 'to meet (e.g. on the road) and Dukek' 'to bump against something', (2) N hik > N hek as with ǎga' hik 'to be/stay awake' and ǎga' hek 'to awaken', (3) N hik > N ka'rik, e.g. payda' hik 'to appear', payda' ka'rik 'to produce, cause to appear', (4) N hik > N karek' as with just hik 'to come together (of people)' > just karek' 'to join together (of people)'. The fact that four different forms of derivation can be identified here does not mean that there are four distinct meanings, each one associated with one form. It is a result of the fact that a first causative from hik can be achieved either morphologically in hek or analytically in ka'rik, and also that sometimes kar'ik and its first causative karek' often have the same meaning.

3.1.1.2. -aw- causatives. The second level of

causative derivation involves the morpheme -aw- (< OIA

-aapaya-). Verb root + -aw- + -a'- + -ik yields a second

causative derivative, e.g. karawa'ik 'to have done (by

someone); to make someone do'. The formation of these

second causatives is regular; infinitives all terminate in

-awa'ik, and -aw- causatives do not have augmented past

stems. This process is very productive in Kalasha. It

seems that almost all verbs can form second causatives in -

aw-; those few that were rejected by my informant involved

internal mental or physical states. For example, from

zrand hik 'to be startled' we have zrand kar'ik 'to

startle', but *zrand karawa'ik was not accepted, I suspect

for pragmatic rather than other reasons. The same applies

to roS hik 'to be angry', roS ka'rik 'to be angry, *roS

karek' and *roS karawa'ik.⁶

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⁶In order to express the idea of causing someone to be
angry, a different construction is used. The first
causative of the verb 'bring (inanimate object)' (onek' <
on'ik) is employed as the analytic "empty" causative verb
instead of karik. For example: a a'sa kahar' onem' 'I will
make him angry (intentionally, as by teasing)' (Literally,
'I will make him bring anger.') A similar idiom, using
'come', 'bring', and 'cause to bring' to denote involuntary
vs. controlled anger and the notion of causing to become
angry is also employed in Burushaski. Compare (a - c).
a) *-moos Juuyas 'to become angry (involuntarily)' (lit.
'anger come affecting s.o.')
  pfute buut i-moos   diimi
  demon very 3s-anger come(PST)3s
  'The Div became very angry.'
b) *-moos dusuuyas 'to become angry (with some control)'
(lit. 'to bring anger affecting bringer')
  ine guus mu-moos   dusu boom
  the woman 3s,hf-anger bring(PST PERF)-3s,hf
  'This woman became angry.'
c) *-moos d*-atsas 'to make s.o. angry' (lit 'to make s.o.
bring anger affecting causee')
  a-moos   a-t-a-atso

Regarding the formation of -aw- causatives with new
borrowings, new verbs are entering the language not as
basic verbal roots but in the form of conjunct verbs, i.e.
adjectival or nominal element plus (most often) a finite
form of hik or kar'ik; e.g. madat' hik 'to be of help to
someone (by helping him to do a piece of work)' and madat'
kar'ik 'to help someone (e.g. financially). madat' kar'ik
forms the second causative madat' karawa'ik from the -aw-
causative of kar'ik.

Should -aw- second causatives be considered as derived
from (basic) intransitives or from (derived) transitives?
There is both formal and semantic evidence that Kalasha
-aw- causatives are better conceived of as derived from
transitives. The first point is that all -aw- causatives
terminate in -awa'ik in which we see the morphemic sequence
-aw + a' + ik (aw + transitivizer + infinitive formant).
Second, in the case of two sets of verbs in which the first
derivative shows a stem change from the basic intransitive,
the causative form incorporates the transitive version of
the stem rather than the intransitive. One set has
unstressed -u- or -i- in the intransitive stem but stressed
-a'- in the transitive stem. For example: uzukik' 'to
spill (intrans.)' but uzak'ik 'to spill (transitive) >
uzakawa'ik 'to get spilled (by someone)', but not

_____

1s-anger NEG-d-1s-bring(CS)imp
'Don't annoy me!'
Examples are from Lorimer (1938.III:268). Transcription
has been normalized in accordance with the system used in
this dissertation; glosses are Lorimer's.

*uzukawa'ik. The second group involves the presence of a nasal in the transitive but not in the intransitive stem, as in chi'ik 'to break (intrans.) and chin'ik 'to break (trans.)' > chinawa'ik 'to get broken (by someone)', but not *chiawa'ik. Up to this point this observation could be interpreted in two different ways. One line of reasoning is to argue that in these pairs the transitive is the basic form[7] and that -aw- causatives are derived from basic forms, be they transitive or intransitive. The alternative position is that since the -aw- causative is clearly in these cases derived from the transitive, to argue that -aw- causatives are derived from transitives, whether they are basic or derived. The second position, it seems to me, is preferable. There are cases when the semantics of the -aw- forms is related more closely to that of the transitive than the (basic) intransitive. For example, the verb cimikik' means 'to shine (of a star or mirror)'. The first causative cimikek' means specifically 'to shine a mirror (at someone, to attract his attention, tease, etc.)', not *'to cause (a star, mirror) to shine', and the second level -aw- causative cimikawa'ik means 'to have someone shine a mirror at someone'.

3.1.2. Transitivity sets

Having introduced the two derivational processes, I now discuss types of transitivity sets found in Kalasha.

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[7]This point is discussed in 3.1.2.2. in connection with anti-causatives.

3.1.2.1. <u>Two-member sets.</u>

Intransitive and -<u>a</u>'- causative only:

(1) Most intransitives can enter into 3-member sets, but a few simple verbs with stressed roots appear not to allow second causatives, e.g. <u>uźlu'ik</u> 'to be bruised', <u>uźluhek</u>' 'to bruise', but not *<u>uźluawa'ik</u> 'to get s.o. bruised (by s.o.)'.[e] (2) Some basically intransitive conjunct verbs also may not allow secondary causativization: e.g. <u>roS hik</u> 'to be angry', <u>roS ka'rik</u> 'to be angry', but not *<u>roS karawa'ik</u>. If classes (1) and (2) really do not allow -<u>aw</u>- causatives, they are in any case numerically quite small.

Transitive and -<u>a</u>'- causative only:

(3) The only basic transitive verb of the stressed root type I have encountered for which a causative in -<u>aw</u>- was not accepted is <u>praSm'ik</u> 'to forget', from which I have <u>praSmek</u>' 'to make s.o. forget', but not *<u>praSmawa'ik</u> 'to have someone cause s.o. to forget' or 'to cause (indirectly) to forget'.

Transitive and -<u>aw</u>- causative only:

(4) I have found two basic transitives with unstressed roots which appear only to have the -<u>aw</u>- causative. These

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[e]The <*>'s reflect rejection of these forms by my main informant as well as non-occurrence (so far) in any sources available to me. I do not reject the possibility, however, that some of his judgements may have been governed by cultural or pragmatic rather than strictly "grammatical" factors. At this point I am inclined to think that -<u>aw</u>- causativization is completely productive in Kalasha, restrained only by the kinds of factors alluded to above.

are halik' 'to bring (animate object)', and nik 'to take

away (animate object)' From these basic transitives we

have haliawa'ik and niawa'ik respectively, but not *halek'

and *niek'.

(5) A number of root-stressed basic transitives allow

causativization with -aw-, but not derivation of a stem in

-a'-. They include verbs like piS'ik 'to grind', and

SØSk'ik 'to sweep', from which are derived piSawa'ik 'to

get ground by someone' and SØSkawa'ik 'to have swept by

someone' but not *piSek' or *SØSkek'.

   3.1.2.2. Three-member sets.

   Intransitive, Transitive, and CAUSATIVE:

(6) Some primary intransitives with unstressed roots allow

two degrees of causative derivation. This class is fairly

numerous. It includes some of the most common verbs, e.g.

nisik' 'to sit', nisek' 'to seat', nisiawa'ik 'to have

seated by someone'; 'to get s.o. to sit'.[9]

(7) From many root-stressed basic intransitives are

derived both a first-order causative in -a'- and a second-

order derivative in -aw-. This is the most frequently

occurring derivational pattern. Note that in this class

the stress shifts from the root to the stem-formant vowel.

For example: uTik'ik 'to jump', uTikek' 'to help someone

---

[9]The fact that out of the sixteen verbs which I have
found of the class (6) type, six of them have an extra /i/
in the -a'- and -aw- causatives, e.g. prekik' >
prekiek'/prekiawa'ik 'to fall > fell > have felled (a
tree)' suggests that these are probably disyllabic i-final
roots in which the root-final -i has coalesced in some
cases with the -i of the infinitive formant -ik.

or an animal jump', and <u>uTikawa'ik</u> 'to have helped to jump
by someone'.

(8)   Some conjunct verbs form three-member sets in which
the intransitive consists of N/ADJ <u>hik</u> 'to become', the
(suppletive) transitive is N/ADJ <u>ka'rik</u> 'to do', and the
CAUSATIVE is N/ADJ <u>karawa'ik</u>, as with the set <u>madat' hik</u>
'to be of help to someone (in doing a piece of work)',
<u>madat' kar'ik</u> 'to help someone (financially)', and <u>madat'</u>
<u>karawa'ik</u> 'to have helped by someone'.

(9)   Other conjuncts also have three-member sets, but of a
mixed type with the second member constructed by <u>-a'</u>-
derivation instead of with the analytic form <u>kar'ik</u>.
Exemplifying this class is <u>DΩb hik</u> 'to be lost, to die',
<u>DΩbek'</u> 'to lose, ruin', <u>DΩbawa'ik</u> 'to have s.o. ruin'; 'to
have ruined'.

(10)   The classification of the next set is
problematic.   While synchronically they appear to be three-
member sets derived from basic intransitives, there is
reason to suppose that historically the intransitives in
these sets may have been derived from the transitives by a
formerly productive process of anti-causative formation.
In this class I have so far found five verbs.   The
intransitive, transitive and CAUSATIVE members of the sets
have the following phonological shapes.

    V-intrans.   (C) u/i C u/i C -ik

    V-trans.   (C) u/i C -a' C -ik

    V-caus.   (C) u/i C a C -aw-a'-ik

The roots in each case are disyllabic, with the stress in

the transitive form falling on the root-final syllable. In

the intransitive forms, which I think are historically de-

rivable from the transitives, the unstressed vowels of both

root syllables are alike, apparently by a vowel-harmony

process after loss of stress.[10] These five verbs are:

```
uzuk-ik'       'to spill (in.)'
uzak'-ik       'to spill (tr.)'
uzakawa'-ik    'to have spilled (cs.)'

niwir-ik'      ' to separate (in.)'
niwar'-ik      'to separate (tr.)'
niwarawa'-ik   'to have separated (cs.)'

utruk-ik'      'to split, tear (cloth) (in.)'
utrak'-ik      'to tear (cloth) (tr.)'
utrakawa'-ik   'to get s.t. torn by s.o.(cs.)'

udhulik'       'to tear (cloth) (in.)'
udhal'-ik      'to tear (cloth) (tr.)'
udhalawa'-ik   'to get torn by s.o. (cs.)'

upuC-ik'       'to come up, off (grass, or bread off
                  cooking iron'
upaC'-ik       'to pull up, off (grass, bread)'
upaCawa'-ik    'to get pulled up by someone'
```

(11) A second problematic class includes two verbs in

which the transitive root contains a nasal element which is

not present in the (derived) intransitive, but appears in

the -aw- causative. With these verbs, the transitive stem

appears semantically prior to the intransitive. These

verbs may, however, be vestiges of an ancient class which

formed their active/causative (as opposed to middle) stems

---

[10]This loss of stress and reduction to identity with
the vowel of the root-initial syllable is reminiscent of
the vowel-shortening process in anti-causative formation in
Urdu, Hindi, Panjabi, etc.. e.g. Urdu dhonaa 'to wash
(trans)' > dhulnaa 'to get/be washed', Panjabi tòNaa 'to
wash' > tùpNaa 'to be/get washed'.

by nasal infixation (cf. Kurylowicz 1919:208); also the

nasal infixing (7th, rudh-) class of Sanskrit). They are:

> chi'-ik   'to break, be cut off'
> chin'-ik   'to break (tr.)'
> chinawa'ik 'to get broken by someone'
>
> du'-ik   'to get burned (hand, bread)'
> dyŨk'ik   'to burn (hand, bread) (tr.)'
> dyŨkawa'ik 'to get burned by someone'

(12) The verb nihik' 'to come out' has a unique

development in the transitive form, which appears to be

formed by reduplication.

> nih-ik'   'to come out'
> ninih-ek'   'to make come out', 'to take away
>   (animate object)'
> niniawa'-ik 'to have taken out or away by s.o.'

"Semi-transitive", Transitive, and Causative

This class is not distinguished formally from three-

member sets in which the base form is a full transitive.

These are considered together under (13).

(13) This class includes the verbs the semantics of which

I introduced in section 3.1.1. above, that is, verbs which

denote operations performed on the human body by human

agents. My sample includes seventeen verbs of this type,

including five "ingestives"--'see', 'eat', 'drink',

'learn', and 'understand'. These verbs are:

> grik   'to take, grasp'
> griek'   'to hit (of a bullet, stone, knife, branch
>   hitting s.o. or s.t.)'
> griawa'ik 'to have s.t. taken or grasped by s.o.'[11]
>
> bhon'ik   'to tie for self'

---

[11]With grik 'take' the semantic development of the
first causative form is idiosyncratic and that the meaning
of the second causative is taken from the base form.

bhonek'   'to tie for s.o. else'
bhonawa'ik 'to get tied by s.o. else'

niq'ik   'to wash (one's own body or an object)'
niqek'   'to wash (other's body)'
niqawa'ik 'to have washed by s.o.'

nij'ik   'to take off (self's item of clothing)'
nijek'   'to take off (other's item of clothing)'
nijawa'ik 'to have something taken off by s.o.'

iSpaZ'ik   'to comb (self's hair)'
iSpaZek'   'to comb (other's hair)'
iSpaZawai'ik 'to have hair combed by s.o.'

draz'ik   'to load on self's back'
drazek'   'to load on another's back'
drazawa'ik 'to get loaded on s.o.'s back by another'

di'ik   'to put on self's shoes or socks'
diek'   'to put on another's shoes or socks'
diawa'ik 'to have shoes or socks put on by someone'

säbi'ik   'to put on self's item of clothing'
säbiek'   'to put on other's item of clothing'
säbiawa'ik 'to have item of clothing put on by s.o.'

khaS'ik   'to rub something on self'
khaSek'   'to rub something on other'
khaSawa'ik 'to have something rubbed by someone'

tap'ik   'to warm self or object in sun, fire'
tapek'   'to warm other in sun, fire'
tapawa'ik 'to get warmed in sun, fire by s.o.'

buT'ik   'to braid self's (hair)'
buTek'   'to braid other's (hair)'
buTawa'ik 'to get hair braided'

pik   'to drink'
piek'   'to make s.o. drink'
piawa'ik 'to get s.o. to drink indirectly'

żuk   'to eat'
żuek'   'to give an appetite, (to feed?)'
żuawa'ik 'to have fed, to get s.o. to eat indirectly'

jhon'ik   'to know, understand'
jhonek'   'to explain, cause to know; seem, appear'[12]
jhonawa'ik 'to have explained by s.o.'

---

[12]This semantic development is discussed in 3.4.3.

CiC'ik   'to learn'
CiCek'   'to teach'
CiCawa'ik   'to have taught by s.o.'

praS'mik   'to forget'
praSmek'   'to cause to forget'
(*?)praSmawa'ik

paś'ik   'to see'
paśek'   'to show'
paśawa'ik   'to get shown by s.o.; to cause to see'

Four member sets

(14)   A few conjunct verbs have four different forms in a

transitivity-CAUSATIVITY relationship: for example, (a)

isprap' hik 'to feel sleepy', isprap' ka'rik 'to feel

sleepy', isprap karek' 'to feel sleepy', and isprap'

karawa'ik 'to put s.o. to sleep';[13]   (b)   istori' hik 'to

ride a horse', istori' kar'ik 'to have s.o. ride a horse',

istori' karek' 'to make s.o. ride a horse', istori'

karawa'ik 'to have s.o. (made to) ride a horse'.   (c) just

hik 'to be joined together, united', justek' 'to join

together', just karek' 'to join together', just karawa'ik

'to have joined together by s.o.'.   (d)   ăga' hik 'to be

alert, awake', ăga' hek 'to waken or alert', ăga' karek'

'to alert or awaken', ăga' karawa'ik 'to have awakened by

s.o.'.

The explanation for the existence of four-member sets

is not that Kalasha has three levels of causativization,

but that with some conjunct verbs both the morphological -a

---

[13]It is difficult to say at this point whether there
is any real difference in meaning among isprap hik, isprap
karik, and isprap karek, for example.   The problem is
discussed later, in section 3.3.3.3.

and -aw derivational processes and the analytic hik >
kar'ik process are operative. Since kar'ik itself is
subject to both -a'- and -aw causativization, the number of
theoretically possible forms is seven. Thus for a conjunct
verb the intransitive form of which consists of N/ADJ hik,
there are the following theoretical possibilities: N/ADJ-
ek'[14], N/ADJ hik, N/ADJ hek, N/ADJ hiawa'ik[15], N/ADJ
ka'rik, N/ADJ karek', N/ADJ karawa'ik. So far I have not
observed any set with more than five of these possibilities
realized.

As far as the semantics of these doublet forms is
concerned, in most cases two or even three of the forms
appear to have (almost?) identical meanings. For example,
in set (e) above both äga' hek and äga' karek' mean 'to
waken someone'.

3.1.2.4. Five-member sets

(15) One such set has come to my attention. It contains
the verb yat hik 'to remember (non-volitionally)', yat
kar'ik 'to remember', yadek' 'to remember (volitionally),
yat karek' 'to remind', yat karawa'ik 'to have reminded by

---

[14]In conjuncts whose first causative is of the form
N/ADJ-ek' we see the causative morpheme functioning as a
verbalizer. Other examples of this are: whä 'place' >
whäek' 'to fit', e.g. e'mi buT ne whäen'-dai warek' o'ni
'These boots don't fit; bring some others.', and trip
'illness, sickness' (Morg. 1973:147) > tripek' 'to hurt,
pain'. This is a frequently attested function of causative
morphemes. The aw causative morpheme does not appear to
have the verbalizing function.

[15]The form hiawa'ik does exist. (See example 34-a
below.)

someone'. The use of these various forms is illustrated in examples (1 - 5).

1) se   mai   yat   haw'-au [S:bk]
    he(NOM) I(OBL) memory become(PST-A)-3s
    'I remembered him' (Lit. 'He came to mind.')

2) a   tai   yat   kar'-im-dai ne praS'm-im-dai
    I(NOM) you(OBL) memory do(P/F-S)-1s not forget(P/F-S)1s
    'I remember you . . . I won't forget you.'

3) a   tai   yad-em'-dai [E:bk]
    I(NOM) you(OBL) remember(P/F-S)-1s
    'I remember you.' (i.e. 'I am thinking about you; I
    won't forget you.')

4) a   tai   yat   kar-em'
    I(NOM) you(OBL) memory do(Cs)(P/F-NS)-1s
    tu   praS'm-is-dai   [S:bk]
    you(NOM) forget(P/F-S)-1s
    'I will remind you; you are forgetting.'

5) a   ta'sa   SaTawai' tai   yat
    I(NOM) him(OBL) by   you(OBL) memory
    kar-aw-a'-am [E:bk]
    do-Cs-(P/F-NS)-1s
    'I will get him to remind you.'

3.1.3. Relation to the Kholodovic typology

I summarize in Table 1 the fifteen morphological types identified above, characterizing each one in terms of the typological categories introduced in section 3.0.

Table 1. Summary of Morphological types

Class	Phonological Shape	Kholodovic Type
1)	'-ik >-ek'	$V_i^{in} > V_j^k$
2)	N/ADJ <u>hik</u> > N/ADJ <u>ka'rik</u>	$V_i^{in} > V_j^k$
3)	'-ik > -ek'	$V_i^{tr} > V_j^k$
4)	-ik' > -aw-a'ik	$V_i^{tr} > V_j^k$
5)	'-ik > -aw-a'ik	$V_i^{tr} > V_j^k$
6)	-ik' > -ek'	$V_i^{in} > V_j^k > V_-^{k}{}''$

7) '-ik > -ek' $\qquad$ $V_1^{in} > V_3^k >$ $V_\bullet^{k\cdot\cdot}$

8) N/<u>hik</u> > N <u>kar'ik</u> > N <u>karawa'ik</u> $\qquad$ $V_1^{in} > V_3^{k\cdot} >$ $V_\bullet^{k\cdot\cdot}$.

9) N/<u>hik</u> > N-ek' > N-awa'ik $\qquad$ $V_1^{in} > V_3^{k\cdot} >$ $V_\bullet^{k\cdot\cdot}$

10) u/i-ik' <?> -a'-ik > -a-aw-a'ik $\qquad$ $(V_1^{tr} > V_3^{ek})$[16]

11) '-ik <?> V'-ik > V-aw-a'ik $\qquad$ $(V_1^{in} > V_3^k) +$ $V_\bullet^{k\cdot\cdot}$

12) nihik' > ninih-ek' > nini-awa'ik $\qquad$ $(V_1^{in} > V_3^k) >$ $V_\bullet^{k\cdot}$

13) '-ik > -ek' > -aw-a'ik $\qquad$ $V_1^{tr} > V_3^{k\cdot} >$ $V_\bullet^{k\cdot\cdot}$

14) N/ADJ <u>hik</u> > N/ADJ <u>kar'ik</u> > N/ADJ <u>karek'</u> $\qquad$ $V_1^{in} > V_3^k >$ N/ADJ <u>karawa'ik</u> $\qquad\qquad\qquad\qquad$ $V_\bullet^{k\cdot\cdot} > V_\bullet^{k\cdot\cdot\cdot}$

15) N/ADJ <u>hik</u> > [N/ADJ <u>kar'ik</u> / N/ADJ-<u>ek'</u>] $\qquad$ $V_1^{in} > V_3^k >$ > N/ADJ <u>karek'</u> > N/ADJ <u>karawa'ik</u> $\qquad$ $V_\bullet^{k\cdot\cdot} > V_\bullet^{k\cdot\cdot\cdot}$

So, in terms of the typology adopted here, we see that Kalasha has both first and second causatives from both transitive and intransitive bases. Also, there may be vestiges of an earlier anti-causative formation process.

Khowar, on the other hand, has only one degree of causative formation. From the basic verb <u>pośik'</u> 'to see', we have <u>paśe'ik</u> 'to show; have shown' but no further derivation. Thus this single form does duty for both contact and indirect causation.[17] The following three

---

[16]Parentheses indicate that this process is no longer productive.

[17]Morgenstierne derives the Kho. causatives from OIA -<u>aapaya</u> (1947:20), but given that Kal. has clear reflexes both of -<u>aapaya</u> in the -<u>aw</u>- causatives and of -<u>a'ya</u>- in the -<u>a'</u>- causatives, it is not clear to me why derivation from -<u>a'ya</u> is not equally likely.

examples illustrate this.

6) awa   kitab'-o poś'itam [rkb]
   I(NOM) book-OBL see(PST-A)-1s
   'I saw the book.'

7) awa   kitab'-o ta   paśe'itam [rkb]
   I(NOM) book-OBL you(OBL) see(CS)(PST-A)-1s
   'I showed you the book.'

8) hatoGo' Cake'i kitab'-o ta   paśe'itam [rkb]
   him(OBL) by   book-OBL you(OBL) see(CS)(PST-A)-1s
   'I had him show you the book.'

Functional second-degree causatives are achieved by
suppletion in a few cases, e.g. brik 'die', marik 'kill',
mare'ik 'cause to kill'. Khowar does not have an anti-
causative formation process.

3.2. Syntax

The agent of CAUSATIVE verbs in finite sentences--
whether V_j or V_e, whether derived from V^{in} or V^{tr}--is
always in the NOM case.

$V_i{}^{in} > V_j{}^k$: Patients (i.e. "causees") of derived
transitives in -a'- are marked in the same way as patients
of primary transitives. Full NP's standing alone are
marked with NOM case, which is indistinguishable from ACC
for full nouns (9), or for a few verbs, OBL (as in 10).[10]

9) ghrast   pai   udrus-el'   [S:bk]
   wolf(NOM)   goats(NOM) scatter-Cs(P/F-NS)-3s
   'A wolf will scatter goats.'

10) sud-on'   istori'   kar-ek'   [S:bk]
    children-OBL horseback do-Cs(P/F-NS)-1p
    'We will make the children ride horseback.'

_____

[10]Whether a given verb takes a NOM (ACC with demon-
stratives) or an OBL direct object seems to be lexically
determined. A few verbs of 'beating' or 'striking' take
OBL objects.

If a noun is modified by the near singular or distant, not-in-sight singular demonstrative, the demonstrative is marked ACC. Third person pronouns (identical with the demonstratives) take ACC case if ACC and OBL are distinguished, OBL when they are not (cf. 11). First and second person pronouns take OBL case, which is indistinguishable from ACC for 1st and 2nd persons (12). Proper names take NOM case (13).

11) a   a'la   tupek' gri bihes' [S:bk]
    I(NOM) him(ACC) gun   with fear-Cs(PST-A)-1s
    'I frightened him with a gun.'

12) a   tai   .yat   kar-em' [S:bk]
    I(NOM) you(OBL) memory do-Cs-(P/F-NS)-1s
    'I will remind you.'

13) śauśehe'ni khăgar' chala'i   dyai[19] tre chela
    flashing   sword   pull out(CP) put(CP) 3   pieces
    ka'da [M:1973:22]
    do(PST-I)3s
    'Pulling out the sword "Flashing" and striking (him),
    he cut him into three pieces.'

$V_i^{tr} > V_j^{k'}$: . In the case of transitives with first order -a' causatives—the anti-reflexives and "ingestives"--full NP's, proper names, and third person as well as first and second person "causees" take OBL marking. These cases are illustrated in (14 - 18) respectively.

14) a   gag'-as uk   pi-em'-dai [S:bk]
    I(NOM) cow-OBL water drink-Cs(P/F-S)-1s
    'I am giving the cow water to drink.'

15) a   salyim'-a a'ma   krom   CiC-em' [S]
    I(NOM) S.-OBL   this(ACC) work(NOM) teach(P/F-NS)-1s
    'I will teach this work to Salim.'

16) a   ta'sa   mai   kitap'   paś-es' [E:bk]
    I(NOM) him(OBL) I(OBL) book(NOM) see-Cs-(PST-A)-1s

---

[19] = tyai 'hit(CP)'?

'I showed him my book.'[20]

17) mai   paśa'i [S]
    I(OBL) show(IMP-2s)
    'Show it to me.'

18) a   tai   a'la   jhon-em' [S:bk]
    I(NOM) you(OBL) him(ACC) know-Cs(PF-NS)-1s
    'I will introduce him to you.' (Lit. I will bring it
     about that you know him.')

The anti-reflexives, which usually pertain to a part of the

body surface rather than to the whole person, behave as

illustrated in (19) and (20).

19) a   suday'ak-as ru   nig-es' [E:bk]
    I(NOM) baby-OBL   face(NOM) wash-Cs(PST-A)-1s
    'I washed the baby's face.'

20) suday'ak-an ka'lun di-ek' [S:bk]
    children-OBL shoes put on-Cs(P/F-NS)-1p
    'We will put shoes on the children.'[21]

    $V_e{}^{k'}$: With -aw- causativization, the causee, if

expressed at all, can be encoded in three ways: (a)

NP(OBL), (b) NP(OBL) SaTawa'i, (c) NP(OBL for pronouns/NOM

for full nouns) kai mat. The postposition SaTawa'i is the

conjunctive participle of the -aw- causative from Sat'ik

'to stick, adhere, attach to' (> SaTek' 'to stick to (tr.)

> SaTawa'ik 'to cause to stick to'). The phrase kai mat

(Lit. 'having spoken to') consists of the element kai 'to',

which appears to be a frozen form of the conjunctive

----

[20]Regarding the form mai 'my' in this sentence,
Kalasha makes very limited use of a reflexive possessive
form. When it is employed, it is perceived as a non-
indigenous construction. The normal way to express
reflexive possession is with the normal OBL personal
pronouns.

[21]In (19) and (20) it is not clear whether the OBL
marking on suday'ak 'child' is to be interpreted as
"possessive" or "dative".

participle of <u>kar'ik</u> 'do', and <u>maʝ</u> is transparently the

conjunctive participle of <u>maʝk</u> 'to speak'.[22]

Examples (21-23) illustrate these three ways of.

indicating the causee (intermediate agent) in -<u>aw</u>-

causative constructions.

```
21) mai    śamond' au'    pac-aw-a'-i  [T10:s][23]
    I(OBL) so much bread cook-Cs(PST-A)-2s
    'You got me to cook so much bread.'

22) darzi'-as  SaTawa'i ek  piran' sawz-aw-a'-am [E:bk]
    tailor-OBL by       one shirt make-Cs(P/F-NS)1s
    'I will get a shirt made by the tailor.'

23) k-as     kai maʝ        kar-aw-a'-ik  [S:bk]
    who-OBL to  speak(CP) do-Cs(P/F-NS)-1p
    'Who shall we get to do it?'
```

In (21) we have simply the OBL case of the causee NP.

With this sentence, one might wonder whether the sentence

is ambiguous between the benefactive reading 'You got so

much bread cooked for me' and the causative reading, but it

is not. The benefactive reading would be expressed by the

sentence <u>tu mai hat'ya śamond' au' pacawa'i</u>, in which the

postposition <u>hat'ya</u> 'for, to' gives unambiguous benefactive

semantics. In (22) we have NP(OBL) <u>SaTawa'i</u>; and in (23)

the intermediate agent is marked with <u>kai maʝ</u>.

With <u>Satawa'i</u> the causee takes the appropriate case

termination, according to whether it is full NP, proper

---

[22]Employment of the phrase 'having spoken to' is a
mechanism employed in other languages, e.g. Telugu <u>too
ceppi</u> 'having spoken to' (Cf. Rao and Bashir 1985) to
indicate an intermediate agent in constructions expressing
distant causation.

[23]The <u>d</u> in <u>śamond</u> is an excrescent consonant. It
frequently appears in the environment (CV)CV<u>n</u> __'# V. Cf.
also <u>śen</u> 'bed' > <u>śen(d)'-una</u> 'bed-LOC'.

name, kinship term, or pronoun. Kinship terms, instead of the normal OBL case terminations for animates, take the pronominal suffixes, as described in 1.5.3.2. above. In (22) we saw SaTawa'i with a full noun. In (24 - 27) I illustrate it with pronouns, kinship terms, and proper names respectively.

24) a'sa   SaTawa'i a   khUi nig-aw-a'-am [E:bk]
    him(OBL) by   I(NOM) cap wash-Cs(P/F-NS)-1s
    'I will get him to wash the cap.'

25) aay-as   SaTawa'i to   pÕj baja'
    mother-PS3s by   him(ACC) five o'clock
    uST-aw-a'-is [S:bk]
    get up-Cs(PST-A)-1s
    'I got his₁ mother to get him₁ up at 5 o'clock'

26) a   tai   aay-au   SaTawa'i to   pÕj
    I(NOM) you(OBL) mother-PS2s by   him(ACC) five
    baja'   uST-aw-a'-is [E:bk]
    o'clock get up-Cs(PST-A)-1s
    'I got your mother to get him up at 5 o'clock.'

27) salyim'-a SaTawa'i pai   car-aw-a'-am [E:bk]
    S-OBL   by   goats graze-CS(P/F-NS)-1s
    'I will get Salim to graze the goats.'

3.3. Semantics

The cross-linguistic polysemy of causative morphemes has often been noted. Nedyalkov and Silnitsky (1973:17-19) classify CAUSATIVE meanings along two parameters: factitive-permissive (i.e. making vs. allowing someone to do something) and distant-contact. Then they identify the following specific types of valence-increasing CAUSATIVE meanings: (a) CAUSATIVE proper, as in 'burn (in.)' vs. 'incinerate'; (b) comitative-CAUSATIVE, as in 'talk' and 'talk with'; (c) anti-reflexive, as in 'put self's clothes on' vs. 'put another's clothes on'; (d) instrumental, as in

'wash' vs. 'wash with something'; (e) affective-CAUSATIVE,
as in 'become light' vs. 'light up, illuminate'; (f)
addressive, as in 'buy', and 'buy for someone'; and (g) as
in 'work' vs. 'treat, process'.

First I shall discuss the semantics of the causative
morpheme -a'- and then that of -aw- causatives.

3.3.1. Semantics of -a'- causatives

In terms of the categories listed in the preceding
paragraph, the first-level -a'- causatives involve contact
rather than distant causation. For example, from naT'ik
'to dance' we have first causative naT(h)ek' which can mean
either 'to make someone dance (by taking him by the hand
and moving around with him, as when playing with a baby)'
or 'to chase someone'. The -aw- causative naThawa'ik 'to
cause s.o. to dance (at a distance); to cause s.o. to chase
s.o.; to cause s.o. to run away', on the other hand,
denotes distant causation, either through the agency of an
second person (or causee), or simply at physical remove, by
verbal instruction as opposed to physical manipulation.[24]

Some but not all -a'- causatives can have permissive
as well as factitive meaning. In (28), for example, the
-a'- causative of śuru'ik 'fall'--śuruek' 'to cause to
fall'--means 'drop, allow to fall' rather than 'make fall'.

28) e'mi   śuru-en' [S:mb, bk]

---

[24]An interesting exception to this generalization is
found in the sentence a kas SaTawa'i tai äqa' hiem' 'I will
have someone waken you' (< äqa' hik 'to wake up'). In this
sentence hek, the -a'- derivative of hik 'become', is
functioning as though it were an -aw- causative.

```
they(NOM) fall-Cs(P/F-NS)-3p
'They will let (her) fall.' (said about children who
didn't know how to hold a baby properly)
```

Also, the intransitive labE' hik 'to play' has first

causative labE' hek 'to allow to play'. Importantly, from

las'ik 'to escape' we have lasek' one meaning of which is

'to let someone go (somewhere)', but whose meaning has

broadened to mean 'to allow to V' in general (cf. 29).

29) phao źu'-una   suday'ak-as mo las-a'i [S:bk, mb]
    soil eat(INF)-LOC baby-OBL   not allow-IMP2s
    'Don't let the baby eat dirt!'

Moving on to the more specific kinds of meanings , we

find that -a'- causatives can, of course, have CAUSATIVE-

proper meaning, as with naś'ik 'die', naśek' 'kill'. Some

can have comitative-CAUSATIVE meaning; for example, from

kas'ik 'to walk, move' we have kasek' 'to make walk

around'; to walk around with, escort. The anti-reflexive

meaning of -a'- causatives was discussed in section 3.1.1

above and illustrated in (19) and (20). Verbs in which

this meaning develops, like sǎbi'ik 'to put on (clothes)',

are listed in section 3.1.1 under class (12). I have not

observed the instrumental-CAUSATIVE meaning in any of my

examples. Nedyalkov and Silnitsky do not specifically

mention a benefactive meaning, but perhaps this is to be

subsumed under their addressive category. Specifically

"benefactive" semantics is not an intrinsic property of the

causative morpheme, but arises as a function of the inter-

action of context and the specific meaning of the verb.

For example, from uTikik' 'to jump ' we have uTikek' which

often means 'to help (an animal) jump (over an obstacle)'.

This meaning arises in the context where (i) it is

desirable that the animal jump over the obstacle, and (ii)

it is having difficulty in doing so, as in example (30).

```
30)   a'la        bat'yak   alyei'    thi  atra' kai
      that(ACC) baby goat there-ABL from there to
      uTikes'   [E:bk]
      jump-Cs(PST-A)-1s
      'I helped that baby goat jump from there to there.'
```

Nedyalkov and Silnitsky's last category, affective

CAUSATIVE may be represented in the pair mØD'ik 'to wash,

scrub' > mØDek' 'to knead, massage (hides, to process them

into leather, to thresh (grain)'.

One important class of -a'- causatives in Kalasha does

not fit into any of Nedyalkov and Silnitsky's valence-

increasing categories, but we find very similar phenomena

discussed by them under the valence-decreasing category

which they call "passive" (op. cit.:20). A class of verbs

involving involuntary sensations, both physical and mental,

has evolved, so that what are semantically stative or

intransitive situations are represented by what are

formally first causative derivatives. For example, mai

kralel'-lai (lit. 'It is making me cough') is the normal

way to say 'I am coughing (involuntarily)'. This class

will be discussed in detail in section 3.3.3 to follow.

Agents of -a'- causatives can be either animate or

inanimate, and even if inanimate, either specific or non-

specific.

3.3.2.   Semantics of -aw- causatives

The -aw- causative morpheme denotes distant rather
than contact causation. As noted above, this distancing
may take the form of employing an intermediate agent
(causee) or simply of effecting causation by indirect
rather than physical means. A few examples will illustrate
this in context.

31-a) a'sa suda'-as   ustat' har ad'u-a du mil
      that child-OBL teacher every day-LOC two miles
      ady-awa'-u-dai [E:bk]
      run-Cs(P/P-S)-3s
      'That boy's teacher is having him run two miles every
      day.'

b) nasir' kai mał   Sula'   on-awa'-yis [E:bk]
   N.   to say(CP) firewood bring(CS)(PST-A)-3s
   i) I got Nasir to bring firewood.
   *ii) I got Nasir to get s.o. to bring firewood.'

In (31-a) the boy's instructor is not taking him by the
hand, nor in the most natural reading is he having a third
party (causee) make the boy run. The intermediate agent
meaning is possible, but not necessary. In (31-b) there
are only two participants--the speaker and the addressee
(Nasir); a reading introducing a third, intermediate agent
is not accepted.

32) DakTar'-as baza' paś-aw-a'-i ghoł   mai   sum
    doctor-OBL arm   see-CS-IMP2s say(CP) I(OBL) with
    salya' ar'-au [E:bk]
    advice do(PST-A)-3s
    'He advised me to show my arm to a doctor.'

In this situation (32) the action of having a doctor look
at his arm is such that the subject could not possibly have
it done by an intermediate agent. The meaning imparted by
the causative morpheme is one of distancing, or respect/
politeness. In (33), below, the distancing consists in the

fact that the doctor is instructing the subject to eat

rather than feeding him by hand.

33) DakTar' mai   mos żu-aw-a'-u-dai [E:bk]
    doctor I(OBL) meat eat-Cs(P/F-S)-3s
    'The doctor is having me eat meat.'

34-a) ek uT   as'ta   ta'sa   uT'-as   wal
      one horse be(PST-I)-3s that(OBL) horse-OBL guard
      hi-awa-ila   tu i'sa   wal   ha
      become-Cs(PST-I)-3s you this(OBL) guard become(IMP2s)
      ghði   se ta'sa   wal   hu'la [T9:kn]
      say(CP) he that(OBL) guard become(PST-I)3s
      'There was a horse. He₁ had him₂ guard that horse,
      saying "You guard it". He₂ became its guard.'

b) du ga'Da moc tara' payda' hu'la
   two old   men there appear(PST-I)-3p
   hu'l-e   au' dai   ta'si   śilyok'
   become(PST-I)3p-when bread give(CP) them(OBL) story
   di-aw-a'-ila [T11:sk]
   give(CS)(PST-I)-3s
   'Two old men appeared there. When they appeared, after
   giving them bread, she got them to tell their stories.'

In (34-a) it is explicitly stated that the agent got

someone to guard the horse by telling him to. There is

clearly no intermediate agent involved. Similarly, in (34-

b) the force of the -aw- causative is that the subject

persuaded the old men to tell their stories.

35) ghði a'-au-e   taly-ei' chin'a   bazay'ak
    say(P PERF)-3s-when there-ABL cut(PST PPL) arm
    gri-aw-a'i a'-au [T21:]
    grasp-Cs(P PERF)-3s
    'When he₁ spoke, he₂ handed them the cut(-off) hand
    from there (to hold).'

The context of (35) is that the clever hero is deceiving

his captors into thinking that he is still present behind a

wall by holding out to them, from behind the wall, a cut-

off arm, which they think is his. While they are holding

the cut-off arm, the hero escapes. Clearly, no intermedi-

ate agent is involved. The distancing in this case is both

verbal and physical; the hero is hiding behind a wall.

It seems to me that instead of considering -aw- as a specifically valence adding morpheme, we should think of it as having a more general function--that of distancing the causal agent, the primary agent, from the result of his initiating a causal chain. Thus -aw- derivation can be thought of as something like [transitive action] + [distancing of the causal agent from the result], instead of the specific addition of an intermediate agent. Nor should we think in terms of "demotion" of the initial agent into the causee, which seems to be the assumption in most theoretical work on causative structures. Under the analysis that I am proposing, the causee never in any sense "was originally" the primary agent, so the question of "demotion" doesn't arise.[25]

Examining -aw causatives with reference to Nedyalkov and Silnitsky's list of specific semantic developments, we find that they may be either factitive (as in 36),

36) a'sa   SaTawa'i alyu'   niCu-awa'-ik [E:bk]
    she(OBL) by   potatoes peel-Cs(P/F-NS)-1p
    'We will get her to peel the potatoes.'

or permissive, as in (37).

---

[25]It is for this reason that I analyze -aw- causatives as including two morphemes: aw + a', rather than a unitaty -awa'-. The meaning constibution of -aw- is distancing, and that of -a'- is transitivizing. This analysis is parallel to that proposed for Hindi by Pray (1970) which also differentiates a causative morpheme -aav from a suffis -aa which functions as a verbalizer, as in filmaa- 'to film'. Common to both these analyses is differentiation of the set of functions which attach to what seems to be the reflex of OIA -a'ya and those of the reflex of -aapaya.

37) mai   au'   kar-aw-a'-i   [E:bk]
    I(OBL) bread do-Cs-IMP2s
    'Let me make bread!'

In (37) the context is that a little girl is asking her

mother to let her cook some bread too. The development of

"permissive" meaning with -aw- causatives is a consequence

of its distancing function.

The semantics of the -aw- causatives is far more

regular than that of the -a'- derivatives. They have

CAUSATIVE proper meaning, as in (36) above. They do not,

however, have comitative-CAUSATIVE meaning; this is

precluded by the fact that they encode distant rather than

contact causation. Those forms also do not carry the anti-

reflexive meaning, which is neutralized in the -aw-

causatives.[26] Nor are instrumental, affective-CAUSATIVE,

addressive, or affective meanings conveyed by -aw-

causatives.

3.4. Areal and typological ramifications

What insights can we draw from this study of Kalasha

causatives for the study of areal phenomena in this region?

Three characteristics of Kalasha causatives are, I think,

potentially mappable features which could lead to a finer-

grained determination of the geographical distribution of

typological features related to causatives. These are (1)

the formation of the agentive postposition; (2) anti-

reflexive semantics of an extended class of verbal notions;

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[26]In this case it appears that the second-level
causatives could be derivable equally well from the
original transitive or from the first-level causative.

(3) the causative involuntatives.

3.4.1. The agentive postposition

As noted above, the postposition used in Kalasha with the intermediate agent when it is expressed is SaTawa'i, which is the -aw- causative form of SaT'ik 'to adhere to'. The South Asianist reader will immediately note that this word is the semantic equivalent of the ubiquitous lagnaa >lagaanaa of Urdu and Hindi. In Khowar also, the exactly equivalent form is used to mark the causee: Cake'i (CP < Cake'ik, Cs. of Cokik' 'to stick to'.) Its use is illustrated in example (38).

38) awa   hatoGo' Cake'i korum kore'itam [rkb]
    I(NOM) he(OBL) by   work   do-Cs(PST-A)1s
    'I got him to do the work.'

In the Dangarikwar (=Phalura) of Byori, the postposition marking the causee in this kind of construction is Sawaa, from the causative of the verb Saa- 'to stick to, etc.'. This set is illustrated in (39-a, b, and c).

39-a) mi goST'-a   agar' Saa'Tu   [gs]
      my house-LOC fire attach-PST(ms)
      'My house caught on fire.'

   b) mi goST'-a   agar' Saauu'Lu   [gs]
      my house-LOC fire attach-Cs-PST(ms)
      'He set my house on fire.'

   c) thi   nawkar'-a   Saa'wa kram thauu'Lu   [gs]
      you(ERG) servant-OBL by   work do-Cs-PST(ms)
      'You got the servant to do the work.'

In Gilgit Shina also, we have a similar but slightly different development of an agentive postposition from the basic transitive verb meaning 'to attach'. The basic transitive is Soiky 'to attach (tr.)', from which is

derived an intransitive *Sacoiky* 'to be attached (in.)' It

is from *Soiky* that the agentive postposition *Seè* has

developed. It is illustrated in example (40).

40) ma-s jamaat Seè ca thareègas [maz]
    I-ERG wife by tea make-Cs-PST-1s
    'I got tea made by my wife.'

This is a natural semantic development of one of the

specific senses which the verb *laqnaa* has been demonstrated

to have developed--that of being engaged in an activity--

(Shapiro ms:6). In fact, a similar usage shows up in

colloquial Panjabi, e.g. (41).[27]

41) muNDa laa-ke   samaan cukwaa
    boy attach-Cs(IMP2s)-CP baggage lift-Cs(IMP2s)
    'Get a boy to move the baggage.

Nevertheless, this sort of agentive postposition seems

to be rather restricted geographically in the NWIA region.

Other languages in the region employ postpositions having

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[27]In Marathi and Dakkhani Urdu there is a slightly
different development of the *laqnaa* equivalent in causative
constructions. In these languages the equivalents of
laqaanaa and *laqwaanaa* respectively have come to be used in
periphrastic causative constructions. Kachru (1986:168)
gives the examples which I reproduce here. (a) shows the
morphological Marathi construction and (b) the periphrastic
construction, which carries coercive meaning.
Marathi
a) mii tyaacyaa kaDuun kaam karavla [=K's #12]
   I he   by   job do-caused
   'I had him do the work.'

b) mii tyaalaa kaam karaaylaa laavla [=K's #13]
   I he DAT job do   DAT engaged
   'I made him do the work (coercive)'

Dakkhini Urdu
c) mãî nawkar se kamraa saaf karne lagvaaii
   I(f) servant by room   clean do   engaged(f.sg. AGR
   with subject) [=K's #14]
   'I had the servant clean the room.'

other origins. Kashmiri marks the causee with either DAT
case or DAT plus a derivative of the word 'hand', as in
(42), which is reproduced from Hook and Koul (1984:102).

42-a) su chu ben-i   ke:m karina:va:n ti be:y-is ni
      he is sister-DAT work making do   and brother not
      'He is making sister do the work and not brother.'

   b) su chu no:kr-as   athi ke:m karina:va:n
      he is servant-DAT hand work causing to do
      'He is having the work done by the servant.'

The Shina of Gurez also uses a word meaning 'by the hand
of', as in (43):

43)   jok theř   tikki sazȢ   hat'yȢ
      what you(AG-2) bread sister(GENsg) by hand
      the'ya: da: [Schmidt 1985:42 =#19]
      got done-2sgm Ȣ
      'Did you get the bread made by sister?'

In the Shina of another village in the Gurez region, the
idiom is still 'by the hand of', but the lexical item is
different, as in (44).

44) sesy   theyo'   mye   dastȢ unu krom   [ag][20]
    he-ERG got done I-OBL hand this work
    'He got this work done by me.'

     Since the idioms are different both in Gilgit Shina
and in the Skardu area varieties, this usage appears to be
a Kashmiri-influenced feature.

     Yet another variation shows up in Kamviri (Strand
1985:56), which employs the form vaⁿre:ti 'having shown' to
mark intermediate agents. The form in Domaki also appears
to be derived from a form of 'see' (cf. 45).

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[20]Thanks are due to Abdul Ghaffar of Village Ranjata
for this example.

45) u tus dyikayraii'   suna' dur-wa-as [hj][29]
    I you having shown (?) dogs drive away-Cs-Fut-1s
    'I will get you to drive away the dogs.'

Yet another group of languages employs semantically

opaque ablative case suffixes. These include two dialects

of Shina spoken in the upper Indus valley near Skardu.

Example (46) is from village Satpara.

46) mu-su tu-nyo anu klum thaya'-ar-emos [gm][30]
    I-ERG you-ABL this work do-CS(Fut-1s)
    'I will get you to do this work.'

Example (47) is from village Tandal.

47) raziya' mu-s tu-lyo anu kom thaeremus [g][31]
    R.   I-ERG you-ABL this work will get to do
    'Raziya, I will get you to do this work.'

Wakhi employs either simple OBL or an ablative ambiposition

to mark a causee. The simple OBL is illustrated in (48-a)

and the ablative ambiposition in (48-b).

48-a) wuz   taw-   lokhpaar wuzduk remim [zi]
      I(NOM) you-OBL clothes will get washed
      'I will get you to wash my clothes.'

   b) wuz   ts -taw-en lokhpaar wuzduk remim [zi][32]
      I(NOM) ABL-you-ABL clothes will get washed
      'I will get you to wash my clothes (and noone else)'

According to my informant, the difference between (48-a)

and (48-b) is that (48-b) stresses the personal identity of

the causee, while (48-a) does not.

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[29]For this example I am grateful to Habibullah Jan of
village Mominabad.

[30]This sentence is due to Ghulam Mehdi, of the Forest
Department in Skardu.

[31]This example is from Golam, a resident of village
Tandal.

[32]For the Wakhi examples I thank Zafar Iqbal, Manager
of the Northern Areas Transport Corporation, Gilgit.

Burushaski shows a variety of strategies. In Hunza Burushaski we can have either an ablative ending or a NOM case for the causee, as in (49-a and b).

49-a) jaa   un-tsum huk ee-skarts-am [skb]
      I(ERG) you-by dog 3s-drive away(P)-1s
      'I will get you to drive away the dog.'

   b) jaa   un   gute duro goo-c-am
      I(ERG) you(NOM) this work 2s-do(P)-1s
      'I will get you to do this work.'

Tiffou and Pesot (1983:60) have pointed out for Yasin Burushaski that when the patient is inanimate, as in (49-b) the pronominal prefix refers to the causee, 'you' in this case; but when the patient is animate, as in (49-a), the pronominal prefix may refer either to the patient, in this case 'dog', or to the causee if the causee is conceived of as the affected participant. The same principle appears to be operating here in Hunza Burushaski. When the causee is encoded by the pronominal prefix, the ablative postposition does not occur, and when the pronominal prefix refers to the patient of the verb, the ablative postposition may appear.

The situation in Yasin Burushaski is unique. In that variety the intermediate agent is marked by a form of the verb d-waQal 'to engage s.o. in s.t.; to make s.o. do s.t.'. The form employed is what Tiffou and Pesot (1983:49) call "Nominal IV", but which appears to be in some respects the analogue of the conjunctive participle of NIA languages. This form agrees, by pronominal prefixation, with the causee; its use is exemplified in (50).

50) jaa   un du-koo-waQal huka oo-skarhc-am [ah][33]
    I(ERG) you by 2s   dogs 3p-drive away(P)-1s
    'I will get you to drive away the dogs.'[34]

From the data presented here it appears that the use

of an agent-marking postposition based on the equivalent of

'cause to attach' is geographically fairly restricted in

NWIA, being confined to Kalasha, Khowar, Gilgit Shina, and

Dangarikwar. Given that other dialects of Shina do not

show this development, that all the languages where it

appears are adjacent to the Khowar-speaking area, and that

both Kalasha and Dangarikwar speakers are all bilingual in

Khowar and their mother tongues, this local development

appears likely to be the result of Khowar influence. The

time depth of this construction in Khowar itself needs to

be established.

3.4.2. Anti-reflexives

Two sets of -a- causatives are especially interesting

in Kalasha. One is the set of anti-reflexive causatives

and its relationship to the set of "ingestives". The

second is the class of verbs of involuntary physical or

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[33]I am indebted to Abdul Hamid of Gilgit for this
example.

[34]The fact that no more primitive meaning is attested
for this word is consistent with the fact that the
causative construction in Burushaski is semantically
different from those in Shina and probably most of the
other languages discussed in this dissertation. The
Burushaski causative is what Lorimer called "active" as
opposed to "passive". He said: "Causatives of transitive
verbs differ in Burushaski from Shina and Khowar. In
Burushaski you cause someone (emphasis mine) to do
something, while in Shina and Khowar you cause something
(emphasis mine) to be done by the instrumentality of
someone". (1935, I:88).

mental sensation or action, or illness and its relation to
the class of "dative subject" verbs.

3.4.2.1. <u>Anti-reflexives in Kalasha</u>. Recall that
the set of "ingestives" and the transitives from which
"anti-reflexives" are derived pattern together in their
morphology and in the case-marking of their causees. These
are illustrated again here for convenience: (51) and (52)
show an "ingestive" verb and its -a'- causative; (53) and
(54) exemplify a reflexive and anti-reflexive pair.

51) a   uk   pi-m'-dai [S]
    I(NOM) water drink(P/F-S)-1s
    'I am drinking water.'

52) a   gag'-as uk   pi-em'-dai [E:bk]
    I(NOM) cow-OBL water drink-Cs(P/F-S)-1s
    'I am giving the cow water to drink.'

53) kanday'ak gri SiS iSpa'Z-is [E:bk]
    comb   with head comb(P/F-NS)-1s
    'I will comb my hair with a comb.'

54) kanday'-ak gri a'sa   Sis iSpaZ-ek' [E:]
    comb   with he(OBL) head comb-Cs(P/F-NS)-1p
    'We will comb his hair with a comb.'

While at first glance these appear to be two separate
semantic classes, the division between which is whether the
action in the derived form is performed by the agent (self)
or by the causee (other), if we consider the semantics of
the actions, these two classes can be seen to be the two
extremes of a continuum, and the fact of whether with the
derived forms the semantic kernel of the action is
performed by self or other turns out to be a consequence of
whether the action is body-external or body-internal and
whether it is physical or non-physical.

Basic meaning: put clothes on self   eat   learn
Derived meaning: put clothes on other   feed   teach

                [+EXTERNAL]   [-EXTERNAL] [-EXTERNAL]
                [+PHYSICAL]   [+PHYSICAL] [-PHYSICAL]

Thus, an external, physical action can be performed on someone else; an internal, physical action cannot be performed on someone else but the second person can be physically manipulated to facilitate his doing it. Nor with an internal, non-physical event can the action be done on the other, but he can be brought to do it by direct intervention, either physical or mental.[35]

    3.4.2.2. <u>Anti-reflexive semantics in other languages</u>. First, with respect to anti-reflexive semantics associated with the causative morpheme, we see it to be well developed in Kalasha. In this discussion I shall mean by "anti-reflexive" the use of the causative morpheme for verbs like 'put on clothes'--not just for the "ingestive" end of the continuum. Specifically anti-reflexive semantics is associated with causative morphology in several other languages that I have examined. In Waigali[36] (Edelman 1982:81) causative stems in -<u>l</u>- participate in pairs like

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    [35]Hook (1984:97) had made a similar observation with regard to Kashmiri causatives, considering that "ingestion is nothing more than a special case of 'reflexion' . . .", reflexive action being defined as "action oriented towards the agent". The present observation with regard to Kalasha was arrived at independently, based on the salience of this class in Kalasha, and the identical phonological, morphological, and case marking behaviors of the first causatives of the "ingestives" and of the anti-reflexives.

    [36]The local name for Waigali is kala'Sa alaa (Strand 1973:302).

those in (55-a and b).

55-a) do:śt pala:lum   [Edelman 1982:81)
       hands wash-Cs-P-1s
       'I am washing somebody else's hands.'

   b) do:śt pala:m   [Edelman 1982:81]
       hands wash-P-1s
       'I am washing my own hands.'

In the Zhonchigal dialect of Waigali, the causative

morpheme is w and the pair in (56-a and b) contrasts in

precisely this way.

56-a) amicã:om   [Edelman 1982:81]
       'I am getting dressed'

   b) amicewê:am   [Edelman 1982:81]
       'I am dressing someone.'

    According to Richard Strand, the same is the case for

this verb in the Kamviri dialect of Kati.[37] See (57-a, b).

57-a) bA.sa'no Amji-na-m [Strand p.c.]
       clothes   put on-PRESENT-1s
       'I am getting dressed/putting on my clothes.'

  b) juk-to bA.sa'no Amj-o:-na-m
     girl-to clothes   put on-Cs-PRESENT-1s
     'I am dressing/putting clothes on the child.'

    In Urdu and Hindi also, it appears that this semantic

development is present to a certain extent.   Compare (58-a

and b).

58-a) mãĩ   kapRe   pahn -rahaa hũũ
       I(NOM) clothes put on-P PROG-1sm
       'I am putting on my clothes.'

   b) mãĩ   bacce-ko kapRe   pahn-aa   rahaa hũũ
       I(NOM) child   clothes put on-Cs-P PROG-1sm
       'I am putting clothes on the child.'

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[37]In Strand's orthography, <A> = [a], <a> = [i] , <.>
= junction, and <:> signifies contrastive length. The
causative morpheme represented as o: < ov < Skt. a:p.
(p.c.)

It is not the case in Khowar, however, where we have the situation demonstrated in (59-a, b, and c).

59-a) awa   tan banyan'-o   niżi'tam   [rkb]
      I(NOM) own sweater-OBL take off(PST-A)-1s
      'I took off my sweater.'

   b) (awa) DaQ-o   zap-an   niżi'tam [rkb]
      I(NOM) boy-OBL clothes-OBL take off(PST-A)-1s
      'I took off the child's clothes.'

   c) (awa) ta   Cake'i DaQ-o   zap-an
      I(NOM) you(OBL) by   child-OBL clothes-OBL
      niże'itam [rkb]
      take off-Cs-PST-A-1s
      'I got you to take off the child's clothes.'

Here the causative morpheme does not carry anti-reflexive meaning.

In Gilgit Shina the causative morpheme appears not to carry this meaning.[38]   Sentence (60-a) with the basic transitive means either 'I braided my own hair' or 'I braided someone else's hair', and the causative sentence in (60-b) can be used with either 'my own' _tan_ or 'your' _tay_.

60-a) ma-s   jakuur bŰyǏg-is   (bŰyẞiky 'to braid') [maz]
      I-ERG hair   braid-PST-1s
      'I braided my/someone's hair'

   b) ma-s tay/tom   jakuur bŰy-ar-eeg-is (<bŰyaroiky)
      I-ERG your/self's hair   braid-Cs-PST-1s
      'I got your/my own hair braided (by someone else)'

Kashmiri also does not employ its causative morpheme

for the specifically anti-reflexive use. Hook and Koul

(1984:100) give these examples.

61-a) śi:li-cha palav   tshuna:n [39]
      S.   is clothes putting on
      Sheela is putting on her (own) clothes.'

   b) beD   beni   cha śi:l-as palav   tshuna:n
      elder sister is S-OBL   clothes putting on
      'Elder sister is putting on Sheela's clothes.'

If the causative morpheme occurs with this verb, giving

tshuninaav- (ibid.:101), the reading is 'to cause someone

to dress' involving distant causation.

Developing a more detailed picture of the geographical

and lexical distribution of anti-reflexive causatives

should yield clues about this aspect of the history of

language contact in the Dardic region.[40]

3.4.3. Involuntative causatives

This is a class of first causative verbs denoting

involuntary physical actions, sensations, illnesses, or

_____

[39]Hook and Koul's orthography is retained in these
examples.

[40]Regarding historical antecedents of the association
of causative morpheme with specifically anti-reflexive
semantics, Hock (1987:14) notes that the relationship
between the middle vaste 'clothes himself' and the formally
causative va:sayati 'clothes s.o. else' "would not be one
of simplex to causative but of reflexive/quasi-
intransitive to non-reflexive/transitive comparable to
vartate 'turns himself = turns (itr.)' vs. vartati
vartayati 'turns s.o. else' (except that vas is transitive
to begin with (emphasis mine)". Thus the verb (vas) shows
a possible origin within OIA for this development.
Further, Hamp (1969:158) points out that in Albanian vesh
'I dress (someone)' must be causative in origin, while
vishem 'I get dressed' is a middle formation. Eichner
(1969) makes the same point for OIA and Germanic. It seems
that this particular inherited type has survived in Kalasha
and come to involve a larger class of verbs whereas in some
other NIA languages it has been lost.

states, like 'stumble', 'vomit', 'sneeze', 'cough', 'feel

cold', 'have a fever', 'have an appetite' and many more.[41]

One is immediately struck by the overlap of this list with

the set of what are usually referred to by South Asianists

as "dative subject" verbs.[42] In this section I shall

explore the relation between this class of involuntative

causatives and the dative subject construction. I begin

with an overview of the main ways of expressing bodily and

emotional states in contemporary Kalasha, focusing on the

syntactic mechanisms by which the semantic parameter

volitional/non-volitional is encoded.

3.4.3.1. Types of volitionality opposition in Kalasha

In the Kalasha of today there are four types of formal

oppositions one of the functions of which is to

differentiate the reporting of involuntary (unavoidable)

and volitional (or neutral with respect to volitionality)

actions.[43]

The first type is that represented by the pair of

basic verbs bom'ik 'to vomit' and bomek' 'to cause to

vomit'. The intransitive member of the pair is used with a

NOM subject, which is also the experiencer, and with which

_____

[41]Some of these verbs were noted by Morgenstierne
(1973:224), who correctly observed that these forms were
probably causatives.

[42]or "quirky case" verbs in the government-binding
analytical tradition.

[43]This discussion is based on as many verbs displaying
this behavior as I could collect. Thus it is an attempt to
be complete rather than representative.

the verb agrees in person and number (cf. 62)

62) a   bom'im-dai   [E:bk]
    I(NOM) vomit(P/F-S)-1s
    'I am vomiting.'

This sentence focuses on the physical action itself, rather

than on the reason for it. With regard to volitionality,

it suggests that the experiencer has potential control over

the action.[44] The causative counterpart is used with an

OBL experiencer and can be used with or without an agent

(i.e. cause of the action/experience, not the experiencer)

expressed, as in (63) and (64).

63)   mai   bomel'-lai   [S]
     I(OBL) vomit-Cs-(P/F-S)-3s
     'I am vomiting.'

64) mai   tabyat' xarap' thi   bom-el'-lai [E:bk]
    I(OBL) condition bad   become(CP) vomit-Cs-(P/F-S)-3s
    'Because I feel bad I am vomiting.' (Lit. 'My condition
    having become bad it is making me vomit.')

In (64) the cause is overtly expressed, but in fact the

most frequently encountered type of utterance is that

represented in (63), in which the force of the causative

verb is that the speaker is vomiting involuntarily for some

unspecified reason. Focus is on the involuntariness of the

action rather than on its mechanics. Notice that this

opposition is effected by -a'- causative derivation in

_____

    [44]My informant has made this comment explicitly on
several occasions. For example, he said that ?a kral'im-
dai 'I am coughing' (NOM subject) is strange because: "Who
coughs intentionally/by himself (lit. xud baxud)?"
Similarly for ?a ronz'im-dai 'I am shivering'" "Who shivers
intentionally?", and ?as'a hɪk'iu-dai 'he is
hiccoughing': "no-one hiccoughs intentionally".

basic verbs.[45]

A list of basic verbs whose -a'- causatives display this semantics follows.

<u>Both members of the pair observed</u>

Basic verb (volitional)	Gloss	-a derivative (non-volitional)
ron'zik	to shiver	ronzek'
bom'ik	to vomit	bomek'
żîk'ik	to pant	żîkek'
jhon'ik	to know	jhonek'
chîk'ik	to sneeze	chîkek'
iślyeg'ik	to slip	iślyagek'
krat'ik	to laugh	kratek'
khral'ik	to cough	khralek'
pad'ik	to break wind	padek'
bihik'	to fear	bihek'
hîk'ik	to hiccough	hîkek'
draż'ik	to stretch limbs	drażek'
żuk	to eat	żuek' 'to feel appetite'
praS'mik	to forget	praSmek'
grik	to grasp	griek' 'to get hit'
jhon'ik	to know	jhonek' 'to seem'
mutr'ik	to urinate	mut'ra lasek'
a'śi bihoc'ik	to open mouth wide/to yawn	a'śi bihocek'

<u>One member of the pair observed</u>

to be numb/ painful with cold	utrek'
to pain, hurt	trupek'
to stumble	(khur) Dukek'
to be drowsy	kukuek'
to be dizzy	SiS gherek'
to blink	ec phikek'

The second way in which this semantic opposition is

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[45]Cardona (1978:13), discussing relations between causatives and passives in Indo-Iranian, discusses the use of constructions in which <u>śrav-i</u> and <u>cet-i</u>, which are formally causative, are used in the senses 'make to be heard, to be heard of, to be famous', and 'make to be perceived, to appear', a development very close to the kind of involuntative semantics under consideration here.

effected is by the employment for one semantic pole of what

I will call indigenous or early conjunct verbs. These are

formed from the semantically bleached dyek (<'put',

'place'; strike, beat)[46] or grik (<'to take, sieze') with

the NOM case of the sensation or action nominal and either

an OBL experiencer or locative expression referring to a

specific part of the experiencer's body.[47] Verb agreement

is third person singular regardless of the person and

number of the experiencer. This collocation encodes

involuntary sensations or afflictions.[48] The opposite

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[46]Trail and Cooper (1987:148) give this verb as dyek
'put, place'. Morgenstierne (1973:97) gives the root as
di- 'to strike, shoot' (< OIA dha: (T 6145)). It is clear
from the range of examples given by both authors that the
same verb is in question. The semantics of this root and
its various reflexes is further complicated by the fact
that forms of 'give' (< OIA da:) and forms from OIA dha: in
the meaning of 'beat' have fallen together in some tenses.

[47]Hock (1981:12) notes a Vedic form śrad dha: 'be-
lieve' (lit. 'belief put') which he classes as an "affected
agent verb". He comments that "It seems that the compound
of śrad 'belief' and dha: 'put' has become lexicalized in
the meaning 'believe'. On p. 16 (ibid.) he also notes a
form pari dha: 'to put on, clothe'. Perhaps these Vedic
conjuncts in dha: contribute to the the historical
antecedence of these early conjunct verbs in Kalasha.
        Cardona (1978), a discussion of dha:- and kr- as
(complementary) causatives to as-, discusses another aspect
of the history of dha: and its reflexes which may be
relevant to the Kalasha situation.

[48]Weather phenomena are also expressed with this
indigenous type of conjunct verb. A partial listing of
these (Trail and Cooper 1987:116) is given here:

sĩ'rA dyek	'to blow (wind)'
bhõjau' dyek	'to occur (earthquake)'
kir'ik dyek	'to fall (snow)'
baS'ik dyek	'to fall (rain)'
ĩdo'cik dyek	'to flash (lightning)'
DiDayõg' dyek	'to rumble (thunder)'
suir'yi dyek	'to rise, shine (sun)'
mastruk' dyek	'to rise, shine (moon)'

semantic pole (volitional) is encoded most often by a basic

transitive verb with NOM experiencer and verb agreement

with the experiencer. In (65 - 68) I illustrate four pairs

of expressions, one involuntary and one volitional; in the

(a) sentences the action is involuntary, and in the (b)

sentences volitional.

65-a) mai   phuS   gri śi'u (T&C 1987:62; E:bk)[49]
      I(OBL) blowing seize(P PERF)-3s
      'I am panting/out of breath.'

   b) a   àgar' phuS'im-dai [S]
      I(NOM) fire   blow(P/F-S)-1s
      'I am blowing the fire (to make it light).'

66-a) śa'sa   phuśik' gandur'yak dyel'-lai [E:bk]
      EMPH-that flower   fragrance put(P/F-S)-3s
      'That flower smells sweet.'

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        prelik' dyek   'to shine (light)'
        bhas dyek   'to radiate (heat)'
        peSgar' dyek   'to fall (dew)'
        Although the verb dyek 'put, place' is originally
lexically transitive, the existence of a causative
counterpart of these semantically intransitive sentences
with weather verbs suggests that they are now perceived as
purely intransitive. Thus we can have a sentence like (a):
(a) baS'ik khodai' di-el'   khoday'-as hok'um
     rain   god   fall-Cs(P/F-NS)-3s god-OBL   order
     pe haw'alaau'   baS'ik
     if become(PST-A)-3s become(PST-A)-3s rain
     dyel   [S:bk]
     fall-Cs-(P/F-NS)-3s
     'God makes the rain fall. If it is God's order, it
      will rain.'
in which a causal agent, i.e. God, is overtly expressed.

   [49]This notation indicates that the example was first
observed in Trail and Cooper's dictionary, then verified
with my own informant. In the case of examples cited from
Trail and Cooper's dictionary, my hearing of the words
usually agrees with theirs, and I have retained their
spelling. Where there is a significant difference, I have
spelled the word as I heard it. One consistent difference
is that instead of spelling words ending in a final vowel
sound with y or w, I have spelled them with the vowel, i or
u in most cases.

b) a   gambu'ri gandur'yak i-em'-dai [S:bk]
   I(NOM) flower   fragrance come(Cs-P/F-S)-1s
   'I am smelling the flower.'

67-a) a'sa   lac   dyai śi'u [E:bk]
      she(OBL) shame put(P PERF)-3s
      'She feels ashamed/shy (because of natural shyness or
      some embarassing situation).

   b) śum krom kai-o   te   lac   as'ta ne
      bad deed do(CP)-o they(NOM) shame also not
      jhon'an-dai [S]
      know(P/F-S)-3p
      'Even after doing a bad deed they don't feel
      ashamed.'

68-a) mai   kO'-una prau   [S]
      I(OBL) ear-LOC fall(PST-A)-3s
      'I heard it.'

   b) mai   mon kO kar'i [S]
      I(OBL) word ear do(IMP2s)
      'Listen to what I say!'

This is not to say that all the conjuncts in nominal
of sensation plus _dyek_ or _grik_ have exact volitional
counterparts in basic transitive verbs with NOM experiencer
subjects, but that enough of them do to suggest that this
formal opposition is functional in the language. A list of
the verbs falling into this type follows.

Basic verbs Some conjuncts (volitional)	Gloss	Early conjuncts (non-volitional)
corresponding pairs directly observed		
phuS'ik	to blow	phuS grik 'to pant'
gandur'yak iek'	to smell (sweet)	gandur'yak dyek gandur'yak kar'ik
	to smell (bad)	gon dyek
	"	kaT'ar kar'ik
lac jhon'ik	to feel shame	lac dyek
kO kar'ik	to listen/hear	kO-una dyek
ger kar'ik	to understand	darak'-una dyek
one member observed		
iśka' dyek	to sigh	
khÖ kar'ik	to curse	
diCik'	to hate	

srŨk kar'ik	to snuff, sniffle
SŨk'ik	"
khaly jagek'	to taste
gaZek'	to think of (in a dream), remember
yadek'	to remember, call to mind
cit'ik	to think
isprap paś'ik	to dream
sǎga'ik	to hear, feel
	to feel pain, dyi'li dyek
	throbbing,
	in head
	to feel pain khila' dyek
	in body
	to feel pain phas grik
	in side
	to like phon dyek
	to feel pins capacunDa'li dyek
	and needles
	to feel numbness SŨg grik
	to be dizzy SiS cakel' dyek[30]

Notice that in the set of verbs discussed in the previous paragraph ten of the non-volitionals are in N-dyek, three in N-grik, and two in kar'ik.[31] All these have OBL experiencers. Of the volitionals there are eleven basic verbs with NOM experiencer subjects, one with NOM experiencer subject and N-dyek, and four with NOM experiencer subjects and N-karik.

The reader will ask why I have grouped these sets of verbs together as constituting an opposition type, given that not all of them show direct correspondences of a volitional (or +control) and a non-volitional member. The answer is complicated. The first reason is that with the

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[30]My informants stated that this was a Khowar rather than an original Kalasha expression. Compare the Kalasha expression in the first opposition class SiS gherek'.

[31]Both of these are doublets with dyek forms, gandur'yak kar'ik ' to smell (in.)'; kaT'ar kar'ik 'to stink' was objected to by one of my informants, but occurs spontaneously in a text.

early conjunct verbs in (lexically transitive) dyek and

grik denoting involuntative there are no corresponding

conjunct verbs constructed with an originally intransitive

verbalizer. Thus this group of non-volitional verbal

concepts stands isolated on that side. Also, the group of

volitionals is unique in that it consists mostly of basic

transitives with nominative subjects; the few conjunct

verbs in kar'ik and dyek also do not have corresponding

non-volitional verbs formed with an intransitive verbalizer

(e.g. hik).[52] Thus this class stands alone for the same

reasons that the non-volitionals in dvek and grik do. But

as can be seen from the four pairs of examples given above

as (65) - (68) the two classes complement each other, and

complete the functional opposition for the type of

structure represented by N-dyek/grik.

The second reason is that both of these groups of

verbs involve original Kalasha words; recent borrowings do

not enter into formations with dyek and grik, nor are any

recent borrowings among the basic verbs. The reader can

verify this for himself by examining the lists of verbs on

which this analysis is based.

These two types of opposition—one effected entirely

by morphological alternation in basic verbs, and the other

by a complementary relationship between a set of indigenous

conjunct verbs and a set consisting mostly of basic

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[52]Later conjuncts in kar'ik, on the other hand, do
form pairs with verbs in hik .

transitive verbs of perception or mental activity--
represent the earliest layer of involuntative/volitional
constructions.

The third type of opposition is represented by the
triplet ano'ra kar'ik 'to be hungry (Lit. 'hunger do
[tr.]'), ano'ra karek' 'to be hungry (Lit. 'hunger do
[cs.]'), and ano'ra hik 'to be hungry (Lit. 'hungry
become'). ano'ra kar'ik and ano'ra karek' are both used
with OBL experiencer and third person singular verb
agreement, e.g. mai ano'ra kar'iu-dai 'I am feeling
hungry', mai ano'ra karel'-lai 'I am feeling hungry'.
ano'ra as'ik/hik is accompanied by a NOM experiencer with
which the verb agrees, e.g. a ano'ra thi aam 'I am hungry
(Lit. 'have become hungry'). Some verbs participating in
this type of opposition are listed here.

N-hik +/- volitional	Gloss	N-(hik)/karik/karek non-volitional
both members of opposition observed		
tramo'na asik/hik	to be cold	tramo'na/karik/karek
ano'ra asik/hik	to be hungry	ano'ra karik/karek
awe'ri asik/hik	to be without breakfast	
Daan asik/hik	to be thirsty	Daan karik/karek
DuD'ik	to lie down to sleep, sleep	isprap' karik/karek/
isprap'-una parik	to go to sleep	hik, 'to be sleepy'
paś'ik	to see	ec'-a hik
one member observed		
lahas' hik	to be sick	
khapha' asik/hik	to be angry	
berchik'	to be tired	
khesmat' hik	to be tired	
agra'ik	to get tired	
tsatsir'ik	to be satisfied	
sarasap' parik	to hear, understand	
śarmanda' hik	to be ashamed	
grõk'ik	to snore	

zrant'ik	to be startled	
	to have diarroeah	julap' SaT'ik, karik/ karek
	to belch	glyok karik/karek
	to feel cold	oś karik/karek
	to be tickled	tikiti'gi karik/karek
	to yawn	hai karik/karek
	to feel hot	hu'luk karik/karek
	to feel like V-ing	V-alyak hik/karik/ (karek)

This represents a transitional stage in which the function of the morphological relationship between kar'ik and karek' is changed so that it no longer represents the involuntative/volitional contrast that it did with bom'ik and bomek'. In the present triplet, both ano'ra kar'ik and ano'ra karek' encode involuntary action, and ano'ra as'ik/hik is neutral with respect to volitionality. When I have tried to determine the semantic difference between ano'ra kar'ik and ano'ra karek', the responses have been varied. Some people say there is no difference; others say it is a matter of dialect, with people in Bumburet using the karek' forms more often than Rumbur people; yet another has said that the form in karek' conveys a sense of more forcefulness and urgency than the form in kar'ik. Thus for example mai Daan kar'iu-dai (with kar'ik) would mean 'I am thirsty' (but moderately so), while mai Daan karel'-lai would mean 'I am thirsty (urgently so)'. The variety of responses as well as the blurred lines of the volitional non-volitional opposition, are, I think, symptomatic of the transitional state which this type of opposition represents in the evolution of the relationship between semantic parameters and formal structures in Kalasha.

There are even a few verbs in this class in which the involuntative action has three possible forms, N-karik, N-karek, and N-hik with OBL experiencer. To this type also belong the expressions in OBL experiencer with verb root-al'yak meaning 'to feel like V-ing', as in mai fual'yak ne kar'iu-day 'I don't feel like eating'. Some of the forms in -alyak allow all three verbalizers--hik, karik, and karek, e.g. bomal'yak hik/karik/karek 'I feel vomiting coming on'; others allow only hik and karik, e.g.bihal'yak hik/karik 'I am feeling afraid'; and still others appear to allow only hik, e.g. kratal'yak hik 'I feel like laughing'. These uses of N-hik with OBL experiencer foreshadow the next stage of the development we are tracing.

The fourth and most recent type of opposition is of the type that will be recognized as that found in the "dative subject" vs. nominative subject distinction in many South Asian languages. This is exemplified in Urdu, for example by the pair of sentences shown in (69-a and b).

69-a)   mujhe   Gussa aayaa
         I(DAT)   anger come(PST)-msg
         'I felt angry (involuntatively)'

    b)   us-ne   mujh   par Gussa kiyaa
         he-ERG I(DAT)   on anger do(PST)msg
         'He was angry at me (with some control)'

In Kalasha this type of opposition is represented by pairs like cir hik 'to be late (involuntarily)' and cir kar'ik 'to be late (with some control)'. cir hik occurs with OBL experiencer in a postpositional phrase and third person singular verb agreement, while cir kar'ik takes a NOM

experiencer with which the verb agrees in person and

number. This verb pair behaves as shown in (70-a and b)

70-a) tai   hat'ya cir haw'-au [S:bk]
     you(OBL) for   late become(PST-A)3s
     'You are getting late (involuntarily)'

  b) cir mo kar'i [S]
     late not do-IMP2s
     'Don't be late!'

Almost all of the verb pairs that participate in this

fourth type of opposition are recent conjunct verbs which

form pairs of the form V^{in} [N-hik/śik] and V^{tr} [N-karik],

in which the N-hik forms take OBL experiencer and the N-

karik forms take NOM experiencer. Recall that the earlier

conjunct verb type in N-dyek/qrik with an OBL experiencer

did not have an intransitive counterpart. Some verbs

participating in this type of opposition are given here.

N-karik (volitional)	Gloss	N-hik (non-volitional)

Both members of opposition observed

N-karik (volitional)	Gloss	N-hik (non-volitional)
roS karik	to be angry	roS hik
kahar' karik	to be angry	kahar' hik
bawar' karik	to trust, believe	bawar' hik
yakin' karik	to believe	yakin' hik
cir karik	to be late	cir hik
dragaST dyek	to be starving	dragaST Sat'ik
khośek'	to like	khoś hik
ajat karik	to need, use	ajat' hik
khośani' karik	to be happy	khośani' hik
mut'ra karik	to urinate	mut'ra lasek'[33]

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[33]This pair represents a mixed type, in which the
volitional member is constructed with karik but the
involuntative member with the a causative of las'ik 'to
escape'. I have included it in this class because of the
[+ control] meaning of the karik form. The basic verb
mutr'ik falls in the earlier type.

<u>Only involuntative member observed</u>

to be sad	khaphagi' hik
	hardi' khapha' hik
	(< Kho.)
to be sick	lahazi' SaT'ik

All this is not to suggest that the earlier type of
opposition--effected by -a'- causative morphology--is no
longer alive in the language and has been replaced by
"dative subject" type constructions, but that these three
stages, which I have outlined represent identifiable phases
in the evolution of these constructions, and successive
accretions, all of which are simultaneously present. This
analysis does claim, however, that the "dative subject"
type is now productive, and predicts that when new verbs
enter this language, the involuntary/volitional parameter
will be encoded in them by pairs of conjunct verbs in <u>hik</u>
and <u>karik</u> with OBL and NOM experiencers respectively for
involuntary and experiencer-controlled actions.

I summarize the salient points of the preceding
discussion in the following diagram.

	[+CONTROL]	[INVOLUNTARY]
<u>Stage 1</u>	NOM experiencer	OBL experiencer
	V_1^{in} <---same verb--->	$V_j^{k'}$
	NOM experiencer	OBL experiencer
	V^{tr} <--different verb-->	V^{tr}
		(early conjunct verbs)
<u>Stage 2</u>	NOM experiencer	OBL experiencer
	V^{in} <--different verb-->	(V_{hik}^{in}) V_1^{tr} > $V_j^{k'}$
		(<u>karik</u> conjunct verbs)
<u>Stage 3</u>	NOM experiencer	OBL experiencer
	V^{tr} <---same verb--->	V^{in}
	(later conjunct verbs in	
	<u>karik/hik</u>)	

Thus we see that the simplicity of the earlier (stage

1) system in which a causative relationship morphologically

encoded expressed the volitionality distinction, is

restored in state 3, where a causative relationship

analytically encoded performs the same function. Notice

also that although the volitional experiencer is in NOM

case at all three stages, in stage 1 it was with an

intransitive and in stage 3 with a transitive; while the

non-volitional experiencer, OBL at all stages, occurred

with a formally causative verb at stage 1 and with a formal

intransitive at stage 3. This reversal of verb

transitivity relations is a result, at least partly, of the

development of the N-<u>hik</u> and N-<u>karik</u> type of conjunct verb,

which in turn reflects both the general trend in NIA to

analyticity and, more specifically, recent influences from

Urdu and Khowar.

3.4.3.2. <u>Causative involuntatives in other languages</u>.

Kalasha is not alone in having a set of involuntative

verbs constructed with causative morphology. Gilgit Shina

has a set of at least twenty-one such verbs (Hook and Zia

1987).[34] In the Shina constructions, however, the

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[34]This property of Shina causatives was noted by
Grierson briefly in the LSI 8(2):166. "By adding <u>ar</u>' to
the root we make it either causal or passive. Thus
<u>śidoiki</u>, 'to strike'; <u>śida'roiki</u> 'to cause to strike, or
'to be struck'. In the present definite and imperfect <u>ii</u>
is substituted for <u>ar</u>', but not, apparently in the present-
future." Past tenses have <u>ar</u>, for which Grierson gives the
following forms: <u>śidar'am</u> 'I am being struck, will be
struck', <u>śidar'eeqas</u> 'I was struck', <u>śidar'eeqaanus</u> 'I have
been struck', and <u>śidar'eeqaasus</u> 'I had been struck'.

experiencer usually appears in the NOM rather than the OBL

case. For example, (71).

71)   ma   Som-ar-eégi-n   [Hook and Zia 1987:1]
      I(NOM) tire-Cs-PST3s-PR-3s
      'I'm tired.'

If we compare Hook and Zia's list of twenty-one verbs with

the list of Kalasha causative verbs of bodily state we find

considerable specific semantic overlap (eight of the Shina

verbs match specifically with Kalasha involuntative

causative expressions).

In Kashmiri also a construction which is formally

transitive or causative but semantically intransitive is

encountered in expressions of impersonal action. Hook

(1986) is an analysis of the syntactic properties of these

constructions, one example of which is reproduced here as

(72).

72)   vakhit-i brö:NTh buDir-o:vu-n-akh tsi [Hook 1986:184]
      time-ABL before   age-Cs-3sAG-2sNOM you(NOM)
      'You've aged before your time.'

In this sentence -o:vu- is a causative morpheme and -n- is

a third singular pronominal suffix of the type which

usually is coreferential with agents in ergative tenses in

Kashmiri.[99] It seems clear that these constructions in

Kashmiri represent another development of the same process

observed in Kalasha causatives of involuntary action.

In the Burushaski of Gilgit involuntary physical

actions like vomiting, sneezing, coughing, pain, shivering,

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[99]For detailed analysis and discussion of the
intricacies of the pronominal suffixing system in Kashmiri
see Hook and Koul (1984).

can be expressed with sentences like (73-a),

73-a) je xus áa-t-imi [skb][54]
    I(NOM) cough PP1s-do(PAST)-3s(hm, y or x)
    'I coughed (involuntarily).'

while the corresponding volitional action is expressed with

(74-b).

74-b) ja xus et-am [skb]
    I(ERG) cough do-PST-1s
    'I coughed (intentionally).'

In (74-a) the pronominal prefix áa- encodes what I have

elsewhere called an "affected" participant.[57] This is a

series III pronominal prefix (Berger ms:4.2.2.), which have

long vowels with stress on the first mora. These prefixes

are coreferential with affected participants who may be

beneficiaries, causees, or, as in the above example, non-

volitional experiencers. Thus (75)

75) góo-t-am [Berger p.c.]
    2s-do(PST)-1s
    a) 'I caused you to do it.'
    b) 'I did it for you.'

can have either the causative (a) or the benefactive (b)

reading.[58]

    It may be that Urdu and Hindi also display

(vestigial?) traces of this semantic development. For the

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[54]I am grateful to Sherbaz Khan Bercha, of the Gilgit
Public Library, for these Burushaski data.

[57]See Bashir (1985) for a discussion of the parameter
of "affectedness" with reference to the semantics of the
Burushaski verb system.

[58]There is evidence from the Aliabad dialect of
Burushaski that the concepts of causee and beneficiary are
conceptually distinct, viz. góotam 'I caused you to do it',
and gó-etam (< goo-r etam 2s-DAT do(PST)-1s 'I did it for
you'). (Berger p.c.)

verbs of perception 'see' and 'hear' we have constructions

like those in (76-a and b), and for 'to be known as, be

called', the originally causative _kahlaanaa_ (< _kahnaa_ 'to

say' (76-c).⁵⁷

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⁵⁷Scattered throughout the literature on IA languages
there are references to the identity of semantically
passive or intransitive and formally causative morphology.
These are discussed under two general heads: (a)
"Potential/necessitative passives" with -_w_-, e.g. Tessitori
(1914:#140) for Old Rajasthani, Hoernle (1880:325); (b) _aa_
passives, e.g. Saksena (1937:290-1) for early Awadhi and
Tiwari (1960) for Bhojpuri. At issue is whether one or
both of these classes of constructions are (historically)
derived from causatives. Hoernle, followed by Tessitori,
derives potential passives from -_aapa_- causatives. Bloch
(1914:241), following Beames, disagrees, arguing that
potential passives are derived from the OIA -_tavya_
gerundives. This seems to be correct with regard to the
potential/necessitative passives.
     Passives in -_aa_- which are distinct from the
"potential/necessitative" passives, are found in Early
Awadhi (Saksena 1937:240-1) and in Bhojpuri (Tiwari
1960:165). For example, Modern Bhojpuri: _aneti calalaa se_
adimii pamc me bejai hãã kahaalaa 'A man is said to be bad
in society by living dishonestly'; or Kabir, "Bijaka mula",
(p. 24) _so bana dekhata jiiwa Deraanaa_ 'The soul was
frightened seeing that forest.' Saksena (1937:291) cites
among others the following forms: _laj aaneu_ 'was ashamed
(Jaayasii, p. 179), _juDaanaa_ 'became afraid' (p. 58, 1. 5);
Nur muhammad _bhulaanee_ 'became forgetful' (p. 15, 1. 23).
The occurrence of the involuntary predicates 'be ashamed',
'be frightened', and 'become forgetful' here is interesting
in view of the Kalasha situation.
     With regard to the historical origin of the -_aa_-
passives, Tiwari (1960:165) reproduces Chatterji's
(1926:928-9) argument for the derivation of these forms
from OIA denominative -_aaya_- (as opposed to derivation from
causative -_aapaya_). Given that one of the functions
typically performed by causative morphemes is to create
demoninative verbs, this is not inconsistent with the
thesis of identity of causative and passive morphology.
The question then becomes whether this identity is
explained by the cross-linguistic propensity of causative
morphemes to this particular polysemy, or whether it is a
phenomenon of the type found in Kalasha.
     Nedyalkov and Silnitsky (1973:20-1) discuss several
non-IA languages in which the causative morpheme is
associated with a decrease in the original syntactic
valence, which they call "passive". They cite examples of

76-a) koi aawaaz sun-aa-i detii
      some sound hear-Cs-CP give-P-3s
      'I heard something (involuntarily).'

b) duur   se   ek makaan dikh-aa-i de rahaa thaa
   distance from one house   see-Cs-CP give(PST PROG)3s,m
   'A house was visible in the distance.'

c) yih muhalla   puraanii anaakalii   kah-laataa hai
   this neighborhood old   A.   say-Cs-PRES IMPERF-3sm
   'This neighborhood is called "Old Anarkali".'

In Dravidian Telugu, the normal verbs for 'see',

'hear', and 'seem' are old causatives: kanipincu 'to see

(lit. to cause to see)', vinipincu 'to hear (Lit 'to cause

to hear'), and anipincu 'to seem' (Lit 'to cause to say')

are the normal verbs for these basic non-volitional

perceptual notions.[60]

The situation in Khowar, however, is different from

that in Kalasha. Although there are situations where

derived transitive verbs, which in Khowar have the same

morphology as CAUSATIVES, can be used with situations

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this type of development from the languages Evenki, Moxa,
Karalpak, and Manchurian. They also note that even in
Chinese, with an analytic causative construction, an "empty
causative verb" kiao can be used to achieve a passive
meaning.
     Masica (1976:177-8) also comments on the recurring
cross-linguistic identity of causative and passsive
morphology; he cites Tuvinian, Manchu, Korean and certin
Mon-Khmer languages of Viet Nam, Georgian, and Bilin.
Citing cases of the resemblance of the causative morpheme
of one language to the passive morpheme of a neighboring
language, e.g. Baluchi causative -en and Brahui anti-
causative -eng, he suggests that "what seems to be implied
is a stage - protohistorical, deep-transformational, or
even present-surface - when there is a category identified
simply as change of verbal valence, for which the
directionality of change (addition vs. subtraction) is
specified later." (ibid.:178)

     [60]See Rao and Bashir (1985:228).

involving involuntary bodily states, this is not the normal

way of encoding these situations, and the use of causative

morphology implies that the speaker has a specific agent in

mind. Examples (77-a and b) illustrate this.

77-a) awa   khaph-im-an (<u>khopik</u>' 'to cough') [rkb]
      I(NOM) cough(P/F-S)-1s
      'I am coughing'

   b) ma   khop-e'-ir-an (<u>khope'ik</u> 'to make cough')
      I(OBL) cough-Cs(P/F-S)-3s
      'It is making me cough.' [rkb]

If (b) is used, it suggests that some specific agent, which

can be animate or inanimate, is part of the conceptualiza-

tion; in Kalasha the meaning is not of specific agent but

of involuntary action. Also, this type of construction is

less frequent than it is in Kalasha.

3.4.3.3. <u>Causative involuntatives in diachronic</u>

<u>perspective</u>. We have seen that originally causative morph-

ology not infrequently tends to develop into involuntative

constructions. In Kalasha we have traced the stages of a

system based on involuntative constructions with causative

morphology evolving into one in which dative subject

constructions are the productive type. The history of

English affords a well-studied example of the evolution of

dative subject (called "impersonal" in that context)

constructions into "personal" (i.e. nominative subject)

constructions.[61] Klaiman's 1976 study of the volitionality

parameter and the dative subject construction in Bengali

demonstrates that the formal mechanism of dative subject

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[61]See, for example, McCawley (1976), Allen (1984).

was not associated with the semantic parameter of

volitionality "until sometime after the early middle

Bengali period" (1976:125). Tantalizingly though, that

study does not say anything about how volitionality was

encoded before it became associated with the dative subject

construction.[62]

Taken together, these synchronic cross-linguistic

glimpses at involuntative causative constructions, and the

diachronic observations on the shifting associations of the

volitionality parameter with causative morphology, dative

subject, and nominative subject constructions, suggest that

the use of causative morphology to encode involuntary

action is a frequently adopted strategy in languages the

other systems of which provide the necessary conditions for

its development.

What are some of the conditions that allow (or

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[62]Thd dative subject construction appears not to be
original in Indo-Aryan. Hook (1982:30) notes that "a
comparison of the construction in Sanskrit with modern
Indo-Aryan shows a dramatic broadening of its scope". At
the time of Pāṇini (ca. 500 B.C.) the dative construction
applied only with the verb 'to like, be pleased', and
appears to have been an innovation at that time (ibid.:36,
n.3).
    The dative subject construction also seems not to be
indigenous to Tibeto-Burman. DeLancey (1985:58) notes that
Lhasa Tibetan has a few dative subject predicates but fewer
than in Western Tibetan dialects, e.g. Balti, which is geo-
graphically closer to other South Asian languages. Verbs
of perception and cognition, for which non-volitionality is
indicated by the dative subject construc-tion in Balti,
take ergative experiencers in Lhasa Tibetan with
volitionality contrasts indicated in part by interaction
with the evidentiality system. (See Ch. 2 above).
    It is also not indigenous to Burushaski, in which the
primary mechanism for encoding involuntary experience is
pronominal prefixation.

predispose a language to) this development? First, a
language must have a morphological means of expressing
causativity relations. Second, the requirement that the
causal agent be animate or even specific must be lost, as
it has in Kalasha and in Gilgit Shina and Kashmiri. Third,
it may be the case that the causative morpheme must be
specified for contact as opposed to distant causation.
Perhaps in order for this to happen with a given causative
morpheme a new (second) causative morpheme (or analytic
mechanism) which is specified for distant causation must
enter the language. In Kalasha the -aw- causative morpheme
meets this description. Kashmiri, which also allows double
causativization, also has this characteristic. So does
Telugu, with its several layers of causative morphology--
-(p)incu, as well as its analytic causatives. If this is
so, we should find that involuntative meanings will develop
only in languages with more than one (historically)
identifiable layer of causative morphology/(formal
mechanism).

These observations also suggest that causative
involuntatives may represent one stage in an evolutionary
cycle, at least two other (potential) stages of which are
represented by dative experiencer and "personal" (i.e.
nominative experiencer) constructions.

CHAPTER 4

COMPOUND VERBS

4.1. Definitions

The compound verb is a complex verbal construction
consisting of the verb stem/conjunctive participial form[1]
plus a finite verbal element, which bears tense/aspect and
person-number marking. These finite elements belong to a
limited set of verbs, usually basic verbs of motion or
action verbs with a strong directional component in their
meanings. 'Go', 'throw,', leave behind', 'put', 'sit
down', 'give', and 'take' are among the verbs most commonly
encountered as vectors, the term I shall use[2] to denote
these finite elements. The first, non-finite component
will be called main verb. In Hindi and Urdu aa jaanaa
('come-GO' > 'come'), rakh lenaa ('put-TAKE'> 'take'), rakh
denaa ('put-GIVE' > 'put') are typical compound verb
collocations. The critical feature of the compound verb
construction is that this second, finite verbal element,
the vector, has been semantically bleached (to a greater or

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[1]In some South Asian languages the conjunctive
participle is homophonous with the bare stem.

[2]following Hook (1974) who adopted the term from Pray
(1970).

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lesser extent), and the specific lexical semantic load is

carried by the first (non-finite) element (the main verb),

while the vector contributes more abstract (grammatical)

meaning. (Masica 1976:141). Example (1) illustrates the

appearance of the compound verb in Urdu, a language in

which the compound verb system is highly developed.

1) mãĩ ne   aap kaa kaam kar diyaa   [Hook, 1974:18]
   I   ERG your   work do-gave
   'I did your job."

In this sentence the main verb is _kar_ 'do' and the vector

verb is _diyaa_ 'gave'.

The compound verb is one of the characteristic but not

defining features of the South Asian linguistic area[3].

Compound verbs are found in the Indo-Aryan, Dravidian,

Tibeto-Burman and Munda languages of South Asia, in Iranian

and Turkic languages immediately to the north in Central

Asia, and in Korean and Japanese and some Tibeto-Burman

languages. These constructions are so salient a feature of

some languages of South Asia that they have been

intensively studied, especially for Dravidian languages and

for Hindi.[4] Compound verb constructions in the "Dardic"

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[3]Masica (1976), Chapter 5.

[4]Hook (1974) is pre-eminent among these studies for
Hindi; it examines, evaluates, and moves forward on the
basis of all previous work on the Hindi compound verb. For
Dravidian languages there is Fedson (1981) on the compound
verb in Tamil; and recently a cross linguistic statistical
study by Singh, Subbarao, and Bandyopadhyay focussing on
the polar verbs (i.e. main verbs) that can co-occur with
various vectors in a sample of seven South Asian languages.

languages, however, have as yet received little attention.[5]

This section is then a first approximation to a

characterization of compound verb constructons in Kalasha

and Khowar. I shall first describe the occurrence and

semantics of compound verbs in Kalasha, and then in Khowar.

Based on the insights gained from the study of compound

verbs in these languages, I suggest an additional

perspective on the function of compound verbs in other

languages.

4.2. Compound verbs in Kalasha

4.2.1. Vectors identified

In Kalasha, I have identified compound verbs with the

vectors 'go', 'put' and 'give'. This is not to claim that

this is an exhaustive list, but it indicates that the

construction definitely exists.[6] The use of 'go' is

illustrated in (2), 'put' in (3) and 'give' in (4).

2) baaba'-a   cei uzuki'-par-au' [S, E:mb]
   sister-OBL tea spill -go(PST-A)-3s
   'Sister's tea spilled.'
\
3) su'da śurua'i-atha'-i [S:bk, E:mb]
   baby fall-Cs-put(PST-A)-2s
   'You let the baby fall.'

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[5]Grierson briefly mentions them in Kashmiri (LSI
8.2:311), giving the forms wasith pyon‸ 'to fall down'
(= Hindi gir paRnaa); trowith tshunun 'to throw away' (= H.
phēk denaa); ganDith dyun‸ 'to tie up' (= H. bǎǎdh denaa).
A recent dissertation (Kaul 1985) which I have not yet
seen, also treats compound verbs in Kashmiri.

[6]There is also a construction consisting of the
imperfective participle in -iman plus finite forms of
'come' which contributes aspectual meanings, but since it
does not meet the formal definition established for the
compound verb for purposes of this study, I shall not
discuss it here.

4-a) mai   hat'ya ek krom kar'i-de [E:sj, mb)
     I(OBL) for   one work do(IMP2s)-give(IMP 2s)
     'Do a job for me.'

b) par'-a   de   (= 42-a below)
   go(IMP2p) give(IMP2s)
   'Go!'

The correct formal definition of the compound verb in
Kalasha is somewhat problematic. For the 'give' compounds,
it seems that imperative plus vector, rather than conjunc-
tive participle plus vector, is the correct analysis. For
most verbs, second person singular imperative, and
conjunctive participle are homophonous. but with the main
verb 'do', since the conjunctive participle form kai is
irregular, we can differentiate between the conjunctive
participle form on the one hand and the imperative on the
other. Examples (4-a and b) in which the forms kar'i-de
and par'a-de rather than *kai-de shows up tells us that for
the 'give' compounds at least the definition cannot be
limited to the conjunctive participle. This conclusion is
also corroborated by the form i-de 'come (lit. 'come-give')
(not *i'ta-de) which occurs in another of my examples.
Since in my data the 'give' forms occur only in the
imperative singular, it appears that the 'give' compounds
should, in the absence of evidence to the contrary, be
analyzed as imperative of main verb plus imperative
singular of vector.

The situation with the 'go' and 'put' compounds is
different, however. We have the collocation phas phas thi
gal'a, 'He broke into pieces', in which the form thi is the

unambiguous conjunctive participle, not the root or
imperative form of <u>hik</u> 'become'. 'go' and 'put' compounds,
therefore, must be defined as conjunctive participle plus
vector.

From the evidence I have so far--(a) lack of clear
examples in my corpus, and (b) rejection by informants in
constructed test sentences--it appears that the vectors
'throw, leave' (<u>histik</u>), and 'take' (<u>grik</u>) probably do not
occur in Kalasha.[7] Examples (5) and (6) show the test

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[7]In my corpus of thirty texts plus elicitation data
there are a few examples of strings which look as though
they might be compound verbs, but might also be reporting
sequences of two actions. I give these here.
(i) <u>with grik 'to take'</u>
a) kai-o   beru'-as   ik'-as   Tem'-un-o   to
   do(CP)-o husband-PS3s come(INF)-OBL time-LOC-o him(ACC)
   gher'i phuS'i   su±ik' kai   jip'-ai   dyai
   again blow(CP) needle do(CP) pocket-LOC put(CP)
   gri a'-au [T10:s]
   take(P PERF)-3s
   'Having done (that), when it was time for her husband$_i$
   to come (home), she again blew (on) him$_j$, changed him
   into a needle, and put it in her pocket, (and kept
   it?).'

(ii)   <u>with hist'ik 'to throw, leave behind'</u>
b) ś-isa   rajuk'-as hat'ya pe hok'um ar'-i   haw'-au
   EMPH-this rope-OBL to   if order do(PST-A)-2s SUBJ
   thamam' duniya' bon'i   hist'-iu   bon'i
   all   world   tie(CP) throw(P/F-NS)-3s tie(CP)
   hist'il-e śe   tu to   cikast' dek
   throw(PST-I)-3s-when you it(ACC) defeat give(INF)
   bha'-as [T17:mz]
   be able(P/F-NS)-2s
   'If you order this rope it will tie up (and throw down?)
    the whole world. When it ties up (and throws down?)
    (everyone) you will be able to defeat (the demon).'

c) bon'i   laTora'i   ahist'-au-e   ragE'ak-as kai
   tie(CP) roll up(CP) throw(PST-A)-3s-when stick-OBL   to
   ama'-u   ki   tu uST'i   a'sa   tye [T17:mz]
   say(PST-A)-3s COMP you get up(CP) him(OBL) beat(IMP2s)
   'When (it) rolled up (and threw down) (the demon), he
    said to the stick, "Get up and beat him!".'

sentences used.

5-a) *a su'da hu'ti-ahist'-is [E:*mb]
     I child send -throw(PST-A)-1s
     *'I sent the child away.'

  b) *to   moc naśa'i-ahist'-is [E:*mb]
     that man kill -throw(PST-A)-1s
     *'I killed that man.'

  c) *a mes   pruST kai-ahist'-is [E:*mb]
     I table good do-throw(PST-A)-1s
     *'I fixed the table.'

  d) *a śen paTaka'i-ahist'-is [E:*mb]
     I bed move   -throw(PST-A)-1s
     *'I moved the bed.'

  e) *a sabak' Ci'Ci-ahist'-is [E:*mb]
     I lesson learn-throw(PST-A)-1s
     *'I learned the lesson.'

6-a) *a palow' źu'i-agr-is' [E:*mb, *bk]
     I apple   eat -take(PST-A)-1s
     *'I ate the apple.'

  b) *a cei pi   -agr-is' [E:*mb, *bk]
     I tea drink-take(PST-A)-1s
     *'I drank the tea.'

  c)?a cewbew' sambi' -agr-is' [E:*bk, ?mb]
     I clothes put.on -take(PST-A)-1s
     *?'I put on my clothes.'ᵉ

While a sentence like (7) is grammatical, its meaning is of

two sequential actions, not the unitary conception required

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d) khăgar'-an tyai   to   naśa-u   du khθDa
   sword-INST beat(CP) him(ACC) kill(PST-A)-3s two halves
   kai   ahist'-au [T19:nk]
   do(CP) throw(PST-A)-3s
   'Beating him with a sword, he killed him. He cut him
    into two halves (and threw him down?).'

    In these sentences it is not clear whether two-action
sequences, e.g. 'tied up and threw down' or single actions
'tied up', as in (b), are intended.

    ᵉSentence (6-c) was rejected by one informant, while
the other said that while it was not totally impossible it
would be very unusual and she would not say it herself.

for compound verb interpretation.

7) a gon'a muT chin'i-ahist'-is [E:mb]
   I big   tree cut -throw(PST-A)-1s
   a) 'I cut the big tree and threw it.'
   b) *'I cut down the big tree.'

4.2.2. Some syntactic properties

The usual order of main verb and vector can be

reversed, as in (8) and (9).[7]

8) Tim'-una par-is'   du'i [S, E:mb]
   stove-LOC go-(P/F-NS)-2s burn
   'You will burn yourself on the stove!'

9) hee   de -lu'i   di aay-au   hat'ya
   heh heh, give-look(IMP 2s) now mother-PS2s for
   tro'i [T15:mb]
   cry(IMP2s)
   'Heh heh, now cry for your mother.'

Such reversal is not frequently encountered; these

examples would indicate that, as in Hindi or in Panjabi[10],

the reversed order marks heightened vehemence or emotion.

No element can intervene between the main verb and the

vector verb. If any particle or adverb is introduced in

this position it has the effect of decomposing the compound

verb and forcing a two-action interpretation. Thus the

insertion of ne 'not', as in (10), destroys the compound

verb.

10) ?cei vI'Si ne par-au' [E:mb]
    tea boil not go(PST-A)-3s

_____

[7]This, however, is not the same as the "true" reversal
discussed in Hook (1974:8-9, 55-65), in which the desinence
occurs on the main verb rather than the vector, as in us ne
jhaTke se laqaam khIIc dii/de khIIcii 'He jerked on the
reins' (p. 54).

[10]For example the sentence oh-tā gyaa aa 'He has
arrived (lit. he-TOP went-come)' (said with emphatic
finality).

*a) 'The tea did not boil over.'
?b) The tea boiled but did not go over the top.'

The same applies to the particles -o, -ta, and -mi.[11]

11-a) *au   du'i-o par-au' [E:mb]
      bread burn-o go(PST-A)-3s
      *a) 'The bread burned.'
      ?b) 'The bread burned and left (of its own
          volition).'

b) *au'   du'i-mi' par-au' [E:mb]
   bread burn-mi go(PST-A)-3s
   *a) 'The bread really burned.'
   ?b) 'The bread just burned and then left.'

c) *au'   du'i-ta par-au' [E:mb]
   bread burn-ta go(PST-A)-3s
   *a) 'The bread burned'.
   ?b) 'The bread burned and left.'

The two-action readings forced in these cases are

semantically strange; they imply that the bread is an

animate agent walking away on its own.

However, with de compounds it appears that the

cajolative particle na(a)/nee can intervene between the

imperative main verb and de, as in (12).

12) i-na-de   mai   sum a tai
    come(IMP2s)-CAJ-give(IMP2s) I(OBL) with I you(OBL)

    pas-em'   nis-an' de-m [T7:kn]
    see(Cs)(P/F-NS)-1s sign   give(P/F-NS)-1s
    'Come on with me. I will show you.'

4.2.3. Kalasha compounds are genuine compound verbs

    In order to demonstrate that these main verb-vector

sequences are indeed compound verbs, I shall invoke the

_____

[11]The particle -o when attached to any conjunctive
participle in a conjunctive participle, matrix verb
sequence has the effect of forcing an unambiguous
sequential rather than manner or cause reading on the
relationship between the conjunctive participle and the
matrix verb. (cf. 1.5.3.4.)

three defining characteristics of this construction,

identified by Hook (1974:94, 119). The first requirement

is that the vector verbs be grammaticized, i.e. that they

have lost their original lexical meaning. To this I would

add the further clarification that this grammaticization

result in the conceptualization of an action reported by a

compound verb sequence as unitary, not as a sequence of two

actions. The second diagnostic of compound verbs is that

they are sensitive to negation, tending, with certain well-

defined exceptions, not to occur in negative assertions.

The third requisite is that the construction be

generalizable, not confined to a few listable lexical

items.

The three vectors 'go', 'put', and 'give' do meet the

grammaticization criterion. First let us consider the

situation with regard to 'go'. While in sentence (14) it

might be argued that 'go' retains too much of its original

motional meaning to be a true vector,

14) aya' iślye'gi-par-is' [S, E:mb, sj]
    here slip   -go(P/F-NS)-2s
    'You will slip here!' (a warning)

in (15) this potential objection does not arise.

15) au'   du'i-par-au' [S, E:sj, mb]
    bread burn-go(PST-A)-3s
    'The bread burned.'

There is no motion involved in this action; second, it is

not possible to consider this sentence as reporting two

actions 'The bread burned and went away.'

With 'put' the case for grammaticization is even

stronger. The verb <u>thek</u> in its use as a main verb is lexically marked for an inanimate patient. Thus it cannot appear with an animate patient[12] as demonstrated in (16).

16) a su'da śen'-una *athe-s'/nise-s' [E:mb]
    I child bed-LOC *put/seated
    'I *put/seated the child on the bed.'

Yet when used as a vector verb, as in (17) it can appear with a main verb taking an animate patient, e.g.'children'.

17) a sud-on'   khɑDia'i-athe-s' [E:mb]
    I children-OBL call   -put(PST-A)-1s
    'I called the children (but I shouldn't have).'

It can, of course, also be used with main verbs taking inanimate patients, as in (18).

18) a plots DuDura'i-athe-s' [E:mb]
    I ball roll-Cs -put(PST-A)-1s
    'I let the ball roll away.'

Example (18) also demonstrates the impossibility of considering that <u>thek</u> retains its literal meaning of 'put' in this construction. The actions of losing control of the ball, which is rolling away, and 'putting' it somewhere to keep are mutually exclusive. The same point argues that a conceptualization of two separate actions is impossible here.

Now let us look at 'give'. Usages such as the actual utterances recorded in (19) and (20) show that <u>de</u> (< 'give') is not to be taken in its literal meaning.

19) tha'i-de [S, E:sj, mb]
    put -give
    'Put it down!'

---

[12]Dead animals and humans are treated grammatically as inanimates.

20) nisi'-de   [S, E:sj, mb]
    sit -give
    'Sit down!' (spoken impatiently)

In neither of these cases are two separate actions

conceptualized; in (19) the single action is of putting

something down, and in (20) of sitting down. Nor is the

allo-benefactive sense that is often found with 'give'

compounds in Hindi, Panjabi, Urdu, and Tajik Persian for

example, present in these cases. It is interesting to note

also that the Kalasha 'give' compounds are formed from both

transitives (19) and intransitives (20).[13]

     The second indicator of compound verb status involves

sensitivity to negation. Compounds with parik 'go' were

not accepted when negated. So, corresponding to (15) au

dui parau 'the bread burned' we do not get (21)

21) *au   ne du'i-par-au' [E:*mb, *bk]
     bread not burn-go(PST-A)-3s
     *'The bread did not burn.'

or (22) corresponding to the positive cei vIŞ'i parau' 'the

tea boiled over'.

22) *cei ne vIS'i-par-au' [E:*mb, *bk]
     tea not boil -go(PST-A)-3s
     *'The tea did not boil over.'

The placement of the negative element before the compound

verb complex can also, depending on the semantics of the

individual verb, transform a compound verb into a two-

---

[13]This is also the case with compound verbs consisting
of CP plus 'give' in Uzbek, e.g. sozlap ber- 'to talk
about'(lit. 'speak(CP)-give') (Sjoberg 1963:132). And,
according to Peter Hook (p.c.) also in some rural dialects
of Hindi, e.g. woh ghar mẽ ghus diyaa 'He forced his way
into the house'.

action reading. For example, for (21) the only possible

reading would be 'The bread went away without burning', in

which the unitary conception of burning is replaced by a

sequence of actions, which in this case does not make sense

in the real world.

Compounds in de 'give' are also sensitive to negation.

Although acceptability judgements varied on some of my

examples, informants agreed that a negated counterpart of

(19) does not work. Thus (24) was not accepted.

```
24) *mo   thai-de   [E:*bk, *mb]
     not put -give(IMP 2s)
     *Don't put it down.'
```

If the negative is inserted between the main verb thai and

the vector de to give (25)

```
25) thai mo  de  [E:mb]
    put   not give(IMP 2s)
    *i)   'Don't put it down.'
    ii)  'Having put it down, don't give it.'
```

the compound verb is again destroyed, leaving a two-action

sequence with the meaning shown in (25-reading ii)[14]

The same is also true of thek 'put' compounds.

Corresponding to (3) su'da śurua'i atha'i 'You let the

baby fall', we do not have a negated version like (26).

```
26) *a su'da ne   śuru-a'i-athe-s'  [E:*mb]
     I child not fall-Cs -put(PST-A)-1s
     'I didn't let the baby fall.'
```

This sentence is not possible with any interpretation,

since even the two-action reading 'I put the baby down

without letting her fall' is ruled out by the fact that

---

[14]also with change in phonological contour from that
of the compound verb sentence.

<u>thek</u> cannot have an animate patient. With an inanimate

patient, as in (27), breaking the compound with a negative

can result in the two-action reading (27-b).

27) a palow' ne br̩k'i athe-s' [E:mb]
   I apples not sell   put(PST-A)-1s
   *a) 'I did not sell the apples.'
    b) 'Without selling the apples I put them away.'

The third criterion—generality—operationally

defined[19] as occurring with more than five main verbs, is

also met by these three vectors. <u>parik'</u> 'go' occurs freely

with intransitives given the correct context and

communicational intent of the speaker. I have examples

attested with the main verbs <u>du'ik</u> 'to burn', <u>pal'ik</u> 'to

fall', <u>CuCu' hik</u> 'to dry up', <u>puri hik</u> 'to fill up

(intrans.)', <u>khyec hik</u> 'to get wet, soaked', <u>iślyeq'ik</u> 'to

slip', <u>uzukik'</u> 'to spill', <u>vIS'ik</u> 'to boil (intrans.)',

<u>gryek hik</u> 'to dry, get seasoned', <u>SuS'ik</u> 'to dry up', <u>phas</u>

<u>phas hik</u> 'to break into pieces, get smashed', <u>lyep hik</u> 'to

be smashed, crushed', <u>biśik'</u> 'to break (intrans.), <u>bilyik'</u>

'to melt (intrans.)', <u>prikik'</u> 'to fall down (wall, tree)',

<u>DuDurik'</u> 'to roll (intrans.)', <u>utrukik'</u> 'to tear', <u>phala'ik</u>

'to be extinguished (fire)', <u>sas lu'i hik</u> 'to become

exhausted (idiom)', <u>uphuik'</u> 'to fall out (hair)', <u>oś hik</u>

'to get cold'.

The 'go' vector does not combine with transitives. An

attempt to combine <u>parik'</u> with <u>śuruek'</u> 'to let slip, to

drop', the derived transitive (first causative) of <u>śuru'ik</u>

---

[19]cf. Hook (1974:119).

'to fall, slip', as in (28) was rejected,

28) *su'da śurua'i par-au'   [E:*bk]
     child slip-Cs go(PST-A)-3s
     *'The child slipped (and fell).'

and su'da śurua'i athau' 'He let the baby fall/dropped the

baby' (cf. 3 above) was profferred instead.

    'Put' (thek), on the other hand, combines with

transitives such as śuruek' 'to drop, let fall', hist'ik

'to throw', hut'ik 'to send (ANIM object)', brïk'ik 'to

sell', chin'ik 'to break (trans.)', dek 'to give', DuDurek'

'to roll (trans.), lasek' 'to let go, loose', paTakek' 'to

move', khŪDiek' 'to call, summon', naśek' 'to kill',

uzak'ik 'to spill (trans.)', paś'ik 'to see', and sãga'ik

'to hear'. It combines also with causatives in -aw-, as in

example (29).

29) a dalaba'sa histi-awa'i-athe-s'   [E:mb]
     I sweepings throw-Cs   -put(PST-A)-1s
     'I got the sweepings thrown away (mistakenly).'

With most of the "ingestive" verbs, however, it appears

less compatible; the test sentences shown in (30-a, b, c,

and d) were not accepted.

30-a) *a sabak CiC'i-athe-s' [E:*mb]
        I lesson learn-put(PST-A)-1s
        *'I learned the lesson (mistakenly).'

  b) *a au'   žu'i-athe-s' [E:*mb]
      I bread eat -put(PST-A)-1s
      *'I ate bread (mistakenly).'

  c) *a cei pi   -athe-s' [E:*mb]
      I tea drink-put(PST-A)-1s
      *'I drank tea (mistakenly)'

  d) *a bŪ'jaw   sãga'i-athe-s' [E:*mb]
      I earthquake hear   -put(PST-A)-1s
      *'I felt the earthquake (mistakenly).'

If the context is precisely right, however, sometimes the verbs paś'ik 'to see' and sãqa'ik 'to hear' can combine with thek. The precise context that allows this will be discussed in connection with the semantics of these constructions.

Notice that all of the compound verbs in thek illustrated so far have animate agents. However, in a very interesting type of sentence, we have the possibility of thek compounds with the same set of causative involuntatives discussed in Ch. 3, and with some weather verbs. Recall that though they are semantically intransitive these verbs are lexically transitive, or morphologically so (first causative derivatives in -a'-), and that the agents are necessarily inanimate. I illustrate these below. In (31) and (32) appear basic transitives with inanimate agents.

31) mahC   mai   cᾳD'i-atha'-u [E:mb]
    chilies I(OBL) sting-put(PST-A)-3s
    'The chilies burned me (i.e. my mouth) (spoken with
     dismay).'

32) ãgar' mai   dyᾳ'ki-atha'-u [E:mb]
    fire I(OBL) burn -put(PST-A)-3s
    'The fire burned me.'

Derived transitives occur in (33) and (34).

33) mai   khur trupa'i-atha'-u [E:mb]
    I(OBL) foot pain-CS-put(PST-A)-3s
    'My foot hurt me (annoyance, dismay)'

34) mai   tramo'na gria'i -atha'-u [E:mb]   _
    I(OBL) cold   grab-CS-put(PST-A)-3s
    'I got a fever (lit. 'cold caused to seize me')'

Example (35) illustrates the semantically bleached weather verb dyek (<'put, place').

35) bo   kir'ik dyai-atha'-u [E:mb]
    much snow   fall-put(PST-A)-3s
    'A lot of snow has fallen (rueful surprise)'

The co-occurrence of these verbs with <u>thek</u>, which otherwise

forms compound verbs only with transitives, is a further

bit of evidence for the originally transitive/causative

nature of these (now semantically intransitive)

constructions.

The verb 'give' <u>dek</u> can combine with more than a small

listable set of main verbs in fixed collocations. 'Give'

compounds are attested with both transitives and

intransitives, e.g. with <u>dek</u> 'to give', <u>kar'ik</u> 'to do',

<u>thek</u> 'to put', <u>nisik'</u> 'to sit', <u>jiek'</u> (=<u>jagek'</u>) 'to look

at', <u>hist'ik</u> 'to throw', <u>ik</u> 'to come', and <u>lui-</u> 'look!'

4.2.4. Kalasha compound verbs are systematic

Having established that these are genuine compound

verbs, let us now investigate their systematicity in

Kalasha. For while it may be true that language A and

language B both have compound verb constructions, it may be

the case that while they are tightly integrated into the

semantic system of one language, i.e. highly systematic,

they are less so in the other. Hook (1977), discussing

this question with reference to Marathi, Hindi, and

Gujarati, demonstrates that compound verbs, though present

in Marathi, are less tightly integrated into the Marathi

system than in Gujarati or in Hindi. Two of the criteria

employed in that study (<u>ibid.</u>:5-6) are as follows. (1) If

compound verbs are systematic, it will be the case that for

nearly every simple verb there is at least one

corresponding compound verb. (2) If compound verbs are

systematic, i.e. interact closely with the other semantic

systems of the language, then factors enhancing or

suppressing the incidence of compound verbs should be

clearly identifiable. That is, the occurrence or non-

occurence of compound verbs should correlate positively or

negatively with the appearance of other definable elements

in the semantic system of the language. Sensitivity to

negation is an example of such a correlation.

In assessing the systematicity of the Kalasha compound

verb I shall employ these two criteria. Considering, then,

the first question: for every non-compound verb in Kalasha

is there at least one compound verb possible? At this

stage of research on Kalasha it would be premature to

attempt an unequivocal answer, but given the fact that

parik' 'go' occurs with many intransitives, thek 'put' with

many (all?) transitives, with the productive class of -aw-

causatives, and with weather verbs and causative

involuntatives, and dek 'give' with both transitives and

intransitives, it seems that a positive answer to the

question is likely.

Turning now to the second criterion for systematicity,

we ask: to what degree does the appearance of the Kalasha

compound verb correlate with other identifiable semantic

parameters? Three such factors will be considered: (a)

the effect of negation; (b) co-occurrence possibilities

with <u>hu'la</u> (see Ch. 2 above); and (c) occurrence in various

tense-aspect-mood forms.

Sensitivity to negation has been demonstrated above

(4.2.3.) for all three vectors. Co-occurrence of the

compound verbs with <u>hu'la</u> is highly constrained. For <u>dek</u>

'give', since I have only imperative attestations, co-

occurrence with <u>hula</u>, which follows indicative forms,

cannot be tested. Compound verbs with the vector <u>parik'</u>

'go' appear not to accept <u>hu'la</u>. In addition to the fact

that no such co-occurrences occur in my corpus, informants

have rejected sentences designed to test this. In a

sentence like (36), in which <u>hu'la</u> was not accepted, it is

not possible to determine whether <u>hu'la</u> is rejected because

of the PST-A form of <u>parau'</u>[16] or because of the compound

verb itself.

36) mai   pi   plots DuDuri'-para'-u (*hula)   [S:mb]
    I(OBL) from ball   roll   -go(PST-A)-3s
    'The ball rolled away from me.'

In sentences (37) and (38) however, we have the P/F-NS

forms <u>biśi' pariu'</u> and <u>iślye'gi pariu'</u> .

37) śehê mo kar'i   pyalya' biśi'-par-iu' (*hula)
    thus not do(IMP2s) cup   break-go(P/F-NS)-3s
    'Don't do like that, the cup will break!' [E:*mb, *bk]

38) se iślye'gi-par-iu' (*hula) [E:*mb, *bk]
    he slip   -go(P/F-NS)-3s
    'He will slip.'

Since it is sometimes possible for <u>hu'la</u> to co-occur with

P/F-NS verbs, as in examples (42) and (45) from Ch. 2,

---

[16]Recall from Chapter 2 that <u>hula</u> does not co-occur
with PST-A verbs.

reproduced here as (39-a and b), we can conclude that it is

probably the compound verb that is preventing the

appearance of hula.

```
39-a) se ne  i-u'              hu'la  [E:bk]
      he not come(P/F-NS)-3s become(PST-I)-3s
      'It seems that he won't come.'

   b) ko  DuD'-iu             hu'la  [S]
      why sleep(P/F-NS)-3s become(PST-I)-3s
      'Why is he sleeping?' (expresses surprise and slight
      annoyance)
```

Next, to consider compounds in thek 'put' and hu'la.

The situation here is less clear. First, since all my

examples of this construction are PST-A forms, which have

been shown to correlate negatively with hula, it is not

possible in this case to isolate the effects of compound-

verb presence. Second, although almost all sentences

involving compound verbs in thek 'put' with hula were

rejected by both my main informants (e.g. 40), in a few

cases sentences were deemed possible by one informant given

a highly specific reading. One such example is shown as

(41).

```
40) a dalaba'sa hist'i-athe-s'(*hula)  [E:*bk, *mb]
    I sweepings throw -put(PST-A)-1s
    'I threw out the sweepings (mistakenly)'

41) a kitap' tas'a    dai -athe-s'  [E:mb]
    I book   him(OBL) give-put(PST-A)-1s
    'I gave him the book (mistakenly, spoken with regret)
```

In the case of (41) the informant felt that hu'la, although

not common in such a sentence, was not impossible; if used

it added a stronger sense of regret to the utterance.

The third type of co-occurrences to be considered are

those of the three vectors with various tense-aspect-mood

forms. If compound verbs are in fact systematic, we should

expect to find a markedly non-random distribution across

tense-aspect-mood forms; if they are non-systematic, no

such correlations are predicted.

First to consider compounds with <u>dek</u> 'give'. All of

my examples of <u>dek</u> compounds are imperatives. Two examples

(cf. 42) in which the main verb appears in its imperative

plural form but <u>de</u> remains in the singular suggest that <u>de</u>

may, in fact, be invariable.

```
42-a) ahut'-au        ki    par'-a    de
      send(PST-A)-3s COMP go(IMP2p) give(IMP2s)
      aghö'-au        ki    mai    a'sa putr ki'ya sawda'
      say(PST-A)-3s COMP I(OBL) this son  any   goods
      on'i a'-au [T26:bk]
      bring(P PERF)-3s
      'He sent him, (saying), "Go", he said, "(find out if)
       this son of mine has brought any goods."
```

```
b) to    mahadeo ahöź'-au        ki    di  jaga'-a
   then Mahadeo say(PST-A)-3s COMP now look(IMP2p)
   de [Parkes, unpublished text (Birir)]
   give(IMP2s)
   'Then Mahadeo said, "Now look!"' (gloss mine)
```

Note that in the examples in (42) we have <u>par'a de</u> not

*<u>par'a det</u>, and <u>jaga'-a de</u> not *<u>jaga'-a det</u>. An attempt to

construct an indicative past-tense sentence was rejected

(cf. 43-a).

```
43-a) *gon'a bat    chom'-una  thai-prau  [E:*sj, *mb, *bk]
       big    stone ground-LOC put -give(PST-A)-3s
       'He put the big stone on the ground.'
```

This sentence was spontaneously repaired by my informant,

who suggested (43-b), with the addition of -<u>o</u>, in its

place.

```
b) gon'a bat    chom'-una  tha'i-o    prau  [S:mb]
   big    stone ground-LOC put(CP)-o give(PST-A)-3s
   'He put the big stone on the ground and gave it
```

(to me).'

Again, however, the insertion of any phonological material
between the main verb and the vector destroys the compound
verb, forcing the two-action reading. It is possible that
further investigation will uncover contexts in which 'give'
compounds may be acceptable in indicative tenses.[17] It is
also possible, however, that they are, in fact, only used
in the imperative and that these 'give' compounds are
either the vestiges of an old system involving the verb
'give' or the beginnings of a new one. With regard to the
former possibility, one cannot help wondering whether there
might be any connection with the present/future-specific
marker -dai, which also looks as though it may have its
origin in the verb 'give'. On the other hand, the -de
compounds may be an independent (new?) feature of the
language, with -de functioning as a sort of non-honorific
addressive particle, corresponding in its use with impera-
tives to the politeness-affection marking particle -lya.

All except one of my attestations of thek-compounds
are in the PST-A tense. The one non-past example (an
elicited sentence) is shown in (44).

---

[17]I have the following textual example:
a) tara' hali'   ek gon'a drℰaw jao'-una   kiS'i
   there bring(CP) one big   bushes thicket-LOC plow(CP)
   di'ta to   10 [T6:b]
   ?   that(ACC) salt
   'He took (a bull) there and sowed that salt in a big
   thicket of bushes.'

In this sentence di'ta could be the PST-I-3s of dek 'give'
or of dyek 'put, place', which fall together in the past
tenses.

44) mo cuT'i   tu su'da śurua'i-the-s [E:bk, mb]
    not touch(IMP2s) you child fall-Cs-put(P/F-NS)-2s
    'Don't touch (her); you will drop the baby.'

Given the semantic contribution of <u>thek</u> (to be elaborated

in the next section), I would predict that most occurrences

of these compounds will be in the PST-A tense.

Compounds with <u>parik'</u> 'go' show several identifiable

patterns in their distribution. Since in my corpus this is

the most frequently occurring of the three vectors, it is

possible to essay some tentative quantitative statements

about their distribution. Considering spontaneous (as

opposed to elicited) utterances only , I find the following

distribution:

<u>Tense-aspect form</u>	<u>Number of Occurrences</u>
P/F-NS	2
P/F-S	2
PRES PERF	1
PST-A	9
PST-I	3
PST IMPFV-A .	0
PST IMPFV-I	0
PST PERF-A	0
PST PERF-I	2

When sentences designed to determine whether the non-

occurrence of the PST IMPFV-A, PST IMPFV-I, and PST PERF-A

forms was simply a result of depending on a relatively

small corpus were tested, informants mostly rejected the

PST IMPFV-A (as in 45), and the PST IMPFV-I (as in 46).[10]

45) as'a iślye'gi-pari'man ay'-is [E:*mb, *bk, sj]
    -he   slip   -go(PST IMPFV-A)-3s
    'He was slipping.'

_____

[10]Peter Hook and Colin Masica independently comment
that 'go' compound verbs tend not to occur with the
progressive in Hindi and Urdu.

46) se iślye'gi-pari'man as'ta [E:*mb, *bk, sj]
    he slip   -go(PST IMPFV-I)-3s
    'He was slipping.'

but mostly accepted the PST PERF-A, as in (47).

47-a) au'   du'i-pai aś-is' [E:bk, mb, sj]
      bread burn-go(PST PERF-A)-3s
      'The bread had burned.'

   b) as'a iślye'gi-pai ay'-is [E: sj, mb, *bk]
      he   slip   -go(PST PERF-A)
      'He had slipped.'

From these results I conclude that (a) compound verbs in

parik' 'go' tend to occur in the PST-A tense most

frequently, and (b) probably do not occur in the PST IMPFV

tenses. Possible reasons for this distribution will be

discussed in the next section.

     Compounds with parik' 'go' were not accepted with

haw'-au the subjunctive marker. (48) and (49) show these

examples.

48) ki'ya jhon-'ek.   se kai [*iślye'gi parau'/
    what know(P/F-NS)-1p he where slip-go(PST-A)-3s
    iślye'g-is] haw'-au [E:mb, bk]
    slip(PST-A)-3s become(PST-A)3s
    'Who knows where he slipped.'

49) tai au' [*du'i-par-au'   /adu'-au]   pe
    your bread burn-go(PST-A)-3s/burn(PST-A)-3s if
    haw'-au   a tai   de-m [E:mb]
    become(PST-A)-3s I you(OBL) give(P/F-NS)-1s
    'If your bread burns, I will give you (some).'

The compound verbs, marked with *, were rejected, and the

alternative simple verbs were spontaneously profferred to

mend the sentences.

     Based on the non-random distribution of co-occurrence

with negation, hula, and various tense-aspect-mood forms

observed for compounds with all three vectors, I think it

is safe to conclude that the compound verbs in Kalasha,
though involving a small set of vectors,[19] do behave
systematically.

4.2.5.   Semantic functions

The function of <u>dek</u> 'give' is not at all obvious. As
noted above it does not have the literal sense of 'give',
and it occurs with both transitives and intransitives.
Since all of its appearances are with imperatives, we can
conclude that it conveys an emphatic meaning, reinforcing
the strength of the imperative. All of the contexts in
which these compound verbs occur seem to involve either
physical or figurative (mental) motion directed away from
the agent of the verb or from his current location. This
is easy to see in compounds with physical action verbs ,
e.g. 'give-give', 'throw-give', or 'come-give' as in (50),
(51), and (52),

50) uk   de'-de   su'da mai [S:bkw, E:mb]
    water give-give(IMP2s) child I(OBL)
    'Give me some water, child.'

51) as'a nazi' hist'i-de   a'la [E:bk, sj, mb]
    that dirty throw -give(IMP2s) that(ACC)
    'That is dirty; throw it (away).'

less so in a sentence like (53).

52) i'-de   aya' i'ta   a'la   sawze'i
    come-give(IMP2s) here come(CP) that(ACC) make(IMP2s)
    'Come! Come here and fix it.' [T15:mb]

53) jia'i-de   rus'i   jahas' iu'-dai [E:bk, sj, mb]
    look -give(IMP2s) russian plane   come(P/F-S)-3s
    'Look - a Russian plane is coming!'

Examination of examples (51) and (53) also shows that allo-

_____

    [19]as far as I have been able to determine so far

benefactive cannot be a meaning common to all compounds in
dek. At this stage the most we can say is that dek
contributes (1) emphatic force (to imperatives), and (2) is
associated with actual or metaphorical motion away from the
actor or his current position.

The functions of parik' 'go' involve three components
of meaning: negative outcome, finality, and the property
of being (potentially) anticipated. In every example of
'go' compounds in my corpus except one, the outcome or
event reported is a negatively valued one.[20] The fact that
with animate agents/experiencers the actions are all non-
volitional is probably causally related to this rather than
an independent parameter. Compounds with parik' 'go' occur
with concepts of burning (person, bread), slipping, drying
up (of crops), breaking into pieces, getting crushed,
boiling over, spilling, rolling away, falling down (wall),
tearing (cloth), being extinguished, getting exhausted,
falling out (hair), getting cold (tea). (54) and (55) are
typical exemplars.

54) au'   du'i-ga'la   atra' ko ne paś'-is
    bread burn-go(PST-I)-3s there why not see(P/S-NS)2s
    'The bread burned over there; why don't you watch
    (it)?' [S:bkw, E:sj, mb]

---

[20]With reference to negative outcomes and the vector
'go', Colin Masica notes the English . . . went and V-ed
construction. Myhill (1985) finds a positive correlation
between "unpleasantness" and the use of gonna as opposed to
will to express the future in English. Fedson (1981)
contains an interesting discussion of the use of 'go'
compound verbs in Tamil as warnings and with certain
classes of verbs in a negative valued meaning. She also
discusses a cross-linguistic tendency to associate 'go'
with negative valuation.

55) paTïgely'-a uk   dyek ne haw'-au   Su'Si-
    tomatoes-LOC water put not become(PST-A)-3s dry
    parin'-dai [S:bkw, E:sj, mb]
    go(P/F-S)-3p
    'The tomatoes didn't get watered; they are drying up.'

The second semantic component of these verbs is a

sense of finality or completeness of the action. (56) and

(57) illustrate this.

56) as'a cew   palyï'cak śia'la   udulyi'-par-au'
    her dress thin   be(PST-I) rip   -go(PST-A)-3s
    'Her dress was thin; it ripped.' [S:bk, E:mb]

57) uTi'ki tyai   uTi'ki tyai[21] sas lu'i thi
     jump   beat(CP) jump   beat(CP) become exhausted-
     ga'la [T16:1g][22]
     (PST-I)-3s
     'Jumping and jumping he got exhausted.'

Modification of compound verb sentences with adverbs

denoting intensity of the action was not accepted by my

informants. The (a) versions of (58) were rejected and the

(b) versions offered to correctly express the thought.

58-a) *au'   kha'ca thi du'i-par-au' [E:mb, bk]
       bread badly   burn-go(PST-A)-3s
       'The bread burned badly.

b)   au'   kha'ca thi adu'-au [E:mb, bk]

---

[21]The form uTi'ki tyai (lit. 'jump-beat') looks like
another candidate for investigation for possible compound
verb status. I have no other examples of this type with
'beat', however, and this could be a conjunct verb
formation analagous to the Punjabi chaal maarNaa (lit.
'jump-beat') 'to jump'.

[22]The phrase sas lu'i hik means idiomatically
something like 'get exhausted, give up'. According to my
informant, it is characteristic of Rumbur rather than of
Bumburet speech. I do not yet understand the exact meaning
of each component of the idiom. Peter Hook tentatively
suggests that the metaphor originates in the practice of
holding a finger (or a mirror) to the nose of a person who
is dead or appears to be dead to "see his breath" (< sas
'breath?' and lui 'look?').

bread badly   burn(PST-A)-3s
'The bread burned badly.'

59-a)   *au' diś   du'i-par-au'   [E:mb, bk]
        bread completely burn-go(PST-A)-3s
        'The bread burned completely up.'

b)   au' diś   adu'-au [E:mb, bk]
        bread completely burn(PST-A)-3s
        'The bread burned completely up.'

It seems to me that the reason for this may be that the sense of completeness or finality is already carried by the compound verb, making this particular type of adverbial modification redundant or perhaps anticlimactic.

The third component of meaning common to all of these usages is that they all are uttered from the point of view of a **prepared mind**. I use this term with specific intent to contrast it with the term **"unprepared mind"** introduced by Slobin and Aksu (1982) in their discussion of the Turkish evidential particle miş. Just as a mind unprepared with reference to a particular event has no "premonitory consciousness" of that event, and the event is not "consonant with the current state of mind of the speaker",[23] so the prepared mind is one into which the (possibility of) the event (to be) reported is already integrated, either by virtue of being anticipated, feared, desired, ordered. . ., or by virtue of its being a natural, forseeable consequence of a circumstance or action already realized.

Now let us re-examine sentences (54) − (57) in the light of this concept. In (54) the implication is that if

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[23]Slobin and Aksu's phrases.

one doesn't keep an eye on the bread while it is cooking,
it is going to burn. Similarly in (55) if tomato plants
are not watered, one can predict that they will dry up.
Or, as in (56), if someone's dress is worn thin, its
tearing is a natural consequence of this, and in (57), as a
result of jumping and jumping (trying to catch a sunbeam),
the subject of this sentence becomes exhausted. Informant
comments about the use of sentences like tu du'i paris'
'you will get burned' or (58) are that they are uttered as
warnings.

58) aya' iślye'gi-par-is' [S, E:sj, mb]
     here slip   -go(P/F-NS)-2s
     'You will slip here!'

Λ warning is an admonition to avoid an anticipated negative
event--precisely the semantics of the prepared mind that we
are discussing.

     Recall also that compounds with parik' 'go' do not
combine with hu'la. The reason for this, I believe, is
that the meanings of these two elements are incompatible,
hu'la signalling the unprepared mind and parik' the
prepared mind. Compounds in parik' also do not combine
with the subjunctivizing element haw'-au (cf. 48 and 49
above). This fact is also consistent with parik' 'go' as
indicating a prepared mind, and with the sense of finality
conveyed by parik'. If an event is already anticipated,
already present in clear contour in the mind, then the
tentativeness, the uncertainty, the hypotheticality carried
by haw'-au the Kalasha subjunctive is incompatible with

that mind-set.

Now let us turn to the semantic function of compounds in _thek_ 'put, keep'. These compounds do not occur frequently, and the following analysis is based on discussion with my informant about the various meanings of elicited examples. There appear to be two senses that can develop from compounds in 'put'. The first is of emphasis on the activity and completeness of an action, as in (59).

59) a kagas' niveś'i-athe-s' [E:mb]
    I letter write -put(PST-A)-1s
    a) 'I wrote the letter and put it down.'
    b) 'I have (really, completely) written the letter.'

Sentence (59) can have two readings: (a) the two-action reading, in which _niveś'i athes'_ is a two-verb sequence rather than a compound verb, and (b) a reading in which _thek_ does not carry its literal meaning, but contributes a sense of definiteness or completeness to the action.

The second sense of the compound verb is more abstract. Consider the compound verb sentence in (60-a), for which the simple-verb version is (60-b).

60-a) a palow' brɪk'i-athe-s' [E:mb]
      I apples sell -put(PST-A)-1s
      'I sold the apples (mistakenly).'

  b) a palow' abrɪk'-is [E:mb]
      I apples sell(PST-A)-1s
      'I sold the apples.'

Given the nature of the act of selling, that is of effecting a (permanent) separation between the agent and the object of selling, _thek_ in such contexts could not possibly have its literal meaning of 'put, keep'. What it does express is a sense of regret, which is based on

information acquired or a situation which developed **after**
the act of selling. For example, this sentence (60-a)
might be uttered if the speaker later developed a desire to
eat apples and then recalled that he had sold them. He
realizes after the fact that he made a mistake in selling
the apples. Or, if some time later guests arrived to whom
the speaker needed/wanted to serve apples[24] and he
remembered that he had sold them all, he might say (60-a),
with the sense, born of **hindsight**, that he had made a
mistake in selling them.

61-a) a dalaba'sa hist'i-athe-s'   [E:mb]
        I sweepings throw-put(PST-A)-1s
        'I threw away the sweepings (mistakenly).'

   b) a dalaba'sa ahist'-is [E:mb]
        I sweepings throw(PST-A)-1s
        'I threw away the sweepings.'

Similarly with (61-a) and its semantically neutral simple-
verb counterpart (61-b), the speaker could say the compound
verb version if he had thrown away the sweepings and later
realized that there was something he needed in them. This
development of the sense of a mistake based on knowledge
acquired later explains the preponderance of past-tense
forms with these compounds. Sentence (62), literally 'I
let the ball roll away',

62) a plots DuDura'i-athe-s'
      I ball roll-CS -put(PST-A)-1s
      'I let the ball roll away.'

reports a situation in which the speaker has hit the ball

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[24]During the season of fresh fruits, these offerings
of seasonal fruit to guests are almost obligatory forms of
hospitality.

but it didn't go where he wanted it to. Again, the sense

is of an action gone wrong, of an action having an

unforseen negative development. Example (63)

63-a) a tai   paś'i-athe-s'   [E:mb]
       I you(OBL) see   -put(PST-A)-1s
       'I saw you.'

   b) *a to   moc paś'i-athe-s'   [E:mb]
       I that(ACC) man see   -put(PST-A)-1s
       'I saw that man.'

is interesting in that it too points up the sense of action

gone wrong. This sentence can be used, according to my

informant, only in very specific contexts. First, it could

only be said by a speaker addressing the person seen; i.e.

only by a first person speaker about a second person

object. Thus (63-b) is not acceptable. Second, it

indicates that the speaker saw the hearer committing some

sort of morally or legally reprehensible act. The sense is

that the speaker saw the hearer inadvertently and wishes

that he hadn't.

Recall that with bodily affliction and weather verbs,

as in (31-35) above, the sense contributed by thek was one

of the speaker's dismay. Since the agent in those

sentences is not the speaker, the regret is not for

unanticipated negative developments after his own act, but

for unforseen negative developments in the world as it

impinges on him.

The semantic contribution of parik' was to indicate a

negative consequence impinging on a mind prepared by

foresight, while thek indicates a consequence perceived as

negative by hindsight.

'go' <u>parik</u>' [prepared mind] [negative consequence]

'put' <u>thek</u> [unprepared mind] [negative consequence]

Thus in Kalasha the formal mechanism of the compound verb

has come to participate in that parameter—actual vs.

inferential/prepared vs. unprepared mind—which is so

salient in the semantic structure of this language. In

spite of the fact that this opposition is already highly

developed in the basic verb morphology, it finds yet

another reflection in the compound verb system.

4.3. Compound verbs in Khowar

A brief examination of compound verb constructions in

Khowar will not only provide some of the wider areal

context for the discussion of Kalasha, but also affords

some fascinating clues to specific puzzles about the

Kalasha system.

In Khowar, compound verb constructions exist with the

vectors 'go', 'leave, let go', and 'sit'.[29] Sentences (64

- 66) exemplify compounds in 'go', 'leave, let go', and

'sit' respectively.

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[29]They appear not to be formed with 'put', 'give', 'rise', 'fall', 'throw', 'take', and 'see'. This tentative conclusion is based on rejection by my informants of some test sentences incorporating such constructions, as well as on wider discussion of the grammatical point involved. It was my-informants' considered opinion that compound verb constructions with these vectors did not exist. The possibility that other verbs which neither of us thought about function as vectors remains open.

The fact that there are no 'give' compounds in Khowar makes the exact status of the 'give' compounds in Kalasha even more interesting and puzzling.

64-a) tu   pulis'   [if]
      you burn(P/F-NS)-2s
      'You will get burned.'

   b) tu   puli'-bis [if]
      you burn-go(P/F-NS)-2s
      'You will get burned.'

65-a) paloG'-an   bezemi't-am   [rkb]
      apples-OBL sell(PST-A)-1s
      'I sold the apples.'

   b) thuu paloG'-an   bezemi'-lak'it-am   [rkb]
      alas apples-OBL sell -release(PST-A)-1s
      'Alas, I sold the apples (by mistake).'

66) hase'   bok-o   la'khi-niś-a'i   [rkb]
    he(NOM) wife-OBL leave -sit down(PST-A)-3s
    'He divorced his wife (the action has been completed).'

In (64) and (65) the (a) sentences show the simple version

and the (b) sentences the compound verbs.

As has been demonstrated for Kalasha, the vectors

which function in Khowar are grammaticized, having lost

their original lexical meanings. Thus in (64) above, the

meaning is the unitary conception 'You will get burned',

not 'You will get burned and go'. In (65) the meaning

contributed by the vector lak'ik' 'leave, let go' is of

regret, and in (61) the vector niśik' 'sit down'

contributes a sense of finality and completion. They

appear to be general, occurring with large classes of main

verbs. The rest of this discussion will consider them as

genuine compound verbs.

Particularly interesting in the context of this study

are the compounds in lak'ik 'let go, leave'. From examples

like (65) above, (67) and others of this type, it appears

that in Khowar lak'ik 'let go, release' has the same

semantics as the Kalasha compounds in <u>thek</u> 'put'.

67) thuu Daq'-o   tei   veśe'i-lak'it-am [rkb]
    alas child-OBL there send -release(PST-A)-1s
    'Alas, I sent the child over there (and realized
    later that I shouldn't have).'

That is, they indicate both a negative consequence and an

unprepared mind with respect to that consequence. As in

Kalasha, then, these Khowar compounds participate in the

system of inferentiality-evidentiality which in Khowar also

is a centrally important semantic parameter.[24]

4.4. Another look at Hindi compound verbs

As this study of Kalasha and Khowar compound verbs and

their semantic functions shows, the formal mechanism of the

compound verb can be attracted to the semantic oppositions

involved in the evidentiality system of a language. If we

re-examine the results obtained thus far in the study of

the Hindi compound verb (mainly Hook, 1974), I think a

strong case can be made that in that language also, the

compound verb mechanism is in some cases the vehicle of

semantic distinctions pertinent to the evidentiality

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[24]Why is it that the Khowar compounds in 'allow, let
go' <u>lak'ik</u> have the same semantics as Kalasha compounds
with 'put'? Given the fact that the two languages have
been in recent close contact for centuries and that Kalasha
speakers are all bilinguals, one might expect that the same
vector should be employed in both languages.for this
particular meaning—that of negative consequence for the
unprepared mind. The fact that the Khowar verbs <u>lakhik'</u>
'put' and <u>lak'ik</u> 'release, let go', are phonologically so
close suggests that at some time in the past a confusion
between these two may have taken place in the process of
forming calques on the Khowar compounds. If a Khowar
compound in <u>lak'ik</u> 'release, let go' were misheard as one
with <u>lakhik'</u> 'put' it might account for the Kalasha
formations with 'put'.

system. When evidentiality and inferentiality systems are
recognized to involve more than just direct experience vs.
hearsay experience distinctions, that is, to have multiple
ramifications including the "prepared mind" vs. "unprepared
mind" distinction, then it can be seen that the compound
verb systems in Hindi and Urdu[27] participate in the
semantics of evidentiality as well as that of aspect.

Hook (1974) contains numerous remarks and examples
which adumbrate this conclusion. I now review a few of
these. First let us consider some of the less common
vectors. The verb nikal- (< 'come out') with its vector
meaning of 'turn out to be' (ibid.:131-33) carries the
meanings associated with the development of the inferential
pole of this semantic dimension, the semantics of the
"unprepared mind". The classes of meanings identified by
Hook all point to this conclusion: the vector nikal-
occurs with verbs of speaking involving unpredictable or
involuntary utterances, with verbs denoting "sudden and
startling appearance of sound or light", with verbs denot-
ing outbursts of feeling, and carrying the meaning "with
great ease" (i.e. lack of planning or foresight). One
particularly revealing example is reproduced here as (68).

68) mäÏ śaraab ke naśe mé unhé na jaane kyaa kyaa kah
    niklaa [Hook, 1974:132]
    'God knows what I said to them while I was drunk.'

This example shows precisely the same semantics—
unconscious action, lack of control, non volitionality—

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[27]and most probably Panjabi also.

which has been shown to develop with inferential forms and
first person experiencers for Lhasa Tibetan (DeLancey,
1985-a) and for Kalasha (Chapter 2 above).

In contrast to nikal- (<'come out') is the meaning
carried by nikaal- (< 'to cause to come out')--that of
"successfully overcoming some difficulty, resistance or
unlikelihood" as in (69).

69)   unhğ ne madad de kar apne riśtedaarğ ko is zindagi
      se ubhaar nikaalaa [Hook 1974:143]
      'By giving his relatives help he raised them up from
      this kind of life.'

where the appearance of the transitive form changes the
semantics to that of the prepared mind.

The vector baiThnaa 'sit' carries a meaning of
surprise and dismay felt after the fact, very much like
that conveyed by Kalasha thek 'put' and Khowar lak'ik
'leave, let go'. Consider example (70).[28]

70)   mşğ kyaa kar . baiThaa
      I   what do(CP) sit down(PST 3sm)
      'What have I done!?'

An interesting usage of the vector rakh- 'put, keep'
with intransitives, which Hook (1974:138-9) finds
characteristic of the speech of Dehra Dun in the northwest
sector of the Hindi area, is reminiscent of the semantics
([+negative] [+unprepared mind]) of the 'put' vector in
Kalasha and Khowar. Of Hook's eight examples, all eight
report negatively valued events, and five of them (a, b, d,

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[28]I am grateful to Peter Hook for this example.
baiThnaa 'sit down', having been dealt with at some length
in Hacker (1958), is not treated in Hook (1974).

e, f) seem arguably to report events that were
unanticipated by the speaker.   I reproduce Hook's example
(a) here as (71).

71) gaaRii mẽ gaRbaR   ho   -rakhii hai
    car   in trouble(fs) become-put-P PERF(fs)
    'Something's gone wrong with the car.'

   The three most common vectors are _jaanaa_ 'go', _lenaa_
'take', and _denaa_ 'give'. Usually compound verbs with
these vectors do not occur in the negative. But there is a
small class of exceptions, for example future imperatives,
expressions of fear, _jab tak_ 'until'. Example (72)
illustrates one class of these examples.

72) mera dil   kããp rahaa thaa   ki   kahĩĩ swaamii
    my   heart tremble(PST PROG) COMP lest S.
    sacmuc aatmaghaat na   kar lẽ [Hook 1974:212, ex. b]
    really suicide   NEG do-take(SUBJ)
    'I was worried to death that Swami might really commit
     suicide.'

In his discussion of these (exceptional) contexts in which
compound verbs with these vectors do co-occur with negative
elements, Hook finds that "the corresponding sentence
without negation does not express the positive occurrence
of an actual event but rather the eventual, contingent or
conjectured occurrence of some imagined (emphasis mine)
event (_ibid_.:209)". The key words are imagined and
conjectured; these contexts all involve situations in which
the speaker has already integrated the (possibility of the)
event into his conceptual structure. They all involve, in
other words, the prepared mind, which is associated with
the evidential pole of this semantic dimension. In these
constructions, contexts demanding the prepared mind

override the tendency of compounds not to occur with
negation.

Another bit of evidence to review here is the contrast
between environments requiring non-compound verbs--in
statements reporting inventions, creations and discoveries
(ibid.:240), generic and stative expressions (p. 243)--and
those requiring the compound verb. For example, in (73)
the compound verb does not work.

73) kalambas ne amrikaa ki khoj ki/
    Columbus-ERG A.   of discovery(fs) do(PST)-fs
    *kar dii/*kar lii [Hook 1974:240]
     do-give(PST)/*do-take(PST)
    'Columbus discovered America.'

Hook states explicitly that "in cases where the performance
of an action is completely unforseen by the speaker he may
not use the compound verb", (ibid.:248), whereas the
compound verb presupposes that the action is already pre-
existing in some sense in the mind of the speaker. Yet,
while pointing out that

> "Of all these conditions, the most intriguing . . .
> the one by virtue of which the aspectual system of
> Hindi may very well depart from that of Slavic is
> that considered under the rubric "lack of prior
> knowledge". It is this condition (for simple
> manifestations of the verb) that suggests that
> the use of the compound verb depends on more than
> how the contour of the action is perceived by the
> speaker. It suggests he must also have presup-
> posed or pre-entertained the existence of the
> entities his utterance describes." (316)

Hook concludes that the aspectual function of the compound
verb is primary:

> "the relation of compound verb to simple verb is a
> privative, aspectual one, with the compound verb
> expressing completion of action. . . . The other
> functions or meanings of the compound verb may be

seen as deriving from (or at least not contradicting)
this aspectual function" (314)

What I should like to add to this dialogue on the
compound verb, based on the insights gained from Kalasha
and Khowar, is to take the argument one step further and
say that the prepared mind vs. lack of prior knowledge
semantics which clearly interacts at certain points with
the Hindi compound verb system is not derived from an
aspectual function, but is the manifestation of the
independent semantic parameter of evidentiality-
inferentiality in this language. This parameter is
locatable on an analytic axis which deals with
epistemology--the nature of the relation of the speaker's
knowledge/belief state to the actions or entities reported.
The category of aspect on the other hand deals with how the
speaker elects to perceive the temporal structure of an
event, and does not relate to questions of how the action
is integrated (or not) into the speaker's knowledge and
beliefs.

This provides an explanation, I believe, for that
"certain residual preference for the compound which
encompasses almost all verbal expression in Hindi," noted
by Hook (ibid.:313). Discussing the three most frequently
encountered vectors in Hindi, he continues:

> "If the marked influence of no simple environment
> is present, if the sentence is fairly simple
> (agent-(object)-verb). . . and, most important
> if there is no special stress or emphasis on
> any particular element in the sentence, then
> for almost all speakers almost all sentences
> sound noticeably better under compound

manifestation (p. 313)".

We have seen that the three most frequently
encountered vectors in Hindi 'go', 'give', and 'take' are
often associated with the evidential end of the evidential
<---> inferential dimension, the pole associated with the
semantics of the prepared mind.[29] Recalling also the

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[29]There appears to be some other cross-linguistic
evidence of a tendency to associate 'go' to varying degrees
with aspects of the semantics of the evidential pole (cf.
direct knowledge, prepared mind). For example, in Tibetan
(DeLancey 1985-a, b, 1986) the particle soṇ (< perfective
of 'go') is associated in the perfect with non first-person
actors with evidential as opposed to inferential semantics.
Consider examples (a) and (b) from Delancey.
a) k'yeran ril soṇ [DeLancey 1985-b:60]
   you   fall PERF/EVIDENTIAL
   'You fell down (I saw it).'
b) k'yeran ril bśag
   you   fall PERF/INFERENTIAL
   'You fell down (I infer it).'
   In a contrast involving a first-person actor, shown in
(c) and (d), from DeLancey 1985-b:64, we find soṇ occurring
with the particle ṇa which carries a sense something like
'just as I thought would happen'.
c) ṇa ril-soṇ-ṇa ·
   I fall-PERF
   'I did fall (just as I expected).'
c) ṇa ril byuṇ
   I fall-PERF
   'I fell down.'
DeLancey notes that "this correlates well with the
evidentiary use of soṇ . . . we find soṇ used when the
speaker is aware of the entire Cause-Effect chain from
start to finish, i.e. from Source to Goal." He explains
this by arguing that soṇ in all of its uses identifies an
actor as Source, and that "both Cause and its subcategory
Agent are identifiable as subcategories of Source." (1985-
b:63)
   Myhill (1985) discussing the distribution of gonna and
will as markers of future time reference in English, shows
that the appearance of gonna is responsive to the variables
(a) source of information reflected in the utterance:
specific source vs. no particular source, and (b) agreement
vs. (unilateral) decision. (1985:5). His figures shows
that when a specific source of information is cited, gonna
rather than will appears, and that when a prospective event
is presented as the result of unilateral decision rather

residual preference for compound-verb expression over

simple, we can postulate a markedness relationship:

insofar as they participate in the evidentiality parameter

of the language, these compound verbs are semantically

unmarked with respect to the simple verb; and the reason

for this is that the evidential pole is semantically

unmarked with respect to the inferential. The semantics of

the prepared mind is unmarked with respect to that of the

unprepared mind.[30]

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than of agreement, gonna appears. Both of Myhill's
variables can be seen to be related to the speaker/agent as
knowledgeable source/agent-initiator of the prospective
action.

    [30]Peter Hook is not in concurrence with certain
aspects of this analysis, arguing (i) that the "no prior
knowledge" condition, which disallows the compound verb, is
of a different order than the semantics of the unprepared
mind, and (ii) that sometimes compound verbs with jaanaa
'go' express the semantics of the unprepared mind. He
cites examples such as (a) and (b) in support of this
argument.
a) suniitaa ke pãão anaayaas darvaaje kii aur baRh gaye
    S.   of feet suddenly door   toward moved forward
    'Sunita's feet suddenly moved toward the door.'
    [from Subha, dopahr, aur śaam by Bindu Sinha]

b) par tabhii merii ããkhõ ke saamne   apne   ghar kaa
    but then   my   eyes in front of self's home of
    naxśaa   ghum gayaa
    picture rose up [from Aakhirii caTTaan tak by Mohan.
                 Rakesh]
With regard to these examples, however, they are in my view
not counterexamples at all. In (a), for example, the
previous context of the story has been leading up to the
very act of going out the door. It is thus reporting an
event which has been (carefully) foreshadowed for the
character and for which the hearer/reader has been mentally
prepared. Similarly, with (b), in the context where the
character is visiting what he suspects to be a house of
prostitution, and hears a second person speak to a woman
holding a child in his own language, it is hardly
unexpected for a vision of his own home (and wife) to rise
up before his eyes.

It also suggests a reason why the manifestation of the evidentiality-inferentiality parameter in Hindi has been relatively little studied. Since it is not manifested in basic (simple) verb morphology (cf. Ch. 2), and since the compound verb, a morphologically more salient (and complex) feature of the language than the simple verb, corresponds in the majority of cases to the semantic pole unmarked with reference to the evidentiality-inferentiality parameter, there exists a "mismatch" between morphological and semantic markedness.[31]

4.5. The Tamil compound verb and inferentiality

Tamil has a highly ramified system of compound verbs, which convey a great variety of specific meanings including denoting resulting states, perfect, aspectual meanings, "status", voice, and manner of action (Fedson 1981:iv-v). In her discussion of the semantics of Tamil compound

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With regard to the first point, I also point out that the "no prior knowledge" condition, if not identical to the semantics of the unprepared mind, is certainly a subset of that domain and therefore legitimately related to it. In general, I also point out first that my claim is not that association with the evidentiality-inferentiality parameter is not the only function of compound verbs, but another one of "the semantic distinctions that are projected onto the simple:compound opposition" (Hook 1974:198). Second, if with reference to the evidentiality-inferentiality parameter the evidential is the unmarked pole, one would expect that forms unmarked with respect to this parameter could sometimes occur in contexts having the semantics of the opposite pole.

[31]This situation is theoretically interesting in that it runs counter to the usual relationship observed between morphological and semantic markedness—that the semantically marked category contains more morphological material than the unmarked.

(serial) verb constructions, Fedson identifies several

points at which the semantic parameter of evidentiality-

inferentiality or prepared/unprepared mind interacts with

the formal mechanism of the compound verb. I discuss three

of these: constructions with (a) _iru_ 'be'; (b) _aaku_

'become'; and (c) _vai_ 'put'.

There exists a specifically inferential construction

consisting of main verb CP plus _iru_ 'be', about which

Fedson says:

> "The inferential construction indicates that the
> speaker infers from direct evidence or from other
> sources, that a certain situation held prior to
> the time of reference. . . . _iru_ in the inferential
> does commit the speaker to the validity of what he
> is saying, but at the same time disavows first-hand
> knowledge . . ." (1981:48)

According to Fedson this is a common usage in all registers

of Tamil. I reproduce one of her examples here as (74).[32]

74) piLLai-kku paZam puLitt-   iru-kkiR-atu at-an-aal
    child-DAT   fruit be sour(CP) be-P-3sn   that-INST

    taan at-ai caapiTa-v-illai/caapiT-aamal
    EMPH it-ACC eat(INF)-NEG   eat-(NEG CP)

    irunt-iru-kkir-atu (=Fedson's #83, p. 49)
    be(CP)be-P-   3sn
    'The fruit has evidently been too sour for the child,
    that's why he didn't eat/has evidently not eaten it.'

This construction is distinct from a specifically reportive

(cf. "hearsay") morpheme -_aam_ (= neuter future < _aa/aaku_

'become'), which indicates that an utterance is reported as

second-hand information, and which does not commit the

speaker to the truth of the statement.

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[32]Transcription is as in Fedson (1981) in all the
Tamil examples.

A compound verb construction consisting of main verb
CP plus finite form of <u>aaku</u> 'become' is, according to
Fedson, subject to two constraints. (1) The
occurrence/situation reported must be "not new"; that is
"when reporting the occurrence of a situation <u>aaku</u> conveys
the nuance either that (a) something occurred as one might
expect, given the circumstances, or that (b) something
occurred which one hoped would occur." (2) It must be "not
undesirable" to the speaker.

I quote Fedson's discussion of the "not new
constraint" at some length here because of its remarkable
similarity to the descriptions of the "not-unprepared mind"
for Turkish and to Hook's characterization of the "no prior
knowledge" environment which requires the non-compound verb
in Hindi.[33]

> ". . . a totally new discovery, the possibility
> of which was not ever suspected (e.g. the discovery
> of a new moon of Jupiter's), cannot be reported
> using <u>aaku</u>. If the milkman who normally comes
> at four o'clock, shows up at eight in the morning
> (unexpectedly), one can report his coming only with
> <u>iru</u> not with <u>aaku</u> or <u>viTu</u>. If, however, a genetic
> mechanism which triggers the growth of neoplastic
> as opposed to normal, cell growth were to be dis-
> covered, even if such a discovery were not <u>speci-</u>
> <u>fically expected</u> it is something which one <u>might</u>
> <u>expect</u> and as such, can be reported using <u>aaku</u>.
> If a missing person (whom one knew was missing)
> were found, as an event which one <u>hoped</u> might
> occur, rather than <u>expected</u> to occur, it can be
> reported with <u>aaku</u>. In such uses, <u>aaku</u> conveys
> the nuance that something has happened 'at last'.
> Routine situations can be reported using the
> construction, on the one hand, and on the other,
> momentous situations, which were not specifically

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[33]The "Columbus discovered America" situation. See
Ex. (73) above; also Hook (1974:242).

expected, but which are not totally new or unex-
pected, given the general knowledge of the speaker."
(pp. 63-4)

The compound verb sequence main verb CP and the vector

vai 'put' has a very interesting semantic development in

Tamil. According to Fedson, its most general

characterization is that "the action is viewed not in

itself but in its result-producing capacity." (p. 263)

Whether the construction conveys intentional or

unintentional production of these results depends,

according to Fedson, on whether the sentence reports the

actor's performance of an action with an eye to its result,

or the speaker's view of an action as having led to a given

(unintended) result. If a sentence concerns the actor

performing the action denoted by the CP for the sake of its

long-term results, the action is intentional (cf. "prepared

mind"), as in example (75) (= Fedson's #51).

75) avan enta kaTai-y-il caikkiL-ai koTu-tt-aan   enRu
    he   which shop-LOC   cycle-ACC give-PST-3sm QUOT(CP)

    kavanittu   vaittu   koN-T-aan   (p. 263)
    observe(CP) place(CP) hold-PST-3sm
    '. . . he observed (Res) (Act) which shop he gave
    the bicycle to (left it at). [A.1969:69][34]

In this sentence the action is undertaken with the

intention of identifying the shop in the future. If, on

the other hand, a speaker is viewing an action as having

(unexpectedly) produced certain results, the use of vai

'put' conveys that the result was unintentional (cf.

_____

[34](Res) and (Act) refer to Fedson's categories (result
orientation) and (actor orientation).

"unprepared mind"). An example of this development is

given here as (76).

76) niinkaL pala-peer mun-nilay-il   kuRRa-vaaLi-aay
    you-HON many-3pe front-state-LOC accused   -ADV

    kaTT-unTu   niR-kum   nilai-y-ai eeRpaTutti
    be bound(CP) stand-nfut state-ACC create(CP)

    vai-tt-een-ee (=# Fedson's 524, p. 266)
    place-PST-1s-EMPHR   [K.M.S. 1965:67]
    '(lit.) Alas, I created (Res) the state of your
    standing bound in front of many people as the
    accused.'

The context for this example is that the speaker, viewing

her action in hindsight feels that she has unintentionally

been the cause of the king's disgrace, since he has been

arrested at the instigation of a jealous rival for her

attentions.[38]

    Note that Fedson's distinction between sentences

reporting on an agent performing an action in order to

cause a result and those reporting a speaker viewing the

result end of the causal chain is consistent with

DeLancey's analysis of the relation between volitionality

and inferentiality. It points also toward an explanation

for the development of unprepared mind semantics in

association with the vector 'put' which we have noted in

Kalasha, Khowar and Hindi, as well as Tamil.

4.6. Typological and areal ramifications

    The epistemological parameter of evidentiality-

inferentiality can, I shall assume, be taken as one which

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[38]Fedson also has similar examples with 2nd and 3rd
person actors, in which the speaker and actor are
necessarily not the same person.

all languages will encode with one mechanism or another——
whether lexical, morphological or syntactic. There is also
accumulating cross-linguistic evidence that the evidential
pole and the semantics of the prepared mind are causally
linked and will tend to share the same formal expression.
Thus if we find association of these two categories it is
probably attributable to typological tendencies (or
universals?) rather than to areal influences. What can be
investigated as possible areal phenomena are the specific
linguistic forms associated with this semantic complex.

The excursus into compound verbs in Khowar, Hindi and
Tamil points up one way in which this can be begun. The
formal mechanism of the compound verb has been shown to
exist all throughout the "Indo-Turanian" area (Masica,
1983). The question we now need to address is this: with
what specific semantics is this particular form associated—
in each language where it is found, in the South Asian
region, in various sub-regions? Just as Hook (1982) found
that the perfective semantics associated in Hindi with the
compound verb is effected by an ergative adverb pp in the
Marwari dialect Godwari, and that the compound verb in
Marathi is not associated with perfectivity and anteriority
as it is in Hindi, so this study of Kalasha and Khowar
finds that the mechanism of the compound verb is associated
with the semantics of evidentiality in Kalasha, Khowar and
also Hindi and to some extent Tamil. We can begin to
construct maps either focussing on the different semantics

associated with a given form, or taking a given semantic parameter, chart the differing formal mechanisms for its expression in the set of languages under study. The beginnings of such an endeavor might look something like this.

Form - compound verb

Language	Associated semantics
Kalasha	inferential-evidential
Khowar	inferential-(evidential(?))
Hindi/Urdu	inferential-evidential aspectuality anteriority
Marathi	(not aspectuality) anteriority (sometimes)
Tamil	perfect resultant state aspectuality voice manner of action inferentiality-evidentiality

Semantics - inferentiality/evidentiality

Language	Formal mechanism of expression
Kalasha	basic verb morphology (all tenses) compound verb system
Khowar	basic verb morphology (all tenses) compound verb system
Hindi/Urdu	compound verb system
Persian	basic verb morphology (past tenses only)
Wakhi	basic verb morphology (perfect tenses only?) (others?)
Tamil	compound verb system -aam for reporting hearsay (others ?)

CHAPTER 5

COMPLEMENTATION STRUCTURES

In this chapter I first introduce and illustrate the

several complementation structures present in Kalasha, then

comment briefly on how the distribution of Kalasha comple-

ments relates to Givon's "binding hierarchy" and typology

of complements (Givon 1980). The second section focuses on

the ghôi (<'say') and ki complementizers, discussing their

synchronic and diachronic relationships. In the third

section I discuss the extended semantic development of ghôi

in the context of SAY complementizers in South Asia and as

reflecting possibly universal tendencies; and finally

comment briefly on the increasing use of ki-clauses.

Throughout the discussion the notion of complement I work

with is a loose, semantically oriented one, rather than a

syntactically defined one. Thus some of the structures I

discuss as complements would not meet a syntactically

specified definition like that in Shopen (1985 II:42)--"the

syntactic situation that arises when a notional sentence or

predication is an argument of a predicate".

5.1. Kalasha complement structures

Complement structures vary from those which retain all

the features of independent sentences to those which lose

all sentential features and are reduced to nominalizations.

An example of a fully sentential complement is 'I think he

is a good man', while 'I disapprove of his administration

of the program' illustrates the nominalized type. In a

fully sentential complement the nominal arguments retain

their independent clause marking, and the verb retains the

categories of tense/aspect/mood and person-number marking.

In a nominalized complement the subject or the object are

genitive rather than nominative or objective NP's and the

verb has become a noun.

   In Kalasha there are (1) fully sentential complements,

with which a complementizer most often but not always

occurs; (2) modified sentential complements in which the

verb, having lost its tense/mood specification and person-

number marking, appears in its conjunctive participle form;

(3) infinitival complements, some constructed with the OBL

infinitive and some with the NOM infinitive; and (4) a few

types in which the complement is an ordinary noun or adjec-

tive. By far the most numerous type is the fully senten-

tial type with the complementizer _ghØi_, which has developed

from the conjunctive participle of _ghØik_ 'to say'.

5.1.1. Types of complements

   5.1.1.1. _Sentential complements_. The most frequent

pattern for sentential complements is [S] _ghØi_ V, in which

[S] is the sentential complement, _ghØi_ is the complemen-

tizer, and V is the complement-taking predicate. In my

materials so far thirty-one predicate types appear with

complements of this form.[1]

    5.1.1.1.1. [S] _ghði_ V. Examples of this structure

follow.

1) SAY
a) uk   ne on'i a'-am   ghði ma'u-dai [S, E:mb]
   water not bring(P PERF)-1s COMP say(P/F-S)-3s
   'She says she hasn't brought water.'

b) salyim' tas'a   kai im   ghði ne
   S.   her(OBL) to come(P/F-NS)-1s COMP not
   am-au' [S, E:bk, mb]
   say(PST-A)-3s
   'Salim₁ didn't tell her he₁ would come.'

2) THINK
a) ne   suir'y-a dyek   tic'ak kharap' ghði cit'-ik [S:bk]
   not sun-LOC put(INF) little bad COMP think(P/F-NS)-1p
   'We think it is a little bad not to put it in the sun.'

b) i'ya goik' ghði tu   acit'-i [S, E:mb]
   this bug COMP you(sg.) think(PST-A)-2s
   'You thought it was a bug.'

3) WANT TO
a) a tai phuTu'chal-em'   ghði citi'man ay'-is [E:j]
   I your photo take(P/F-NS)-1s COMP think(PST IMPFV)-1s
   'I wanted to take your photograph.'

b) tic'ak mon   dem   ghði cit'-iu-dai [S:bk]
   little speech give(P/F-NS)-1s COMP think(P/F-S)-3s
   'She (the baby) wants to speak a little.'

c) tu andai' is'-or'i   ghði cit'im-dai [E:mb]

---

[1]These upper-case PREDICATES are intended to represent not specifically English words, but quasi-abstract predicates. For example, sentences for which the most natural English glosses are 'think of V-ing', 'want to V', and 'like to V', are all sometimes rendered with the verb _cit'ik_, whose meaning is broader than its original meaning of 'think'. In example (a) its best gloss is 'like to V'.
a) te   bi'en draZni'   kas'-ik   ghði cit'-in [S:mb]
   they out go out(CP) walk(P/F-NS) COMP think(P/F-NS)-3p
   'They (sheep and goats) like to go outside and walk
    around.'
Since the subject of this sentence is sheep and goats, we know that neither can _ghði_ mean literally 'having said' nor can _cit'in_ mean literally 'they think'.

```
you hither come(P/F-NS)-2s-HORT COMP think(P/F-S)-1s
'I want you to come here.'
```

4) TELL
a) a salyim'-a kai aya' i   ghði mai ay'-is [E:bk]
   I S.-OBL   to here come(IMP2s) COMP say(PST PERF-A)-1s
   'I told Salim to come here.'

b) as'a Sula'   on'iu-or'i   ghði tas'a daad-as
   he   firewood bring(P/F-NS)-3s COMP his father-PS3s
   amau' [E:bk, mb]
   say(PST-A)-3s
   'His father told him to bring firewood.'

5) FEAR
a) śuru'-am   ghði bih-iu'-dai [S:bk, E:mb]
   fall(P/F-NS)-1s COMP fear(P/F-S)-3s
   'She is afraid of falling.'

b) tu tas'a   xat   ne des   ghði mai Săg
   you him(OBL) letter not give(P/F-NS)-2s COMP my fear
   aś-is'. [E:mb, bk]
   be(INAN)(PST-A)-3s
   'I was afraid you would not give him the letter.'

c) mai A'gu   oś   thi   trup-en'   ghði
   my fingers cold become(CP) hurt(P/F-NS)-3p COMP
   bih-im'-dai [E:bk, mb]
   fear(P/F-S)-1s
   'I am afraid my fingers will get frostbitten.'

6) TRY
a) a'bi-ta a'la   naś-ek'   ghði kuśiś' ar'-imi
   we-TOP him(ACC) kill(P/F-NS)-1p COMP try   do(PST-A)1p
   'We tried to kill him.'   [T15:mb][2]

b) ogoeg'in   sum mo SaT'-an-ori   ghði kośiś'
   each other with not fight(P/F-NS)-3p-HORT COMP try
   ar'-is [E:bk, mb]
   do(PST-A)-1s
   'I tried that they should not fight with each other.'

c) jit him   ghði har   moc kośiś' kar'-iu [S:mb]
   win(P/F-NS)-1s COMP every man try   do(P/F)-3s
   'Every man tries to win.'

7) FORGET
a) a tai phuTu' chal-em'   ghði apraS'm-is [S, E:mb]
   I your photo take(P/F-NS)-1s COMP forget(PST-A)-1s
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[2]This sentence is itself embedded within a larger quote, which constitutes evidence that ghði does not mean literally 'having said'.

'I forgot to take your photograph.'

b) a warek'      kaSðg' sambi'-em              ghði ðga' ne
   I different hat     put on(P/F-NS)-1s COMP alert not
   hu'la-him  [S:bk, E:mb]
   become(PST-I)-1s
   'I forgot to put on my other hat.'

8) REMEMBER
   a tai   phuTu' chal-em'              ghði yat
   I your photo  take(P/F-NS)-1s COMP memory
   kai ay'-is  [E:mb]
   do(PST PERF-A)-1s
   'I remembered to take your photograph.'

9) KNOW
a) se ne   iu'                   ghði mai      hat'ya mahalyum'
   he not come(P/F-NS)-3s COMP I(OBL) for       known
   'I know that he won't come.'  [E:j, mb]

b) nawkari' mai     hat'ya hiu'                 ghði
   job         I(OBL) for    become(P/F-NS)-3s COMP
   jhoni'man ay'-is  [[E:bk, mb]
   know(PST IMPFV-A)-1s
   'I knew I would get a job.'

10) BE ASHAMED
a) a kitap' kharap' kai a'-am        ghði se lac
   I book   spoiled do(P PERF)-1s COMP he shame
   jhon'-iu-dai  [E:mb]
   know(P/F-S)-3s
   'He is ashamed of having spoiled the book.'

b) a mð'ik       ne bha'-am                ghði ðarmanda'
   I read(INF) not be able(P/F-NS)-1s COMP ashamed
   thi a'-au  [E:j, mb]
   become(P PERF)-3s
   'He is ashamed of not being able to read.'

11) PROMISE
   a tas'a       hat'ya paysa' on'-im              ghði
   I him(OBL) for     money bring(P/F-NS)-1s COMP
   wakda' kai ay'-is  [E:bk, mb]
   promise do(PST PERF-A)-1s
   'I promised (him) that I would bring the money for him.'

12) CONSIDER
   ðum moc ghði asmun'     kai a'-am  [E:bk, mb]
   bad man COMP judgement do(P PERF)-1s
   'I consider that he is a bad man.'

13) FORCE
a) tas'a       daad-as      tas'a      kai ja   kar'-i      ghði
   his(OBL) father-PS3s him(OBL) to   wife do(IMP2s) COMP

```
      majbur' kai a'-au [E:mb, bk]
      obliged do(P PERF)-3s
      'His father forced him to get married.'

b) as'a      ja   kar'-iu-or'i       gh8i tas'a daad-as
   he(NOM) wife do(P/F-NS)-3s-HORT COMP his   father-PS3s
   zor     ar'-au [E:bk, mb]
   force do(PST-A)-3s
   His father forced him to get married.'³
```

14) PERSUADE/ADVISE
```
   a to          mai   sum nim          gh8i salya'
   I him(ACC) I(OBL) with take(P/F-NS)-1s COMP advice
   ar'-is [E:bk, mb]
   do(PST-A)-1s
   'I persuaded him to come with me." (lit. 'Saying, "I
   will take (you) with me," I persuaded/advised him.')
```

15) BELIEVE
```
   as'a      bo    pruST moc gh8i a bawar' kar'-im [E:bk, mb]
   he(NOM) very good  man COMP I belief do(P/F-NS)-1s
   'I believe he is a very good man.'
```

16) UNDERSTAND/RECOGNIZE/REALIZE
```
a) as'a żot        jaga'i   hair'ou gh8i ger ar'-au [E:bk, mb]
   he   quickly look(CP) thief    COMP recognize(PST-A)-3s
   'Looking at him₁ he₁ quickly recognized/understood that
   he₁ was a thief.'

b) i'ya baCa' gh8i ajhon'-au  [S:mb]
   he   king  COMP know(PST-A)-3s
   'She recognized that he was a king.'

c) i'ya ne  jhon'-iu          suru'-am          gh8i ne
   she  not know(P/F-NS)-3s fall(P/F-NS)-1s COMP got
   jhon'-iu [S:bkw, E:mb]
   know(P/F-NS)-3s
   'She doesn't understand.  She doesn't understand that
   she will fall.'
```

Example (16-c) is spoken by a mother about her eight month

old baby daughter, who is too young to have begun to

understand or use specific words. This is another

interesting bit of evidence for the grammaticization of

gh8i, since in this case it could not possibly mean 'say'

³The (a) sentence may be interpreted either as direct
or indirect speech, depending on the context, while the (b)
sentence has only the indirect interpretation.

or even 'think'. In this regard see also fn. 2.

17) SHOUT/SCREAM
a) Dar'an-as taada mo   par'i   ghÒi hÒ'ża kai
   flood-OBL near not go(IMP2s) COMP loudly
   khÒDi-es' [E:bk, mb]
   call(PST-A)-1s
   'I shouted not to go near the flood'

b) DÒb haw'-is   ghÒi abayo' pral'-e
   lost become(PST-A)-1s COMP shout give(PST-A)-3s-when
   ś-ase'   moc gher'i paida' haw'-au [Parkes, unpub.
   EMPH-that man again appear(PST-A)-3s   text]
   'When she shouted, "I am lost", that same man again
    appeared.'

c) mai   A'gu-ei   tu gria'-i   ghÒi żirik'
   I(OBL) finger-LOC you grab-CS-(PST-A)-2s COMP shriek
   ar'-au [T3:fs]
   do(PST-A)-3s
   '"You cut my finger," he screamed.' (lit. 'You caused
     (the knife) to grab my finger.')

18) ADVISE
   DakTar'-as baza' paś-aw-a'i   ghÒi mai   sum
   doctor-OBL arm   show-CS-IMP2s COMP I(OBL) with
   salya' ar'-au [E:bk, mb]
   advice do(PST-A)-3s
   'He advised me to show my arm to a doctor.'

19) CRY/WEEP
   uTiik'il-e   .   mai   waar'eś DÒb haw'-au
   cross(PST-I)3s-when I(OBL) falcon lost become(PST-A)-3s
   ghÒi tru'ila [Morgenstierne 1973:18]*
   COMP cry(PST-I)-3s
   a) 'When it had crossed (he) wept, "My falcon is lost."'
   b) 'When it had crossed (he) wept that his falcon was
       lost.'

The two glosses given for this example indicate that, as

with most ghÒi complements of verbs of reporting either the

direct speech or indirect speech interpretation is

possible, depending on context.

20) SEEM
   se pruST moc ghÒi mai   hat'ya saru'-iu-dai [E:bk, mb]
   he good man COMP I(OBL) to   seem(P/F-NS)-3s

_____

   *Transcription of this example normalized to system
used for other Kalasha examples.

'It seems to me that he is a good man.'

21) <u>INTEND</u>
a) tas'a   Chetr   kabza' kar'-im   ghØi mai   maksat'
   he(OBL) field   capture(P/F-NS)-1s COMP I(OBL) aim
   aś-is' [E:bk, mb]
   be(INAN)(PST-A)-3s
   'I intended/aimed to capture his field.'

b) ac   kaw   kawa' hat'ya pai   ni-m   ghØi
   this year where to   goats take(P/F-NS)-1s COMP
   cit'-is-dai [T & C 1987:276]
   think(P/F-NS)-2s
   'Where are you intending to take (your) goats this
    year?'

22) <u>BE ABLE</u>
   doS   Sula'   on'-im   ghØi ne
   yesterday firewood bring(P/F-NS)-1s COMP not
   abha'-is [S:bk, E:mb]
   be able(PST-A)-1s
   'Yesterday I wasn't able to bring firewood (although
    I wanted/intended to).'

23) <u>BE READY/EAGER</u>
   . . . tas'a   So'i gal'-e   źu-m
         he(OBL) near go(PST-I)-3s-when eat(P/F-NS)-1s
   ghØi cak hul'-e . . . [T27:mb]
   COMP ready become(PST-I)-3s
   'When he₁ went near himⱼ, when he₁ got ready to eat
    himⱼ . . .'

24) <u>DECIDE</u>
   a peśa'ur ne par-im'   ghØi faysalya' ar'-is [E:mb]
   I P.   not go(P/F-NS)-1s COMP decision   do(PST-A)-1s
   'I decided not to go to Peshawar.'

25) <u>WONDER</u>
   mai gak kur'a lawa'i-aal   haau   ghØi
   my cow who   steal(P PERF)-3s become(PST-A)-3s COMP
   cit'-im-dai [S:mb]
   think(P/F-S)-1s
   'I wonder who stole my cow.'⁹

26) <u>ORDER</u>
   i'ya dukan' ban   hiu'-or'i   ghØi hokumat'
   this shop   closed become(P/F-NS)-3s-HORT COMP gov't.
   hok'um ar'-au [E:mb]
   order do(PST-A)-3s
   'The government ordered that this shop be closed.'

_____

   ⁹<u>lawai' aal haau</u> = <u>lawai' aau haw'au</u>, in which <u>haw'au</u>
indicates the subjunctive.

27) <u>BE GREEDY</u>
    i'ya saw'-in pi   śaśäg' istri'źa źu-m   ghði
    this all-OBL from greedy woman   eat(P/F-NS)-1s COMP
    i'ya bo   śaśägi' kar'-iu [S:bk, E:mb]
    she much greed   do(P/F-NS)-3s
    'This is the greediest woman of all. She is very greedy
     about eating/to eat.'

28) <u>ASK FOR/BEG</u>
    kitap' mai   del-or'i   ghði aghaT'-is [E:mb]
    book   I(OBL) give(P/F-NS)-3s-HORT COMP ask(PST-A)-1s
    'I asked him to give me the book.'

29) <u>REMIND</u>
    alyu'   on'iu-or'i   ghði ägah-es' [E:mb]
    potatoes bring(P/F-NS)-3s-HORT COMP remind(PST-A)-1s
    'I reminded him to bring potatoes.'

30) <u>WARN</u>
    atra' mo   par-iu'-or'i   ghði tas'a   khabardar'
    there not go(P/F-NS)-3s-HORT COMP him(OBL) warning
    ar'-is [E:mb]
    do(PST-A)-1s
    'I warned him not to go there.'

31) <u>ALLOW</u>
    mai   chu   sukuly'-una hat'ya mo par-iu'-or'i
    I(OBL) daughter school-LOC to   not go(P/F-NS)-3s-
    ghði ne   lasa'-au [E:bk]   HORT
    COMP not allow(PST-A)-3s
    'He did not let his daughter go to school.'

    5.1.1.1.2. V [S] <u>ghði</u>. Word order in Kalasha, though

normally verb-final is fairly flexible, and the complement

is sometimes found extraposed to the right of the matrix

verb, giving the order V [S] <u>ghði</u>. This pattern is thus a

word-order variant of the basic unmarked [S] <u>ghði</u> V pattern

of 5.1.1.1.1.; the first six examples in this section are

variants of the first six in 5.1.1.1.1.

32) <u>SAY</u>
    ghoi'man ay'-is   par-im'   ghði [S, E:mb]
    say(PST IMPFV-A)-3s go(P/F-NS)-1s COMP
    'He was saying he would go.'

This example is interesting in showing <u>ghðik</u> 'to say' used

both as a finite verb and as a complementizer in the same

sentence. Probably this is possible here because of the

extraposition of [S] ghði, separating ghði from V.

Otherwise, I have no other examples with the sequence *ghði

ghði(V-fin). The usual sequence is ghði amau'/ma'ila, in

which one of the other verbs of saying, mãik, is used.

33) THINK
    a sëhë cit'-im-dai   salyim' rageST'i ne
    I thus think(P/F-S)-1s S.   early   not
    iu'   ghði [E:bk, mb]
    come(P/F-NS)-3s COMP
    'I think Salim will not come early.'

34) WANT TO
    a citi'man a'y-is   salyim' aya'
    I think(PST IMPFV-A)-1s Salim   here
    iu'-or'i   ghði [E:bk, mb]
    come(P/F-NS)-3s-HORT COMP
    'I wanted Salim to come here.'

35) TELL
    rakmat'-as kai ma'-as   du ser   alyu'
    Rahmat-OBL to speak(IMP2s) 2 seers potatoes
    on'i   ghði [E:j, mb]
    bring(IMP2s) COMP
    'Tell Rahmat to.bring two seers of potatoes.'⁴

36) FEAR
    a bih-im'-dai   ðje muc'-iu   ghði [E:j, mb]
    I fear(P/F-S)-1s now rain(P/F-NS)3s COMP
    'I am afraid it will rain now.'

37) TRY
    se bo   košiš' ar'-au   a ne   pad'-im ghði
    he much try   do(PST-A)-3s I not break wind(P/F-NS)-1s
    'He tried very hard not to break wind.' [S:mb]   COMP

    Predicates in the next group of examples have the V

[S] ghði word-order variant; this does not mean, however,

that this is the only possible order for them, only that I

have not observed others in my materials.

_____

    ⁴A seer is a unit of weight slightly less than one
kilogram.

38) <u>HOPE</u>
```
mai      omet' śi'u                 źo'śi-una  sahi' Tem'-una
I(OBL) hope  be(INAN)(P/F)-3s zhoshi-LOC right time-LOC
i-u'              (ghθi) [E:bk, mb]
come(P/F-NS)-3s (COMP)
```
'I hope he will come in time for Zhoshi.'

39) <u>DOUBT</u>
```
mai     śak    hi-u'-dai      se paysa'  piśtyak'
I(OBL) doubt become(P/F-S) he money    back
ne  de-l                (ghθi) [E:bk, mb]
not give(P/F-NS)-3s (COMP)
```
'I doubt that he will give back the money.'

40) <u>INFORM</u>
```
saw'-in khabar' kar'-i    cop'-o    meTĭg' śi'u
all-OBL news    do(IMP2s) morning-o meeting be(P/F)-3s
(ghθi) [E:bk, mb]
(COMP)
```
'Inform everyone that there is a meeting tomorrow
morning.'

41) <u>CONVINCE</u>
```
a as'a        pati-es'             a tai       pai  ne
I him(OBL) convince(PST-A)-1s I you(OBL) goats not
hE      kai ay'-is          ghθi [E:bk, mb]
theft do(PST PERF-A)-1s COMP
```
'I made him believe him that I didn't steal his goats.'[7]

42) <u>WHISPER</u>
```
a kθ'-una kai ama'-is          wareg'-in  kai mo
I ear-LOC to  say(PST-A)-1s others-OBL to   not
ma'-as       ghθi [E:bk, mb]
say(IMP2s) COMP
```
'I whispered not to tell anyone else.'

43) <u>ASK</u>
```
a tas'a     aphuc'-is      kai'-o i-s                ghθi
I him(OBL) ask(PST-A)-1s when-o come(P/F-NS)-2s COMP
```
'I asked him when he would come.'   [E:bk, mb][8]

44) <u>PLAN TOGETHER/CONSPIRE (to harm someone)</u>
```
bo    moc tas'a     hat'ya dro abin'-an          to
many men him(OBL) for     conspire(PST-A)-3p him
naś-ek'          ghθi [T&C 1987:143]
kill(P/F-NS)-1p COMP
```

---

[7]According to my informant, this sentence implies that
the speaker was, however, guilty of stealing the goats.

[8]In this sentence <u>ghθi</u> is obligatory.

'Many men met together to plan how to kill him.'[7]

45) <u>CHALLENGE</u>
    chelyen'   pron   aphŏakhŏi ś-i'ya   tromiś
    challenge give(PST-A)-3p A.   EMPH-this evening
    tayar' ha   a'bi żăg kar'-ik   ghŏi
    ready become(IMP2s) we   war do(P/F-NS)-1p COMP
    'The villagers of Aphŏa issued a challenge, "Be ready
     this very evening. We will make war (on you).'
     [Parkes, unpublished text, translation mine].[10]

46) <u>AGREE</u>
    Samnyo than   ne prau   bas'und
    S.   consent not give(PST-A)-3s spring
    hi-u'   khodai' khayr   kai   hiś ki'ya ne
    become(P/F-NS)-3s God   blessing do(CP) nothing   not
    ghŏi [Parkes, unpublished text, translation mine]
    COMP
    'Shamnyo did not agree, saying, "Spring will come. God
     having blessed (us) nothing (will happen)."'

Note that in examples (38), (39) and (40) the <u>ghŏi</u>
complementizer was felt to be optional. Omission of the
complementizer from this pattern gives the sequence V [S],
of which I also have several examples.

     5.1.1.1.3. V [S]. The three predicates KNOW, THINK,
and TELL which have the more usual variants with [S] <u>ghŏi</u>
V, and V [S] <u>ghŏi</u>, also display a V [S] pattern.

47) <u>KNOW</u>
    mai   hat'ya malyum' śi'u   se ne
    IOBL) to   knowledge be(INAN)(P/F)-3s he not
    i-u' [E:j, mb]
    come(P/F-NS)-3s
    'I know he won't come.'

48) <u>THINK</u>
    mai   khyaly se ne i-u' [E:j, mb]

---

    [7]Whether this should be analyzed as the complement of
a conjunct verb <u>dro bin'ik</u> 'to conspire', or as a purpose
clause is not clear.

    [10]This example is interesting in that it incorporates
the English loan-word 'challenge' into this structure. I
take this as evidence for the continued productivity of the
<u>ghŏi</u> constructions.

I(OBL) opinion he not come(P/F-NS)-3s
'I think he won't come.'

49) <u>TELL</u>
rakmat'-as kai ma'-as   du ser   alyu'
Rahmat-OBL to say(IMP2s) two seers potatoes
on'-iu-or'i [E:j, mb]
bring(P/F-NS)-3s-HORT
'Tell Rahmat to bring two seers of potatoes.'

50) <u>BE HAPPY</u>
mai   hat'ya bo   kośani'   haw'-au   tai
I(OBL) for   much happiness become(PST-A)-3s you(OBL)
saw iśnya'ri pruST [E:j, mb]
all things   good
'I am very happy that everything is well for you.'

51) <u>REGRET</u>
mai   bo   afsus' a ik   ne abha'-is [E:bk, mb]
I(OBL) much sorrow I come(INF) not be able(PST-A)-1s
'I regret very much that I couldn't come.'

52) <u>ANNOUNCE</u>
hukumat' elyan'   kai a'-au   cop'o   cuTi'
gov't   announcement do(P PERF)-3s tomorrow holiday
'The government announced that tomorrow is a holiday.'

53) <u>HEAR</u>
mai   kØ'-una haw'-au   sa'dar   i-u'-dai
I(OBL) ear-LOC become(PST-A)-3s president come(P/F-S)-3s
'I heard that the president is coming.' [E:mb, bk]

54) <u>SUPPOSE</u>
misaly' kar'i   se voT'-una jit pe haw'-al-aau. . .
example do(IMP2s) he vote-LOC win if become(PST-A)-3s
'Suppose that he wins the election . . .' [E:bk, mb]
(lit. 'suppose if he wins in the election. . .'

55) <u>SEE</u>
tu   paśi a'-as-e   mai   jarap' ku'ra lawa'-an
you see(P PERF)-2s-Q I(OBL) socks who   steal(PST-A)-3p
'Did you see who stole my socks?' [E:mb]

   5.1.1.1.4. [S] V. Inversion of the word order of

(55) for emphasis gives the pattern [S] V, shown in (56).

56) <u>SEE</u>
a pe lyaw-em'-dai-o a'sa pai   jagal'-or'i
I if lie(P/F-S)-1s-<u>o</u> he   go(CP) look(P/F-NS)3s-HORT

'Let him go and see whether I am lying!'[11]
(lit. 'If (you think that) I am lying, let him go and
see (for himself).'[T15:mb]

5.1.1.1.5. V <u>ki</u> [S] <u>ghối</u> V. In contemporary Kalasha

the complementizer <u>ki</u> is also employed. <u>ki</u> has probably

entered Kalasha from Khowar, which makes extensive use of

<u>ki</u> as its primary complementizer. Its use seems to be in-

creasing, possibly because of the increasing number of Kal-

asha speakers who know Urdu. The simultaneous presence of

<u>ghối</u>, which is still the main complementation mechanism,

and <u>ki</u> leads to a variety of mixed patterns. Among these,

V <u>ki</u> [S] <u>ghối</u> V is especially interesting in that it shows

a repetition of both verb and complementizer in a mirror-

image pattern. Examples (57) and (58) illustrate this.[12]

57) <u>THINK</u>
     tai   ki'ya khyaly ki   a ne jhon'-im-dai
     you(OBL) what opinion COMP I not know(P/F-S)-1s
     ghối cit'-is-day'-e [Trail, unpublished text]
     COMP think(P/F-S)-2s-Q
     'What do you think — that I don't know anything!'

58) <u>SPEAK</u>
     se phaker'-o ma'ila   ki   a tai   beru'-o
     the beggar-o say(PST-I)-3s COMP I you(OBL) husband-o
     paś'i a'-am   ek ra-nO'   śi'u
     see(P PERF)-1s one pine-beneath be(INAN)(P/F)3s
     śend-una kai thai śi'u   tai   beru'-o   ghối
     bed-LOC to put(P PERF)-3s you(OBL) husband-o COMP
     ma'ila [T2:bkw]
     say(PST-I)-3s
     'The beggar said, "I have seen your husband. There is a
     place under a pine tree. He has been put on a bed there

_____

[11]Note the enclitic particle -<u>o</u>, which here is
attached to the [S] constituent.

[12]Notice that (57) also incorporates two question
markers--<u>ki'ya</u> and -<u>e</u>.

your husband," he said.'[13]

What seems to be happening here is that the speaker starts his utterance with a V ki construction, and after completing it, feels the need to complete it with a ghði V sequence. That is, the competing pressures of the right-branching V ki and the left-branching ghði V constructions result in his using a combination of both.

5.1.1.1.6. V ki [S] ghði. This type represents another mixed structure, which results from beginning a sentence with V ki [S] and then partial completion with the ghði V complementizer. This type occurs fairly frequently. Of the six examples of this pattern I have, four of them occur with predicates whose usual expression is with the [S] ghði V pattern. (59 - 62) show these, and (63) and (64) involve other verbs.

59) SPEAK
    piciśwew'-o ek· juwan'   mai'la   ki   da
    afterwards-o one young man say(PST-I)3s COMP here
    ś-i'y-o   sayra' baS ghði chom'-una thal'ya
    EMPH-this-o Saira share COMP ground-LOC put(PST-I)-3s
    'Afterwards one young man said, "Here, this is Saira's
    share," and put it on the ground.'   [T14:1g]

60) THINK
    a citi'man ay'-is   ki   tu ta'sa   xat
    I think(PST IMPFV-A)-1s COMP you him(OBL) letter
    ne de-s ghði [E:bk, mb]
    not give(P/F-NS)-2s COMP
    'I thought you wouldn't give him the letter.'

61) WANT
    a cit'-im-dai   ki   mai   putr skuyl'-una hat'ya
    I think(P/F-S)-1s COMP I(OBL) son school-LOC to
    par-iu'-or'i   ghði [E:bk, mb]

---

[13]The inanimate form of 'be' is used here because the woman's husband is dead, and it is his dead body that is being discussed.

```
        go(P/F-NS)-3s-HORT COMP
        'I want my son to go to school.'
```

62) FEAR
```
a) a cit'im-dai        ki    mai    A'gu    os    thi
   I think(P/F-S)-1s COMP I(OBL) fingers cold become(CP)
   trup-en'           ghői  [E:bk, mb]
   hurt(P/F-NS)-3p COMP
   'I am afraid that my fingers will get frostbitten.'
```

```
b) mai     Sag aś-is'                 ki    tu  ta'sa    xat
   I(OBL) fear be(INAN)(PST-A)-3s COMP you him(OBL) letter
   ne  de-s              ghői [E:bk, mb]
   not give(P/F-NS)-2s COMP
   'I was afraid that you wouldn't give him the letter.'[14]
```

---

[14]Sentences (60) and (62-b) will be recognized as
Kalasha versions of a negation of Peter Hook's test
sentence 'I was afraid that you would give him the letter,'
upon the results of which (cf. Hook 1985) he found "a
regular progression in the frequency ratios of subordinate-
main as opposed to main-subordinate clause orders as one
proceeds from north to south within western Indo-Aryan
(Sindhi, Kutchi, Gujarati, Marathi). Subordinate-main
order is typical of Dravidian; main-subordinate of Persian"
(1985:158). If Kalasha were subject (only) to the
influences reflected in that geographical gradient, we
would expect (almost) all subordinate clauses to follow the
matrix verb, and sentences like (60) and (62-b) could be
interpreted as evidence consistent with this. That is
clearly not the case in Kalasha, as we have seen. I
suspect that (60) and (62-b) have this particular form as a
consequence of two facts: (a) they are elicited rather
than spontaneously occurring sentences; (b) the sentence
was presented in Urdu, which involved a ki clause.
        Note that clauses of 'fearing' and 'until' clauses in
Kalasha do not take a negative element in their positive
forms, as they do in Urdu and Hindi. Thus we have (a):
```
a) tai        xat    del                 śamon' aya' apau' de
   you(OBL) letter give(P/F-NS)-3s until  here wait(IMP2s)
   'Wait here until he gives you the letter.'
```
        As with other aspects of the language, however, we
sometimes find Urdu-influenced mixed types, as in (b).
```
b) jabtak a ne  im                 śamon' tu  and-ei'   mo
   until  I not come(P/F-NS)-1s until  you here-ABL not
   par'i  [T&C 1987:108;  E:mb (*ne)]
   go(IMP2s)
   'Don't leave here until I come.'
```
Just as with mixed complementation structures we find a
duplication of the complementizer, so here we have both the
Urdu jabtak 'until', which has carried along its negative
element ne in this example, and the Kalasha śamon' which
does not carry a negative. Incidentally, when presented

63) REPLY

      . . . ta'sa   kai jawap' prau   ki   ś-i'ya
          him(OBL) to reply give(PST-A)3s COMP EMPH-this
      kal'-a   am'a   jayga' badely' det   ghBi
      year-LOC this(ACC) place change(IMP2p) COMP
      'He replied to him, "This very year change this place".'
      [Parkes, unpublished text, translation mine]

64) EXCLAIM

      pharyat' ar'-au   ki   ś-i'ya   śihB'dyaka   iśnya'ri
      exclaim(PST-A)-3s COMP EMPH-this such a small thing
      sA śohB'   iśnya'ri cBD'i   as'a ko naś-a'u
      such a big thing   sting(CP) this how kill(PST-A)-3s
      ghBi [T16:1g]
      COMP
      'He exclaimed, "This is such a little thing. How (lit.
      why) could it kill such a big thing by stinging it?"'

     5.1.1.1.7. V _ki_ [S]. If the final _ghBi_ of the

previous type is deleted, we have the pattern V _ki_ [S].

This is the final stage in the transition from the original

left-branching structure to the right-branching _ki_-clause.

The following examples illustrate some predicates with pure

_ki_ clauses. All seven of the predicates illustrated here

take [S] _ghBi_ V complements also. (See 5.1.1.1.1. above.)

65) SPEAK

      žuik'-ani   aC'o wazir'   tas'a   kai ma'ila
      eat(INF)-ABL after minister him(OBL) to say(PST-I)-3s
      ki   phaker' sayp tu śilyok' kar'i   mai   hat'ya
      COMP beggar sir you story   do(IMP2s) I(OBL) for
      oCBik de [T17:mz]
      story give(IMP2s)
      'After eating the minister said to him, "Beggar, tell me
      a story - tell a story".'[15]

      _____

with the sentence in (b) my informant eliminated the
negative element _ne_. What seems to be happening in (b) is
that we are approaching a situation which could be
reanalyzed as a relative correlative structure [_jabtak_ S]
[_śamon_' S] in which _śamon_' becomes a clause-initial,
instead of clause-final, element.

      [15]This sentence shows the same tendency noted above in
connection with the V _ki_ [s] _ghBi_ V sequence--that of
beginning a sentence with a non-indigenous structure and
then reverting to an indigenous pattern to finish it off.

66) <u>THINK</u>
```
mai      xyaly   śiu'                  ki    se  waxt'-una  ne
I(OBL)  opinion  be(INAN)(P/F)-3s  COMP  he  time-LOC   not
i-u'     [E:j, mb]
come(P/F-NS)-3s
'I think he won't come on time.'
```

67) <u>KNOW</u>
```
tu  jhon'-is-dai   ki   ðj'-o  tu  juan'  haw'-i
you know(P/F-S)-2s  COMP  now-o  you  adult  become(PST-A)-2s
'You know that now you are grown up.'
[Trail, unpublished text]
```

68) <u>BE ASHAMED</u>
```
se  bo   śarmanda'  thi  a'-au              ki    mäik       ne
he  very  ashamed    become(P PERF)-3s  COMP  read(INF)  not
bhai'man  ay'-is  [E:j, mb]
be able(PST IMPFV-A)-3s
'He was very ashamed that he couldn't read.'
```

69) <u>BELIEVE</u>
```
tai          mondr'-as  tha'ra  tasalyi'        śi'u
you(OBL)  word-OBL    on       satisfaction  be(INAN)(P/F)-3s
ki    krom  kar'-is  [E:bk, mb]
COMP  work  do(P/F-NS)-2s
'I believe your word that you will do the work.'
```

70) <u>UNDERSTAND</u>
```
ghði  amal'-e                   to'a  ajhon'-au       istri'źa
thus  speak(PST-A)-3s-when  then  know(PST-A)-3s  woman
baCa'-as  chul'-as          ki    i'ya  sahi'  baCa'
king-OBL  daughter-PS3s  COMP  this  real    king
a'-au                  mamulyi'  moc  ne  [T17:mz]
be(ANIM)(P/F)-3s  ordinary  man  not
'When he spoke thus then the woman-the king's daughter-
understood that he was a real king - not an ordinary
man.'
```

71) <u>WONDER</u>
```
a  cit'-im-dai       ki    mai      gak  ku'ra  lawai'  a'-al
I  think(P/F-S)-1s  COMP  I(OBL)  cow  who    steal(P PERF)-3s
ha'au¹ᵒ  [E:j, mb]
become(PST-A)-3s
'I wonder who stole my cow.'
```

Here <u>śilyok'</u> is a loan from Khowar (< Kho. <u>śiloG'</u> 'story,
tale'), and <u>oCðik dek</u> 'give a story' is the original
Kalasha expression.

¹ᵒ<u>lawai' aal haaw</u> = <u>lawai' a-au' haw'-au</u>, in which
<u>haw'-au</u> is the subjunctive marker.

5.1.1.1.8. [S . . . V ki . . . S] SPEAK. This

structure is illustrated in (72) and (73).

72) hai mai lyoT khoda'i agh℧'-au ki   khoday'-as kai
    hai my great God   say(PST-A)-3s ki God-OBL   to
    'Oh, my great God, he said to God. . .' [T16:1g]

73) gh℧i amau'-e   e hakmak' agh℧'-au   ki
    thus speak(PST-A)-3s-when oh fool   say(PST-A)-3s ki
    tara' pai   śℊhℊ'   thi   jiay'-o
    there go(CP) like this become(CP) look(CP)-o
    ś-i'ya-ta   tai   peruk'   ś-i'y-o   tic'ak
    EMPH-this-TOP you(OBL) likeness EMPH-this-o little
    kol'yi gh℧i ma'-as [T16:1g]
    crooked COMP say(IMP2s)
    'When he₁ spoke thus, he₃ said, "Hey simpleton, go
    there, look, and say thus,'This one is like you, but
    this one is a little crooked'".'

What is interesting here is the occurrence of the sequence

agh℧'au ki in (72) in a position such that ki does not

precede (any part of) the complement clause. This happens

because ki forms a phonological unit with the verb of

speaking and not with the complement clause. This is also

the case with gh℧i and the verbs of speaking and cognition

in the basic construction type (5.1.1.1.1.), and it appears

that the newer construction with ki is mirroring the older

one in this behavior. Constructions like (72-3) are fairly

common in my texts.

5.1.1.1.9. [S] gh℧i. Not infrequently we find a

sentence consisting of just a complement S and gh℧i,

without a matrix verb. In this construction, exemplified

in (74-76), the "missing" matrix verb is understood as

meaning 'wants to V'.

74) janap' as'ta pim   gh℧i [S, E:mb]
    Janap also drink(P/F-NS)-1s COMP
    'Janap also (says he) wants to drink (tea).'

75) gulyistan' pim'-dai   ghði [S, E:mb]
    Gulistan   drink(P/F-S)-1s COMP
    'Gulistan (says she) wants to drink it.'

76) awaz' chala'-am   ghði awaz' mai   ne
    voice take out(P/F-NS)-1s COMP voice I(OBL) not
    draZn-au' [Parkes, unpublished text, translation mine]
    come out(PST-A)-3s
    'I wanted to cry out, but my voice wouldn't come out.'

In constructions like these, where ghði is dissociated from

an immediately following verb and its presence alone is

enough to give the sense of 'want to', or 'intend to', we

see a semantic stage transitional between ghði as

complementizer and ghði as introducer of purpose clauses.

     5.1.1.2. Reduced sentential complements. A few

predicates take S-like complements in which the verb of the

semantic complement appears in its conjunctive participial

(CP) form. The CP has lost the verbal properties of tense,

mood, person and number, but is still clearly a verbal

form. The next two examples illustrate these complements.

77) ENJOY
    a philyim' jagai'   bo   maza'   kar'-im [E:mb]
    I film   look(CP) much enjoyment do(P/F-NS)-1s
    'I enjoy seeing films a lot.'

78) FINISH
a) Sumber' mastruk'-asa a guum lei   khuly-es' [E:bk]
   last   month-LOC   I wheat cut(CP) finish(PST-A)-1s
   'Last month I finished harvesting wheat.'

b) a niveś'i   pur'a   ar'-is [E:bk, mb]
   I write(CP) finished do(PST-A)-1s
   'I have finished writing it.'

Possibly one might argue that (77) is better analyzed as a

CP main verb sequence in which the relationship between the

predicates of subordinate clause and the matrix clause is

causal. This may also be valid, but I present the example

here to invite discussion of the problem.

5.1.1.3. *Infinitival complements*. The second major

complement type is that based on the infinitive. The

infinitive is clearly a nominal form, taking case endings

and postpositions, and often functioning as subject of a

sentence. Infinitival complements fall into two classes:

those based on the OBL infinitive, and those incorporating

its NOM form.

5.1.1.3.1. Oblique infinitival complements.

5.1.1.3.1.1. Oblique infinitive plus postposition:

Two postpositions, <u>bat'i</u> 'for, for the sake of', and <u>hat'ya</u>

'to, for', are employed in these constructions. The

following sentences display some of the predicates with

which they are used. With the predicates of speaking TELL,

DECIDE, and REMIND, these constructions have only the

indirect reported speech interpretation.

79) <u>PREPARE</u>
    dzukaik'-as   bat'i tayari'   kar'-iu-dai
    push(INF)-OBL for   preparation do(P/F-S)-3s
    'He is getting ready to push it.' [T&C 1987:92][17]

80) <u>ALLOW</u>
    mai   daada mai   to   ja karik'-as   bat'i
    I(OBL) father I(OBL) her(ACC) wife do(INF)-OBL for
    jazat'   prau [T&C 1987:109][18]
    permission give(PST-A)-3s
    'My father gave me permission to marry her.'

---

[17]The example was originally from Trail and Cooper
(1987:92) who have <u>źuk-ek'-as</u>. They also have <u>zuk-ek'-as</u>
in another version of the same sentence (p. 176). My
informant, however, insisted on <u>dzukaik'-as</u> as the correct
form; therefore the example has been so modified.

[18]Spelling and translation of the original slightly
modified.

81) <u>TELL</u>
```
a salyim'-a kai aya' ik'-as            bat'i
I Salim-OBL to  here come(INF)-OBL for
mai ay'-is [E:bk, mb]
speak (PST PERF-A)-1s
'I told Salim to come here.'
```

82) <u>DECIDE</u>
```
a peśa'ur ne  parik'-as    bat'i faysalya' ar'-is [E:bk,mb]
I P.       not go(INF)-OBL for   decision  do(PST-A)-1s
'I decided not to go to Peshawar.'
```

83) <u>REMIND</u>
```
at      onik'-as          bat'i a to        ãgah-es'
flour bring(INF)-OBL for    I him(ACC) remind(PST-A)-1s
'I reminded him to bring flour.'   [E:mb, bk]
```

84) <u>BE READY, EAGER</u>
```
a catrau' parik'-as    bat'i cak   him'-dai [E:bk, mb]
I Chitral go(INF)-OBL for    ready become(P/F-S)-1s
'I am getting ready to go to Chitral.'
```

85) <u>BE READY, EAGER</u>
```
aghõ'-au-e              se  kakboi' cak   haw'-au
speak(PST-A)-3s-when the leopard ready become(PST-A)-3s
źuik'-as        hat'ya [T4:fs]
eat(INF)-OBL for
'When he spoke, the leopard got ready to eat him.'
```

86) <u>GET A CHANCE</u>
```
tas'a      hat'ya milau'  hik'-as           bat'i na
him(OBL) for    ·meeting become(INF)-OBL for    not
waasa  hu'la [T17:mz]
chance become(PST-I)-3s
'He didn't get a chance to meet her.'
```

87) <u>GET A CHANCE</u>
```
ajad'ua uk      gher'i au               mai    cewbew'
today   water again  come(PST-A)-3s I(OBL) clothes
mõDik'-as       hat'ya CP      hi-u' [S:bk, E:mb][17]
wash(INF)-OBL for    chance become(P/F-NS)-3s
'Today the water came again.  I will get a chance to
wash clothes.'
```

From (84) and (85) and (86) and (87) we see that some

predicates, e.g. <u>cak hik</u> 'be ready, eager' and <u>CP hik</u> and

<u>waasa hik</u> both meaning 'get a chance' allow either <u>bati</u> or

---

[17]<u>CP</u> may be the same as Trail and Cooper's <u>ChO</u>
'leisure, free time' (1987:123); I am not sure which
spelling is correct.

hatya.

    5.1.1.3.1.2. Oblique infinitive with conjunct verb:

This class is also fairly well represented, including the

predicates in the following examples. I include

expressions in V-al'yak hik/kar'ik in the formal class of

conjunct verbs because they consist of a nominal element

plus the verbalizing element(s) hik/karik 'become/do'.

88) TRY
     as'a sud'a labEhek'-as   kośiś' kari'man ay'-is
     that baby play(CS)(INF)-OBL attempt do(PST IMPFV-A)-3s
     'She was trying to play with the baby.' [E:bk, mb]

89) ORDER
    Sa   tas'a   tyik'-as   hok'um mai   prau
    king him(OBL) beat(INF)-OBL order I(OBL) give(PST-A)-3s
    'The king ordered me to beat him.' [E:bk, mb]

90) FEAR
    as'a catrau' parik'-as   bihal'yak haw'-au [E:mb, bk]
    he(OBL) C. go(INF)-OBL fear   become(PST-A)-3s
    'He was afraid to go to Chitral.'

91) ADVISE
    se mai   DakTar'-as baza' paś-aw-aik'-as   salya'
    he I(OBL) doctor-OBL arm   show-Cs(INF)-OBL advice
    ar'-au [E:bk, mb]
    do(PST-A)-3s
    'He advised me to show my arm to a doctor.'

92) THINK OF/REMEMBER
    krom karik'-as   phak'um ko ne i-u' [S:bk, E:mb]
    work do(INF)-OBL thought why not come(P/F-NS)-3s
    'Why don't you (ever) think about working?'

    5.1.1.3.1.3. Oblique infinitive with simple verb:

This class includes two basic phasal notions--'to be about

to' and 'to begin to'. These two constructions are among

the most characteristic of indigenous Kalasha style.

93) BE ABOUT TO
a) mucik'-as   thi śi'-u
   rain(INF)-OBL become(P PERF)-3s
   muc'i-o   ne śi'-u [S, S:mb]

rain(CP)-<u>o</u> not be(INAN)(P/F)-3s[20]
'It is about to rain, (but) it hasn't rained yet.'

b) pacik'-as   thi aś-is' [S]
   cook(INF)-OBL become(PST PERF-A)-3s
   'It was about to get cooked (but the process was
   interrupted).'

c) tu DuDik'-as   thi a'-as [S]
   you sleep(INF)-OBL become(P PERF)-2s
   'You are about to go to sleep.'

d) hist'i   jằgaly' khulyaik'-as   ar'-au-e
   leave(CP) jungle finish(INF)-OBL do(PST-A)-3s-when
   diś   kher   gher'i a-u [T17:mz]
   terrible stench again come(PST-A)-3s
   'When he had left it (the desert), when he was about to
   come to the end of (lit. 'finish') the jungle, there
   again came a terrible smell.'

In (93-a, b, and c) we have 'be about to' with an

intransitive verb, expressed with V(INF)-OBL <u>hik</u> 'become',

while in (93-d) with a transitive, V(INF)-OBL <u>kar'ik</u>

'do'.[21] 'To begin to' is expressed with V(INF)-OBL <u>dek</u>

'give' (cf. 94).[22]

94) <u>BEGIN TO</u>

a) thay'-o   mewa' żuk'-as   dit'a [Morg. 1973:22]
   put(CP)-<u>o</u> fruit eat(INF)-OBL give(PST-I)-3s
   'Having put it down, it (a dragon) began to eat fruit.'

b) hul'uk karik'-as   prau [S]
   heat   do(INF)-OBL give(PST-A)-3s
   'I began to feel hot.'

c) cei pik'-as   ‟ de [S:bkw, E:mb]

---

[20] <u>muc'i-o ne śi'u</u> is the present perfect of <u>muc'ik</u>
'to rain'. Note the insertion of the discourse particle <u>o</u>
and the negative between the conjunctive participle and the
finite components of this tense form.

[21] At this point I am not sure whether this example
represents the general situation, or an idiosyncracy of
this speaker.

[22] A parallel construction is encountered in Khowar and
in Shina.

```
tea drink(INF)-OBL give(IMP2s)
'Start drinking (your) tea!'
```

5.1.1.3.1.4. Oblique infinitive with ADJ or N: A few

predicates take semantic complements which consist of the

OBL infinitive with matrix verbal concept expressed by an

adjective, or a noun in the NOM or LOC case plus a finite

form of 'be'.

95) BE ABOUT TO
a) baCai' khur-o'-te hik'-as tap [T16:1g]
   kingdom other-OBL-DAT become(INF)-OBL on the verge of
   'The kingdom is about to fall into someone else's
   hands (i.e. not my descendents').'[23]

b) digA prikik'-as tap [E:mb, bk]
   wall fall(INF)-OBL on the verge of
   'The wall is just about to fall.'

The semantic difference between this construction and that

in (93) seems to be one of immediacy or urgency. INF-as

tap indicates more urgency than INF-as hik.

96) BE APPROPRIATE
   ja hik'-as munasip'-e [T17:mz]
   wife become(INF)-OBL appropriate-Q
   'Is it appropriate that she marry him?'

97) SAY
   tas'a So tarik'-an ik'-as mon as-is'
   he(OBL) 6 date-INST come(INF)-OBL word be(PST-A)-3s
   'He said he would come on the sixth (but he hasn't come
   yet).' [S:mb, E:bk]

98) INTEND
   mai tas'a Chetr kabza' karik'-as maksat'
   I(OBL) his(OBL) field capture do(INF)-OBL goal
   as-is' [E:mb, bk]
   be(INAN)(PST-A)-3s
   'I intended to capture his field.' (Lit. 'My aim was to
   capture his field.')

99) DESERVE
   hom'a saza' dik'-as lyakat'-una ay'-ik
```

---

[23]khurote 'to another' is from Khowar khur 'other',
plus the Kho. OBL marker -o plus the DAT marker -te.

```
we(OBL) punishment give(INF)-OBL ability-LOC be(P/F)-1p
'We deserve to be punished.'   [T&C 1987:16]
```

5.1.1.3.1.5.   Ablative infinitive: A final type of

non-NOM infinitive complement is that represented in (100).

100) <u>WARN</u>
```
     a e'lyi tara' parik'-ani  xabardar' ar'-is [E:bk, mb]
     I them   there go(INF)-ABL warning   do(PST-A)-1s
     'I warned them not to go there.' (Lit. I warned them
      from going there.')
```

5.1.1.3.2.   Nominative infinitives.   This is the most

common type of infinitival complement, corresponding in

frequency to the [S] <u>ghØi</u> V sentential complements.   It

includes the basic phasal concepts 'begin to, start',

'finish', 'stop', and the abilitatives 'be able to', 'know

how to', 'learn', and 'teach'.   Some predicates taking this

complement type follow.

101) <u>BE ABLE</u>
```
a) uk     iSpo'na ne  kai    ru'i nigik'    ne
   water hot       not do(CP) face wash(INF) not
   bha'-am [E:bk, mb]
   'I can't wash my face without heating (the) water.'
```

```
b) A:   tu  kar'ik  bha'-as-e   [S]
        you do(INF) be able(P/F-NS)-2s-Q
        'Can you do it?'
```

```
   B:   ne  bha'-am  [S]
        not be able(P/F-NS)-1s
        'I can't'
```

Note that the verb <u>bha'ik</u> 'be able' can be used without its

complement, like the English <u>can</u> but unlike the Hindi,

Urdu, Panjabi, etc. <u>saknaa</u>.   When used in reply to a

question it almost always occurs without the complement, as

in (101-b).[24]

102) <u>BEGIN TO</u>
    se kagas' niveś'ik   śuruk' ar'-au [E:j, mb]
    he letter write(INF) start do(PST-A)-3s
    'He began to write a letter.'

103) <u>LOOK FOR/WANT TO</u> (ironic)
a) tu tyek   khoj'-is-dai [S:bkw, E:mb]
   you beat(INF) look for(P/F-S)-2s
   'You are looking for a beating.'

b) tu tro'ik   khoj'-is-dai [S:bkw, E:mb]
   you cry(INF) look for(P/F-S)-2s
   'You want (an excuse) to cry.'

104) <u>FINISH</u>
a) tu au'-gar'ik   khulya'i-a [E:bk, mb]
   you bread-make(INF) finish(PST-A)-2s-Q
   'Have you finished making bread?'

b) a niveś'ik   pur'a   ar'-is [E:bk, mb]
   I write(INF) finished do(PST-A)-1s
   'I have finished writing.'

105) <u>STOP</u>
    tro'ik   bas/ban kar'i   mai   SiS trup-el'-lai
    cry(INF) enough do(IMP2s) I(OBL) head hurt(P/F-S)-3s
    'Stop crying, my head hurts.' [E:bk, mb]

106) <u>KNOW HOW TO</u>
    tu labE' karek: ne jhon'-is [S:bkw, E:mb]
    you play do(CS)(INF) not know(P/F-NS)-2s
    'You don't know how to make (the baby) play.'

107) <u>LEARN</u>
    as'a moTer' kasek'   ne CiC'i a'-au [E:bk, mb]
    he   jeep   drive(INF) not learn(P PERF)-3s
    'He has not learned how to drive a vehicle.'

---

[24]Peter Hook (p.c.) comments that constructions like
(101-b) were possible in Vedic Sanskrit, and also that
constructions with <u>aanaa</u> 'come' in the meaning of 'to be
able' in Hindi and Urdu do not require that the infinitive
be repeated in such questions. I give an example from
Panjabi.
a) A: tanŨŨ ãgrezi paRhnii   aundii   e
      you-DAT English read(INF)fs come(P IMPFV)fs be-3s
      'Can you read English?'
   B: neĭ aundii
      not come(P IMPFV)fs
      '(No), I can't.'

108) TEACH
    a moTer' kasek'   tas'a   Cic-a'i a'-am [E:mb, bk]
    I jeep drive(INF) him(OBL) learn-Cs(P PERF)-1s
    'I have taught him how to drive a car.'

109) THINK ABOUT/REMEMBER
    a cei pik   phak'um ne kar'-im [E:j, mb]
    I tea drink(INF) thought not do(P/F-NS)-1s
    'I don't think about drinking tea.'

110) REMEMBER
    tai   phuTu' chala'ik mai   yat   aś-is'
    you(OBL) photo take(INF) I(OBL) memory be(PST-A)-3s
    'I remembered to take your photograph.' [E:j, mb]

111) FORGET
    a tai   phuTu' chala'ik apraŚ'm-is [E:j, mb]
    I you(OBL) photo take(INF) forget(PST-A)-1s
    'I forgot to take your photograph.'

112) LIKE
    mai   catrau' parik' bo   khoś [E:bk, mb]
    I(OBL) Chitral go(INF) very pleasing
    'I very much like to go to Chitral.'

113) FEAR
a) a tramaSⱺg'-una bi'en nihik'   bih-im' [E:mb, ek]
   I dark-LOC   out   go out(INF) fear(P/F-NS)-1s
   'I am afraid to go out in the dark.'

b) mai catrau' parik'/*parik'-as bihaly'ak kar'-iu-dai
   I(OBL) C.   go(INF)/*OBL   fear   do(P/F-S)-3s
   'I am afraid to go to Chitral.'[26]

    5.1.1.4. Nominalized complements. Only a few predi-
cates take nominal complements. The predicate ALLOW does
this in three different ways. In the first construction,
illustrated in (114), the verb stem is treated as a nomi-
nal, taking the LOC case ending. The verbs lasek' 'to let
(go)', and dek 'give' are used in the meaning of 'allow'.

114) ALLOW
a) phao ťu'-una suday'ak-as mo   lasa'i [S, E:mb]
   soil eat-LOC baby-OBL   not let(IMP2s)
   'Don't let the baby eat dirt (i.e. dust, soil).'

---

[26]Compare (90) above. I do not know why the OBL INF
was supplied in that example but rejected in (113-b).

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b) mai   krom-gar'-una ne del'-lai [S, E:mb]²⁶
   I(OBL) work-do-LOC   not give(P/F-S)-3s
   'She doesn't let me work.'

c) anda'i pac'i-una ne den   kur'a as'ta
   here   ripen-LOC not give(P/F-NS)-3p who   also
   žun   su'da žun, pat'ua žun, catruma'
   eat(P/F-NS)-3p children eat Chitralis eat Katis
   žun [S, E:mb]
   eat
   'Here they don't let (the fruit) ripen. Someone or
   other eats it — the children eat it, the Chitralis
   eat it, the Katis eat it.'

If the verbal concept of the complement is GO, the verb

'go' is omitted and a locative form of the noun expressing

the goal of motion precedes the verb lasek' 'to let (go)',

as in (115).

115) ALLOW (TO GO)
a) gag-o suir'yak-a lasa'-a [S, E:mb]
   cow-o sun-LOC   let go(IMP2p)
   'Let the cow go in the sun.'

b) se chul'-as   skuly'-ai ne lasel'-lai [E:bk, mb]
   he daughter-PS3s school-LOC not let go(P/F-S)-3s
   'He doesn't let his daughter (go) to school.'

An alternate way of expressing (115-b) is (116), in which

the LOC noun is followed by hat'ya 'to, for'.

116) se tan chul'-as   skuly'-una hat'ya ne
     he own daughter-PS3s school-LOC to   not
     las-el'-lai [E:bk, mb]
     let go(P/F-S)-3s
     'He doesn't let his daughter (go) to school.'

In this ability to omit the verb of the complement, lasek'

'to let (go)' behaves like bha'ik 'to be able'. And, as

with bha'ik, the answer to a question can consist of simply

ne lasen' 'They don't let (me/us) V', where V can represent

---

²⁶Note the voicing of the initial consonant (k > g) in
the compound krom-garuna. This is one of the diagnostics
of a compound word in Kalasha.

verbal concepts other than 'go'. Panjabi, Hindi, and Urdu

again display the opposite characteristic, requiring

expression of the complement verb, as in <u>nahÎÎ karne detaa</u>

'he doesn't let (me) do it', and not accepting *<u>nahÎÎ detaa</u>

in this meaning.

The postposition <u>hat'ya</u> also occurs in two other

complements: BE EAGER and BE READY.

117) <u>BE EAGER</u>
     cuT'yek istri'ža-gUak krom'-as hat'ya śauk
     little   girl   work-OBL for   eagerness
     kar'-iu-dai [E:bk, mb]
     do(P/F-S)-3s
     'The little girl is eager to work.'

118) <u>BE READY</u>
     a catrau' hat'ya cak   thi a'-am   cop'o
     I Chitral for   ready become(P PERF)-1s tomorrow
     catrau' par-im'-dai [S:bk, E:mb]
     Chitral go(P/F-S)-1s
     'I am ready to go to Chitral; tomorrow I am going to
      Chitral.'

With two verbs meaning CONSIDER the semantic complement is

reduced to an adjective phrase or NP modifying an ACC NP.

119) <u>CONSIDER</u>
a) te   to   śum joS'-in [T&C 1987:112]
     they him(ACC) bad consider(P/F-NS)-3p
     'They think badly of him./ They consider him bad.'

b) to   śum moc a asmun' kai a'-am [E:bk, mb]
     him(ACC) bad man I judge(P PERF)-1s
     'I have judged/consider him a bad man.'

5.1.2. Kalasha complements and the "binding hierarchy"

     Givon (1980) gives cross-linguistic evidence for a

number of "systematic correlations between the semantic

structure of complement-taking verbs and the syntactic

structure of their complements." (p. 333) Verbs are ranked

in a semantic "binding hierarchy" such that implicative

verbs like BEGIN, FINISH, SUCCEED, MAKE, FORCE, CAUSE,

PREVENT are most tightly bound, followed by verbs which

show strong attempt (but not necessarily success) like

PLAN, INTEND, TRY, ORDER, ASK, ALLOW, TELL. In the mid-

range of the binding scale are found first verbs with high

emotive content like HOPE, FEAR, EXPECT, LIKE, and WANT,

then, slightly lower on the scale, verbs involving less

emotional intensity like DECIDE or AGREE. The lower end of

the scale comprises verbs of relatively stronger or weaker

epistemic attitude, the former class including predicates

like KNOW, THINK, BELIEVE, DOUBT, or BE SURE, and the

latter predicates of noncommittal reporting like SAY or

TELL (ibid.:369) These last occupy the lowermost position

in the binding hierarchy.

The syntactic forms of complements are similarly

ranked in a scale ranging, in descending order of syntactic

integration with the matrix clause, from the most reduced

(lexicalized) through nominalized, infinitive, S-like with

subjunctives, free clauses with restrictions, and finally

free clauses. The correlations found by Givon between

semantic binding and syntactic form are such that the

higher on the semantic binding scale a predicate is, the

closer its syntactic complement type is likely to be to the

tight syntactic integration end of the syntactic continuum.

From this correlation follows an implicational hierarchy

prediction:

> "If a point on the semantic hierarchy of binding
> is coded by a certain syntactic coding device,

then a semantically higher point cannot be coded
by a syntactically lower point. Rather, it will
be coded either by the same coding point, or by a
higher coding point on the syntactic coding scale."
(<u>ibid.</u>:370)

Now let us see to what extent the distribution of

Kalasha complement types fits these predictions. We begin

by selecting representative predicates from each of Givon's

semantic-binding classes--implicative, strong attempt, high

emotive content, low emotive content, stronger epistemic

attitude, weaker epistemic attitude--and noting their

complement types.

<u>Binding class/Predicates</u>	<u>Complement type</u>
<u>Implicative</u>	
STOP	INF(NOM)
BEGIN	1) INF(NOM)
	2) INF(OBL)
FINISH	1) INF(NOM)
	2) S-(reduced)
CAUSE	Lexical/morphological
CONVINCE	[S] <u>ghði</u>
BE ABLE	1) INF(NOM)
	2) [S] <u>ghði</u>
KNOW HOW	INF(NOM)
<u>Strong Attempt</u>	
WARN	1) INF(ABL)
	2) [S] <u>ghði</u>
INTEND	1) INF(OBL)
	2) [S] <u>ghði</u>
TRY	1) INF(OBL)
	2) [S] <u>ghði</u>
ORDER	1) INF(OBL)
	2) [S] <u>ghði</u>
ADVISE	1) INF(OBL)
	2) [S] <u>ghði</u>
ALLOW	1) Nominalization-LOC
	2) INF(OBL)
	3) [S] <u>ghði</u>
TELL	1) INF(OBL)
	2) [S]
	3) [S] <u>ghði</u>
ASK FOR	[S] <u>ghði</u>

<u>High Emotive Content</u>

ENJOY	Reduced [S]
HOPE	[S] ghöi
FEAR	1) INF(NOM)/(OBL)
	2) [S] ghöi
	3) ki [S]
LIKE	INF(NOM)
WANT	1) [S] ghöi
	2) ki [S]

Lower Emotive Content

DECIDE	1) INF(OBL)
	2) [S] ghöi
REMEMBER	1) INF(OBL)
	2) [S] ghöi
FORGET	1) INF(NOM)
	2) [S] ghöi

Stronger Epistemic Attitude

KNOW	1) ki [S]
	2) [S]
	3) [S] ghöi
THINK	1) ki [S]
	2) [S]
	3) [S] ghöi
UNDERSTAND	1) ki [S]
	2) [S] ghöi
BELIEVE	ki [S]
DOUBT	[S] ghöi
CONSIDER	1) Nominalization
	2) [S] ghöi

Weaker Epistemic Attitude

SAY	1) Nominalization
	2) ki [S]
	3) [S] ghöi
ASK	[S] ghöi

In some respects the Kalasha pattern supports Givon's prediction and in others runs counter to it. First we note that, in consonance with the prediction, the implicatives like CAUSE, STOP, BEGIN, FINISH, BE ABLE, and KNOW HOW tend to have complements with the simple (NOM) infinitive. Also as predicted, the predicates of epistemic attitude (with two exceptions) have fully sentential complements.

According to the implicational hierarchy formulated above, however, we should not find "strong attempt" verbs

like FORCE and TRY with fully sentential complements while

at the same time having "lower emotive content verbs" like

DECIDE, REMEMBER, and FORGET with infinitive complements.

The possibility of fully sentential complements with BE

ABLE TO and CONVINCE is also anomalous from the point of

view of the prediction.

We note further, however, that almost all of the

predicates in the middle ranges of the scale—the strong

attempt, high emotive content, and low emotive content

categories—can have two types of complement, one senten-

tial and one infinitival. One might assume that, in accor-

dance with the prediction, for those verbs the infinitival

complement is associated with a higher and the sentential

complement with a lower emotive content. But, in fact,

this is not so. On the contrary, we find that the higher

degree of emotional committment to the outcome denoted in

the complement clause is expressed by the sentential com-

plement, and the more matter of fact, objective statement

by the infinitival complement. Consider (120-a and b).

120) FORGET
a) a tai   phuTu' chal-em'   ghÐi apraS'm-is
   I you(OBL) photo take(P/F-NS)-1s COMP forget(PST-A)-1s
   'I forgot to take your photo.'   (=7-a)

b) a tai   phuTu' chala'ik apraS'm-is
   I you(OBL) photo take(INF) forget(PST-A)-1s
   'I forgot to take your photo.' (=11)

Sentence (120-a) expresses the speaker's sense of regret

and disappointment at not taking the photograph, while

(120-b) is emotionally neutral. Compare also (121-a and

b). In (121-a) the sentence describes a baby crying out

121) FEAR
a) śuru'-am   ghɒi bih-iu'-dai [S:bk, E:mb]
   fall(P/F-NS)-1s COMP fear(P/F-S)-3s
   'She is afraid of falling.'   (=5-a)

b) a tramaSɒg-una bi'en nihik'   bih-im' [E:mb, ek, bk]
   I dark-LOC   out   go out(INF) fear(P/F-NS)-1s
   'I am afraid to go out in the dark.' (=113-a)

in fear of a specific, actual possibility of falling;

while (121-b) is making a general statement about a

person's attitude toward going out in the dark.

The explanation for this anomaly lies in the fact that

the complementizer ghɒi (< 'say') is involved in each of

these cases. The legacy of this complementizer's origin in

'say' is complex. (1) It means that the syntactic

distinction between direct and indirect reported speech is

not clearcut in sentences involving complements with ghɒi,

since ghɒi may be the equivalent of 'that', 'thus', or

sometimes of 'having said'. (2) Complements with ghɒi,

especially in contrast with complements of other types,

e.g. infinitival complements or ki clauses, tend to keep

the semantics of speaker involvement with the utterance, a

sort of semantic reflex of the original meaning of ghɒi.

Note that the ki clauses tend to cluster at the bottom end

of the binding hierarchy. Thus, although they are evolving

into the syntactic equivalent of ghɒi clauses, there

appears to be some differentiation between them in the

semantic dimension of emotive content. Whether this

differentiation will become accelerated, with a resultant

polarization of ki and ghɒi clauses, or whether ki clauses

will gradually become co-equal with (or replace) ghɒi

clauses all along the scale is an interesting question, one

capable of generating some testable diachronic predictions.

This explains why we have the apparently anomalous

sentential complement of BE ABLE, as in (122-a).

122) BE ABLE
a) doS   a Sula'   on'-im   ghØi ne
   yesterday I firewood bring(P/F-NS)-1s COMP not
   abha'-is [S:bk, E:mb]
   be able(PST-A)-1s
   'Yesterday I was not able to bring firewood.' (=22)

b) doS   a Sula'   on'ik   ne abha'-is [E:mb, bk]
   yesterday I firewood bring(INF) not be able(PST-A)-1s
   'Yesterday I was not able to bring firewood.'

What (122-a) is conveying is the speaker's sense of regret

at not being able to carry out his specific intention of

bringing firewood yesterday, i.e. 'I wanted to bring

firewood yesterday, but wasn't able to'. (122-b) on the

other hand does not carry this emotional nuance.

(3) This leads naturally to the semantic development

of ghØi into a marker of purpose and reason clauses, which

will be examined in the next section.[27]

Thus the appearance of fully sentential complements at

anomalous positions on the hierarchy is explained by the

fact that emotionally relevant complements retain the shape

---

[27]It also explains why Morgenstierne, faced with the
problem of arriving at the meaning of ghØi based on only a
few occurrences, glossed it as 'willingly' or 'for the sake
of'. Undoubtedly what happened is that his informants,
unfamiliar with notions like "complementizer", explained
the word in terms of its semantics, either of emotional
committment, or in its purpose clause development. It is
noteworthy that Morgenstierne did not give the meaning
'having said'; I take this as evidence that his informants
did not perceive ghØi as related to 'say', and thus for its
completely grammaticized status.

of the direct-speech form which is their etymological
heritage. Interestingly, it is precisely in the middle
range--where strength of emotional committment is the
operative variable--where this effect of origin in 'say' is
observed.[20] So, with the caveat that qualifications taking
into account the semantic effects of 'say' complementizers
of the Kalasha type need to be incorporated into the
predictions of the implicational hierarchy, it appears that
on the whole the binding hierarchy is not contradicted by
the distribution of Kalasha complement types.

5.2. ghÕi and ki clauses

A synchronic summary of the range of ghÕi and ki
clauses and mixed complement types was presented in the
previous section. To recapitulate briefly, we found the
following types:

    (1) [S] ghÕi V
    (2) V [S] ghÕi
    (3) V [S]
    (4) [S] V
    (5) V ki [S] ghÕi V
    (6) V ki [S] ghÕi
    (7) V ki [S]
    (8) [S . . . V ki . . . S]
    (9) [S] ghÕi

A closer study examining constructions involving only verbs

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[20]This finding is of the same form as that discussed
by Givon (1982) in relation to an epistemic continuum which
ranges from an "unchallengeable" pole, through propositions
which are asserted with relative confidence and thus
require or admit evidentiary justification, to propositions
asserted (only) with doubt and which thus require no
evidentiary support. (p. 24) Givon finds that
"evidentiality contrasts appear primarily in the middle . .
. portion of the epistemic scale, where truth is neither
presupposed and thus beyond doubt, nor too hazy and
dubitable to bother with". (p. 26)

of speaking reveals the further types:

    (10) SPEAK [S] ghði SPEAK
    (11) SPEAK ki [S] SPEAK
    (12) SPEAK [S] SPEAK
    (13) [S] ghði (ghði as CP)
    (14) ghði as 'thus'

These are illustrated in examples (123) - (127).

123) SPEAK [S] ghði SPEAK
    to'a ma'u-dai   gardok'-as kai ei gardok' ma brik-o
    then say(P/F-S)-3s donkey-OBL to hey donkey my death
    huś aru   ma peśi'ru źu bos'an ghði amau'[T6:b]
    found out my flour   eating up COMP say(PST-A)-3s
    'Then he says to the donkey, "Hey donkey, you found out
    about my death (and) are eating up my flour."'[29]

124) SPEAK ki [S] SPEAK
    to'a ja'-as   ma'ila   ki e moc a tai   ne
    then wife-PS3s say(PST-I)3s COMP hey man I you(OBL) not
    pe khoś   ha'au   tu mai   hut'i   a
    if pleasing become(PST-A)-3s you I(OBL) send(IMP2s) I
    parim'-dai   mai   daada'-a   dur'-a   hat'ya
    go(P/F-S)-1s I(OBL) father-PS1s house-LOC to
    ghð'ata [T11:sk][30]
    say(PST-I)-3s
    'Then his wife said, "Hey, husband, if I am not pleasing
    to you send me (back). I will go to my father's house,"
    she said.'

125) SPEAK [S] SPEAK
    ghði ma'il-e   istri'źa baCa'-as kai jawap'
    thus speak(PST-I)-3s-when woman   king-OBL to   reply
    di'ta   a mai   dada'-a   dur'-a   hat'ya
    give(PST-I)-3s I I(OBL) father-PS1s house-LOC to
    ne par-im'   tu ś-atra'   phond'-una roT'-una
    not go(P/F-NS)-1s you EMPH-there road-LOC   road-LOC

---

    [29]The quoted sentence 'Hey, donkey . . .' is in
Khowar. This type of tale sometimes has quoted dialogue in
Khowar interpolated into the text. The reason for this is
that many of these stories (fairy tales, animal tales) are
not originally Kalash stories. They have been transmitted
in Khowar, and rendered into Kalasha. When a particular
piece of dialogue depends for its effect on specific word-
ing, sometimes the original Khowar sentence is retained.

    [30]The form ghð'ata (< ghð'ik 'to say') is interesting.
A few past inferentials are formed in -ta. Another is
maata, an alternate past inferential of mǎik 'speak, say',
the usual past inferential form of which is ma'ila.

```
mai      hat'ya ek  belyDïg' sawza'i      ghû'ata
I(OBL) for     one building make(IMP2s) say(PST-I)-3s
'When heᵢ spoke thus, the woman replied to the kingᵢ,
"I will not go to my father's house.  You make a
building for me right there on the road," she said.'
[T11:sk]
```

126) [S] ghûi (ghûi as CP)
```
a) . . . oh-ho anaś'-is          anaś'-is ghûi pha'to
       oh-ho die(PST-A)-1s died       COMP then
iton' thi a'-au       hu'la            dri'ga
lie down(P PERF)-3s become(PST-I)-3s long
'Saying, "Oh-ho, I am dead, I am dead", he lay down
 flat (on the ground).'  [T6:b]
```

```
b) ne a'sa         ki'ya andaza' ghûi-o      istri'ża
   no that(OBL) some   limit    say(CP)-o woman
   ma'ila          kimon'   al'a        cit'-is [T11:sk]
   say(PST-I)-3s how much that(ACC) think(P/F-NS)-2s
   'Saying, "No, that (must have) some limit," the woman
    said, "how long (lit. 'how much') are you going to
    think about it?"'
```

In (126-b) we have ghûi followed by -o. By making

explicit the sequentiality of the two actions, -o indicates

that ghûi is functioning in the meaning 'having said'

rather than as a complementizer.

127) ghûi as THUS .
```
   ghûi ma'il-e                 baCa' tas'i      mon  kai
   thus speak(PST-I)3s-when king  them(OBL) word to
   chul'-as         tas'a    ja   di'ta  [T11:sk]
   daughter-PS3s him(OBL) wife give(PST-I)3s
   'When they spoke thus, the king, heeding their word,
    gave his daughter to him as wife.'
```

These variations represent stages, all simultaneously

present, in the evolution of Kalasha complement structures

resulting from the assimilation of the right-branching ki

clause structure into a predominantly left-branching

language.

The above list tells us the range of types present,

but nothing about their relative frequency in the language.

In an attempt to determine this, I have tabulated their

occurrences in several texts, focussing on verbs of speaking and direct speech contexts only. In Tables 1 and 2, S represents a verb of speaking, and Q represents the reported speech. By far the most frequently occurring verbs of speaking are mä'ik, ghö'ik, and höź'ik, all meaning 'say, speak'. Other verbs include phuc'ik 'ask', hok'um dek 'order', etc. The figures in Table 1 are raw numbers of occurrences, and those in Table 2 represent percentages.

Table 1.　Numbers of occurrences of reported speech construction types[31]

Construction Type	LSI	M	T_1	T_2	$B_{1,2}$	B_3	B_4
1) [Q] ghöi S	1	1	4	4	15	9	9
2) S [Q] ghöi	0	0	0	3	2	3	0
3) S [Q]	9	15	0	0	5	29	0
4) [Q] S	0	0	0	0	0	2	2
5) S [Q] S	0	0	0	0	0	0	0
6) S [Q] ghöi S	0	0	0	0	2	0	2
7) S ki [Q] ghöi S	0	0	0	1	13	2	4
8) S ki [Q] ghöi	0	0	1	0	1	0	1
9) S ki [Q] S	0	0	0	0	0	0	0
10) S ki [Q]	0	8	17	0	6	18	0
11) [Q S ki Q]	0	0	0	0	1	4	2
12) [Q] ghöi (=CP)	0	0	0	0	3	3	3
13) THUS	0	0	1	0	1	7	1
Totals	10	24	23	8	49	77	24

Table 1. (continued)

Construction Type	B_7	B_{10}	B_{11}	B_{14}	B_{15}	P_1	P_2
1) [Q] ghöi S	0	1	10	17	12	0	2
2) S [Q] ghöi	3	0	2	0	1	8	1
3) S [Q]	6	0	7	1	0	0	2
4) [Q] S	3	0	1	0	0	1	0
5) S [Q] S	0	0	1	0	0	0	0

---

　　　　[31]M = Morgenstierne, T = Trail, B = Bashir, LSI = Linguistic Survey of India, and P = Parkes.

6) S [Q] qhŏi S	1	0	1	0	0	0	0
7) S ki [Q] qhŏi S	0	0	0	2	1	0	0
8) S ki [Q] qhŏi	0	0	1	5	1	1	0
9) S ki [Q] S	3	0	1	1	0	0	0
10) S ki [Q]	14	10	13	17	8	6	5 .
11) [Q S ki Q]	0	0	1	7	0	0	0
12) [Q] qhŏi (=CP)	4	3	4	5	18	2	0
13) THUS	1	6	14	16	6	1	1
Totals	35	20	56	71	47	19	11

Table 2. Percentages of occurrence of reported speech types

Construction Type	Texts						
	LSI	M	T₁	T₂	B₁.₂	B₃	B₆
1) [Q] qhŏi S	10	4	17	50	31	12	38
2) S [Q] qhŏi	0	0	0	38	4	4	0
3) S [Q]	90	63	0	0	10	38	0
4) [Q] S	0	0	0	0	0	36	8
5) S [Q] S	0	0	0	0	0	0	0
6) S [Q] qhŏi S	0	0	0	0	4	0	8
7) S ki [Q] qhòi S	0	0	0	13	27	3	17
8) S ki [Q] qhŏi	0	0	4	0	2	0	4
9) S ki [Q] S	0	0	0	0	0	0	0
10) S ki [Q]	0	33	74	0	12	23	0
11) [Q S ki Q]	0	0	0	0	2	5	8
12) [Q] qhŏi (=CP)	0	0	0	0	6	4	13
13) THUS	0	0	4	0	2	9	4

Table 2 (continued)

Construction Type	Texts						
	B₇	B₁₀	B₁₁	B₁₄	B₁₆	P₁	P₂
1) [Q] qhŏi S	0	5	18	24	26	0	18
2) S [Q] qhŏi	9	0	4	0	2	42	9
3) S [Q]	17	0	13	1	0	0	18
4) [Q] S	9	0	2	0	0	5	0
5) S [Q] S	0	0	2	0	0	0	0
6) S [Q] qhŏi S	3	0	2	0	0	0	0
7) S ki [Q] qhòi S	0	0	0	3	2	0	0
8) S ki [Q] qhŏi	0	0	2	7	2	5	0
9) S ki [Q] S	9	0	2	1	0	0	0
10) S ki [Q]	40	50	23	24	17	32	46
11) [Q S ki Q]	0	0	2	10	0	0	0
12) [Q] qhŏi (=CP)	11	15	7	7	38	11	0
13) THUS	3	30	25	23	13	5	9

Finally, in Table 3, the percentages of clear left-branching structures, clear right-branching structures, and

mixed structures are compared for each (group of) text(s).

Table 3.   Percentages of left-branching, right-branching
            and mixed structures[32]

Text	L		Structure Type R		M	
LSI	10 (n = 1)		90 (9)		0	
Morgenstierne	4 (1)		96 (23)		0	
T₁ (Tales)	22 (5)		74 (17)		4	(1)
T₂ (Conversation)	50 (4)		0		50	(4)
B₁,₂	39 (19)		25 (12)		37	(18)
B₃	27 (21)		66 (51)		7	(5)
B₆	63 (15)		8 (2)		29	(7)
B₇	23 (8)		66 (23)		11	(4)
B₁₀	50 (10)		50 (10)		0	
B₁₁	52 (29)		39 (22)		9	(5)
B₁₄	54 (38)		37 (26)		10	(7)
B₁₅	77 (36)		17 (8)		6	(3)
P₁	21 (4)		32 (6)		48	(9)
P₂	27 (3)		64 (7)		9	(1)
Average (B texts)	48		39		14	

What do these results tell us?   Three things are

clear: (1) There is a great variety of constructions;

among these the clear left-branching [Q] ghði S and the

pure right-branching S ki [Q] are the most frequent.

(2) Variation among individual speakers is great, some

(e.g. B-15, B-6) using a preponderance of left-branching

constructions, others, (e.g. B-3, B-7, P-2) using more

right-branching.[33] (3) The proportion of left vs. right-

branching structures also varies with discourse type.   A

---

[32]For purposes of this comparison, the construction
types were classified as follows: left branching: types 1,
4, 12, and 13; right-branching: types 3, 9, 10, and 11;
mixed: types 2, 5, 6, 7, and 8.
Raw numbers of occurrences of each type are given in
parentheses.   Averages represent the B-texts only in order
to hold constant the variables of time and elicitation and
recording technique.

[33]Each of the B-texts represents a different speaker.

comparison of the two sets of texts T-1 and T-2 is instructive. Set T-1 includes two texts, both of which belong to the folk tale genre (animal tales), while the two texts of set T-2 are realistic conversational discourse-- one a letter, and one a scolding by a father to his son. All four texts are from the same speaker. What we observe is that the texts involving folk-tale narratives have a much higher percentage of right-branching structures than do those recording realistic everyday discourse. This result tends in the same direction as my own informal observation that in everyday domestic and casual conversation _ki_ clauses are infrequently heard, while in narratives (particularly of this type of story) they are used more often.[34]

From Table 3 it seems that on the average (for my folk-tale texts) left-branching structures only slightly predominate over right-branching. If the three non-finite types [Q] _ghŏi_, [Q] _ghŏi_ (as CP), and THUS are excluded, and if we compare, for example, only the clear left-branching and clear right-branching structures, then the proportion of right-branching structures is higher. Table 4 shows this comparison.

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[34]With regard to the assumption that folk-tales tend to be grammatically conservative (referred to by Peter Hook), it may be that in Kalasha this particular genre, since it involves non-indigenous stories, tends to import non-indigenous syntactic structures too.

Table 4.   "Pure" left- vs. right-branching
complement types (percentages)

Text	Left br.		Right br.		Totals
LSI	100	(n = 1)	0		1
Morg	11	(1)	89	(8)	9
T$_1$ (tales)	19	(4)	81	(17)	21
T$_2$ (conv.)	100	(4)	0		4
B$_{1,2}$	71	(15)	29	(6)	21
B$_3$	33	(9)	67	(18)	27
B$_4$	100	(9)	0		9
B$_7$	0		100	(14)	14
B$_{10}$	9	(1)	91	(10)	11
B$_{11}$	44	(10)	57	(13)	23
B$_{14}$	50	(17)	50	(17)	34
B$_{15}$	60	(12)	40	(8)	20
P$_1$	0		100	(6)	6
P$_2$	29	(2)	72	(5)	7
Averages (Btexts)	46	(73)	54	(86)	159

5.3.   Extended semantic developments of ghðik 'say'

In the previous section we saw that __ki__ clauses seem increasingly to be fulfilling the function of complementizer with reported speech (at least in the folk tale narrative genre), especially when the verb of speaking is one of the semantically unspecialized __ahðź'ik__, __mä'ik__, or __ghðik__ 'say, speak'.   When the verb is a more specialized one like 'report', 'warn', or 'shout', for example, __ghði__ clauses still seem to be preferred.

__ghði__, however, has developed an extended range of uses which are comparable to the functions reported for 'say' complementizers worldwide and in South Asia for Dravidian and some more southerly Indo-Aryan languages.   The functions of 'say' complementizers in south Asian languages has been the focus of much recent attention; see Hamp (1976), Kachru (1979), Hock (1982), Subbarao and Saxena

(ms), Meenakshi (1986), and Rau (1987) for example. One
aim of this research has been to delineate the range of
functions of SAY complementizers in various individual
languages; another has been to consider this as a possible
convergence phenomenon and to establish the origin of these
constructions. This aspect of the discussion has focussed
on the question of whether or not Dravidian is the
historical source of quotative uses in South Asia. Some
authors have been cautious in venturing a conclusion:
"Historically it is not clear that the quotative in NIA
developed as a result of the influence of Dravidian (Kachru
1979:75)".

> ". . . It is not, however, possible to state with
> any degree of certainty the extent to which these
> developments are attributable to internal Sanskrit
> developments, to outside influence, or to a
> convergent combination of the two. Nor does our
> current state of knowledge permit the claim that
> if there was outside influence, that influence can
> have come only from Dravidian." (Hock 1982:79)

Others, based on the observation that ". . . (this)
development is restricted only to the outer group of Indo-
Aryan languages which are geographically contiguous to
Dravidian languages (Subbarao and Saxena, ms:54)", argue
that Dravidian influence is the most likely source of the
development of (extended) functions of SAY complementizers
in NIA. Yet a third position is articulated in Rau
(1987:271), who, noting the existence of SAY complements in
a wide variety of genetically and geographically diverse
languages, says that:

"it is likely that functions such as the use of
SAY as a quotative marker, clause linker, etc.,
are language-internal developments . . . (while)
"a greater number of non-literal usages in the
Dravidian languages also does not necessarily
point to a Dravidian source of all functions.
Extension of usages in various contexts could
well be the product of mutual convergence and the
resultant strengthening of the process."

The purpose of the following paragraphs is to
introduce data from Kalasha relevant to these questions,
thus adding another perspective to the discussion. Using
Subbarao and Saxena's list of functions of SAY as a basis
for comparison, I characterize Kalasha with respect to each
of them, stating whether or not ghõi or another form of SAY
has the given function. Subbarao and Saxena identify the
following functions:[39] (1) complementizer, (2) introducing
reason clauses, (3) introducing reason phrases, (4)
anaphoric reason indicator, (5) with onomatopoetic
expressions, (6) with onomatopoetic expressions conveying a
sense of efficiency and speed, (7) wish, (8) question word
complement, (9) conveying deliberateness, (10) as a
clarifier, (11) complementizer with embedded questions,
(12) with disjunct constructions, (13) introducer (of a
person), (14) to name, (15) conditional, (16) as a staller
(conversational filler), (17) meaning clarifier, (18)
linker (i.e. complementizer) after emotive predicates, (19)
as a property explicator, (20) with relative-correlative
adverbial pairs, (21) as an approximator, (22) in the

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[39]Although some of these seem redundant, I work with
the original list to facilitate comparison of the data.

meaning 'think', (23) as a memory retriever, 'by the way',

(24) as an opinion seeker, (25) to mark hearsay reporting,

(26) comparative marker, (27) in the meaning 'do', (28) as

a story starter, (29) in the sense 'that means', (30)

meaning 'as an x', (31) meaning 'because', (32) as an

intensifier, (33) meaning 'about to'. I will add to this

list (34) introducing purpose clauses, which should be

distinguished from reason clauses, and (35) meaning 'thus',

an anaphoric discourse element used to introduce a sentence

by referring to a previous utterance.

The following examples illustrate the functions found

in Kalasha.[36]

128) <u>COMPLEMENTIZER</u> (+)
a) se pruST moc ghǒi mai   hat'ya saru'-iu-dai [E:bk, mb]
   he good man COMP I(OBL) to   seem(P/F-S)-3s
   'It seems to me that he is a good man.' (=20)

b) mai   daada iu'   ghǒi salyim'-a hat'ya
   I(OBL) father come(P/F-NS)-3s COMP S.-OBL   to
   mahalyum' [E:bk]
   knowledge
   'Salim knows that his father will come.'

129) <u>INTRODUCING REASON CLAUSE</u> (+)
   ne agri'-au   e'mi post kriZ'na ghǒi [S:z, E:mb]
   not take(PST-A)-3s these skins black   COMP
   'He didn't buy these skins because they are black.'

130) <u>WISH</u> (+)
a) a tai   dur'-a   i-m   ghǒi cit'-im-dai
   I you(OBL) house-LOC come(P/F-NS)-1s COMP think(P/F-S)1s
   'I want to come to your house.' [E:bk] (cf. 3 above)

b) janap' as'ta pi-m   ghǒi [S, E:mb] (=74)
   J.   also drink(P/F-NS)-1s COMP
   'Janap also wants to drink (tea).'

_____

[36]The (+), (-), or (?) notations following the
function name indicate its presence, absence, or
questionable status.

131) QUESTION WORD COMPLEMENT (+)
    khyẽ ghõi periśan' hal'i-dai [T&C 1987:56]
    why   worried become(P/F-S)-2p
    'Why are you worried?'

The sequence khyẽ ghõi, literally 'how having said', means

simply 'why'.

132) CLARIFIER (+)
    A: tu khyẽ ma'-as-dai   a tai   bi'ra
        you what say-(P/F-S)2s I you(OBL) goat
        hE kai a'-am   ghõi [E:bk]
        steal (P PERF)-1s COMP
        'What are you saying — that I stole your goat?'

    B: ne-lya baaya   śehẽ   ghõi ne ma'-am-dai
        no-POL brother like that COMP not say(P/F-S)-1s
        'No brother, I am not saying that.'[37]

133) COMPLEMENTIZER WITH EMBEDDED QUESTION (+)
    a tas'a   aphuc'-is   kai-o i-s   ghõi
    I him(OBL) ask(PST-A)-1s when-o come(P/F-NS)-2s COMP
    'I asked him when he would come.' [S, E:bk, mb]

134) NAMING (+)
    mahmat' rahim' ghõi   su'da [S, E:mb]
    M.   R.   called child
    'A boy called Mahmat Rahim.'

135) MEANING 'THINK' (+)
a) mai   ś-i'ya · daada pha'to cikast' hiu'
   I(OBL) EMPH-this father then   upset   become(P/F-NS)-3s
   ghõi   tas'a   kai ne mai   gher'i śa-talai'
   thinking him(OBL) to not say(CP) again EMPH-there
   ati'   se śa-te'   sawz-au' [T16:lg]
   enter(CP) he EMPH-those(ACC) make(PST-A)-3s
   'Thinking that his, father₁ would worry, without telling
   him₁, he, again went in there and worked on making
   them.'

b) goST'-ai   di'ta   hu'la   ghõi ·
   cattle house-LOC put(PST-I)-3p become(PST-I)-3s thinking
   phar tara' tha'i-o ji-em'-e   goST'-ai
   load there put(CP)-o look(P/F-NS)-1s-when cattle h.-LOC
   gak du'-iu-dai [T O:sj]
   cow milk(P/F-S)-3s
   'When I put down my load there and looked, thinking that
   they might have put (them) in the cattle house, (I see
   that) he is milking a cow.'

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    [37]POL indicates lya, a marker of politeness and
affection.

136) REPORTER (HEARSAY) (+)
    ne śik   ghŏ-an   mai putr [S:bk]
    not be(INAN)(INF) say(P/F-NS)-3p my   son
    'They say there isn't any, my son.'

137) BECAUSE (+)
    Dar'an iu'-dai   ghŏi   ab'i biho'mi [E:bk]
    flood come(P/F-S)-3s because we   fear(PST-A)-1p
    'We were afraid because a flood was coming.'

138) THUS (+)
    ghŏi amal'-e/   ma'il-e [Texts]
    thus say(PST-A)-3s-when/(PST-I)-3s-when
    'When he spoke thus, . . .

This is one of the most frequently encountered uses of

ghŏi. It refers to an utterance in the previous sentence.

139) PURPOSE (+)
    ulyak' alai' ni-n'-dai   brŧk'-ik   ghŏi [S:bk]
    flock there take(P/F-S)-3p sell(P/F-NS)-1p PURP
    'They are taking the flock there to sell it.'

Those functions the status of which is not clear to me

are listed below.

140) INDICATING REASON PHRASES (?)

141) INDICATING REASON ANAPHORICALLY (?)

142) MEANING CLARIFIER (+?)
    a mai ay'-is   se   i'ya śum moc ghŏi   [E:bk]
    I say(PST PERF-A)-1s that he   bad man COMP
    'What I said is that he is a bad man.'[38]

143) EMOTIVE PREDICATE LINKER (+?)
    salyim' ȧgrezi' kitap' (ghŏi) khoś-el'-lai [E:bk]
    S   English books ghŏi like(P/F-S)-3s
    'Salim likes English books.'[39]

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[38]I list this as uncertain first because the structure
of Subbarao and Saxena's example involves a verbal
adjective of 'say' and pronominalizing suffix, which
produces the equivalent of the English cleft sentence. The
Kalasha structure is syntactically a free relative clause.
'that which I said'. Second, it is an elicited example.

[39]This example is uncertain because ghŏi is optional
at most, and because it is elicited rather than attested
from actual texts.

144) <u>STORY STARTER</u> (?)[40]

145) <u>THAT MEANS/IN THAT CASE</u> (+?)
    šehě   ghǒi tu ne is [E:bk]
    like that <u>ghǒi</u> you not come(P/F-NS)-2s
    ?'In that case, you won't come.'

146) <u>AS AN "x"</u> (-?)
    a ustat'   ghǒi krom kar'-im-dai [E:bk, mb]
    I teacher <u>ghǒi</u> work do(P/F-S)-1s
    ?i) 'I am working as a teacher.'
    ?ii) 'Because I am a teacher I am working.'[41]

    Functions which seem clearly not to be present, are

given next, along with the evidence when available for

judging them absent.

147) <u>WITH ONOMATOPOETIC EXPRESSIONS</u> (-)
    salyim' hǒža thi/*ghǒi pal'i   alai' tyai'   char
    S   noisily   fall(CP) there hit(CP) noise
    ar'-au [E:bk]
    do(PST-A)-3s
    'Salim fell down with a thud and made a noise.'

148) <u>DELIBERATENESS</u> (-)
    šaitan' su'da *kar'-im-dai/*hiu'-ori/*biš-iu-ori
    naughty child I will do it/let it happen/let it break
    ghǒi pyalya' biš-au' [E:bk]
    <u>ghǒi</u> cup   break(PST-A)-3s
    *'The naughty child broke the cup deliberately.'

149) <u>DISJUNCT CONSTRUCTIONS</u> (-)

150) <u>INTRODUCER</u> (-)
    i'ya mai malygi'ri salyim' (*ghǒi) [E:bk]
    this my friend   Salim   <u>ghǒi</u>
    'This is my friend Salim.'

151) <u>CONDITIONAL</u> (-)
a) salyim' pe al   ha'au   ustat'

---

    [40]There is a formulaic expression, <u>vakt-ama'i</u>
equivalent to 'once upon a time', 'a long time ago', which
also appears in Khowar in the form <u>vaxt-amai vaxt-a</u>. I am
not sure of the etymology of the second element. If -<u>amai</u>
should turn out to be from <u>maik</u> 'say, speak', then this
function would be present in Kalasha.

    [41]Informants differ on the meaning they assign to this
sentence.

```
Salim    if come(PST-A)-3s become(PST-A)-3s teacher
tas'a    hat'ya kitap' on'-iu  [E:bk]
him(OBL) for   book  bring(P/F-NS)-3s .
'If Salim comes, the teacher will bring the book for
 him.'
```

b)
```
salyim' i-u'                 ghði    ustat' tas'a
Salim   come(P/F-NS)-3s thinking teacher him(OBL)
hat'ya kitap' on'-iu-dai [E:bk]
for    book  bring(P/F-S)-3s
```
i) Thinking that Salim will come, the teacher is
   bringing a book for him.
ii) *If Salim comes the teacher will bring a book
    for him.

152) STALLER (-)[42]

153) PROPERTY EXPLICATOR (-)
```
Dar'an *ghði/i'ta      takliw'  [E:bk]
flood   ghði/come(CP) trouble
```
*i) 'A flood means trouble.'
ii) 'When a flood comes there is trouble.'

154) WITH RELATIVE-CORRELATIVE ADVERBIAL EXPRESSIONS (-)
```
salyim' kawai' [as'ta/*ghði alai'] par-iu' [E:bk]
Salim   where  also  / ghði there  go(P/F-NS)-3s
'Salim will go somewhere or other.'
```

155) APPROXIMATOR (-)
```
Sð-as   raw/*Sða ghði cut'yak żandar'  [E:bk]
dog-OBL like/dog ghði small    animal
'A small animal something like a dog.'
```

156) BY THE WAY/MEMORY RETRIEVER/ (-)

157) OPINION SEEKER (-)

158) COMPARATIVE MARKER (-)
```
salyim' [tas'-a    pi/ *ghði] dri'ga  [E:bk]
Salim   [him(OBL) from/ghði] long
'Salim is taller than him.'
```

159) MEANING 'DO'[43] (-)

160) INTENSIFIER (-)

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[42]No example I was able to construct using ghði in
this function was even close to being possible.

[43]In Kalasha 'say' does not generalize to 'do'. Nor
is 'do' used in the sense of 'say.' In Shina, however, the
verb whose basic meaning is 'do, make' is regularly used in
the sense of 'say'.

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*Dar'an ghði Dar'an [E:*bk]
 flood   ghði flood
*'A terrible/severe flood'
```

161) ABOUT TO (-)[44]

Examining the inventory of functions present in
Kalasha, we find that twelve of them are definitely
present, and another seven possibly so.

What can these data from Kalasha contribute to the
discussion of SAY complementizers in South Asian languages?
First, it must be pointed out that Kalasha is not the only
NWIA language to have a well developed set of 'say' func-
tions. Of the functions under discussion, the following
are found in Khowar: COMPLEMENTIZER (with a wide variety
of complement-taking predicates), PURPOSE, REASON (CLAU-
SAL), ONOMATOPOEIA, QUESTION WORD COMPLEMENT, DELIBERATE-
NESS, CLARIFIER (with adverb), COMPLEMENTIZER WITH EMBEDDED
QUESTIONS, INTRODUCER, NAMING, PROPERTY EXPLICATOR, and
meaning THINK. Gilgit Shina, Domaki, and Dangarikwar also
make extensive use of forms of 'say', as as do the non-IA
languages Burushaski and Tibeto-Burman Balti.[45]

Comparing the Kalasha and Khowar lists, we see that
the COMPLEMENTIZER, PURPOSE, REASON (CLAUSAL), QUESTION
WORD COMPLEMENT, CLARIFIER (with adverb), COMPLEMENTIZER
WITH EMBEDDED QUESTIONS, NAMING, and THINK functions are

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[44]The ways of expressing this meaning have been
discussed earlier in section 5.1.1.3.1.3.

[45]For discussion and exemplification of developments
of 'say' in Khowar, Shina, Dangarikwar, Balti, and
Burushaski, see Bashir (in preparation).

found in both languages.

Now comparing the range of functions of 'say' complementizers in Kalasha with the array of functions which developed for iti by the time of Classical Sanskrit (cf. Hock, 1982)--PURPOSE, EMPHASIS, NAME, ONOMATOPOEIA, RITUAL QUOTATIVE, CAUSE, and QUESTION WORD COMPLEMENT--we see that with the exception of ONOMATOPOEIA, EMPHASIS, and RITUAL QUOTATIVE, the same functions found in Sanskrit are also found in Kalasha. Hock (1982) traces the sequence of emergence of each of these functions in Sanskrit, finding chronological orders of development schematized as follows:

COMP with {'say' } > COMP with {'hear'} > COMP with 'see'
          {'think'}   {'know'}
          {'hear' }

THINK > PURPOSE > CAUSE (SUBJECTIVE) > CAUSE (OBJECTIVE)

NAME > ONOMATOPOEIA

'Say' is also the source of complementizers in creole languages, e.g. Krio (Givon 1980)[44] and Jamaican Creole (Lord 1976:188). The fact that 'say' develops into a complementizer in creoles, which are argued to be likely to transparently exhibit universal tendencies is quite telling.

Given that complementizers from 'say' are widely attested in genetically diverse and geographically

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[44]For example:
a) a no   se i bin-sik   [Givon 1980:346]
   I know say he been-sick
   'I know that he's been sick.'
b) i op   se i go-ebul go na Watalu tuma'ra
   he hope say he go-able go   W.   tomorrow
   'He hopes that he will be able to go to Watalu tomorrow.'

separated language families[47], and that they tend to
develop similar clusters of semantic extensions--into
purpose, reason, and conditional clauses, or into naming
and onomatopoeia marking phrases for example--it seems that
we must conclude that the presence of complementizers from
'say' and their development into markers of purpose,
reason, and conditional clauses are at least as likely to
be attributable to universal tendencies as to result from
convergence. In order to argue for convergence effects we
either have to find specialized developments other than
these extremely common ones and then evidence for their
presence in adjacent languages of different families, or
establish a quantified geographical gradient with respect
to some putative source (language).

The Kalasha and Khowar evidence relates to the
discussion in the following ways. Since neither Kalasha
nor Khowar is or has, as far as we know, been contiguous
with Dravidian, the presence of a strongly developed and
fairly wide range of functions of 'say' in these languages
suggests that in NWIA at least the source for the initial
development of 'say' complementizers could not have been
Dravidian. It could, however, be any one or several of the
following: independent internal development, influence

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[47]These include Niger-Congo (Lord 1976); Tibeto-
Burman--Newari (Ebert 1986) and Balti (Read 1934:67),
Bashir (in preparation); Quechua (Muyksen 1977 cited in
Hook 1985); Turkic--Sjoberg (1963:58) for Uzbek, Ebert
(1986:147) for Turkish, and Perry (1979) for Uzbek and
similar constructions in Tajik Persian; and creoles (Givon
1980 and Lord 1976).

from Turkic, or Tibeto-Burman, or from Burushaski.[48] The
semantic developments are all such that once the initial
innovation occurred, they would continue to develop inde-
pendently. With regard to the Dravidian question, the fact
that while having a strongly-developed 'say' complementizer
with a wide range of functions Kalasha does not have some
of the specialized functions taken as the most cogent
evidence for Dravidian influence on more southerly NIA
languages like Bengali, Marathi, Dakkhani Urdu, and
Sinhalese--namely the APPROXIMATOR and COMPARATIVE MARKER
functions--shows that the occurrence of these specific
functions for 'say' is a less widely attested phenomenon.[49]
Their presence in contiguous genetically unrelated
languages thus lends greater weight to an argument for
convergence.

Perhaps what we will find, once detailed analyses of
'say' functions in a wide range of languages have been
compared, is a clustering of functions with those develop-
ing from a structure [S] SAY (e.g. complementizer with
complement-taking predicates and with embedded questions,
purpose, reason, and conditional clauses) constituting one
cluster, those developing from a structure [NP] SAY (e.g.

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[48]'Say' complementizers in Iranian seem to be marginal
at most. Only a few of the functions under discussion are
found in Wakhi, for example. Those found in Tajik are
attributable to Uzbek influence (cf. Perry 1979).

[49]Subbarao and Saxena (ms) discuss the COMPARATIVE
MARKER function in Dakkhani Urdu and the APPROXIMATOR in
Marathi (p. 22, 26).

phrasal reason expressions, name, onomatopoeia, introducer, property explicator) making up another, and perhaps those from [ADV] SAY (e.g. anaphoric reason indicator, clarifier, question word complement) yet another. Within each cluster of functions there will be an identifiable diachronic pattern of development, along the lines sketched in Hock (1982) for Sanskrit. The development of SAY complementizers with 'say' will precede 'think', which will precede 'see'. The extension of the SAY complementizer to use with 'think' will also precede the evolution of purpose constructions, which will in turn precede the development of subjective and finally objective reason constructions. Similarly, the NAME function will precede more specialized developments like ONOMATOPOEIA or INTRODUCER.

Such a diachronic order should be reflected in synchronic implicational hierarchies such that the presence of the PURPOSE function implies the presence of the "THINK" function, and the presence of the REASON (OBJECTIVE) function implies the PURPOSE construction. Similarly the presence of ONOMATOPOEIA, or INTRODUCER would imply the presence of the NAME construction. These particular predictions do, in fact, turn out to hold for Kalasha, Khowar, Gilgit Shina, Dangarikwar, Burushaski, and Balti.[90]

5.4. Developments of ki

The incipient development of some of the functions of

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[90]See Bashir (in preparation) for data from these languages.

'say' complementizers is observed also for ki clauses in

Kalasha. In addition to functioning as complementizer with

many predicates ki is occasionally observed introducing

purpose and reason clauses. In the following example, ki

may be interpreted either as simply introducing the

reported speech 'He has given you his daughter", or as

introducing a purpose clause with an understood (deleted?)

verb 'say'.

162) te   parik'-ani aC'a   gher'i su'da on
     they go(INF)-ABL after again boys   come(PST-A)-3p
     ki   chul'-as   tai   prau [T26:bk]
     that daughter-PS3s you(OBL) give(PST-A)-3s
     'After they left, again some boys (i.e. messengers)
      came (to say) that, "He has given you his daughter."'

The following examples illustrate ki clauses with reason

interpretations.

163) 8j-o a'i (=ab'i) bo   kośan' ki   ho'ma putr
     now-o we   very happy that our   son
     a'-au   ghӨi hom'a   dhar'-iu   ghӨi
     be(P/F)-3s COMP we(OBL) take care of(P/F-NS)3s COMP
     'Now we are very happy that we have a son, because he
      will take care of us.' [Trail, unpublished text]

164) ghӨi amal'-e   se tic'ak khośan'
     thus say(PST-A)-3s-when she little happy
     haw'-au   ki   o   i'ya baCa'zada' a'-au
     become(PST-A)-3s that oh this prince   be(P/F)-3s
     i'ya mamulyi' moc ne [T17:mz]
     this ordinary man not
     'When he spoke thus, she was a little happy, because
      (she thought that), "Oh, this is a king's son, he
      isn't an ordinary man".'

165) śӨhӨ'   Tem di'ta   ki   wazir'-as
     like that time give(PST-I)3s that minister-OBL
     putr'-as hat'ya baCa'-as chul'-as   ne
     son-PS3s to   king-OBL daughter-PS3s not
     żal'-iu [T17:mz]
     reach(P/F)-3s
     'They set a time because (otherwise) the wazir's son
      would not get the king's daughter (lit. 'The king's
      daughter would not reach the wazir's son.')

A calque on the Urdu kyộ ki 'because' (lit. 'why

that') as in (166) is occasionally observed.

166) ab'i żuba'ram ne har'-ik   ko'ki ho'ma
     we   edibles not take(P/F-NS)-1p because we(OBL)
     isprap' kar'-iu-dai [T:#3]
     sleep   do(P/F-S)-3s
     'We won't take anything to eat, because we will feel
     sleepy (if we do).'

Some texts/speakers have ki developing functions more

like those of ki in Urdu, Khowar, or Persian, as in (167),

where ki introduces a clause which is the complement of

'happen', and in (168) where the clause introduced by ki is

in apposition with karun' 'custom'.

167) khośpo muźi śèhè   haw'-au ki - sotho'
     in a dream   like this happened that seventh
     asman'-una asman' pari'-as   chul'-as   ay'-is -
     heaven-LOC sky   fairy(OBL) daughter-PS3s be(PST-A)3s
     khośpo muźi aśek'   haw'-au [T26:bk][1]
     dream in   in love become(PST-A)-3s
     'It happened that in a dream - in the seventh
      heaven there was the daughter of a sky fairy -
      he fell in love in a dream.' (He saw the fairy's
      daughter in a dream and fell in love with her.)

168) ho'ma   baCahi'-una śèhè   karun' śi'-u
     we(OBL) kingdom-LOC like this custom be(P/F)-3s
     ki   ek hawta' źa   beru'-as   ta'da ne
     COMP one week   until husband-OBL near not
     par-in' [T3:fs]
     go(P/F-NS)-3p
     'In our kingdom the custom is like this - that they
      (i.e. newly married women) don't go near their
      husbands for a week.'

In (169) ki follows a temporal clause, as in Persian or

Wakhi.

169) deo   talai' par-au'   ki na ek sộa   mes
     demon there go(PST-A)-3s when CAJ one golden table
     tara' uchunD-au' [T26:bk]
     there descend(PST-A)-3s
     'When the demon/giant went there a golden table

_____

[1]The phrase khośpo muźi is Khowar.

descended (from the sky).'

Finally, in (170) ki appears in the meaning of 'if'.

170) ki mai   mon galyat' śial'aaw [=śiala haw'au]
     if I(OBL) word wrong   be(PST-I)3s become(PST-A)-3s
     tu mai   ẓu [T4:fs]
     you I(OBL) eat(IMP2s)
     'If my word turns out to be wrong, you eat me!'

How the various subordinating and complementizing functions will be distributed with continued change in Kalasha remains to be seen. At this point, however, it appears that ki clauses will continue to increase in frequency over ghối clauses in the function of introducing both direct and indirect reported speech with non-specific verbs of saying, while ghối clauses will remain the main way of expressing purpose and reason clauses and with semantically specialized verbs of verbal behavior, especially in everyday speech.

CHAPTER 6

RELATIVE CLAUSES

6.1. Theoretical considerations

6.1.1. Basic definitions

In this study I adopt the functional semantically

based definition of relative clause (hereafter RC) framed

in Keenan and Comrie (1977:63-4).

> "We consider any syntactic object to be an RC
> if it specifies a set of objects (perhaps a
> one-member set) in two steps: a larger set is
> specified, called the domain of relativization,
> and then restricted to some subset of which a
> certain sentence, the restricting sentence, is
> true. The domain of relativization is expressed
> in surface structure by the head NP, and the
> restricting sentence by the restricting clause,
> which may look more or less like a surface sen-
> tence depending on the language."

The restricting clause will be referred to as S-REL, and

the NP in the restricting (sentence or) clause that is

coreferential with the head NP will be called NP-REL. The

above definition automatically eliminates what are usually

called non-restrictive relative clauses, and in this

chapter I shall be discussing only restrictive RC's.

The restricting clause may either follow or precede

its head NP. In the former case S-REL is post-nominal and

in the latter pre-nominal; in both of these situations the

head NP is external to S-REL. I will refer to these as

post-nominal and pre-nominal externally-headed relative

clauses respectively. The English <u>The man</u> s-rel [<u>who</u>

<u>bought the red shirt</u>] exemplifies the post-nominal

externally headed type; the Urdu s-rel [<u>kursii par baiThaa</u>

<u>huaa</u>] <u>admi</u> 'the man sitting on the chair' illustrates the

prenominal externally headed type. If the head NP is

internal to the RC, the construction will be called

internally headed. Example (1) shows an internally headed

RC from Bambara.

1) tye ye   [ne ye so   min   ye] san
    man PST rc[I PST horse which see] buy
    'The man bought the horse that I saw.'
  [Keenan and Comrie 1972:65, from Bird (1966)]

By "free" or "headless" relative I shall mean a

structure like that in the English <u>I like what I see</u>, in

which a single (relative) pronominal element fuses the

functions of both head NP and relative element.

6.1.2. The relative-correlative structure

The structure called sometimes "relative-correlative",

sometimes "co-relative" is commonly found in Urdu, Panjabi,

Bengali, Hindi and other NIA languages.[1] (2-a) shows a

typical example of this type from Urdu or Hindi.

---

[1]"Co-relative", referring to an adjoined structure
(e.g. as in Keenan's diagram on p. 328), is opposed to "ad-
relative", which refers to a structure embedded under an
NP. "Correlative", on the other hand, is opposed to
"relative". Thus "co-relative clause" refers to the S-
initial or j- clause; while "correlative clause" refers to
the S-final (w-) clause. This potentially confusing
terminological similarity has arisen because of the
changing analyses given to this construction.

2-a) s-REL[jis   laRke ke saath aap baiThe the]
         [which boy   with   you were sitting]
      wo   cor   hai
      that thief is
      'The boy with whom you were sitting is a thief.'

S-REL can, however, also occur in sentence-final position,

as in (2-b).

2-b) wo   laRka cor   hai s-REL[jis   ke saath aap
      that boy   thief is   whom with   you
      baiThe the
      were sitting
      'The boy with whom you were sitting is a thief.'

or S-REL can be immediately post-nominal (2-c).

2-c) wo   laRka s-REL[jis   ke saath aap baiThe the]
      that boy   whom with   you were sitting
      cor   hai
      thief is
      The boy with whom you were sitting is a thief.'

While (2-b) and (2-c) are clearly post-nominal, externally

headed RC's, the construction illustrated in (2-a) is

susceptible of and has received varying analyses. Comrie

(1981:139) summarizes these differences as follows:

> "In one sense, this construction does have an
> internal head, since the relative clause . . .
> contains a full noun phrase . . . referring to the
> head. Alternatively, one could argue that the
> head is actually the noun phrase (with a full noun
> or just a pronoun) that occurs in the second clause,
> in which case this kind of construction would be a
> subtype of the prenominal relative clause. Both
> classifications are found in the literature, and
> perhaps it would be more accurate to say that this
> correlative construction combines features of both
> prenominal and internal-head types, i.e. these two
> types are not necessarily mutually exclusive."

Many scholars have discussed the jo . . . wo

construction in relation to the postnominal variants.

Gonda (1954:9), discussing Indo-Iranian ya (< IE io-), the

ancestor of the j- forms of NIA, says:

"It would appear that the Indo-Iranian ya- . . .
originally was an introductory, announcing; isola-
ting; explaining, qualifying, defining, distinguish-
ing pronominal word which included the word or word
group to which it drew attention or which it
introduced, etc., in a larger whole. From the point
of view of 'logical' syntax the relations of the
included (relative) clause and the other part of the
sentence were of a considerable degree of vagueness. .
. Various types of Indo-Iranian sentences can be
explained as formed with ya- of the above definition
rather than a strictly relative pronoun." (p. 10)

Downing (1973:12-3) argues that:

"there really is no evidence for deriving co-
relative clauses of the types discussed here from
underlying embedded relative clauses by a rule of
extraposition. (p. 12). . . None of this evidence,
taken alone, is yet conclusive regarding the deri-
vation of co-relative from ad-relative clauses. In
every case, however, the evidence suggests that either
there is no transformational relation or that the de-
rivation is in the opposite direction." (p. 13)

Keenan (1985:163), commenting on the syntax of

corelatives, considers that corelatives "are not NP's and

thus a fortiori not RC's on our definition, but they are

the functional equivalent of RC's in many languages", and

gives (p. 168) the structure:

$$S$$
$$S_{REL} \qquad S_{MAIN}$$
$$(COREL) + NP_{REL} \qquad NP_{ANAPHORIC}$$
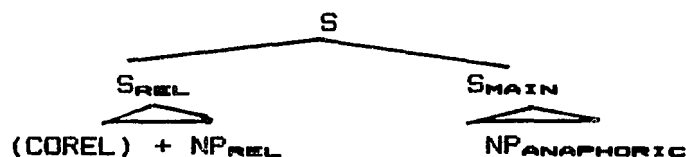
Srivastav (1987) shows that the semantics of sentence-

initial S-REL in relative-correlative structures indicates

that they are instances of base-generated adjunction, that

is that they have a structure basically different from the

postnominal and sentence-final variants. She argues, based

on evidence from NP recursion, full NP realization,

quantification, and multiple relativization phenomena that

the (2-a) type does not represent true relativization.

> ". . . adjunction has to be recognized at D-
> structure. The relationship of the noun and
> subordinate clause is not one of noun modifi-
> cation. The function of the 'relative clause'
> is to restrain the domain of discourse; the
> main clause NP is anaphorically linked to the
> restricted set denoted by it." (1987:2)

Srivastav continues that the correlative (2-a) type

> "is a true instance of adjunction and even
> though in many cases it seems to function
> like a relative clause its semantics is very
> different. It represents a restriction on
> the domain of individuals, not on the set
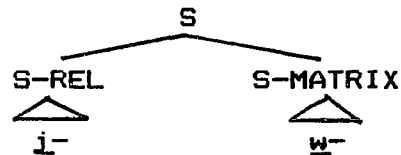> denoted by the main clause nominal (1985:15)."

Given the above, and since this type is structurally

different from the true relative clause, the correlative w-

element cannot be said to be its "head", at least in the

sense of "head" defined earlier.

Common to these analyses is the distinction of the S-

initial relative-correlative structure (e.g. 2-a) from the

postnominal (2-c) and sentence-final (2-b) types. Arguing

from four different backgrounds, these writers conclude

that the jo. . . wo construction is fundamentally different

from the NP jo or the [S] jo structures. In this

discussion, following Gonda (1954), Downing (1973), Keenan

(1985), and Srivastav (1987), I adopt an analysis of the

sentence-initial type (2-a) as having a structure in which

S-REL bears a coordinate relation to S-MATRIX.[2]

---

[2]The postulation of a coordinate relation between S-
REL and S-MATRIX also derives support from the work of
Schachter (1973:19) who, discussing cross-linguistic
similarities between focus constructions and restrictive
relative clauses, argues that "both constructions involve
the promotion of material from an embedded into a matrix

```
                              S
                    ┌─────────┴─────────┐
                 S-REL              S-MATRIX
                  △                    △
                  i-                   w-
```

In a cross-linguistic study of relative-correlative
constructions, Downing (1973:11) finds a correlation such
that "the most consistent OV languages have preposed ad-
relative clauses (as in Japanese and Turkish) and no right
extraposition. Languages with preposed, co-relative
clauses are not rigidly OV in structure, and tend to allow
right-extraposed clauses as well." Based on this
generalization, he formulates a diachronic hypothesis:

> "This suggests to me the hypothesis that the
> common or exclusive use of preposed modifying
> clauses arises historically in a language when
> it is in transition from a rigid OV structure,
> with preposed ad-relative clauses, to a VO
> structure, which requires the modifiers to fol-
> low the head--or the reverse, or both. Lehmann
> (forthcoming) finds evidence in favor of such a
> hypothesis in his study of syntactic develop-
> ments in the early Indo-European languages."
> (ibid.:11)

This seems to fit the situation in Kalasha, which is an
originally (consistently) left-branching language in the
process of acquiring and assimilating some right-branching
structures. The preposing of S-REL to a position preceding
S-MATRIX reflects the tension between the structural pulls

---

sentence, a syntactic process that may be correlated with
the semantic process of foregrounding one part of a
sentence at the expense of the rest." The difference
between Downing's and Srivastav's and Schachter's
treatments is that the former treat S-initial relative-
correlative structures as underlyingly coordinate rather
than arising by derivation from an embedded structure.

of right and left-branching tendencies.[3]

6.1.3. The Accessibility Hierarchy

Keenan and Comrie (1977, 1979, and 1979-a) formulate a

cross-linguistic generalization about relative clause-

formation which has become well known as the "accessibility

hierarchy" (henceforth AH). This is summarized as (A).

A) ACCESSIBILITY HIERARCHY
   [high] SUBJECT > DIRECT OBJECT > INDIRECT OBJECT >
OBLIQUE > GENITIVE > STANDARD OF COMPARISON [low]

According to this generalization, for any given

relativization strategy, each nominal position is more

accessible to relative clause formation than any position

to its right. The constraints on the hierarchy are:

B) HIERARCHY CONSTRAINTS (K & C 1977:67)
   1) A language must be able to relativize subjects.
   2) Any RC-forming strategy must apply to a continuous
      segment of the AH.
   3) Strategies that apply at one point of the AH may in
      principle cease to apply at any lower point.

After briefly introducing Kalasha's relativization

strategies, I discuss each one in detail, exemplifying its

distribution with respect to the AH and describing its

syntactic properties.

6.2. Kalasha relativization strategies - an overview

Kalasha has several indigenous and two borrowed

relativization strategies. The most frequently encountered

indigenous strategy is illustrated in (3).

3-a) sarak'-una kas'-iu-dai   moc mai mБa [E:j, mb]

---

[3]Klaiman (1976:332) discussing relative-correlative
structures in a diachronic perspective makes a similar
observation, noting that correlatives . . . "preserve main
clause verb-final order".

```
road-LOC    move(P/F-S)3s man my  maternal uncle
'The man walking on the road is my maternal uncle.'
```

b) sarak' preš pariu'-dai   a'sa mai mša [E:bk, mb]
```
road    down go(P/F-S)-3s he    my  maternal uncle
'The one (who is) going down the road is my maternal
uncle.'
```

c) se mai a'-au   se   bo   šum mon šia'la [E:bk]
```
   he say(P PERF) that very bad word be(PST-I)3s
   'What he told me was very bad news.'
```

This is a pre-nominal, externally headed structure, in

which the head may be a noun (3-a), or a pronoun (3-b and

c). Note that the verb of the relative clause is finite,

retaining all the categories of tense, mood, person and

number. I shall refer to this as the finite verb (V-FIN)

strategy.[4]

A second strategy employs the past participle, as in

(4).

4) tai   ka'da   krom mai   bo   khoš [E:mb, bk]
```
   you(OBL) do(PST-PPL) work I(OBL) very pleasing
   'I like the work you did very much.'
```

The PARTICIPIAL strategy is also pre-nominal and externally

headed. Note that in this type the subject of S-REL takes

OBL case, and that the verb has lost the categories of

person and number.[5]

---

[4]This type is also found in Marathi and Gujarati
(Masica 1972:199). Masica discusses this in terms of "a
reduction which deletes the relativized noun and the J-
element but retains the noun in the main clause with its
correlative element. . ." It seems likely that the
presence in Gujarati and Marathi of the structures
corresponding to the Kalasha V-FIN RC's can be attributed
to convergence with Dravidian.

[5]Whether or not relative clauses can be constructed
with the verb of the RC in the conjunctive (=perfective)
participial form is somewhat unclear. All my informants
unanimously rejected examples like that in (a)

A third strategy I shall refer to as **INFINITIVAL.**

This is illustrated in (5).

5) a sabak' mǎik'-as   Tem'-una a'bi catrau'
   I lesson read(INF)-OBL time-LOC we   C.
   par-o'mi [E:j, mb]
   go(PST-A)-1p
   'While I was studying we went to Chitral.' (Lit. 'In
   the time when I was studying, . . .'

In (3) S-REL a saba' mǎikas precedes the head NP Tem.

Here the verbal concept has become almost entirely

nominalized, losing the categories of tense, mood, person

and number. The infinitive appears in its OBL form. This

is also a prenominal, externally headed structure.

A fourth construction still further nominalizes the

verbal concept, turning it into the agent noun, which means

in general 'one who V's'. This is a type of free relative,

in which the domain, instead of being indicated by a NP, is

an implied pronominal concept, 'the one/someone'. Example

'(6) illustrates this construction.

6) i'ya mai SÖ'a naśawaw'-as   putr'-as [E:ek, mb]
   this my dog kill(AG N)-OBL son-PS3s
   'He is the son of the one who killed my dog.'

---

a) *tai kai   krom bo   pruST [E:*mb, *bk, *sj]
   your do(CP) work very good
   'The work you did is very good.'
Yet Trail (unpublished ms) reports the existence of such a
construction, and sporadic examples which meet this
description are observed. (b) is one of these.
b) Sok   kai   Temb-un-o nuristan-ai mutabar ita
   mourning do(CP) time-LOC-o N-ABL   M.   come(CP)
   'In the time of mourning Mutabar came from Nuristan and
   . . .' [Parkes, unpublished text, gloss mine]
No such examples occur in my texts, however, and the weight
of evidence available to me seems to suggest that such
constructions are not acceptable.
   Recall from Ch. 2 above that the imperfective
participle cannot be used attributively or to construct
participial RC's.

(Lit. 'He is the son of my dog's killer.')

Of the two borrowed strategies the first is common, especially in narrative texts, and the second infrequent. In the first, an interrogative element k- (usually but not always) plus ki is employed in the function of relative marker, and a deictic element serves as correlative element in the matrix clause. This is structurally quite different from the indigenous types. It is an internally headed RC, the head NP most often occurring between the interrogative k- word and ki.

7) kiy'a caku' gri ki krom kari'man a'yis   se
   what knife with ki work do(PST-IMPFV-A)-1s that
   Dhăba' hu'la [E:bk, mb]
   dull   become(PST-I)-3s
   'The knife with which I was working was dull.'

Thus in (7), which exemplifies this type, caku is the head in the structure kiya head NP ki. In this structure the case role of NP-REL in S-REL is marked either on the NP itself (as in 7), or on the k- word (as in 94-a below). The role of the relative NP in the matrix clause is indicated by a pronominal element, often but not always the remote demonstrative.[6]

The other borrowed strategy is a transparent Urdu borrowing; it is illustrated in (8).[7]

---

[6]There are exceptions to this, however, when a gap appears in the matrix clause.

[7]The element -waala(a) is one of the most frequently used relativizing elements in colloqial Indo-Aryan languages of the central area, like Urdu, Hindi, Panjabi. For example, the Urdu sentence of (a)
a) dhone   waale kapre   yahăă rakh-do
   wash(INF OBL) REL   clothes here put(IMP2p)

8) a'sa udulu'na piran' wa'la moc ku'ra [E:bk, mb]
   that torn   shirt REL   man who
   'Who is that man with the torn shirt/whose shirt is
   torn?'

Like the indigenous strategies, this structure is also pre-

nominal and externally headed.

6.3.   The finite verb (V-FIN) strategy

6.3.1.   Relation to the Accessibility Hierarchy

The V-FIN strategy can be used to relativize all

positions on the hierarchy except postpositional objects

and perhaps genitives. Beginning with subjects: in (9 -

11) NP-REL has the grammatical relation of subject in S-

REL and is also the subject of the main clause (S-MATRIX).

9-a) atra' krom kar'iu-dai   (asa) moc ku'ra [E:bk, mb]
     there work do(P/F-S)-3s (that) man who
     'Who is the man (who is) working (over) there?'

b) to   krom ar'-au   (se)   moc mai baaya [E:mb]
   that(ACC) work do(PST-A)-3s (that) man my   brother
   'The man who did that work is my brother.'

10) tai   SaTawa'i krom karawa'-is   (se)   moc ku'ra
    you(OBL) by   work do-CS(PST-A)-3s (that) man who
    'Who is the man who got the work done by you?' [E:mb]

11) al'yu   żualy'ak   kar'-iu-dai   ghδi
    potatoes feeling-like-eating do(P/F-S)-3s COMP
    mau-dai   ś-a'sa   moc mai yardus' [E:mb]
    say(P/F-S)-3s EMPH-that man my friend
    'The man who says that he feels like eating potatoes
    is my friend.'

In (12) and (13) NP-REL is subject of S-REL and direct

object of S-MATRIX.[e]

'Put the clothes that have to be washed here.'

[e]The form śia'la in (12) could, according to form
alone, be either the finite verb or the past participle.
Since I have no clear examples in which the participial
strategy is used to relativize on subjects, I have chosen
to consider it as the finite verb.

12) tai   dukan'-una śia'la   to/*se   guum a
     your shop-LOC   be(PST-I)-3s that(ACC)/*NOM wheat I
     agri-s' [E:bk, mb]
     take(PST-A)-1s
     'I bought the wheat which was in your shop.'

13) a) sukuly'-una sabak' di'man ay'-is   (to/*se) moc
       school-LOC lesson give(PST IMPFV-A)-3s (that)   man
       a apa'ś-is [E:bk, mb]
       I see(PST-A)-1s
       'I saw the man who was teaching in the school.'

b) a mez'-una kaSög' thai a'-au   moc jhon'-im
   I table-LOC hat   put(P PERF)-3s man know(P/F-NS)-3s
   'I know the man who put the hat on the table.'[E:bk, mb]

In (14) NP-REL is indirect object in S-MATRIX.

14) alai' par-in'-dai ta'si   moc'-an   as'ta
    there go(P/F-S)-3p those(OBL) men-(OBL) also
    del'-lai   har   gehen'   par-in'-dai moc'-an
    give(P/F-S)-3p every direction go(P/F-S)-3p men-OBL
    del'-lai [S:mb]
    give(P/F-S)3s
    'She also gives to the people (who are) going there;
     she gives to people going in every direction.'[?]

In (15) NP-REL is a dative experiencer in S-MATRIX.

15) tes kar'-iu   moc'-as ek gATa' ajat' [S:ekb]
    fast do(P/F-NS)-3s man-OBL one hour necessary
    'A man who works fast needs one hour.'[10]

In (16) and (17) the matrix role of NP-REL is OBL in a

[?]This sentence is instructive in that the first clause
NP-REL is preceded by the deictic element tasi 'those',
while in the second clause it is not. When present, it
adds an element of specificity to NP-REL, as is made clear
in the spontaneous example (14). The people 'going in that
direction' are more specific in the mind of the speaker
than 'people going in every direction'. Both of my English
speaking informants have given explanations to this effect
when asked about this point. The reader will have noticed
that in some of the earlier (elicited) examples the deictic
elements to 'that' etc. have been indicated as optional.
This apparent optionality is an artifact of the fact that
elicited examples do not provide a rich enough context for
the speaker to definitely exclude either the presence or
the absence of the deictic element.

[10]The absence of the deictic in (15) corresponds to the
non-specific meaning, i.e. 'any man who works fast'.

postpositional phrase.

16) tara' ja   as'-is   chul'-as   taada tara'
    there wife be(PST-A)-3s daughter-PS3s near there
    par-au' [Parkes, unpublished text, translation mine]
    go(PST-A)-3s
    'He went there to his daughter who was married there.'

17) śen(d)'-una nisi' a'-au   istri'źa'-as pi   a takala'
    bed-LOC   sit(P PERF)-3s woman-OBL   from I strong
    'I am stronger than the woman sitting on the bed.'
    [E:bk, mb][11]

In (18), NP-REL is a genitive in S-MATRIX.

18) oCO'ik del'-lai   ta'sa   moc'-as dur [S:bs]
    story give(P/F-S)-3s that(OBL) man-OBL house
    '. . .to the house of the man who is going to tell (us)
    a story.'

Proceeding to relativization on objects, (19) and (20)

show NP-REL as direct object in S-REL and subject in S-

MATRIX.

19) tu ar'-i   *(se)   krom bo   pruST
    you do(PST-A)-2s *(that) work very good
    'The work that you did is very good.'[E:bk, mb, ek][12]

20) źuk-daay-e   i'ya as'ta nOa   [S:bkw]
    eat(P/F-S)-1p-? this also new
    'This which we are eating is also new.'

Examples (21) - (24) show NP-REL as direct object in S-REL

and direct object, object of a postposition, and possessor

respectively in S-MATRIX.

21) tu chi'ni a'-as   au'   a aś'-is [S:mb]
    you break(P PERF)-2s bread I eat(PST-A)-1s

---

[11]Standards of comparison in Kalasha are treated as
ordinary postpositional phrases, with NP(OBL) followed by
pi 'from'.

[12]Informant mb considered se optional; bk felt that
"the sentence sounds incomplete without it"; ek stated that
se is obligatory because the PST-A form ari 'you did'
implies that the speaker actually saw the specific work
referred to being done, and therefore se, which conveys
specificity, is required.

'I ate the bread which you broke.'

22) ne paś'-in   awa'ta thai   apaś'-in   pe
    not see(P/F-NS)-3p place put(IMP2s) see(PST-A)-3p if
    haw'-au   ku'ra har'-in [S:bk, E:mb]
    become(PST-A)-3s someone take(P/F-NS)-3p
    'Put it in a place (people) don't see. If someone sees
     it, they will take it.' or 'Put it in an unseen place;
     if it is seen, someone will take it.'

23) tu atra' apaś'-i   a'sa   istriźa'-as pi   a
    you there see(PST-A)-2s that(OBL) woman(OBL) from I
    bo   tagala' [E:bk, mb, ek]
    very strong
    'I am much stronger than the woman you saw there.'

24) a naś-es'   śa-ta'sa   moc'-as putr
    I kill(PST-A)-1s EMPH-that(OBL) man-OBL sons
    a'-an   e ne' [E:bk, mb, ek]
    be(ANIM)(P/F)-3p Q not
    'Does that man (that) I killed have any sons or not?

Relativization with the baS and -el'yi necessitative

constructions is also possible. These can be considered a

variant of the V-FIN strategy, in which the copula śi'u is

understood. In (25 - 27) NP-REL is direct object in S-

REL, and S-MATRIX subject, object, or locative

respectively.

25) i'ya/*a'ma   mɵDik   baS' piran' kas [E:mb, bk]
    this(NOM)/*ACC wash(INF) NEC shirt who(OBL)
    'Whose is this shirt that needs to be washed.'

26) a'ma/*i'ya   nigik   baS' pyalya' atra'
    this(ACC)/*NOM wash(INF) NEC cup   there
    thai [E:mb, bk]
    put(IMP2s)
    'Put this cup that needs to be washed there.'

27) hɵcik baS' śen'-una mo nisi' [E:bk, mb]
    pull NEC bed-LOC not sit(IMP2s)
    'Don't sit on a bed that needs to be pulled tight.'

Relativization of indirect objects, which are in turn

matrix subjects, direct objects or possessives is

exemplified in (28 - 30).

28) tu   kitap' dai ay'i   istri'ża gUak/*gUak-as
    you book   give(PST PERF-A)-2s girl(NOM)/*OBL
    (asa) mai   baaba [E:mb]
    (that) I(OBL) sister
    'The girl to whom you gave a book is my sister.'[13]

29) tu   kitap' dai ay'-i   (to/*ta'sa)
    you book   give(PST PERF-A)-2s (that(ACC)/*OBL)
    istri'ża-gU'ak apaś'-is [E:bk, mb]
    girl   see(PST-A)-1s
    'I saw the/a girl to whom you gave a book.'[14]

30) i'ya mai   chu   dai a'-am   ta'si   dur
    this I(OBL) daughter give(P PERF)-1s they(OBL) house
    'This is the house of the people to whom I gave my
    daughter.' [E:bk, mb]

Relativization of oblique arguments of various kinds

is shown in (31) and (32), in which the oblique argument is

"dative experiencer".

31) cewbew' mÖDik   baS' istriża alai' pariu'-dai
    clothes wash(INF) NEC woman   there go(P/F-S)-3s
    'A woman who has to wash clothes is going there.'

32) a'sa peśa'ur pari-ely'i haw'-au moc/*moc-as   bo
    that P.   go-NECESS become(PST-A)-3s man/*OBL much
    krom kar'-iu-dai [E:mb, bk]
    work do(P/F-S)-3s
    'That man who has to go to Peshawar is doing a lot of
    work.'

In (33) the OBL argument of NP-REL is the causee in an -aw

causative.

33) se cew   mÖD-awa'-is   ta'sa   istri'ża'-as
    she dress wash-CS(PST-A)-1s that(OBL) woman(OBL)

---

[13]Contrast with this the sentences tu kitap dai ayis
istriża gUak-as *(asa) mai baaba 'You gave a book to the
girl. She is my sister,'in which instead of a relative
clause construction we have two independent sentences, and
in which asa then becomes obligatory as the subject of the
second sentence.

[14]As with (27) above, if we change the structure to tu
kitap dai ayi istriża gUak-as a *(to) apaśis 'You gave a
book to a girl. I saw her.' we have two independent
clauses, and to becomes obligatory again as the direct
object of the second sentence.

chu [E:bk, mb]
daughter
'She is a daughter of the woman by whom I got my dress
washed.'[15]

The FINITE VERB strategy in Kalasha allows consider-

able flexibility in the semantic relation between S-REL and

NP-REL. The precise nature of this relation is often to be

inferred from context or knowledge of the world.[16]

Instrumental, temporal and locative relations can be ex-

pressed with this strategy. In (34) the semantic relation

of NP-REL is instrumental; this is understood from context,

rather than induced by any specific case marking on NP-REL.

34) a krom kari'man ay'-is   caku' raz'au ne [E:j, mb]
    I work do(PST IMPFV-A)-1s knife sharp not
    'The knife with which I was working is not sharp.'

In (35) the specific relation is temporal.

35-a) a sabak' mǎi'man ay'-is   Tem'-una ab'i catrau'
       I lesson read(PST IMPFV-A)-1s time-LOC we   C.

---

[15]It is likely that this sentence is syntactically
ambiguous, with another reading in which NP-REL is the
subject of S-REL: 'She is the daughter of the woman who
got her clothes washed (by someone else)'. This ambiguity
is possible because first person and 3rd person singular of
the PST-A for -aw causatives are homophonous; mǒDawa'is
could thus be 'I got washed', or 'She got washed.'

[16]This semantic flexibility is also characteristic of
the participial relative constructions in Dravidian
languages. For example in Telugu, the participial relative
construction raasina profesarugaaru (lit. 'written
professor') can mean either 'the professor to whom someone
wrote', or 'the professor who wrote.' Similarly raasina
kalam ('written pen') can mean 'the pen with which
something was written'. (Examples from Masica (1972:201)
Likewise in Tamil the participial relative clause saapTa
ele ('eaten leaf') could theoretically mean 'leaf which was
eaten,' or 'leaf which ate', but in the context of Tamil
culture means 'the leaf on which someone ate'. (Example
quoted in Masica (1972:202) from E. Annamalai, The
Adjectival Clause in Tamil, Ph.D. dissertation).

par-o'mi. [E:m, mb][17]
go(PST-A)-1p
'While I was studying, we went to Chitral.'

b) a para'   wat'-una rawlyei'   azat' as-is'
   I go(PST-A)-1s time-LOC Lowari Pass   open be(PST-A)-3s
   'When I went, Lowari Pass was open.' [S:mb, E:ek]
   'At the time (when) I went, . . .'

c) sikuly'-ani ciTi'   hu'la   wakt'-una ciTi'
   school-ABL holiday become(PST-I)3s time-loc holiday
   thi   ek jayga'-una mulyakat' ka'da [T17:mz]
   become(CP) one place-LOC meeting   do(PST-I)3s
   'At the time of school's letting out, after school let
    out, they met.'

d) a hawely' a   wat'-una sarak' ne
   I first   come(PST-A)-1s time-LOC road   not
   as-is' [E:bk, mb]
   be(INAN)(PST-A)-3s
   'When I first came (here) there was no road.'

This construction, formally a relative clause, but

functioning as a temporal clause, is very common. One of

Parkes' unpublished texts, for example, has six occurrences

of precisely this type.

In (36) is displayed a more economical way of

expressing the idea of (35-d). This makes use of two

pervasive strategies in Kalasha--that of employing adverbs

functioning like NP's to create both simplex and embedded

structures.[18] Then, the originally locative expression is

extended to express a temporal concept. Thus 'there' >

'then', and then the adverb functions as a pronoun in a

---

[17]Compare this with the infinitival structure in (3)
above.

[18] This usage occurs frequently in simplex sentences
like this one.
a) moc'-ei nahãg'-as   tara' par-au' [T17:mz]
   middle snake demon-OBL there go(PST-A)-3s
   'He went to the middle snake demon's place.'

relative construction to express the temporal relation.[19]

36) a Sumber' a   tara' sarak' ne aś-is' [E:bk]
    I before come(PST-A)-1s then   road   not be(PST-A)-3s
    'When I came before there was no road.'

Locative relations expressed with relative clauses

also occur, as in (37) where we have the nouns 'country',

and 'place'.

37-a) a ga'la-him' (se) mulyk   bo   de'śa [E:bk, mb]
      I go(PST-I)1s (that)country very far
      'The country where I went is very far.'

b) a apau' di'man ay'-is jayga'-una bo   fekTri'
   I stay(PST IMPFV-A)-1s place-LOC   many factories
   aś-i'ni [E:j, mb]
   be(INAN)(PST-A)3p
   'There were a lot of factories in the place where I
   lived.'

The sentences in (38) exemplify locative relative clauses

constructed with adverbs functioning as head NP's.

38-a) a gri a'-am   ś-and-ei   gri [S:bkw, E:mb]
      I hold(P PERF)-1s EMPH-there-ABL grasp(IMP2s)
      'Grab it from where I am holding it.'

b) bo   moc   hin·   tara' a khoś-em'-dai
   many people become(P/F)-3p there I like(P/F-S)-1s
   'I like (a place) where there are a lot of people.'
   [E:bk, mb]

When a specific postposition is required to capture

the meaning, however, it appears that the structure must be

modified as in (39).

39) a tas'a   sum maśguly   thi-o   [E:bk, mb]
    I he(OBL) with conversation become(CP)-o
    i'ta ay'-is   se moc mai krom ne ar'-au
    come(PST PERF-A)-1s that man my work not do(PST-A)-1s
    'The man whom having met I came home did not do my

_____

[19]This is similar to a mechanism employed in Dravidian
for temporal clauses, viz. Telugu neenu waccinappuDu 'when
I came' (lit. 'I come (adjectival participle)-then'), which
also has the structure of a relative clause. Peter Hook
adds (p.c.) that Marathi forms a similar construction.

work.'

In (39) the phrase <u>ta'sa sum</u> 'with him' appears in S-REL, instead of the gap characteristic of the V-FIN strategy. Given this, it seems that (39) is better analyzed as two independent sentences. The sentence in (40), however, was accepted by two informants and rejected by one; the alternative expression in (41), utilizing the interrogative-correlative structure was profferred, and accepted by all three.

40) kitap' śi'u   as'a istri'źa mai baaba [E:bk, ek,
     book   be(P/F)-3s that woman   my   sister   *mb]
     'The woman who has the book is my sister'

41) kurei' istriźa'-as sum ki kitap' śi'u   as'a
     which   woman(OBL) with <u>ki</u> book   be(P/F)-3s she
     mai   baaba [E:mb, ek, bk]
     I(OBL)   sister
     'The woman who has the book is my sister.'

     Relativization on possessives may be possible with this strategy; my evidence is not conclusive. The examples in (42) are good for all my informants.[20]

42-a) khur trupel'-lai   ś-ase'   moc ku'ra [S:mb]
      foot hurt(P/F-S)-3s EMPH-that man who
      'Who is that man whose foot is hurting?'

----

[20]It may be, however, that the acceptibility of the sentences in (42) has another explanation. That is, in causative sensation expressions like <u>mai khur trupel'-lai</u> 'My foot hurts', or '(My) foot hurts me,' the precise syntactic relation of <u>mai</u> is not clear. It could be a genitive modifying <u>khur</u>, or it could be an OBL patient (i.e. direct object) of the formally causative <u>trupek'</u> 'to hurt'. The fact that this is the only type of possessive NP for which I have clear examples of relativization might constitute one piece of evidence for its status as (OBL) direct object of <u>trupek'</u>. On the other hand, it may simply be that I have not succeeded in finding other examples of relativized possessives. Another possibility, suggested by Peter Hook (p.c.) is that the issue of alienable vs. inalienable possession is involved here.

b) khur trupel'-lai   as'a ku'ra [E:bk, mb]
   foot hurt(P/F-S)-2s he   who
   'Who is it whose foot is hurting?'

In (42-b) as'a 'he' is the head.   However, for the

sentence 'This is the man whose elder brother hit me', I

received the paratactic structures in (43).

43-a) i'sa   gaaDa baay-as   mai   pEu
      he(OBL) elder brother-PS3s I(OBL) beat(PST-A)-3s
      i'ya ś-ase'   moc/*moc ś-ase' [E:bk, mb]
      this EMPH-that man/*man EMPH-that
      'This is the man whose elder brother beat me.'

b) i'ya ś-ase'   moc i'sa   gaaDa baay-as   mai
   this EMPH-that man he(OBL) elder brother-PS3s I(OBL)
   pEu [E:bk, mb]
   beat(PST-A)-3s
   'This is the man whose elder brother beat me.'

   In Kalasha the object, or standard, of comparison is

expressed with a postpositional phrase consisting of OBL

case NP and pi 'from', as in (44).

44) a ta'sa   moc'-as pi   tagala' [E:bk]
    I that(OBL) man-OBL from strong
   'I am stronger than that man.'

Although I have no examples confirming or disconfirming the

possibility of relativizing on this structure, given the

difficulty in using the V-FIN strategy with objects of

other postpositions, I suspect that it cannot be done.

6.3.2. Syntactic properties

    FINITE VERB relative clauses are pre-nominal and

externally headed. The head NP is represented in S-REL by

a gap. The structure of (21) above, a typical RC on a

direct object, is given in (45).[21]

45)
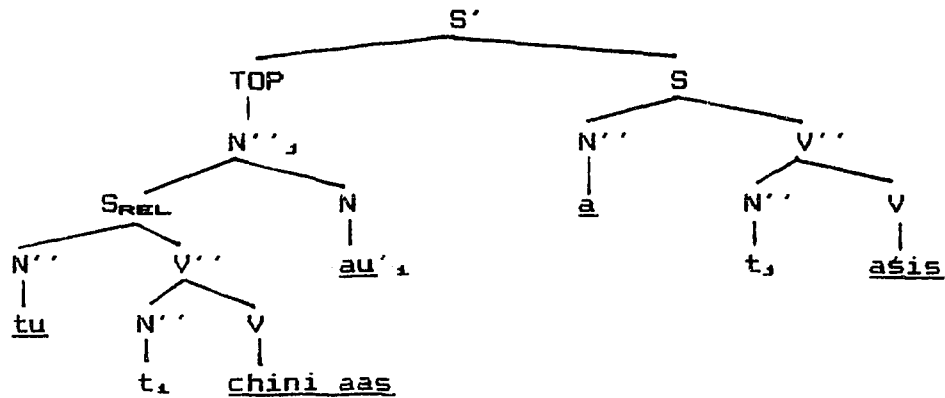
'I ate the bread which you broke.'

This (optional) leftward topicalization of the relative

construction occurs more often than not.[22] It seems to

reflect a tendency to avoid separating the matrix subject

(a 'I') and the matrix verb (aśis 'ate') by a long

intervening construction. This tendency will also be

observed in the leftward displacement of RC's employing the

k- NP ki relative-correlative strategy. For this reason I

have also postulated the structure shown in (46) for

relativization on a subject, in which no obvious word order

displacement has occurred. (46) represents the structure

---

[21]In these diagrams, N'' = NP, and t stands for
"trace", by which I mean a position co-indexed with a
constituent which appears somewhere else in the sentence.

[22]What happens with these Kalasha relative clauses is
reminiscent of Schachter's work on the relation between
relativization and topicalization. So is the use in
Panjabi, Hindi, Urdu of a form homophonous with the
relative marker as a topicalizer, e.g. (a).
a)[meri choTi pèn   jiDii] o   bót tang kardii e
  [my   little sister TOP]   she much annoys
  'My little sister really annoys (me) a lot.'

of example (3) above.[23]

46)
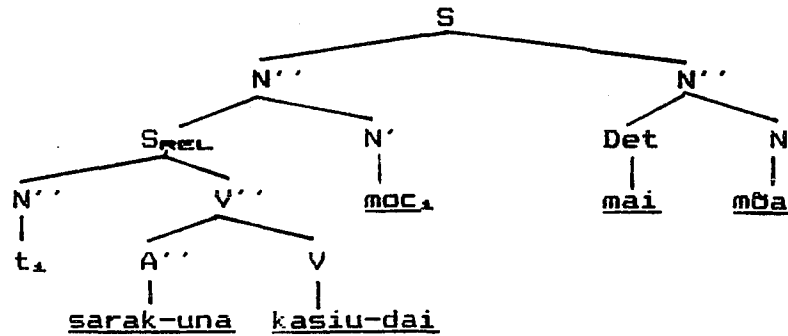
'The man walking on the road is my maternal uncle.'

Case marking of the head NP always reflects its case

role in the matrix rather than in the relative sentence.

Examples (47), (48) and (49), in which the case roles of

NP-REL in S-REL and in S-MATRIX are different, demonstrate

that in each case NP-REL takes the case required for its

role in the matrix S.

47) tai dukan'-una śia'la   to/*se   guum a
    your shop-LOC   be(PST-I)3s that(ACC/*NOM) wheat I
    agri-s' (=12)
    take(PST-A)-1s.
    'I bought the wheat which was in your shop.'

In (47) NP-REL is subject in S-REL and direct object in S-

MATRIX; it takes ACC to rather than NOM se.

48) a agri-s'   se/*to   guum tai   dukan'-una
    I take(PST-A)-1s that(NOM/*ACC) wheat you(OBL) shop-LOC
    śia'la [E:bk, mb]
    be(INAN)(PST-I)-3s
    'The wheat which I bought was in your shop.'

In (48) the opposite situation obtains: NP-REL is Direct

object in S-REL and subject in S-MATRIX. It takes NOM and

not ACC case.

_____

[23]This assumes the structure S --> N'' N'' for
equational (i.e. nominal) sentences.

49) tu kitap' dai a'y-i   istri'za gUak(-*as)
    you book   give(PST PERF-A)-2s girl(NOM/*OBL)
    (a'sa) mai   baaba (=28)
    (she) I(OBL) sister
    'The girl to whom you gave the book is my sister.'

In (49) NP-REL is S-REL indirect object and S-MATRIX

subject; accordingly, we find NOM and not OBL case marking.

    According to Keenan (1985:160) the V-FIN

relativization strategy represents a typologically unusal

situation. He says, "In prenominal RC's V_{REL} is almost

always in some sort of non-finite form. . ." and cites

Japanese as an exception to this statement. In answer to

the potential claim that the Kalasha V-FIN relative clause

is really a paratactic structure, I offer the following two

observations: first, the V-FIN relative clauses form a

tight phonological unit with their NP-REL's; there is no

pause between them. Second, since NP-REL is consistently

represented by a gap in S-REL, S-REL could not stand alone

as an independent clause.

6.4. Participial strategy

6.4.1. Relation to the AH

    The participial strategy can be employed to relativize

direct objects, maybe indirect objects, locatives, maybe

causees, and possessives. Based on the data I have so far,

the question of whether or not subjects are relativizable

by this strategy is unresolved. Examples (50) and (51)

(both of which are elicited) show relativization of

subjects with forms which, because they are third person,

could be either past participles or PST-I finite forms.

50-a) se   ga'la   moc ku'ra as'ta [E:bk, mb]
      that go(PST PPL) man who   be(PST-I)-3s
      'Who was that man who went.'

b) to/*se   ga'la   moc ku'ra paś'i as'ta
   that(ACC/*NOM) go(PST PPL) man who   see(PST PERF-I)-3s
   'Who saw that man who went away?'

c) ta'sa/*se/*to ga'la moc'-as/*moc   a bo   paysa'
   that(OBL/*NOM/*ACC) go(PST PPL) man-OBL I much money
   dai ay'-is [E:bk, mb]
   give (PST PERF-A)-1s
   'I gave a lot of money to that man who went away.'

51-a) tai   SaTawai' krom kar-aw-a'ila   moc ku'ra
      you(OBL) by   work do-CS(PST PPL) man who
      'Who is the man who got you to do the work?'
      [E:bk, ek, ?mb]²⁴

b) a tai   kitap' di'ta   moc'-as pi   tagala'
   I you(OBL) book   give(PST PPL) man-OBL from strong
   'I am stronger than the man who gave the book to you.'

Since the third person singular and plural PST-I forms are

homophonous with the past participle, the only way to

answer this question would be to find or test a sequence in

which a participial relative is constructed on a first or

second person pronoun. Since the function of a RC is to

restrict the domain of reference to a specified subset, and

since first and second singular are inherently so

restricted, the only possibility is to test strings such as

those displayed in (52).

52-a) ?to   krom ka'da   a'bi   adyek' nis-a'
      that work do(PST PPL) you(pl) little sit(IMP2p)
      cei-mai pi'-a [made up test sentence]
      tea drink(IMP2p)
      'Those of you who did that work sit a little; drink
      some tea.'

b) ?andai' a'la _____ a'bi   mai   bo   khoś

---

²⁴According to mb, this is "slightly wrong" because "a
person would have to think a little before understanding
it."

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    here    come(PST PPL) you(pl) I(OBL) very pleasing
    'I like those of you who came here a lot.' [made up]
```

c) ?to   krom ka'da   a'bi θj-o nisi' a'y-ik [made up]
   that work do(PST PPL) we   now-o sit(P PERF)-1p
   'Those of us who did that work are now sitting down.'

d) ?andai' a'la   a'bi tai yardus' [made up]
   here   come(PST PPL) we   your friends
   'Those of us who came here are your friends.'

Examining only examples occurring in texts or in

spontaneous conversation, I find so far that all of the

clearly participial relatives are on direct objects. A few

examples of this type follow.

53) tai   ka'da   au' a bo   khoś-em'-dai
    you(OBL) do(PST PPL) bread I much like(P/F-S)-1s
    'I like the bread made by you a lot.' [E:bk, mb]

54) mai   di'ta   mon kＱ ka'-as
    I(OBL) give(PST PPL) word ear give(IMP2s)
    'Listen to what I say!'   [Trail, unpub. text]

55) tai   a'la/*asa   uzak'ila   uk   gri
    you(OBL) that(ACC/*OBL spill (PST PPL) water with
    su'da   labE' hin'-dai [E:bk, mb]
    children play(P/F-S)-3p
    'The children are playing with that water which you
    spilled.'

56) i'ya/*a'ma   a'sa   sawzaly'a   mes bo
    this(NOM)/*ACC him(OBL) make(PST PPL) table very
    śiśoy'ak [E:bk, mb]
    beautiful
    'This table which he made is very beautiful.'

57) se   moc tara' pai   to   ka'da   darwaza'
    that man there go(CP) that do(PST PPL) door
    umr-au'   umraly'a-lai-o   ar'-au   gri'la
    open(PST-A)-3s open(PST PPL)-lai-o do(PST-A)-3s wet
    bronz'-ani uk   chi'ni du'na   bronz'-una
    meadow-ABL water cut(CP) burn(PST PPL) meadow-LOC
    pEu [T19:nk]
    beat(PST-A)-3s
    'That man went there and opened the closed door. He
    closed the one that had been opened. He cut off the
    water from the wet meadow and gave (lit. 'beat') it to
    (lit 'in') the meadow which was dried up.'

The homophony between the past participle and PST-I

third person forms contributes to some potential

ambiguities. For example, the sentence in (58) has two

possible readings.

58) tai   krom'-una SaTaly'a   moc ku'ra [E:ek]
    you(OBL) work-LOC   attach (PST PPL) man who
    i) 'Who is the man whom you set to work?'
    ii) 'Who is the man who set you to work?'

In the (i) reading tai is OBL because it is the subject of

a participial relative clause, and moc, the object, is in

the unmarked case; in the (ii) reading tai is OBL because

it is the object of the transitive verb SaTalya and moc,

the subject, is in the unmarked case.

My evidence on whether or not the participial strategy

can be used to relativize indirect objects is conflicting.

In (59), designed to test for this possibility, two out of

three informants did not accept the reading in which NP-REL

is interpreted as an indirect object.

59) mai   kitap' di'ta   moc
    I(OBL) book   give (PST PPL) man
    i) 'a man who gave a book to me [E: bk, mb, ek]
    ii) 'a man to whom I gave a book [E: *bk, *mb, ek]

Only one informant felt that the sentence was ambiguous. A

similar example, that shown in (60), was not accepted as

relativizing the indirect object by any of the three

informants.

60) sabak' di'ta   moc
    lesson give(PST PPL) man
    i) a man who gave a lesson [E:bk, mb, ek]
    ii) a man to whom a lesson was taught [E:*bk, *mb, *ek]

In the following spontaneously profferred example, su'da

'child' may be the indirect object.[25]

61) a ta'sa   sabak' CiCa'i   bo   wat haw'-au
    I him(OBL) lesson teach(CP) much time become(PST-A)-3s
    se   mai   CiCaly'a   su'da [S:mb]
    he(NOM) I(OBL) teach(PST PPL) child
    'It has been a long time since I taught him. He is a
    child whom I taught/taught by me.'

Some OBL arguments can be relativized with the

PARTICIPIAL strategy, others apparently not. (62) and (63)

show locatives.

62) mai   as'ta   jayga' bo   namuna' [E:bk, ek, mb]
    I(OBL) be(PST PPL) place very strange/beautiful
    'The place where I was (i.e. my native place) is very
    strange/beautiful.'

63) ho'ma   ga'la   jayga' bo   deś'a [E:mb, bk, sj]
    we(OBL) go(PST PPL) place very far
    'The place where we went is very far.'

Apparently OBL expressions with the -alyak construction

cannot be relativized with the participle (cf. 64).[26]

64) *alyu'   źualy'ak   ka'da   moc mai
    potatoes feeling like eating do(PST PPL) man I(OBL)
    yardus' [E:*bk, *mb]
    friend
    'The man who feels like eating potatoes is my friend.'

Causees may be relativizable with the participial strategy.

Again, evidence is conflicting. (65) is accepted in both

readings by one informant, but not by another.

---

[25]Or, as Peter Hook points out, may be assuming the
position of direct object. He notes that in Urdu, if the
direct object is absent, as in the second sentence of (61),
the (normally) indirect object may be treated as direct
object, viz. mãĩ piyaa huaa nahĩĩ, mãĩ pilaayaa gayaa hũũ.
'I have not drunk (i.e. am not drunk by my own fault), I
have been made to drink ' but not *mãĩ śaraab pilaayaa
gayaa hũũ, in which the direct object appears.

[26]This may have to do with matters of deixis or
inferentiality, however, rather than the participial form
per se.

65) tai   krom'-una SaTawa'ila   moc ku'ra
    you(OBL) work-LOC attach-CS(PST PPL) man who
    i) Who is the man whom you have set to work? [E:sj,
    ii) Who is the man who has set you to work?   *ek]

Some possessors can, however, be relativized with a variety

of this strategy.

66) a'sa   khur-chin'a   su'da ku'ra [E:bk, mb]
    that(NOM) foot-break(PST PPL) child who
    'Who is that child whose leg is broken?'

67) a'sa   piran-udulun'a   moc ku'ra [E:bk, mb, ek]
    that(NOM) shirt-tear(PST PPL) man who
    'Who is that man whose shirt is torn/with the torn
    shirt/torn-shirted man?'

The structures <u>khur-chi'na</u> 'leg broken' and <u>piran-udulu'na</u>

'shirt torn' are probably compounds.

6.4.2. Syntactic properties

PARTICIPIAL RC's are also prenominal, externally

headed structures. As with the V-FIN RC's, the head NP is

represented in S-REL by a gap. (68) represents the
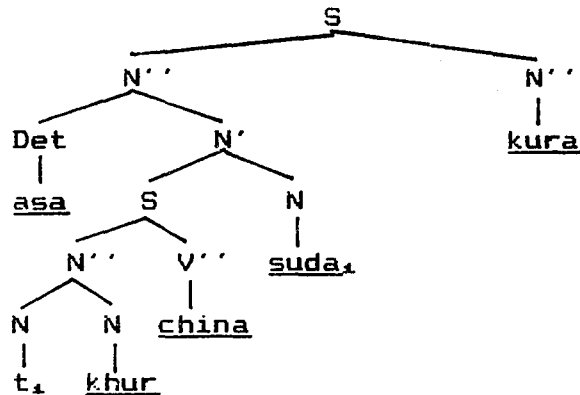
structure of (54) above.

68)
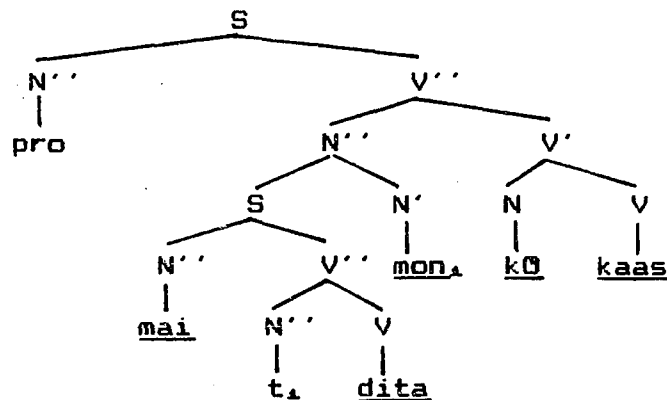
'Listen to what I say.'

The structure of (66) is represented in (69).

69)

'Who is that child whose leg is broken?

Case marking of the head HP is determined by its role in the matrix S (cf. 70 and 71).

70-a) to/*se   ga'la   moc ku'ra
        that(ACC)/*NOM go(PST PPL) man who
        paśi as'ta [E:bk, mb] (cf. 50-a)
        see(PST PERF-I)-3s
        'Who saw that man who went away?'

b) ta'sa/*se/*to   ga'la   moc-*(as) a bo   paysa'
    that(OBL)/*NOM/*ACC go(PST PPL) man-*(OBL) I much money
    dai ay'is [E:bk, mb] (=50-c)
    give(PST PERF-A)-1s
    'I gave that man who went away a lot of money.'

71) i'ya/*am'a   as'a   sawzaly'a   mes bo
     this(NOM)/*ACC him(OBL) make(PST PPL) table very
     śiśoy'ak [E:bk, mb]   (=57)
     beautiful.
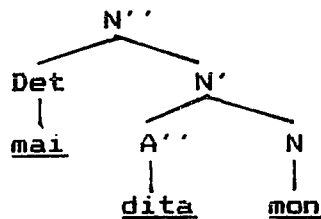   'This table which he made is very beautiful.'

In (70-a) NP-REL, to moc, is subject of S-REL and direct object of S-MATRIX; it takes ACC case marking; while in (70-b) tasa moc-as is subject of S-REL and indirect object of S-MATRIX and takes OBL case. In (71) NP-REL iya mes 'this table' is direct object of S-REL and subject of S-MATRIX, and takes NOM case.

When relativization is on some position other than subject, as in (71) or (61) and (62) above, the notional

subject of S-REL appears in OBL case. Historically this probably represents a reflex of the origin of this construction in a past passive participle with instrumental or genitive agent[27]; synchronically it reflects a surface structure in which the verb of S-REL is moving toward adjectival status and the notional subject toward being a determiner (see 72).

72)

```
                        N''
                    ___/ \___
                  Det        N'
                   |       __/ \__
                  mai    A''      N
                          |       |
                        dita     mon
```

6.5. Nominalized constructions

I discuss these constructions in order to illustrate the range of syntactic strategies employed in Kalasha for the relative function. These vary from fully articulated sentential modifications as with the V-FIN strategy, to completely nominalized agent nouns. One such construction employs the infinitive.

6.5.1. Infinitival relatives

Though they have the structure of (reduced) relative clauses, these constructions are functionally RC's only to the degree that the (semi-abstract) nouns Tem 'time' or kibau' 'thing', are head NP's. As we saw, example (5), while formally an infinitival relative clause with head NP Tem 'time', functions in the total sentence as a temporal clause. In (73) S-REL could be analyzed as either a

---

[27]Subjects of finite verbs are NOM in all tenses.

locative or a purpose clause.

73) grom'-una   thaik'-as   jayga' ne śi'u [S:mb]
    village-LOC put(INF)-OBL place not be(P/F)-3s
    'There is no place in the village to keep (them)..'

In (74) the relationship is perhaps describable as

instrumental.

74) alyu'   thaik'-as   tarika' śëhë śi'u [S:mb]
    potatoes put(INF)-OBL method thus be(P/F)-3s
    'The method of storing potatoes is like this.'

In (75) and (76) S-REL stands in a relation to the head NP

such that S-REL restricts the reference of the semi-

abstract nouns kibaw' 'thing' and mon 'word'.

75) bribo'   cØik'-as   źe bribo' kØa'i
    walnuts harvest(INF)-OBL and walnuts collect(CP)
    onik'-as   bribo'-as   kharca'-as kibau' śëhë
    bring(INF)-OBL walnuts-OBL use(OBL)   event thus
    śi'u [Trail, unpublished text]
    be(INAN)-(P/F)-3s
    'The event/matter of harvesting, collecting, bringing
     (home) and using walnuts is like this.'

76) tas'a   So tarik'-an ik'-as   mon aś-is' [S:mb]
    he(OBL) 6 date-INST come(INF)-OBL word be(PST-A)-3s
    'He said he would come on the sixth.'
    (Lit. 'His word was of coming on the sixth.'

    Semantic complements of the form INF-as ᵥ[N V], i.e.

OBL INF with a conjunct verb consisting of nominal element

plus verbalizer (cf. 5.1.1.3.1.), also have the syntactic

structure of infinitival relatives, though perhaps not

their semantic function. Consider (77).

77) tas'a   piyaik'-as   kośiś' ar'-au
    him(OBL) drink(CS)(INF)-OBL attempt do(PST-A)-3s
    'He tried to make him drink.' [T&C:213, E:mb]

in which the head NP is kośiś 'attempt', and S-REL is ta'sa

piyayik'as 'to make him drink'.

    In these structures the verbal concept has lost the

categories of tense, mood, person and number. It would be
difficult to describe these structures in terms of what
grammatical relation is relativized on. What it seems one
should say is that if the head NP represents an abstract or
verbal concept like mon 'word', kibau' 'thing, event',
kośiś 'attempt', the relation is appositive, or stretching
the point, "subject" of S-REL in an understood semantic
structure like 'word (which is) to come' for (76). If the
head NP represents TIME, the relation is temporal; if it
represents PLACE, the relation is locative, and if it
represents METHOD, the relation is instrumental.

With regard to the other syntactic properties we are
examining, these structures are also prenominal and
externally headed. If the head NP can be said to be
represented in S-REL at all, it is by a gap. If, on the
other hand, based on their surface form, they are analyzed
as NP's modified by AP's rather than S-REL's, then this
question does not arise.

6.5.2. Agent noun constructions

Another nominalized construction involves the deverbal
agent noun form as in (78).

78-a) i'ya mai   SÔ'a naśawaw'-as   putr'-as   [E:ek, mb]
      he   I(OBL) dog kill(AG N)-OBL son-PS3s
      'He is the son of the one who killed my dog.'
      'He is the son of my dog's killer.'

b) SÔ'a naśawaw'   a jhon'-im [S:ek]
   dog kill(AG N) I know(P/F-NS)-1s
   'I know who killed the dog.'
   'I know the dog's killer.'

The agent noun can be incorporated into compounds, as in

(79).

79) za-garaw'   moc   ne [S:z, E:mb]
    food-make(AG N) person not
    There is no-one to make the food.'[20]

When the agent noun is involved, NP-REL is always the

subject of S-REL. Thus if we think of it as a strategy for

constructing (free) relatives, it is one that applies only

to subjects.

6.5.3. Verb-root compounds

    The verb-root alone can be compounded and used in the

sense of a RC, as in (80).

80) dukan'-una ki'ya piran-gar' san   ne śi'-an
    shop-LOC   any   shirt-do   cloth not be(P/F)-3p
    'There is no cloth (from which) to make shirts in the
    shop.'[S:bk, E:mb]

When the verb-root (as opposed to the agent noun) is

compounded, the role of NP-REL in S-REL is not the subject;

in this case it is oblique--instrumental or source. These

nominalized constructions, with their economy of expression

and great reliance on the language user's ability to

interpret context and specific meaning are characteristic

of informal colloquial discourse.

6.6. The (incipient) relative-correlative strategy

6.6.1. Relation to the AH

    In the third major relativization strategy S-REL

consists of an interrogative k- word followed by the head

---

[20](d)za actually refers to any sort of flavorful--
sweet, salty, or sour--side dish which is eaten in a small
quantity along with bread. This category includes cheese,
butter, buttermilk, eggs, salty maize porridge, curry of
the usual Pakistani type, stewed dried fruit, bean and
walnut dishes, etc. Probably < Kho. za 'wet, damp'.

NP and usually <u>ki</u> preceding the rest of S-REL. The head NP

is represented in S-MATRIX by a correlative pronominal

element. In contrast to the indigenous V-FIN and

PARTICIPIAL strategies, however, this one is probably

borrowed from Khowar, where it is the major strategy. As

a basis for comparison, consider the basic Khowar RC

structures illustrated in (81) and (82). In (81) NP-REL

appears within S-REL in its normal position.

```
81) [ispa' am'-o      kya baaG-a    ki ceśT
    [we    mango-OBL  REL grove-LOC ki midday meal
    oyotam] [hase lahur'-ari taQriban joś mil    duder'i
    ate   ] [that Lahore-ABL about    ten miles far
    ośoi] [E:ys, rkb]
    was]
    'The mango grove in which we ate lunch is about ten
    miles from Lahore.'
```

In (82) NP-REL <u>kya DaQ-o ki</u> has been displaced leftward to

the TOPIC position within S-REL.

```
82) [kya DaQ-o    ki tu  tang aru]          [hase' Thanedar-o
    [REL boy-OBL ki you tease(PST-A)-2s] [he     T.-OBL
    żau] [E:rkb].
    son]
    'The boy you teased is the son of the head of the
    police station.'
```

In this structure NP-REL is unreduced in S-REL and bears

the case marking dictated by its role in S-REL; it is

represented in S-MATRIX by a correlative pronominal form in

S-MATRIX, which is marked for the S-MATRIX case role. In

Khowar the (invariant) relative marker <u>kya</u> is homophonous

with the interrogative adjective <u>kya</u> 'what, which', but

differentiated from the interrogative pronoun <u>kyaaG</u> 'what'.

I call this an incipient relative-correlative strategy

because although it utilizes an interrogative element

rather than a true relative pronoun like the j- elements in

other NIA languages, it regularly preposes S-REL, employs

the same case-coding strategy, and represents the head NP

in S-MATRIX with a demonstrative pronominal element.[29]

In Kalasha, there are numerous minor, but two main

variations on this strategy: in the first, S-REL has the

form [ki'ya 'what'/kura 'who' NP ki . . . V], while in the

second [kurei' 'which' NP . . . V]. The main difference is

in the adjectival form and the absence of ki in the second

sub-type. These are illustrated in (83) and (84).

83) a ki'ya jayga'-una ki ay'is se   (jayga') bo   namuna'

---

[29]Dravidian languages (e.g. Telugu and Tamil) which
have also borrowed the relative-correlative strategy from
Indo-Aryan, also employ their interrogative elements in
place of the j- element of I.A.

Languages like Panjabi, Bengali, Gujarati, Urdu, and
Hindi have an inherited relative element in j- which
introduces a relative clause which usually precedes a
correlative clause in which NP-REL is represented by a
demonstrative, usually in the remote degree. An example
from Panjabi illustrates the pattern.
a) [jis buDDi nÛÛ tÛ panj rupe ditte san] [mÞÝ o-de
    kolÛ kapRe twáaye] [E:b]
    'I got my clothes washed by the woman to whom you gave
    five rupees.'
In this structure the head NP is internal to S-REL and
takes at that point the DAT case required by its
grammatical relation of indirect object within S-REL. In
the matrix S [mÞÝ . . . twàaye] it is represented by the
anaphoric pronominal element o, which takes the case
(oblique plus ablative postposition) required by its matrix
S function.

The relative clause can also be sentence-final, as in
(b).
b) [mÞÝ os buDDi kolÛ kapRe twáaye] [ji-nÛÛ tÛ panj rupe
    ditte]
    'I got my clothes washed by the woman to whom you gave
    five rupees.'
In this case the head NP appears in its normal position in
S-MATRIX and is represented in S-REL by the appropriate
oblique form of the relative pronoun plus the dative
postposition nÛÛ.

```
     I what  place-LOC  ki was    that (place)  very strange
     'The place where I was was very strange.'
```

84) kurei' istriźa-gU'ak-as tu kitap' dai a'y-i
    which girl-OBL   you book give(PST PERF-A)-2s
    a to   apaś-is [E:bk, mb]
    I her(ACC) see(PST-A)-1s
    'I saw the girl to whom you gave the book.'

(83) is the equivalent of the participial construction _mai_

as'ta jayga' bo namuna' (62 above), and was offered as a

paraphrase of it.

There is also a mixed type in which S-REL has the form

[_kurei'_ NP _ki_ . . . V], as illustrated in (85).

85) kurei' istriźa ki tu atra' kai paś-is-dai   a
    which woman   ki you there-to see(P/F-S)-2s I
    a'sa   pi takala' [E:ek]
    her(OBL) from strong
    'I am stronger than the woman you are looking at
     there.'

Speakers differ considerably in the particular variant of

this strategy that they employ and which they accept when

asked for acceptibility judgements. What it does seem to

be safe to say, though, is that (perhaps under the

influence of Khowar) the _kiya_ NP _ki_ version is rather more

stable than the others.

In Kalasha this strategy can be used to relativize on

all points in the AH except possibly genitives. Beginning

with subject, we have examples (86) -(89).

86) ku'ra moc ki sarak'-una kas'-iu-dai   a'sa mai
    who man ki road-LOC   walk(P/F-S)-3s he   my
    mθa [E:j, mb]
    maternal uncle
    'The man who is walking in the road is my maternal
     uncle.'[30]

---

[30]With this sentence compare the V-FIN construction in
(3) above.

87) ki'ya moc ki amerika' hat'ya par-au'   putr'-as
    what man ki America to   go(PST-A)-3s son-PS3s
    as'ta gri   se mai yardus' [E:mb]
    also take(CP) he my friend
    'The man who took his son to America is my
    friend.' (Lit.'who went to America with his son')

87-a) ku'ra ki khūDia'i ay'-is   ś-ase'   baCa'-as
      who   ki call(PST PERF-A)-3s EMPH-that king-OBL
      chu as'ta [T3:fs]
      daughter be(ANIM)(PST-I)-3s
      'The one who called you was a king's daughter.'

88-a) falya'na   jayga'-una ki'ya hawlyi' ki ki'ya
      such and such place-LOC what   walls   ki what
      nogor' ki sawz thi aś-i'ni   aghū'-au ki³¹ baCa'
      castle ki build(PST PERF-A)-3p said   COMP king
      i'ya intezam'   saw aya' pu'ra
      this arrangement all here complete
      hiu'-or'i [T26:bk]
      become(P/F-NS)-3s-HORT
      '"The same walls and castle--the same arrangements--
      that were built in that place should all be built
      here," said the king.'

b) i'ya mai   tha'ra ki'ya halat'   ki śoksi s'i'u
   this I(OBL) on   what   condition ki pass(P PERF)-3s
   'This is what happened to me.' (Lit: 'This is the
   condition that passed on me.') [Parkes, unpub. text,
   translation mine]

89) ki'ya intyizam'   ki hiu'-dai   ś-a'sa
    what arrangements ki become(P/F-S)-3s EMPH-that
    baCahat'-una hiu'-dai   ś-a'sa   intezam'
    kingdom-LOC become(P/F-S)-3s EMPH-that arrangement
    mai   bat'i-o mo hil-or'i   aghū'-au
    I(OBL) for-o   not become(P/F-S)-3s-HORT say(PST-A)-3s
    '"The arrangements that are in that kingdom should not
    be done for me," he said.'

Comparing these sentences we immediately notice

several things. We have both _kura moc ki_ (86) and _kiya moc

ki_ (87-b), which indicates that _kiya_ NP _ki_ is not

restricted to inanimate NP's, although _kura_ NP _ki_ is

---

³¹This _ki_ is the complementizer following _ghūik_ 'to
say'. Recall that since it forms a phonological unit with
the verb of speaking, it sometimes precedes material not
part of the complement clause.

restricted to animates. The adjectival <u>kurei'</u> is
applicable to both animates and inanimates. In (87-a) the
pronominal <u>ku'ra</u> 'who' function as head NP. Functioning as
the correlative pronominal element we can have any of the
three deictic degrees: near visible <u>iya</u> (88-a), far
visible <u>asa</u> (86, 89), and remote (non-visible) <u>se</u> (87-b).

    Relativization on direct objects is illustrated in (90
- 93).

```
90) kurei' istriźa ki tu   atra' kai paś'-is-dai
    which  woman   ki you there to  see(P/F-S)2s
    as'a         pi  a takala' [E:ek]  (=85)
    her(OBL) from I strong
    'I am stronger than the woman whom you see there.'

91) tu  ki'ya krom ki kai ay'-i          pruST  [E:sj, mb]
    you what  work ki do(PST PERF-A)-2s good
    'The work that you did is good.'

92) gośnagoźi kai    kimon'   bribo'  sapra'-an       pe
    gleaning  do(CP) how many walnuts find(PST-A)-3p if
    haw'-au             te     bribo'  tas'i    mi'
    become(PST-A)-3s those walnuts they(OBL) EMPH
    hi-n [Trail, unpublished text]
    become(P/F-NS)-3p
    'However many walnuts they find by gleaning, those
     walnuts belong to them only.'

93) fasgilyas'  mai maksat' ha'-au             kiy'a ki
    first class my aim      become(PST-A)-3s what   ki
    maksat' ki kho'ji ay'-is  [T17:mz]
    aim     ki search for(PST PERF-A)-1s
    'The goal that I was looking for was accomplished
     very well.' (i.e. 'I found what I was looking for.')
```

Example (93), with two <u>ki</u>'s, illustrates the kind of mixed
structures resulting from conflicting left and right-
branching tendencies.

    The following examples demonstrate relativization on
indirect objects.

```
94-a) tu kas/*ku'ra        istri'źa gU'ak-as kitap'
      you who(OBL)/*NOM girl-OBL          book
```

```
        dai ay'-i            *(se) mai baaba  [E:bk, mb]
        give(PST PERF-A)-2s she my  sister
        'The girl to whom you gave the book is my sister.'
```

b) kas istri'za gU'ak-as ki tu kitap' dai ay'-i
   who(OBL)   girl-OBL ki you book   give(PST PERF-A)-2s
   *(se) mai baaba [E:j, mb]
     she my sister
     'The girl to whom you gave the book is my sister.'

c) kas/*ku'ra   ki istriza'-as tu kitap'
   who(OBL)/*NOM ki woman-OBL) you book
   dai ay'-i   *(se) mai baaba [E:bk, mg]
   give(PST PERF-A)-2s she my sister
   'The woman to whom you gave the book is my sister.'

d) kurei' istri'za gU'ak-as tu kitap' dai ay'-i
   which girl-OBL   you book   give(PST PERF-A)-2s
   *(se) mai baaba [E:bk, mb]
     she my sister
     'The girl to whom you gave the book is my sister.'

95) ś-a'sa   moc kas'-ki   phuTu'   paś-e'mi [E:ek]
    EMPH-that man who(OBL) ki photograph show(PST-A)-1p
    '. . .the man to whom we showed the photograph.'

Comparison of (94-a and b) shows that NP-REL can occur

either in its normal position within S-REL (a), or it can

be left-dislocated (b). NP-REL can also be removed from

between the interrogative element and ki (c); when this

takes place, S-REL can also, sometimes, with some speakers,

be displaced to the right (cf. 90 and 95).

Various oblique relations are also easily relativized

using this strategy. (96) and (97) show oblique

experiencers.

96) kas   peśa'ur parik baS' haw'-au   se
    who(OBL) P.   go(INF) NEC become(PST-A)-3s that
    moc bo   krom kar'-iu-dai [E:bk, mb]
    man much work do(P/F-S)-3s
    'The man who has to go to Peshawar is doing a lot of
    work.'

97-a) kiy'a moc'-as ki alyu'   zual'yak
      what man-OBL ki potatoes feeling like eating
      kar'-iu-dai se mai yardus' [E:bk, mb]

do(P/F-S)-3s he my friend
'The man that feels like eating potatoes is my
friend.

b) kurei' moc'-as alyu'   żualy'ak   kar'-iu-dai
   which man-OBL potatoes feeling like eating do(P/F-S)-3s
   se mai yardus' [E:bk, mb]
   he my friend
   'The man that feels like eating potatoes is my friend.'

In (98) NP-REL is a locative argument; compare (98-a) with

(38-b) above.

98-a) kiy'a jayga'-una ki bo   moc   a'-an   a
      what place-LOC ki many people be(P/F)3p I
      khoś-em'-dai [S:mb]
      like(P/F-S)-1s
      'I like a place where there are lots of people.'

b) a kurei' mukhen'-una nisi'   cei api-s'   tara'
   I which verandah-LOC sit(CP) tea drink(PST-A)-1s there
   Thanedar' as'ta apau' dai ay'-is [E:bk, mb]
   T.   also stay(PST PERF-A)-3s
   'The in-charge of the police station also stayed in the
   verandah where I sat and drank tea.'

Notice that in (98-a) there is no correlative element; in

(98-b) the correlative element is the locative adverb tara'

'there'.

      Postpositional obliques are also easily relativizable.

In (99) an instrumental NP is shown; notice the variation

in speaker judgements in (99-b).

99-a) kiy'a caku' gri *(ki) krom kari'man ay'-is   se
      what knife with ki work do(PST IMPFV-A)-1s that
      Dhāba' hu'la [E:bk, mb]
      dull   become(PST-I)-3s
      'The knife with which I was working was dull.'

b) kurei' caku' gri krom kari'man ay'-is   se
   which knife with work do(PST IMPFV-A)-1s that
   Dhāba' hu'la [E:bk, *mb]
   dull   become(PST-I)3s
   'The knife with which I was working was dull.'

In (100) NP-REL is the object of the postposition sum.

100) kurei'/*kas istriża'-as sum ki kitap' śi'-u

```
which/whom  woman(OBL)  with ki book    be(P/F)-3s
a'sa mai baaba  [E:bk, ek, mb]
she  my  sister
'The woman who has a book is my sister.'
```

For true genitives, however, although it may be

possible to relativize them with this strategy, I have no

examples. Test sentences involving a genitive NP-REL

elicited responses with paratactic constructions like those

in (101) and (102).

```
101-a) iy'a ś-ase'    moc i'sa    gaaDa baaya   mai
       this EMPH-that man he(OBL) elder brother I(OBL)
       pEu [E:bk, mb]
       beat(PST-A)-3s
       'This is the man whose elder brother beat me.'
       (lit. This is that man.  His elder brother beat me.')
```

```
b) i'sa    gaaDa baaya   mai    pEu              i'ya
   he(OBL) elder brother I(OBL) beat(PST-A)-3s this
   ś-ase'    moc [E:bk, mb]
   EMPH-that man
   'This is the man whose elder brother beat me.'
   (Lit. His elder brother beat me.   This is that man.')
```

```
102) tu  to          istri'źa gU'ak jhon'-is-e
     you that(ACC) girl            know(P/F-NS)-2s-Q
     ta'sa    piran' utruki' śi'-u [E:bk, mb]
     she(OBL) shirt  tear(P PERF)-3s
     'Do you know that girl whose shirt is torn?' (Lit.
     Do you know that girl? Her shirt is torn?)
```

6.6.2. Syntactic characteristics

In contrast to the indigenous V-FIN, PARTICIPIAL, and

INFINITIVAL strategies, in the k- NP (ki) strategy NP-REL

is unreduced in S-REL and is represented by an anaphoric

correlative pronominal element in S-MATRIX. The

prototypical structure is shown in (103), which represents

the structure of (86) above.

103)
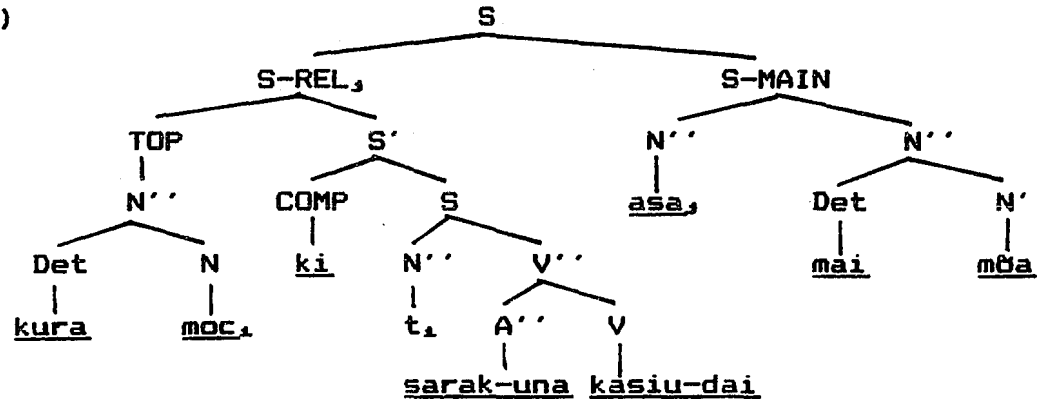
The difference between this and the indigenous pattern(s)
(cf. 46 above) is immediately obvious. S-REL is an
internally right rather than left-branching structure: S-
REL follows NP-REL, and its complementizer ki precedes it.

As noted above, however, in actual use this pattern is
subject to considerable variation. In examples (91) and
(98-a), for example, there is no correlative pronominal
element in S-MATRIX, where NP-REL is represented instead by
a gap.

6.7. The -wala construction

This construction is not common, occurring in my cor-
pus only with genitives. Example (6) above is the only one
in my own materials; I have noted three other examples in
some of Parkes' unpublished texts. In (6) NP-wala modifies
the NP moc 'man'; in Parkes' materials it functions
similarly. One of his sentences is reproduced as (105).

105) chau putr payda' thi   du-ta ek   aaya   wala du-o
     four sons be born(CP) 2-TOP one mother-REL two-o
     ek   aaya   wala [Parkes, unpublished text]
     one mother REL
     'Four sons having been born, two from one mother and
      two from another mother.' (translation mine)

What is especially interesting about this construction

is how closely (both formally and functionally) it

parallels the indigenous Kalasha construction with -lei

(see section 6.8.3.).

6.8. Free relatives

Several constructions can be classified as free

relatives, that is relative constructions in which a single

pronominal element functions as ooth head and NP-REL.

6.8.1. Indefinite relatives

These constructions are formed with the element

-gal'e/-galak'se suffixed to the interrogative element.

```
106-a) ku're-ga'le in                se in   [S]
       whoever      come(P/F-NS) he come(P/F-NS)-3p
       'Whoever comes will come.'
```

```
b) kure-galak'se in se in   [E:mb]
   whoever      come(P/F-NS)-3p he come(P/F-NS)3p
   'Whoever comes will come.'[32]
```

```
107-a) kiy'a-galak'se paś'-is          tu  ghaT'-is-dai
       whatever        see(P/F-NS)-2s you ask for(P/F-S)-2s
       'Whatever you see you ask for.' [S:bkw, E:mb, bk]
```

```
b) kiy'a-galak'se paś'-iu          aś'i-ai    dyel
   whatever        see(P/F-NS)-3s mouth-LOC put(P/F-NS)-3s
   'Whatever she sees she puts in her mouth.' [S:bkw, E:bk]
```

Notice that in (107-a and b), in which NP-REL is matrix

direct object, it is represented not by a correlative

pronominal element but by a gap.[33]

---

[32] I do not know why in (106) the verb appears in the
plural in S-MATRIX even though se is singular.

[33]The indefinite relative construction can also be
used as part of postnominal headed RC's, as in (a).
```
a) to    ś-ata'si          istri'ża kimon'-ga'le ośwa'li
   then EMPH-they(OBL) women      however many pregnant
   ay'-ini ta-i (=tasi) wat  ajal'-au (=ażal'-au ?)
   were    they(OBL)    time reach(PST-A)-3s
   'Then those women - as many as were pregnant - their
   time came.' [Parkes, unpublished text, translation mine]
```

6.8.2. Past participle as substantive

A second type is illustrated in (108), in which the past participle itself functions as a substantive.

108) oCO'ik de   ghõi ma'il-e   ec'-an
     story give(IMP2s) COMP say(PST-I)3s-when eyes-OBL
     paśtya   dem'-a   ki[34] ne
     see(PST PPL) give(P/F-NS)-1s   or   no
     kara-tori'ru[35]   dem   kO'-una
     ear(LOC)-reached give(P/F-NS)-1s ear-LOC
     źal'ila   pe dem'-o   to   dem . . .
     reach(PST PPL) if give(P/F-NS)-1s-o that give(P/F)1s
     'When he said, "Tell (me) a story," (I said), "Shall
     I tell one that I have seen with my own eyes, or
     shall I tell one that I have (only) heard about? If
     I am to tell one that I have heard about, (then) I
     will (tell that one) . . .' [T17:mz]

The participles paśtya 'one which I have seen, karatoriru
'one which I have heard about', and źalila 'one which has
reached (my ear)', serve as heads for these relative
clauses.

6.8.3. The -lei construction

The morpheme -lei can be added to past participles,
postpositional phrases, adjectives, nouns (111-a) or finite
verbs (112) to form RC's. In (109) the past participle
plus the morpheme -lei function together as substantive
head of a RC.

109) ka'da   darwaz'a-ta umra'i   aghõ'-au
     do(PST PPL) door-TOP   open(IMP2s) say(PST-A)-3s
     umraly'a-lei-o   kar'i   aghõ'-au [T19:nk]
     open(PST PPL)-one-o do(IMP2s) say(PST-A)-3s
     '"Open the door which is closed," he said. "Close
     the one which is opened.'

_____

[34]ki meaning 'or' is a Panjabi-ism, which has come
through Urdu into Kalasha.

[35]This is a Khowar form kar-a 'ear-LOC' tori'ru 'reach
PST PPL'. The exact Kalasha equivalent follows immediately
in the next sentence: kO-una źal'ila 'ear-LOC reach(PST PPL).

In (110) -lei is suffixed to the postpositional phrase

mimi raw 'like you'.

110-a) mi'mi-raw'-lei   a bo   żu'i a'-am   ghŏi
       you(OBL)-like-ones I many eat(P PERF)-1s COMP
       mai a'-au [T22:sa]
       say(P PERF)-3s
       'He said, "I have eaten plenty like you."'

b) hĕ aya' jia'-a   mi'mi-raw'-lei   bo
   heh here look(IMP2p) you(OBL)-like-ones many
   gri a'-am [T22:sa]
   take(P PERF)-1s
   'Heh, look here. I have caught plenty like you.'

   Trail and Cooper (1987:248) gloss -lei as a

comparative marker, but give no examples of that usage.   I

suspect that the reason for this gloss is the fact that

many uses of -lei as nominalizer occur with inherent

comparatives, as in (111-a - d).[36]

---

[36]Notice that -lei does not function as a comparative
in any straightforward way. The normal Kalasha expression
for 'ADJ-er than X_{NP}' is NP(OBL) pi ADJ, as in (a).
a) fakher' śah salyim'-a pi   dri'ga [E:bk]
   F.S.   S.-OBL   from long
   'Fakher Shah is taller than Salim.'
To express the adjectival concept 'like an X_{NP}', the
formula is NP(OBL)-raw e.g. (b)
b) tai-raw   moc ho'ma   żun [T22:sa]
   you(OBL)-like men we(OBL) eat(P/F-NS)-3p
   'Men like you eat us!?' (ironic)
To express an adverbial 'like X_{NP}' is NP(OBL)-raw-kai in
which kai, the conjunctive participle of 'do', functions as
an adverbializer.
c) jafayrat' ug-as-raw   kai   cei piu'-dai [S:z]
   J.   water-OBL-like do(CP) tea is drinking
   'Jafayrat is drinking tea like water.' (i.e. as if it
    were water)
   To express the absolute idea of 'ADJ-er, rather ADJ-
er', the first syllable of the adjective is reduplicated,
e.g. gogo'na '(rather) bigger', cucut'yek '(rather)
smaller', bibir' '(rather) wide', titic'ak '(rather) less',
babaDu'la '(rather) fatter'. Also, a few inherited
comparatives in -er survive, e.g. qaDer'ak 'elder',
goner'ak 'bigger', tsater'ak 'younger'

111-a) tas'i   moc-ani   tsat'ak-lai daad-as   kai
       they(OBL) middle-ABL younger-one father-PS3s to
       aw&j'-au [LSI, VIII:77]
       say(PST-A)-3s
       'The younger of them said to his father.'

b) ek   moc'as   du putr as'ta gaDar'a-lai-ta goT
   one man-OBL two sons were elder-one-TOP simpleton
   as'ta tsatey'rak-lai-o   tharar' as'ta [T29:mb]
   was   younger-one-o   clever   was
   'A certain man had two sons. The elder one was a
    simpleton, but the younger one was clever.'

c) gogon'a-lei-ta   nasir' žu'i as'ta   [S:g]
   bigger-ones-TOP N.   eat(PST PERF-I)3s
   'Nasir ate the bigger one.'

d) ta'sa barabar'ik-lei kur'-o maSTer' haw'-an kur'-o
   his   age-mate-ones who-o teacher became who-o
   kiy'a mulyazimat' agri'-an . . . [T26:bk]
   some job   took
   'Some of his age-mates (lit. 'equals') became teachers,
    some of them got jobs.. . .'

If the reason for the frequent co-occurrence of -lei

with inherent comparatives is that -lei once was itself a

comparative marker, then it may derive originally from a

verb root l- meaning 'see, look at'. We have the forms lui

'look at' from my texts and li in on'is li 'Look, I

brought it' (Trail and Cooper 1987:248). This appears to

be cognate with Khowar loLik' 'to look at, for' (cf. T

10922).[37] A similar development of comparative marker from

(the conjunctive participle of) a verb meaning 'see, look

at' is found in Gilgit Shina (see 112).[38]

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[37]As Richard Strand has pointed out. *l > palatalized
/l/ in Khowar and velarized /l/ in Kalasha.

[38]The use of -lei in these functionally relative
constructions recalls discussion in Kemmer (1984) of the
development of the Icelandic relativizer sem from a former
comparative marker, and of parallels in English with 'as'.
Sadock (1972) discusses a similar construction in Danish.
The uses of -lei in Kalasha may support Kemmer's suggestion

112) salim' akbar-eT cakeè   Jigo han   [E:maz]
     S.   A-DAT   look(CP) tall is
     'Salim is taller than Akbar.'

In example (111) -lei occurred with explicit

comparative constructions with NP -raw, and in (110) there

is an implicit comparison. Comparison is implicit in (110)

because there the situation refers to a closed set of two

conditions--one in which the door is closed and one in

which it is open. In (113) and (114), however, -lei appears

in situations in which the domain set is not (inherently)

closed.

113) mai   naśai'man as'ta-lei   tu   mai   bac ar'-i
     I(OBL) kill(PST IMPFV-I)-ones you I(OBL) save(PST-A)2s
     'You saved me from those who were trying to kill me.'
     [T26:bk]

114-a) śiśamon' ec'-an   lei   [M. 1972:119][39]
       so big   eyes-OBL REL
       'a man with such big eyes.'

b) parim'-a   lei dili' je (=že) piśawur [Schomberg]
   go(P/F-NS)-1s-? REL Delhi and   Peshawar
   'I will go with a man to Delhi and Peshawar'
   (Morgenstierne's gloss)
   ?'a man with whom I will go to Delhi and Peshawar' (my
   gloss)
   ? 'a man who (says, "I) will go to D. and P.' (P. Hook)

In these examples -lei is seen to be completely

---

that "the potential for the change of a comparative to a
REL may not be confined to Germanic". (p. 304)
     If the etymology -lei < *l- 'look' is correct, Kalasha
-lei may represent an interesting transitional stage
between comparative marker and relativizer. Its frequent
association with inherently reference restricting
comparatives (cf. 111) could have strengthened its
connection with reference restriction, which is the
function of a relative clause.

[39]Morgenstierne gives several examples from
Schomberg's unpublished materials. (114-a and -b) are two
of these.

generalizable. In (113) and (114-b) it functions as a pronominal head for RC's of the V-FIN type, and in (114-a) it functions as a relativizer-nominalizer.

In functioning as a generalized nominalizer-relativizer, it behaves like the IA -wala, and appears to be the indigenous Kalasha functional analogue of the recently-borrowed -wala construction. Syntactically, however, there is some difference. S/ADJ-lei forms a NP-REL, while NP-wala either functions as a NP-REL or forms an S/ADJ which can in turn modify a NP in a relative construction.

The agent noun construction as a type of free-relative operating on subjects was discussed in 6.5.2. above.

6.9. Diachronic and areal considerations

Throughout this discussion I have been assuming that the V-FIN and PARTICIPIAL strategies are indigenous to Kalasha, or at least represent an older level in the language than the (incipient) relative correlative strategy. In the following paragraphs I discuss three types of evidence relevant to this assumption.

6.9.1. Relativization strategy and the AH

The first kind of evidence concerns the synchronic relation between relativization strategy and position on a syntactic hierarchy. Romaine, discussing the correlation of relativization strategies and syntactic position in Middle Scots, states that "the farther one moves down the hierarchy of syntactic positions which are relativizable,

the more WH-dominated the system becomes (1982:151)." I

reproduce figures from Romaine's Tables 6.11 and 6.12 here

for reference.

Percentages of WH-relatives correlated with
syntactic positions in the case hierarchy (Middle Scots)

	Syntactic Position	WH-Relatives	TH and Ø-Relatives
Increas-	Subject	14	89
ing	Dir. Object	14	88
complex-	Oblique	36	63
ity	Genitive	75	25

These results appear to show "the entrance of WH into the

system 'by the back door', since it enters the most complex

and least frequently occurring positions in the case

hierarchy". (1982:152n.)

Romaine (1984:160-3), based on data in Nadkarni (1975)

cites the case of relativization in Konkani, an IA language

some dialects of which are in contact with Dravidian Kan-

nada. These dialects of Konkani possess two relativization

strategies, one of which (the older) is an evolved version

of the IA relative pronoun strategy, and the other a

strategy employing Konkani interrogative elements in a

calque on the Kannada interrogative-correlative structure,

which in turn had been borrowed originally from IA. In

these Dravidianized dialects of Konkani the two strategies

distribute themselves as follows: the older strategy has

become restricted to subject position, while the newer

(interrogative-correlative) strategy is used for DO, IO,

OBL, and GEN positions. This distribution is along the

same lines as that found by Romaine for Middle Scots and

Dekeyser for Early Modern English.

In Tamil also the indigenous participial strategy is confined to subjects, direct objects and indirect objects, while the (borrowed) interrogative-correlative strategy is used if other positions have to be relativized.[40]

6.9.2. Relativization strategy, the AH, and time

Dekeyser (1984) discusses the relationship between relativization strategy, AH position, and change over time in Early Modern English. Applying the concepts of "non-natural change", or "change from above" as opposed to "change from below" or "natural change" drawn from the work of Bailey (1973)[41], he says:

---

[40] Tamil data supporting this point cited in Keenan and Comrie (1977:72-3).

[41] Bailey characterizes his dynamic model as " . . . a view of linguistic analysis in which historical, descriptive, and variational analysis are integrated. . . . presuppose that the function of time in defining synchronic language patterns cannot be ignored in valid descriptions of language." (1975:31-2) The model distinguishes "natural change" from two types of non-natural change. "Natural change" is that which results from the way in which children acquire their first language; this is [+ natural] in Bailey's system (1973:130). Changes resulting from borrowing from other systems are [X natural]; and [- natural] changes are those exhibited for example in dying language, . . . (p. 134)" The directionality of natural change is from marked to unmarked status; but in borrowing between language systems, i.e. creolization, "the directionality of change from marked to unmarked may be set aside (p. 136, n. 38)".

In Bailey's terminology, "weighting" refers to the degree to which the operation of a rule is favored; the more favorable to the operation of a rule, the "heavier" the environment; and conversely, the less favorable the environment is to the operation of a rule, the "lighter" it is. With regard to the locus and directionality of change, this model predicts that a given change begins in the most heavily weighted environment (i.e. that most favorable with respect to that change) and diffuses through the grammar

"Following Romaine (1980) I am inclined to believe
that the introduction of the partly extraneous
WH-strategy (prompted by French and Latin QU- forms)
is a change from above, or a non-natural change.
According to Bailey (1973) the direction of such a
change is from the lightest environment to the
heaviest: in terms of the AH this is from right to
left (p. 76)".

He then adduces statistical evidence indicating that the
spread of the WH-strategy was indeed from right to left on
the AH.   I reproduce Dekeyser's Table XVI (1984:77) here
for the convenience of the reader.

Relativization strategies in Modern English

	WH-	THAT	Ø	
SUBJ 1600-49	765 (40.95%)	992 (53.10%)	111 (5.94%)	1,868
PE(Quirk)	451 (72.28%)	171 (27.40%)	2 (0.32%)	624
O/PC 1600-49	549 (54.79%)	125 (12.48%)	328(32.73%)	1,002
PE(Quirk)	231 (36.49%)	184 (29.07%)	218 (34.44%)	633

Dekeyser's figures show that when the period 1600-1649 is
compared with modern standard English as represented in
Quirk (1968), the following changes are observed. The
percentage of RC's on subject position expressed with the
WH-strategy rises from 40.95% to 72.28%, while the
percentage of RC's on subject position expressed with the
THAT strategy falls from 53.10% to 27.40%. Conversely, the

---

moving to successively less heavily weighted environments.
(Romaine 1982:172)
       In terms of the predictions, and the application of
this model to change in relativization strategies and the
AH, the environments most heavily weighted for natural
changes become least heavily weighted for non-natural
changes and the directionality of change with respect to
the (absolute) continuum reverses itself. In this case,
the "constraints" (variables which correlate positively or
negatively with the operation of a rule) the weighting of
which appears to be operative are syntactic position and
degree of formality.

percentage of WH- RC's on object and object of postposition positions falls from 54.79% to 36.49% and the percentage of THAT-RC's on these same positions rises from 12.48% to 29.07%.

Put another way: in the earlier period (1600-49) the ratio of subject RC's with WH- to those with THAT was 40.95 to 53.10 or .77, while in the later period (ca. 1968) it was 72.28 to 27.40 or 2.64. Similarly, the ratio of direct object/prepositional object RC's with WH- to those with THAT changed from 54.79 : 112.48 or 4.39, to 36.49 : 29.07 or 1.26. In other words, considering only the variables of change over time and position on the AH, the proportion of relativization of subject position with the WH strategy as compared to the THAT strategy has increased in frequency with time, while that of OBJ and PREP OBJ positions has decreased. This increase over time in the proportion of subject position RC's effected with the WH-strategy is what Dekeyser refers to as moving up the hierarchy over time.

6.9.3. Relativization strategy and discourse type

A third type of evidence derives from the relation between relativization strategy and and discourse type. Romaine (1980:234) writes about Scots English that " . . . the WH strategy entered the written language and worked its way down a stylistic continuum ranging from the most to the least complex styles." That is, the imported strategy first affected the more formal types of discourse and then moved gradually into the less formal types.

Dekeyser also shows for four registers of Early Modern English (1600-49)—epistolary (most formal)(E), narrative and descriptive prose (P), verse (V), and drama (D) (least formal, written to be spoken)—that the percentages of RC's effected with the WH- and the THAT strategies correlate regularly with degree of formality. I reproduce his Table VII (1984:77) here for inspection.

Dekeyser's results on relativization strategies
and register for Early Modern English

	WH-		THAT		Ø		Totals
E	260	(71.43%)	51	(14.01%)	53	(14.56%)	364
P	939	(65.57%)	418	(29.19%)	75	(5.24%)	1,432
V	236	(55.66%)	152	(35.85%)	36	(8.49%)	424
D	344	(29.84%)	531	(46.05%)	278	(24.11%)	1,153

The table shows that at this point the imported (WH-) strategy is most frequent in the most formal style, while the indigenous strategy (THAT) is most frequent in the least formal style.

6.9.4. Kalasha relativization strategies and the AH

Now let us apply a similar analysis to the distribution of relativization strategies in Kalasha. With regard to the first type of evidence—relating AH position to relativization strategy synchronically—Table 1 is designed to be compared with Romaine's results summarized above. It shows percentages of RC's on various syntactic positions classified by strategy—indigenous or borrowed.

Table 1.   Borrowed and indigenous strategies -
by AH position (Kalasha)

Syntactic Position	Borrowed	Indigenous
Subject	56% (31)	44% (24)
Direct object	28% (11)	73% (29)
Obl. (incl. I.O.)	56% (23)	44% (18)
Genitive	60% (3)	40% (2)

The pattern in Table 1 is mixed; the subject position

ratios are anomalous in the context of Romaine's results,

whereas the rest of the positions do display the expected

pattern.   I suspect that the smallness of my corpus and the

competing effects of several variables are complicating the

picture.

With regard to the second type of data--change in

distribution of relativization strategies over time--

we unfortunately do not have data for any earlier period of

Kalasha.[42]   What can be tried, however, is to compute the

proportion of subject vs. other RC's with the k- (NP) (ki)

and -wala strategies to those with the V-FIN and

PARTICIPIAL strategies and then see whether the set of

ratios so obtained resembles the earlier or the later

pattern in Dekeyser's English data.   If it resembles the

earlier pattern, we can take the result as pointing to

relatively recent introduction of the k- word strategy.

If, on the other hand, it resembles the later pattern, it

would suggest a greater time depth for the k-word strategy.

In order to do this I have classified and tabulated

_____

[42]It is possible, though, that study of the Urtsun
dialect, reported to be more conservative, may provide a
geographical analogue of an earlier stage of the language.

relative clauses occurring in (i) spontaneous conversation and (ii) narrative texts, according to AH position and relativization strategy.[43]

Table 2. Conversational texts: AH position
and relativization strategy*

AH Position	V-FIN	PPL	Strategies [k-(NP)(ki)][pron.]	-wala
Subject	4 (57%)	0	3 (43%)	0
Dir. Obj.	5 (50%)	3 (30%)	2 (20%)	0
Ind. Obj.	0	1 (100%)	0	0
Temporal	1 (100%)	0	0	0
Locative	1 (50%)	0	1 (50%)	0
Other OBL	0	0	0	0
Postp. Obj.	0	0	0	0
Possessive	0	0	0	0

*-Percentages in Tables 2 and 3 express the percentage of RC's on the given position with each strategy

Table 3. Narrative texts: AH position
and relativization strategy*

AH Position	V-FIN	PPL	Strategies [k-(NP)(ki)][pron]	-wala
Subject	15 (31%)	5 (10%)	28 (58%)	0
Dir. Obj.	4 (13%)	17 (57%)	9 (30%)	0
Ind. Obj.	0	0	0	0
Temporal	11 (52%)	0	10 (47%)[44]	0
Locative	3 (21%)	0	11 (79%)	0
Other OBL	1 (100%)	0	0	0
Postp. Obj.	0	0	1 (100%)	0
Possessive	1 (20%)	1 (20%)	0	3 60%

[43]The corpus so far includes: __conversational materials:__ my own field notes including one conversational text (#28), and one conversational text from Trail ("My Son"); __narrative materials:__ one text from Trail ("Walnut Harvesting"), four unpublished texts from Peter Parkes, two short pieces in the __Linguistic Survey of India, Vol. III,__ and twenty-two of my own texts. (The rest have not been counted yet.) The absolute number of RC's from narrative texts is far greater than that from conversational discourse.

[44]Seven of these are tokens of __kya wat ki__ the Kalasha calque on the Khowar phrase which is formally a RC, but means 'when' (relative adverb).

I shall group the data in Tables 2 and 3 in the following ways: (1) the indigenous V-FIN and PPL strategies will be grouped and compared with the combined borrowed k- and -wala strategies.   (2) In order to compare the ratios with Dekeyser's results, subject position will be compared with the aggregate of direct object, indirect object, obliques and possessives.   Performing these consolidations, we obtain the following results.

Table 4.   Conversational texts: AH position and
           indigenous vs. borrowed strategies

AH Position	Indigenous	Borrowed	Totals
Subject	4 (57%)	3 (43%)	7
D.O/OBL/POSS	11 (79%)	3 (21%)	14
Totals	15 (71%)	6 (29%)	21

Table 5.   Narrative texts: AH position and
           indigenous vs. borrowed strategies

AH position	Indigenous	Borrowed	Totals
Subject	. 20 (42%)	28 (58%)	48
D.O/OBL/POSS	38 (53%)	34 (47%)	72
Totals	58 (48%)	62 (52%)	120

Now the ratios of RC's in each of these positions with borrowed to those with indigenous constructions can be calculated for each discourse type.   These results are given in Table 6.

Table 6.   Ratios of percentages of borrowed to
       indigenous RC's — by AH position and discourse type

	Discourse Type	
AH Position	Conversational	Narrative
Subject	43 : 57 .75	58 : 42 1.38
D.O/OBL/POSS	21 : 79 .27	47 : 53 .89

What can be learned from these results? First, with

regard to the relation of AH position, RC strategy, and time: recall that for the 1600-49 period Dekeyser's ratio of WH-:THAT subject RC's was .77, while in the later period it was 2.64. The Kalasha ratios are .75 for conversational and 1.38 for narrative texts, or 1.29 over both types. On the whole this position is closer to that of the earlier than the present stage of English.

For non-subject RC's Dekeyser's ratios were 4.39 for the earlier and 1.26 for the later periods. The borrowed: indigenous Kalasha ratios are .27 for conversational and .89 for narrative. These low ratios are more like Dekeyser's later than his earlier stage.

These Kalasha data show a pattern different from that in Dekeyser's findings. Unfortunately my corpus is still very small and the data too sparse for any statistical conclusions, but based on what we do have, I would tentatively say that the borrowed:indigenous ratios for subject position suggest that the k- NP strategy is fairly new in the language. The borrowed:indigenous ratio for non-subject position, however, is lower than expected for a relatively newly introduced strategy based on Dekeyser's results. This reflects a situation in which the indigenous strategies are not losing ground to the k- strategy in the non-subject AH positions. From the limited data I have, it appears that this may be accounted for by a strong tendency to use the PARTICIPIAL strategy for direct object and the V-FIN stratgy for temporal relatives.

Two interesting findings are that only one instance of relativization on an indirect object turned up in my corpus,[49] and that the (presumably) newest strategy of all, with -wala was in fact confined to the POSSESSIVE position. This last result is in consonance with the diachronic prediction that a new strategy will enter from the rightmost end of the AH.

6.9.3. Relativization strategy and discourse type

The third question concerns the relation of AH position, RC strategy and discourse type. Here we do see a difference in the predicted direction. Tables 4 shows that for conversational texts 71% of all the RC's are of the indigenous types and 29% of the borrowed types; while in Table 5 we see that in narrative texts 48% are of the indigenous and 52% of borrowed types.

6.9.4. Implications for areal studies

The lines of inquiry discussed in the previous section have potential methodological implications for areal linguistics. Working with the concepts of natural vs. non-natural change (Bailey 1973), and assuming that these can be interpreted as evolution from within a language and (borrowing) from without, we have the possibility of observing different behavior of these two types of change

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[49]Given that on K&C's AH indirect object is the third position, presumably ranking after direct object in ease of relativizability, its very low frequency of actual occurrence is interesting. Romaine's (1982:148) frequency distribution of Middle Scots RC's by syntactic position shows only two instances of relativization on IO out of a total of 2,777 RC's.

over time. If we can establish hierarchies of some
grammatical feature (like the AH for relativization), then
it should be possible to distinguish changes originally
from without from those originally within a language.
According to Bailey, non-natural changes will first enter a
language in the lightest environment (i.e. the one most
difficult to access), and progress in the direction of
easier (heavier) environments. Given this, if the
frequencies of strategies x and y at positions a, b, and c
on such a hierarchy can be compared over time, then the one
which moves from higher frequency at difficult positions
and lower frequency at easier positions in the direction of
lower frequency at difficult positions and higher frequency
at easier positions can be identified as a borrowed
strategy, one resulting from relatively recent, or
superstratum, borrowing effects. This can provide one
technique for separating the effects of internal evolution
from those of geographical (or cultural) proximity. To
speculate a bit: if we hypothesize that substratum effects
will operate more like "natural change" than "non-natural
change", it might, given an independent way of
distinguishing substratal from internal effects, also lead
to ways of distinguishing superstratum from substratum
effects.

Ranking discourse types from least formal to most
formal, if we observe that a certain change is manifested
more frequently at the formal end of the continuum than at

the informal, we can conclude that it is a (superstratal)

change from outside, and with respect to the language in

question, a potential areal phenomenon.

CHAPTER 7

KALASHA AND LINGUISTIC AREAS

This final chapter integrates methodological
observations and partial conclusions regarding Kalasha
developed in the previous chapters.

7.1. Methodological comments

7.1.1. Exploiting continua

Several specific methods for distinguishing borrowed
from indigenous changes, and in turn for distinguishing
similarities due to areal (convergence) factors rather than
shared inheritance or chance can be subsumed under a
general "strategy of exploiting continua". In Ch. I it was
argued that a distribution of a feature or change charac-
terized by a regular increment over space across language
boundaries rules out chance or shared inheritance as the
cause of that distribution, and points directly to
geographical proximity as the causal factor. This reason-
ing exploits the continuum of physical space, allowing us
to distinguish causal factors for similarities observed
over more than one language. In depending on the pattern
of distribution over more than one language it is analogous
to the comparative method in historical linguistics.

Other types of (abstract) continua can also be exploited to yield evidence for the language-internal or external origin of a given linguistic change. A regular progression in the frequency of occurrence of a given phenomenon over such continua can yield evidence based on data from a single language; this approach is analogous to the method of internal reconstruction in historical linguistics.

Two such syntactic continua have been utilized in the preceding exposition. In Ch. 5, Kalasha complementation types were discussed with reference to Givon's "binding hierarchy". Recall that the binding hierarchy correlated degree of semantic bonding with tightness of the syntactic bond. The distribution of Kalasha complement types (with some exceptions accountable for by the etymological history of the SAY complementizers) was in the direction predicted by the binding hierarchy. Another pattern which emerged in their distribution with respect to this continuum was that sentential complements with ki-clauses (the borrowed strategy), as opposed to those with ghõi clauses (the indigenous strategy), tended to cluster near the lower, more loosely bound, end of the hierarchy. If this is indicative of a general tendency, that tendency might be formulated tentatively as follows: "Given the binding hierarchy (as formulated by Givon), and given a non-natural syntactic change, that is, one introduced into a language by superstratum borrowing, that change will be

more likely to manifest itself first at the lower, less

tightly semantically and syntactically bound end of the

continuum". I know of no other research pertinent to this

question, but it is a hypothesis which could be tested by

studying the distribution of complement types in other

languages with co-existing borrowed and indigenous

complementation strategies.[1]

Keenan and Comrie's accessibility hierarchy (discussed

in Ch. 6) is a second such syntactic continuum. Evidence

cited by other researchers points to the possibility of

identifying borrowed syntactic strategies by the pattern of

their distribution with respect to this hierarchy. Romaine

(1980, 1982) and Dekeyser (1984) report that the borrowed

WH- relativization strategy in English, in consonance with

the predictions of Bailey's dynamic model, enters the

repertoire of English syntax first in the environments at

the right of the accessibility hierarchy and then moves

gradually up the hierarchy. Although my (limited) Kalasha

data only partially displayed this distribution, the

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[1]One possibly relevant point does suggest itself. If
we assume a structure for the restrictive RC such that it
is embedded under an NP node, but a coordinate structure
for non-restrictive relatives, then the restrictive
relative is more tightly bound, both semantically and
syntactically, than the non-restrictive. The distribution
of the WH- and THAT relativization strategies in English,
in which THAT relatives are confined to restrictive RC's
may reflect the operation of such a tendency.
    Conversely, if we assume a coordinate relation (rather
than embedded) between S-REL and S-MAIN in the
relative/interrogative-correlative construction, this might
suggest one reason why this structure is (quite)
susceptible to borrowing.

results obtained by Romaine and Dekeyser and the Tamil and
Konkani evidence cited suggest that the methodological
point should not be dismissed.

In Ch. 6 also, the utility of observing the
distribution of a putative borrowing phenomenon over a
continuum of discourse types was demonstrated. In this
case the distribution of Kalasha relative clause types
displayed the same pattern as that found by Romaine (1980)
and Dekeyser (1984) for Middle Scots and Early Modern
English respectively. That is, given discourse types
ranging from oral/informal to written/formal, the borrowed
strategy appears earlier and with greater frequency at the
formal end of the continuum. The same observation holds
for the distribution of Kalasha complement types between
narrative and conversational discourse (cf. Ch. 5 above).

One supplementary tactic for identifying borrowed
lexical items or structures is to observe situations in
which a word or construction is repeated or paraphrased.
In narrative discourse often these will begin with a
borrowed element, in this case Khowar, and conclude with an
indigenous equivalent. Examples of this included šilyok
ka'ri — oCⴀik de 'tell (me) a story', bik'o — šehě thi 'so,
then', amau ki [S] ghⴀi amau '(He) said that [S] so he
said', kara toriru — kⴀuna žalila 'which has reached my
ears, i.e. which I have heard'.[2]

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[2]In the speech of some individuals and under certain
circumstances, e.g. talking to foreigners, a variation on
this phenomenon is found, in which a(n) (indigenous)

7.1.2. Two types of mapping

Basic to areal linguistics is the mapping of linguistic features. Three approaches to this mapping can be distinguished. The first, and basic type, maps the simple presence or absence of a given formal characteristic. Then on the basis of these binary judgements, the area in question is divided into two regions—one having the feature and the other not having it. Masica's (1976) maps of the extent of word-order features, morphological causatives and anticausatives, compound verbs, and dative subject constructions are of this sort.

If sufficient data are available, the presence of a formal feature can be assigned a scalar quantity. Hook's (1985) map of frequencies of pre- vs. post- main clause positioning of subordinate clauses exemplifies this type. This procedure yields a multi-region map and the consequent potential for observing continuum effects.

A further step in mapping can be taken if a given semantic parameter is taken as given, and the types of formal device expressing this parameter are mapped. This also yields a multi-region map of formal devices, but specifically as correlated to a semantic variable. The map of 10 + n vs. n + 10 as the form for expressing the teen numerals (See Map 1, Appendix) falls into this category, as

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Kalasha or Khowar lexical item is parphrased by a borrowed English word, e.g. nogor' - belyDͳq' 'palace, building', phon(d) - roD 'road'. Both these English words are quite well integrated into colloquial Kalasha.

does the fragmentary mapping of the form of the agentive
postposition represented in Map 2. If one were to chart
(as suggested in Ch. 3) the formal devices associated with
involuntative semantics--e.g. dative subject construction,
causative morphology, passive constructions--the resulting
map would fall into this category. Similarly, if one were
(cf. Ch. 4 above) to map the devices used to express the
semantics of inferentiality--basic verb morphology,
compound verbs, verbs of saying, adverbial expressions,
etc.--the map would be of this type. At this stage,
however, this remains a program for future research.

The converse procedure could also be adopted; that is,
a formal device can be taken as the given feature or
independent variable and its various semantic correlates
mapped. So, for example, if one were to take the compound
verb as the independent variable and map the semantic
contrasts expressed by this formal device--aspectuality,
inferentiality, temporal precedence--he would obtain a map
of this type. Morphological causatives are a second
promising candidate for this treatment. Several semantic
functions have been identified for causative morphology in
Kalasha and some of its neighbors--anti-reflexivity,
transitivity, involutative action--which could be mapped
onto the area of morphological causatives.[3] The
construction of such maps, however, requires an

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[3]See Nedyalkov and Silnitsky (1973) for the
typological perspective and Ch. 3 above for Kalasha.

availability of comparable descriptions and a degree of

refinement in our understanding of the languages in

question that lies still in the future.

What might be learned by comparing mappings which take

a semantic parameter as the independent variable and

syntactic correlates as the dependent variable with those

taking a given formal characteristic as independent and

mapping semantic features against it? It seems to me that

the relative[4] size and compactness of geographical regions

so obtained would be indicative of the tendency to be

subject to areal effects; so that if the former mapping

strategy yielded relatively larger and more coherent

regions than the latter we might be justified in concluding

that associations of formal mechanisms with a semantic

parameter diffuse geographically more readily than specific

semantic associations of a formal mechanism. And

conversely, if mapping semantic correlates against a given

formal mechanism yielded relatively larger more coherent

areas, we might conclude that specific semantic

associations are more susceptible to areal effects.

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[4]Relative rather than absolute extent of the regions
obtained is the crucial point here, since the absolute size
and extent of the regions would be identical under both
procedures. Relative size of regions is to be understood
as in comparison to the total region under consideration,
in the first case to the domain of the given semantic
feature, which is probably the set of all languages, and in
the second to the (previously determined) geographical
extent of the formal mechanism. Thus though the absolute
size of the regions [involuntative semantics (f) causative
orphology] and [causative morphology (f) involuntative
semantics] are equal, their relative sizes may not be.

7.2. The position of Kalasha

7.2.1. Kalasha vis-à-vis the South Asian linguistic area

Masica (1976:187-90) identifies the following features as defining the South Asian linguistic area and having a distribution (almost) coincident with the Indo-Pakistan subcontinent. (1) retroflex consonants, (2) echo-words, (3) an enclitic particle (< Skt. api/ Dr. um) functioning as 'even, also, indefinite, and', e.g. Hindi, Urdu bhii, Panjabi vi and Tamil -um, and (4) the dative subject construction. He lists also the following additional features which various authors have suggested characterize the S.A. linguistic area but are not confined to it: (5) absence of prefixes, (6) two stems in personal pronouns, (7) same case morphemes added to singular and plural stems, (8) morphological causatives, (9) phonaesthetic forms (reduplicated and in -k), (10) conjunctive participles, (11) the absence of a verb HAVE, (12) word-order features, and (13) compound verbs. A later paper (Masica 1982) adds (14) identified object marking, to the inventory of characteristic but not defining diagnostic features.

Let us consider the extent to which Kalasha displays the four defining features. (1) As noted in Ch. I, Kalasha has consonant pairs which participate in the opposition designated "dental-retroflex", following the usual practice of describing this opposition in South Asian studies. Phonetically, though, the consonants called "retroflex" are much closer to a(n) (Post-)alveolar pronunciation than to

the true retroflexes of Dravidian. In terms of Ramanujan

and Masica's discussion (1969:564) the opposition would be

characterized as retracted/unretracted.

(2) Kalasha makes frequent and productive use of echo-

words, formed in the Pashto manner with an initial m- in

the second, repeated, element. Kalasha echo-words can be

constructed on both nouns and verbs, as in (1) and (2).[5]

1-a) ceyjuś'-ik-meyjuś'ik as'ta nig-ely'i [S:bkw]
     teakettle-DIM-ECHO   also wash-NEC
     'The (small) teakettle also needs to be washed.'

b) sa'bun-ma'bun udri'man thai [S:bkw]
   soap   ECHO   inside   put(IMP2s)
   'Put the soap inside!'

2-a) parik'-o marik'-o na' [S:bkw]
     go(INF)-o ECHO   not
     'You're not going anywhere!'

b) aśi-maśi [S:bkw]
   eat(PST-A)-2s - ECHO
   'You ate/have eaten.'

There is also a relic of an (older?) formation in which the

echo component has an initial b-, in the word cewbew'

'clothes' (cf. cew 'Kalash dress, shirt').[6]

(3) So far I have not observed an enclitic particle

functioning like Skt. api or Dravidian -um. (4) With

regard to the "dative subject" construction (see Ch. 3

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[5]I have the impression that the force of these echo
words in Kalasha may not be exactly the same in all
respects as that described for other languages having this
construction. The extending and generalizing sense of the
echo element, as in cei'-mei 'tea and things like that' is
certainly present, but in Kalasha the use of these forms
also seems to convey an increased emphasis or vehemence
that I have not noted with echo-words in other languages.

[6]See Heston (1980) for discussion of Iranian echo-
formations in m- and b-. Kho. also forms echo-words in m-.

above), although the construction is present in Kalasha it is not as strongly developed as in other South Asian languages, and appears to belong to a relatively recent stratum of the language.

With regard to features which have been proposed as characteristic of but not definitive of the S.A. linguistic area, Kalasha's position is as follows. (5) It agrees with the S.A. pattern in lacking prefixes.[7] (6) Kalasha also has two stems in the personal pronouns, e.g. a '1st sg. NOM'/mai '1st sg. OBL'; abi '1st pl. NOM/homa '1st pl OBL'; tu '2nd sg. NOM'/tai '2nd sg. OBL'; abi '2nd pl NOM'/mimi '2nd pl. OBL'. (7) With regard to this criterion--same case morphemes added to singular and plural stems--Kalasha has a mixed system. When case relations are expressed with inflectional endings alone, this criterion does not hold; when inflectional ending plus postposition are employed, then it does. (8) Two levels of morphological causatives are present in Kalasha (Ch. 3).

(9) Kalasha does make use of reduplicated and phonaesthetic forms. For example, (3) - (6).

3-a) wIIc wIIc   [T15:mb]
     'sound of whistling to goats to make them go faster'

b) yök yök   [S:bk]
   'call to sheep to follow'

c) brak brak   akrat'-au-e [T17:mz]
   sound of laughing laugh(PST-A)-3s-when
   'When she laughed, "brak brak". . .'

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[7]Khowar, however, has a set of verbal (directional) prefixes.

4) mĭ'go mĂ'go [S]
   'a quarrel'

5-a) brim brak (kar'ik) [T15:mb]
     '(to make) rattling sound (dried skins, dishes,
        vessels)

b) krim kroc (kar'ik) [T15:mb]
   '(to make) rattling sound (dried skins)

c) zrĭg zrăg (kar'ik) [T27:mb]
   '(to make) sound of bells, jangling metal'

6-a) tyek tyek hik [S]
     'to fight (people)' (lit. 'beat-beat become')

b) żuk żuk hik [S]
   'to fight (animals, e.g. cats, dogs)' (lit. 'eat-eat
   become')

The reduplicated verbs in (6) convey the meaning of

reciprocal action, i.e. 'fight among themselves'.[8]

(10) With regard to conjunctive participles, a few

general observations will suffice here. Kalasha makes

extensive use of these non-finite forms, which are not

marked for tense or person-number and which do not agree

with any NP in the sentence, to conjoin and subordinate

sentences. As in other S.A. languages, these forms do not

appear to function adjectivally.[9] As in Bengali and Tamil

(Masica 1976:112) the Kalasha (and Khowar) CP's are used in

forming the compound perfect tenses. Several CP's have

been grammaticized as postpositions (gri 'with'

(instrumental) < grik 'grasp, hold, take'; thi 'from' (<hik

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[8]Richard Strand informs me that similar formations
are found in Kamviri, in which reduplication signifies
mutual action, e.g. vik vik 'beating each other'.

[9]Although a few possible exceptions to this
generalization appear in various texts.

'become'), possibly dai 'from' (< dek 'give')[10]; kai 'to'
(<karik 'do'). Some adverbs are fossilized CP forms:
gher'i 'again' (<gher'ik 'to turn'), SaT'i 'continually'
(<SaT'ik 'to attach to (intrans.)'). Kai and thi, the CP's
of kar'ik and hik, function as transitive and intransitive
adverbializers, and there is even an adjectival form lo'ti
'smeared with x', e.g. phao-lot'i 'dusty' which is clearly
the CP of lot'ik 'to roll (intrans.)'.

In Kalasha, the CP is not constrained by the "same-
subject condition" to the degree it is in Hindi, for
example. Its pattern of use resembles that described for
Tamil (Lindholm 1975), in which considerations of "natural
relevance" can override the same-subject condition, more
than the pattern of Hindi.[11]

With regard to the predilection for use of the CP,
which Masica (1976:129-34) compares roughly for other S.A.
and non S.A. languages, it is interesting to note that the
Kalasha counts are approximately twice those for
Dravidian.[12] The figures are displayed in Table 1.

[10]But cf. Pashai -dai 'from, out of, than' and Phalura
-de:i 'from' (Morgenstierne 1973:210).

[11]Detailed discussion of the syntax and semantics of
the Kalasha conjunctive participles is the subject of a
projected study by this author.

[12]In arriving at these counts I have adopted the
following ground-rules in order to make the numbers
comparable with Masica's. (a) CP's functioning in complex
tenses or in compound verbs have been excluded, (b) CP's
lexicalized as adverbs or adjectives have been excluded,
(c) As did Masica, I have excluded postpositions whose CP
origin is not entirely clear. Thus the postpositions dai
and kai have been excluded, but thi and gri are included,

Table 1. Kalasha conjunctive participle counts

Text/ Speaker	CP's	Postpos.	qhõi	Adverb- ializers	Totals
3 [fs]	81	0	6	8	95
7 [kn]	79	3	10	1	93
27 [mb]	103	9	32	4	148
Averages	88	4	16	4	112

112 x 7.5 = 840 CP's per 7,500 words (average)

Masica's Dravidian counts for Malayalam and Telugu were 432
and 429 respectively. It is possible that the much higher
frequency in Kalasha is partially a function of the fact
that Masica's Telugu and Malayalam samples are from written
texts in languages with a long written tradition, while the
Kalasha materials are from orally transmitted tales in a
language with no written tradition. One not untypical
example of Kalasha narrative is shown as (7); CP's have
been emphasized.

7) tara' drami'-a ita te saman' ta'a gordok'-a tha'ra
   thai-o to phus'ti sambi' uTik'i tyai drami'-a tyai zrĭg
   zrãg zrĭg zrãg zrĭg zrãg kai awas' kai aau. [T27:mb]
   'Coming there on the roof and having put those things
   on his donkey, he put on the skin and leaping, jumping
   on the roof, made a sound of clashing metal.'

   (11) As with other S.A. languages, there is no verb
HAVE in Kalasha. The usual expression of alienable
possession is with an OBL NP and the postposition sum

(d) quotative qhõi is included, and (e) CP's functioning as
adverbializers are included. Three 1,000-word samples from
three different speakers were counted, and the CP-count
thus obtained multiplied by 7.5 to give a figure comparable
to that obtained by Masica for his 7,500 - 8,000 word
samples. My texts are traditional stories rather than
Bible translations and thus represent a different genre
than Masica's. They are, however, entirely typical of
Kalasha narrative style.

'with', e.g. (8).

8-a) mai   sum kalam' śiu [S]
     I(OBL) with pen   is
     'I have a pen.'

b) tai   sum du rupe' śi'an [E:j]
   you(OBL) with two rupees are
   'You have two rupees.'

Inalienable possession is expressed by the OBL form of the

NP and the verb 'be' as in (9-a, b, and c), or by the OBL

form of the possessor NP followed by the possessed NP plus

pronominal suffix (cf. 9-d).

9-a) ek   moc'-as   du putr as'ta [T29:mb]
     one man-OBL   two sons be(PST-I)-3p
     'A (certain) man had two sons.'

b) tai   kimon'   baaba źe baaya   a'-an [E:j]
   you(OBL) how many sisters and brothers be(P/F)-3p
   'How many sisters and brothers do you have?'

c) ta'sa   du dur   śi'an [E:j]
   he(OBL) two houses be(INAN)(P/F)-3p
   'He has two houses.'

d) as'a   daad-as   TaTor'i kar'i
   she(OBL) father-PS3s bread   do(IMP2s)
   ghŏi mau'-dai [S:bkw]
   COMP say(P/F-S)-3s
   'Her father says to make walnut bread.'

     (12) Kalasha shares all the word-order features which

characterize the S.A. linguistic area.[13]   (13) A weakly

developed (incipient?) set of compound verbs is found in

Kalasha and Khowar; so far I have been able to positively

identify in Kalasha three verbs functioning as vectors (Ch.

4). (14) The situation with regard to direct object

marking is not entirely clear. With some lexical

exceptions (notably verbs of beating and striking), objects

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[13]Masica (1976:193) and (1974).

in Kalasha are marked as follows:

    1st, 2nd, 3rd person pronouns - OBL
    (close?) kinship terms - NOM + pronominal suffix
    proper names (humans) - NOM
    (specific) animals   - NOM
    some definite NP's   - ACC deictic element + NOM NP

Whether the use of the deictic elements am'a 'this', al'a

'that', and to 'that' to mark certain direct objects is

simply a marker of definiteness, as in English 'the man',

or whether it has specific deictic force, e.g. 'this/that

man' is not yet clear to me, although at this point I am

inclined in favor of the second view.[14]

Summarizing these results in tabular form, we have:

	Feature		Kalasha's status vis a vis the feature
Area	1	retroflex cons.	+, – (weak)
de–	2	echo words	+
fin–	3	'also' enclitic	–
ing	4	dat. subj.	+, – (weak)
Char	5	no prefixes	+
ac–	6	2 pron. stems	+
ter–	7	sg. = pl. case endings	+, – (mixed system)
is–	8	morph. caus.	+
tic	9	onomatopoetic words	+
but	10	CP use	+, + (very strong)
not	11	no verb 'have'	+
de–	12	word order	+
fin–	13	comp. verbs	+, – (weak)
ing	14	ident. obj. marking	+, – (mixed system)

[14]There is nothing corresponding to the Hindi –ko
marking for identified objects, or to the Persian –i + ra
for specific objects, although with the increasing
penetration of recent conjunct verbs of the NP–kar'ik type
into Kalasha, some of the predisposing conditions for the
emergence of more consistent identified object marking may
be developing.
    Khowar, on the other hand, marks identified objects
consistently with its general oblique morphemes––sg. –o,
pl. –an, e.g. (a)
a) awa   paloG'/(-an) bizemi'tam [rkb]
   I(NOM) apples(OBL) sell(PST–A)–1s
   'I sold (the) apples.'

From this we see that of the most telling indices of the S.A. linguistic area, Kalasha lacks one entirely and shows only a weak development of two. It shares all the features which characterize the S.A. area as well as adjoining regions.

7.2.2. Non South Asian characteristics

In addition to the features which link it to the S.A. linguistic area, Kalasha displays characteristics not associated with the South Asian linguistic area: (1) A much higher incidence of left-branching structures than would be predicted for a language in its geographical position with respect to the South Asian linguistic area alone. These include the preponderance (in conversational discourse) of left-branching V-FIN and PARTICIPIAL relative clauses, the left-branching SAY-complements,[15] and the extremely strong predilection for the use of the conjunctive participle. (2) Agglutinative or semi-agglutinative structures are employed in Kalasha more than in most lowlands NIA languages, which have evolved from highly inflectional to analytical structures. (3) Highly developed expression of the category of inferentiality in basic verb morphology (Ch. 2). (4) Strong development of its causative involuntative semantics coupled with the weak

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[15]SAY-complements are found in Turkic languages, as well as in Burushaski and Tibeto-Burman.

development of the dative subject construction (Ch. 3).[16]

(5) Replacement of grammatical gender by a grammaticization

of the animate-inanimate distinction.[17] (6) The restruc-

turing of the numerals 11-19 in accordance with the pattern

10 + n rather than the inherited Indo-Iranian n + 10

schema. (7) Preservation of dental, palatal and retroflex

sibilants. (8) Infinitives in -k. These features show

Kalasha to be strongly under the influence of factor(s)

other than position vis-à-vis the S.A. linguistic area.

7.2.3. Other areal affinities

Let us first consider possible explanations for the

extremely high incidence of left-branching structures in

Kalasha. The commonly accepted explanation for left-

branching characteristics like the geographical gradient

reported in Hook (1985) for position of subordinate

relative to main clause is relative proximity to the

Dravidian-speaking (i.e. South India) or the Persian-

dominated (i.e. Southwest Asia) areas. Given that the IA

languages of the Indo-Gangetic plain and Central India are

(collectively) contiguous with present Dravidian areas and

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[16]Menges (1968:127) makes the following interesting
observation about Turkic: "Passive and causative overlap
each other, as e.g. with the suffixes -t-, -r- (rarely: Uj.
-bas-ur- 'to cause to press' > 'to be vanquished,
subjugated') as in Tungus the simple, uncompounded passive
aspect suffix -w- usually also has a causative function.
In Uighur, the suffix-compounds -t-yQ are used, like the
above -syQ- for the expression of the passive: bas-t-yQ,
'to be suppressed', bul-t-uQ 'to be found'." (1968:127)

[17]See Bashir (1983) for an earlier discussion of
points (3) and (4). Edelman (1980) also discusses these
issues.

also occupy territory in which Dravidian was previously
spoken, and that there are no major natural boundaries
dividing the area, that seems likely to be correct for
those languages. But what of Kalasha (and the other NWIA
languages like Shina) which show a great preponderance of
left-branching structures? Assuming that speakers of these
languages have remained in the Karakoram and Hindu-Kush
mountains, and that (proto-) Dravidian speakers have not
been in contact with them since at the latest the second
millenium B.C., if ever,[18] in order to invoke specifically
Dravidian influence one would have to say that it took
place during the time after the Indo-Aryan migrations but
before the southward displacement of Dravidian, and in the
isolated mountain valleys of the Karakorams and Hindu Kush.
This seems highly unlikely.

What seems more likely is that Kalasha along with
Shina, (and Khowar to a lesser extent because of its
influences from Iranian) show the effects of another strong
center of left-branching characteristics. Altaic languages
represent one possible source of such influences. From the
point of view of archaeology and history, this is a tenable
hypothesis. According to Menges' (1968) map of Urheimat I
(ca. 2300 - 1800 B.C.), Indo-Aryan and Turkic were in
contact along the Indo-Aryan trans-Caspian migration route

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[18]For approximate distributions of Indo-European,
proto-Dravidian, and proto-Altaic speakers during the
periods 2300-1800 B.C. and ca. 1000-300 B.C. I am relying
on the maps in Menges (1968).

into South Asia. Grierson's (1903:64) postulation of an

early "non-Sanskritic" migration route from the headwaters

of the Oxus, through the Pamirs and thence to Chitral and

Gilgit would place the proto-Kalasha-Khowar speakers in the

Turkic and Iranian speaking area. Allchin (1980:83-4)

cites archaeological discoveries indicating that

migration/trade routes from Central Asia through the high

passes of the Pamir were in use during the time period

involved. More recently Turkic speaking groups have

migrated into and moved repeatedly across the area where

Kalasha and Khowar are now spoken and were also probably

located within the last millenium (see Menges' (1968) map

of the historical Altaic migrations).

What linguistic evidence can be considered vis-à-vis a

specifically Turkic-influence hypothesis. Aside from the

general left-branching character of Kalasha, several

grammatical morphemes functioning in the Kalasha verb

system behave in a(n) (semi-) agglutinative fashion, i.e.

are attached in an invariant form at the end of their host

word. These are -elyi (necessitative), -ori (hortative), -

dai (specificity of action), hula (inferentiality-

unprepared mind), hawau (potentiality-subjunctive), and

dya/dyapa (contrafactual).

One of these morphemes itself is very probably of

Turkic origin--the Khowar/Kalasha necessitative

construction: Khowar el'i(k), Kalasha -ely'i.[19] Menges

(1968:139) gives the 1st person imperative -aLy[20] to which

-m for first person sg. or -Q for first person plural are

added. He cites varying developments of this morpheme in

the Turkic languages including N. Uighur -ajLi, -eLi, -

eLin, -i:lin, -ajn±q,[21] -eni. Brockelmann (1954:227-9),

calling them "voluntatives" or "cohortatives" gives

numerous examples of developments of these forms.

Sebuktekin (1971:70) describing modern Turkish, lists a

necessitative participial suffix -meli 'must, ought to',

which can occur with persons other than 1st pl, e.g. gel-

meli-sin-iz come-NEC-2nd-pl 'You(pl.) must come.' or when

no independent subject or personal suffix is indicated

refers to an impersonal situation. Shaw (1877:284)

describing the language of Kashgar and Yarkand (Uighur)

describes an "optative defective tense", with "only the 1st

persons singular and plural in -ai and -ali or -aliQ (-

alik), e.g. gel-ali(Q) 'we will do/let us do'.[22] Kashgar

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[19]As noted above (Ch. 2), -elik is probably the
original form in Khowar (cf. 2.2.4. above). Phonetically
the /l/ is a palatalized sound in both Khowar and Kalasha,
but in Kalasha the palatalized /l/ probably is probably not
original, since original /l/ has developed into the
velarized /l/. The palatalized /l/ in Kalasha -elyi points
to this construction as a borrowing from Khowar.

[20]In citing Menges' examples I have used L for his ±.

[21]-±q = [iŋ].

[22]-elik and -aliQ are variants conditioned by vowel
harmony with the verb root.
    Masica (p.c.) points out the (coincidental?)
resemblance of this necessitative morpheme to the Telegu -
aali.

and Yarkand are in the area with which the people of the Gilgit and Hunza valleys and the Chitral area have had continuous cultural and economic intercourse until very recently.

The semantics of inferentiality in Kalasha and Khowar (Ch. 2) and the fact that the category of inferentiality is expressed in basic verb morphology, as in Turkic, is highly suggestive. The relation of the category of inferentiality to tense for Turkic languages is treated by several authors. Haarmann (1970:45) says for Turkish "Auf der Basis der grammatisierten Modalität der Mittelbarkeit (IE) mit dem formalen Kennzeichen -miś hat sich ein ganzes system periphrastischen, modalgefärbter Tempora entwickelt (vgl. die verhältnisse im Älttürkischen 4.1)". Windfuhr (1985:397) states that ". . . -(y)miś follows all (other morphemes) to express inference, except with -di. In this function it is tense-neutral." According to Aksu-Koc and Slobin (1986:159) the choice between the suffixes -dI representing direct experience and -mIş representing indirect experience is obligatory in past tenses. The unstated implication is that in other tenses this choice is available but optional. In some other Turkic languages also (Haarmann 1980:82) the category of inferentiality is marked in all tenses, while in others it is restricted to preterital tenses.[23]

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[23]Historically the Turkic inferential forms developed from perfect forms (Haarmann 1980:22, and Slobin and Aksu 1982:188 following Grunina, E.A. 1976. "K istorii

Consideration of Tibeto-Burman is also relevant at
this point. In Lhasa Tibetan evidentiality distinctions
are marked across both perfective and non-perfective tenses
(DeLancey 1986). The semantic distinction in the non-
perfective tenses is characterized by DeLancey as between
"old and new knowledge", and that in the perfective system
as "true inferentiality", that is a distinction between
first-hand knowledge and that known by inference or by
observation of the end result. In the present and future
tenses the auxiliaries used--yin and red, yod and 'dug are
respectively copular and existential 'be' verbs. The
copular verbs yin and red also function in the perfective
tenses, along with the auxiliaries sûg-, etymologically
derivable from a perfect form of 'go', expressing direct
knowledge and byûg, derivable from a verb meaning 'arrive,
appear, come into view', expressing indirect or inferred
knowledge.[24]

The difference between the Turkish and the Kalasha
systems is that in Turkish a single, invariant morpheme mIş
effects the contrast in all tenses, while in Kalasha in the
past tenses it is effected by an obligatory choice between
the actual and inferential forms of the auxiliary 'be', and

semanticheskogo razvitija perfekta miš". Sovetskaja
tjurkologija 7(1):12-26.

[24]In this connection recall the association of
compound verbs with parik 'go' and the 'prepared mind'.
Also recall the discussion of Hindi compound verbs and the
association of jaanaa with the prepared mind and of
nikalnaa 'come out' with the unprepared mind.

in the non-past tenses by optional use of <u>hula</u>, a form of
'become'. In Tibeto-Burman originally perfective forms of
'be' are used across all tenses. The systems of Kalasha,
Khowar, Turkish and Tibetan are compared here.

	Marking mechanism		Distinction optional or obligatory	
	Past	Non-Past	Past/perfective	Non-Past
Kal.	'be'	'become'	obligatory	optional
Turk.	mIś	mIś	obligatory	optional
Tib.	'be'	'be', 'go/come'	obligatory	obligatory
Kho.	'become'	'become'	obligatory	(?)
	('be')			

Given the remarkable similarity of the semantics of the
unprepared vs. prepared mind described for Turkish and
Tibetan (old vs. new knowledge) with the semantics of
Kalasha <u>hula</u> and Khowar <u>birai</u> 'became(inferential)', it is
difficult to judge at this point based on linguistic
evidence alone whether Turkic or Tibeto-Burman is a more
likely source of the influence to which Kalasha and Khowar
are responding. Before a properly informed opinion can be
ventured, we need also to know more about the extent and
means of grammaticization of this category in the Nuristani
languages and in Burushaski.[29]

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[29]I am grateful to Richard Strand for the information
that inferentiality-evidentiality, involving semantic
distinctions similar to those under discussion here, is
also grammaticized in Kamviri (eastern Kati), employing
both basic verbal morphology and forms of 'become'.
    Buddruss (1987:33-4, 37-8) describes a "reportative
particle" -<u>le</u> in Waigali, which "zum Ausdruck gebracht, da&
der Sprecher das Verbalgeschehen nicht selbst beobachtet
hat, sondern nur vom Hörensagen kennt". His examples are:
<u>oR'oi</u> 'er war'; <u>oR'oi-le</u> 'er soll angeblich gewesen sein';
<u>pudiseR'ot-le</u> 'sie sollen, wie es hei&t weiderholt
durchgegangen sein'. Buddruss likens the Waigali <u>le</u> to
Nepali <u>re</u> as in <u>u aayo re</u> 'man sagt, er kam'.

Perhaps, like general left-branching characteristics,
the grammaticization of this category and the semantic
contrasts characterized as "prepared vs. unprepared mind"
or "old vs. new information" are a much larger-scale areal
phenomenon (cf. Haarmann 1970 passim) involving all the
major language stocks of Northern Eurasia.

Certain characteristics of Kalasha and Khowar point to
Burushaski substratum effects. The first of these are
semantic. As discussed above (Ch. 3) expression of
involuntary actions or bodily processes with verbal forms
which are formally causative is well-developed in Kalasha,
Shina and Burushaski. I have argued that in Kalasha this
mechanism belongs to a stratum of the language older than
that in which dative subject constructions appear. This is
consistent with its being a substratum influence from
Burushaski.[26] Interestingly, in Shina the causative
involuntatives are found in Gilgit Shina but not in the
varieties of that language spoken higher on the Indus near
Skardu.[27] This points to influence from Burushaski, since

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[26]Given a historical scenario in which Burushaski was
originally spoken over a wider area than it is today,
probably including Chitral.

[27]Compare (a) employing causative morphology, which is
from Gilgit Shina, with (b) and (c) which do not employ
causatives.
a) ma   taati tharéegin [Gilgit, maz]
   I(NOM) heat do-Cs-PST(fs)
   'I feel hot.'
b) mo-re taato daST-aas [Tandal, g]
   I-DAT heat know/feel(PST)-1s
   'I feel hot.'
c) mo   tatyi   hããs [Satpara, gm]
   I(f)(NOM) heat/hot be(PRES)-1s(f)

Gilgit is in the Burushaski speaking area but Skardu is in

the Balti region. The absence of this feature in Khowar is

probably to be explained by subsequent Iranian influences

on that language.[28]

A second semantic development concerns the question of

gender categories. Neither Kalasha nor Khowar has retained

the inherited Indo-Iranian system of grammatical gender.

Both languages have, though, evolved a new, semantically

defined system based on the animacy distinction. This

[28]It would be interesting to know the extent to which
other languages of the "active" type share this (causative)
treatment of involuntative semantics.
      Edelman (1980) discusses several other characteristics
of this area, which in the Soviet tradition is designated
the "Central-Asian linguistic area" (and which includes a
rather larger group of languages than I have been dealing
with in this dissertation). Among these are retention of
the cerebral affricates, the form of the 2nd pl. personal
pronouns, the model for the verbal concept 'to begin'. In
the context of the partial acquisition of characteristics
of the active typology by languages in this region, she
treats the conjugation of some apparently (or semantically)
intransitive verbs as if they were transitives (i.e. with
agentive marking), a group of stative intransitives of the
type 'to be red', the inclusive/exclusive distinction in
the 1st person plural, and the treatment of inalienable and
alienable possession.
      The association of anti-reflexive semantics with -a'
causatives recalls Klimov's active typology. Contrasting
the nominative and the active types, Klimov (1979:330)
notes that "in the latter, the opposition of centrifugal
and non-centrifugal versions of active verbs is obligatory
(cf. the voice distinction in nominative languages). The
centrifugal version denotes an action directed outside the
subject, and the non-centrifugal version an action limited
to the subject". Elsewhere (1974:19) he likens
"centripetal" and "centrifugal" to middle and active voice
in proto-Indo-European. The specific anti-reflexive
semantics which I have discussed for Kalasha may well be a
manifestation of this characteristic of the active
typology.

distinction is operative in both the nominal and verbal

systems. With Kalasha singular nouns the old Indo-Aryan

suffixal cases have, except for the oblique (old genitive-

dative) been restricted to inanimate nouns, case marking

functions for animate nouns being taken over by postposi-

tions. In the plural (with certain classes of listable

exceptions), both animate and inanimate have zero-ending in

the direct case and a generalized OBL marker -an/-on´/-in.

The verbal systems of both Kalasha and Khowar are

dominated by the fact that there are both animate and

inanimate forms of the verb 'be' in the third person sg.

and pl. in both present and past tenses.[29] Since the

compound participial tenses are constructed with the

perfective and imperfective participles plus forms of 'be',

the animacy distinction permeates the conjugational system.

Certain verbs have become lexically marked for either

animate or inanimate objects, e.g. halik´ to bring (anim.

_____

[29]See 1.5.3.3.for the Kalasha paradigms, and 2.2.3.
for the Khowar forms. Animate and inanimate forms of 'be'
in the third person are also found in Pashai (Morgenstierne
1967:100, 176, 229, 274). SW dialects: pres 3rd sg.
animate -ha:/ha:sta; inanimate śi:k invariant for 3rd sg.
and pl. and for gender. NW dialects: 3rd sg animate u:n,
bi:n, inanimate śi:n. NE dialects: pres. 3rd sg and pl.
animate o:st.o:yon, 3rd sg. and pl. inanimate śi:u. Past
3rd sg. and pl. inanimate si:k. SE dialects: pres. 3rd
sg. animate a:s(t)/ha:s 3rd sg. inanimate śi:/si:/śe:, 3rd
pl animate a:(e)n/ha:in, 3rd pl. inanimate sen/śen.
For Shumashti, Morgenstierne (1945:255) gives ine/ini
3rd sg. m/f and śue 3rd sg. inanimate. And in Parachi
(Morgenstierne 1929:81-2), we have the forms si: 3rd sg.
inanimate, and ha:, hā, ā. -a 3rd sg. animate. According
to him (p. 82), "śi: is borrowed from Pashai S. śi: (<
śete) with substitution of s for the palatal ś.
Derivatives of śete are frequent in Dardic languages."

obj.) vs. <u>on'ik</u> 'to bring (inan. obj.), <u>thek</u> 'put (inan. obj.), <u>nik</u> 'to take away (anim. obj.) and <u>har'ik</u> 'to take away (inan. obj.).
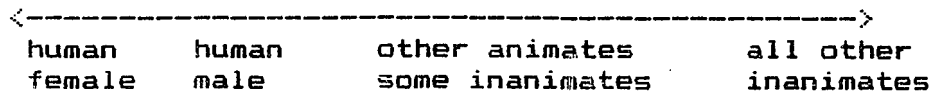
Iranian influence has been cited (Emeneau 1965) as the possible cause of the loss of grammatical gender in NWIA, with Wakhi and Sanglechi-Ishkashmi mentioned as possible influences on Khowar. There is, of course, no doubt of the penetration of Iranian vocabulary into Khowar (Morg. 1936). But in view of two sets of facts presented here, I should like to suggest that influence from Burushaski is more likely to be a contributing factor for the gender developments in Khowar and Kalasha. First, gender loss is not uniform within the Pamir languages. According to Karamshoev (1979) in the Shugni-Roshni group gender is a productive category with many syntactic and semantic correlates; in these languages it has also developed into semantic rather than grammatical gender.[30] Where it has been lost--in Sarikoli, Ishkashmi, and Wakhi--Karamshoev attributes this to the loss of contrast between long and short vowels rather than to a general Pamir tendency toward loss of gender.

The second point concerns the existence of a strongly developed four-fold gender system in adjacent Burushaski based on humanness, sex, and animacy distinctions (Lorimer 1935). Burushaski distinguishes four noun classes: 1)

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[30]See Edelman (1980:28-9) also on this regarding the acquisition of active typological features.

human female, 2) human male, 3) x (which include all non-
human animates and some inanimates, and y, into which fall
all other inanimates.[31] Locating these classes on an
"animacy continuum" like this:

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<------------------------------------------------->
    human      human     other animates      all other
    female     male      some inanimates      inanimates
```

we see that the salient endpoints of the continuum clearly
constitute animate and inanimate classes. It might be
argued that the salient property on the animate end of the
continuum is "humanness" or "human femaleness" rather than
animacy. This would certainly be true for native
Burushaski speakers, but for bilingual speakers of Khowar
or persons with various degrees of partial competence in
Burushaski, it might well be the grosser animate/inanimate
distinction that would be perceived. Thus it seems quite
possible that (proto-) Kalasha-Khowar, with a decaying
inherited gender system may have assimilated this animacy
distinction into its own structure. Although the syntactic
consequences of its gender system permeate the entire
grammar of Burushaski, one of these correlates is the forms
of the verb 'be' which vary with the gender--hf, hm, x, or
y--of the subject. As previously noted, one of the places
where the animacy parameter is manifested in Khowar and
Kalasha is in the present and past third person forms of

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[31]Lorimer suggests that the distinction between
inanimates which fall into the x and those which fall into
the y class is based at least partly on tangibility and
individuation of form.

'be'.

A third characteristic of Kalasha and Khowar, which is also shared by some of the Pamir languages (Iranian), marginally by Tirahi[32], Tibeto-Burman and by Burushaski is the structure of the numerals 11-19. In these languages the form of the teen numerals is 10 + n rather than the usual (inherited) Indo-Iranian pattern n + 10. The 10 + n area includes a compact block of languages belonging to four genetic groupings--the Tibeto-Burman, Burushaski, and some but not all of both the Indic and Iranian branches of Indo-Iranian (see Map 1, Appendix). I have argued in Bashir (1983) that this is a true convergence area apparently induced under the influence of Burushaski and/or the Tibeto-Burman languages.[33]

A fourth feature of Kalasha and Khowar which probably originates in Burushaski is the necessitative baS construction. A construction consisting of a non-finite verbal form plus the element baS is found in Kalasha, Khowar, Yidgah, perhaps Wakhi, Shina, and Burushaski. Its use in Kalasha is discussed in 2.1.3. above. The following

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[32]Edelman gives the forms (dah)eko '11', (dah)bo '12', and (dah)tro '13', while Morgenstierne has i:ko: '11', and bo: '12'. The other Tirahi numerals follow the n + 10 pattern.

[33]Beskrovny (1976) discusses the 10 + n structure of the teen numerals in Romani, considering it to be an early innovation reflecting contact with Burushaski and the Dardic languages. In support of the plausibility of the explanation he cites the development in colloquial Sinhalese of a 10 + n alternate of the teen numerals under the influence of Tamil, which has an indigenous 10 + n order.

examples illustrate its use in Khowar.

10) kan ju baS   hoi [S:rkb]
     tree 2 shares become(PST-A)3s
     'The tree split in two.'

11-a) žibik'-o   baS ni'ki [E:rkb]
      eat(INF)-OBL NEC is(NEG)
      i) 'It is not worth eating.'
      ii) 'One should not eat it.'

b) žibik'-o   baS no asur' [E:rkb]
   eat(INF)-OBL NEC not be(ANIM)(P/F)-3s
   'He is not able to eat.'

c) nigik'-o   baS piran' ma-t   taraawe [E:rkb]
   wash(INF)-OBL NEC shirt I(OBL)-DAT reach(CS)IMP2s
   'Hand me the shirt that needs to be washed.'

12) ma   pešaur-o-t bik-o   baS [E:rkb]
    I(OBL) P(OBL)-DAT go(INF)-OBL NEC
    'I have to go to Peshawar.'

13) keLar'u gik-o   baS kor'um [S:rkb]
    weeping come(INF)-OBL NEC deed
    'a deed/event which causes one to weep'

Example (10) illustrates the (nominal) meaning of 'piece,

share', which is also found in Kalasha.[34] (11-c) shows baS

in an attributive construction[35] and (11a, b, 12, and 13)

various other modal senses. As in Kalasha, it overlaps

semantically with -eli(k); according to my informant, in

Khowar -eli(k) and baS can both be used for either internal

or external compulsion.

In Yidgah (Eastern Pamir), Morgenstierne (1938, IIFL,

II:165) observes forms in baš calling them "potentials".

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[34]It also has the specific meaning of a special gift
of food to female relations. In the conjunct verbal
formation with kor'ik 'do' it means to give a share of
property (land, house, cattle, trees, but not money) to a
child or relative. [rkb]

[35]Compare Kalasha examples (25-7) in Ch. 6.

He gives the examples shown in (14).

14-a) yasp Gazevda baś [IIFL(2):165]
      horse run-CS   baś
      'The horse could be made to run.(?)' (M's gloss)

b) vruta   ti:e baś [IIFL(2):165]
   mustache cut baś
   'The mustache could be cut.'

c) žu:ya baś [IIFL(2):165]
   sew   baś
   'It could be sewn.'

Morgenstierne says: "This form, which is not found in

Munjani, is of Khowar origin. . . . It can have nothing to

do with Sanglechi buś". (p. 165)[36]

Morgenstierne also mentions (1973:86) that baŚ is also

found in Wakhi in the meanings 'ought to, is likely', but I

have not been able to locate the examples.[37]

In Gilgit Shina the construction with baŚ and the

infinitive seems to have the meaning of 'to be about to be

V-ed' as well as 'to be fit/able to be V-ed'. For example:

15-a) Tiki-s   khijo'iky   baŚ hany [maz]
      bread-AG eat(PASS)-INF baŚ be(PRES)3sf
      i. 'The bread is about to be eaten.'
      ii. 'The bread is fit to be eaten.'

b) be   ho   th-ar-ij-o'iky   baŚ han-as [maz]
   we(NOM) call do(CS)(PASS)-INF baŚ be(PRES)-
   i. 'We are about to be invited.'
   ii. 'We are capable of being invited.'

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[36]Notice palatal ś in Yidgah. Regarding sibilants in
Yidgah-Munjani, Morgenstierne says, "There can be no doubt
that /S/ and /ś/ are separate phonemes, but it is not
always easy to distinguish between them, and it is possible
that some speakers of Munjani use a neutral /ś/ for both
through the influence of Prs. phonology." (1938:30)

[37]Wakhi has a particle -aŚ with multiple functions
including use with contrary to fact conditions (Grjunberg
and Steblin-Kamensky 1976:#180). This may possibly be
relatable to the Burushaski -Ś forms (see below).

c) ma-s krij-o´iky   baS (o)   gúum gaaC déeg-as
   I-AG rot(PASS)-INF <u>baS</u> (that) wheat price set(PST)
   ´I sold the wheat which was about to rot.´[maz]

In the Yasin variety of Burushaski <u>baS</u> is used in the

meaning of ´must´, ´is necessary to´, and ´fit to/for´.

<u>baS</u> is constructed with the present participle of the verb

and is optionally followed by the appropriate form of the

copula. Lorimer gives the following examples for Yasin

Burushaski (1962:52).[38]

16-a) ja   huuCo yaT-e aulan biśaćum baS duua
      I(OBL) boot on   patch apply   NEC is
      ´It is necessary to put a patch on my boot.´

b) memalćum baS źaGa duua
   fear   NEC place is
   ´It is a place which must make us afraid (i.e. a very
    dangerous place.)´

c) duro baS a-p<u>oe</u>i/a-pi
   work NEC neg-is
   ´He/it is useless, unserviceable.´

Morin and Tiffou (ms 1985:12) have the following Yasin

Burushaski examples:

17-a) me´na   du-gur´guy-um baS b-i
      apricot nuts(x-sg) <u>d</u>-grind(P)-PPL NEC be(P)3s(x)
      ´There are still some apricot nuts to be ground.´

b) uC   ga´mić-um   baS dua´
   loan(y)NOM return(P)-PPL NEC be(P)3s(y)
   ´There is still some money to pay back.´

For Hunza Burushaski, Lorimer has the following (1935-

8, I:242).

18) eedelin   tei   baS   etin
    NEG-3s-beat-IMP2p thus   be-SUBJ-3s(hm) do(IMP2p)
    ´Don´t beat him, let him be as he is.´ (L´s gloss)

_____

[38]The orthography of Lorimer´s examples has been
normalized in accordance with the practice adopted in this
dissertation. Glosses are Lorimer´s.

The form baS in Burushaski is almost certainly the 3rd sg. human male "-S form" of ba- 'be'. These function and characterization of these "-S forms" have been variously analyzed by Lorimer (1935, I:324-8) and Berger (ms. Ch. 10) for Hunza Burushaski, and Berger (1974) and Tiffou and Pesot (1983) for Yasin Burushaski. Berger (1974:42, 44) simply calls it the "-S form" and notes that it functions somewhat like an infinitive with ta- 'to follow' in the meaning of 'to begin' and as a 3rd sg. and pl. imperative. Tiffou and Pesot identify the optative function of the S-form: "une série de formes in -iS à valeur volitive" (p. 33). Describing Hunza Burushaski, Berger (ms. Ch. 10) calls the -S forms "der infinite Form auf -S/-iS", probably because of its ability to function as the semantic complement of ÷-man- 'become' in the meaning of 'to be able' and of ÷t- 'make, do' in the meaning of 'let, allow'.[39] Lorimer (1935) gives the most complete description and illustration of the -S forms, showing them indicating imperative, injunctive, permissive and optative senses. He shows that the -S forms can also occur with the postposition xa 'up to, until', and as semantic complements of the concepts 'be able' and 'allow'. Example (19) illustrates the imperative-optative complex of meanings.

19-a) baadśa hukum etimi ulo   JuuS   nusen [I:324]
      king   order did   inside come(SUBJ)3s say(CP)

---

[39]In Berger's system -V and ÷V (stressed or unstressed) indicate pronominal prefixes of Type I; ÷V a prefix of Type II, and ÷-V a prefix of Type III (ms:4.2.5.)

'The king gave the command for her to come in.'

b) tham in-e   maniS [I:324]
   tham he-AG(?) become(SUBJ)3s
   'Let him become Tham!' (Tham is the ruler's title.)

In (20) we see the -S form after xa 'until, up to, before'.

20) i:n a-CuS   xa   guċ'a-mo [I:324]
    he NEG-come(SUBJ) until give birth(PST)-3s(hf)
    'Before he returned she gave birth.'

And in (21) and (22) the -S form expresses semantic

complements of 'be able' and 'allow'.

21) duwaiS   a-mo-manu-mo [I:327]
    fly(SUBJ)3s NEG-3s(hf)-become(PST)-3s(hf)
    'She was not able to fly.'

22) iin niS   eti [I:328]
    he go away(SUBJ) do(IMP2s)
    'Let him go away!'

Analyzing the -S forms as general subjunctives explains all

the various senses in which they function in Burushaski,

and is consistent with the meanings which baS has in the

neighboring languages.

Having observed the use of baS constructions in

Kalasha, Khowar, Yidgah, Shina and Burushaski, it remains

to decide whether the Kalasha/Khowar and Shina baS

construction is borrowed from Burushaski or whether, as has

been suggested by others (Turner 1966, Masica p.c.), it has

an Indo-Aryan origin. Turner suggests vaśya (T11433) 'to

be subjected, obedient; at the disposal of' as the etymo-

logy of Khowar and Shina forms which he has recorded as baś

with palatal ś.[40] In fact, however, the form clearly has a

_____

[40]Masica offers vaśa meaning 'obliged by' as a suffix
as a possible etymology.

retroflex rather than a palatal sibilant. Invoking _vaśya_ as the source of _baS_ would require explanation of the change _ś_ > _S_. But Kalasha preserves the distinction between final _ś_ and _S_, viz. _daś_ 'ten' < _daśa_ (T6227), _deśa_ 'far' < _de:śa_ 'province, region' (T6547), and _doS_ 'yesterday' < _do:Sa:'_ 'night' (T6590). Both sibilants are also preserved in Khowar: _daśa_ 'ten' (T6227) > _joś_ 'ten' and _do:Sa:'_ 'night' > _doS_ 'yesterday'. Given the exact correspondence of form and semantics between the Burushaski and the Khowar and Kalasha forms it seems likely that Burushaski _baS_ is the source of the necessitative-obligative construction in Kalasha and Khowar.[41]

Thus the grammaticization of the animacy distinction, the 10 + n structure of the teen numerals, involuntative semantics associated with causative morphology (see Appendix, map 3), the shape of the agentive postposition (see Appendix, map 2), and the _baS_ construction suggest that a distinct convergence area can be identified in the languages of the Hindukush, Karakorams and Pamirs—one in which the interaction pattern probably reflects a Burushaski substratum effect.

Certain syntactic features most intensively localized in Khowar but present also in Kalasha and other languages of the immediate region can probably be attributed to

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[41]The meaning of 'share' found in Kalasha and Khowar still poses a problem. Perhaps it has evolved from the necessitative meaning, or perhaps it represents the reflex of a separate root, perhaps _vaNTa-_ 'share' (T 11235).

Iranian influence. These include ki- clauses, infinitives

in -ik,[42] consistent marking of specific direct objects in

Khowar, and echo-formations in m-.

7.3. Conclusion

Kalasha, then, reflects convergence phenomena at at

least three levels. The largest-scale pattern in which it

participates and that with the greatest time-depth is an

extensive left-branching area embracing Altaic, Tibeto-

Burman, Burushaski, Dravidian, and (partially) Indo-Aryan.

This is the area which Masica (1983:5) designates "Indo-

Turanian" instead of his earlier "Indo-Altaic". Seen

against this larger picture, the injection of right-

branching characteristics into the IA languages of the

midlands and into Khowar appears as a later, smaller-scale

effect.[43] To the next layer belong those features

---

[42]Other nearby languages with infinitives in -k are
Nuristani Prasun, with a form in -nik/q; Indo-Aryan Gawar-
Bati, whose -ik infinitive is also inflected as a nomen
actionis, Pashai -ik, and Gilgit Shina -oiky; Iranian
(Pamir) Wakhi -ak, -q (Morgenstierne 1938:166), Yidgah
(Grierson 1920:51), Ishkashmi -uk (Grierson 1920:51), -
o:k, -u:k (Morgenstierne 1938:370), Zebaki -a:k (Grierson
1920:51), Iranian Ormuri -ók (Morgenstierne IIFL, 1:78).
Morgenstierne derives the Wakhi form from *-aka (1938:166),
but offers no historical comments on the Kalasha and Khowar
forms. Bloch (1965:280) assumes the -k infinitives in IA
to be borrowed from Iranian.
    Gardezee (1986) has proposed a Turkic origin (cf.
verbal nouns in -Q) for the -k infinitives of languages in
this region. Perhaps, as G. Windfuhr suggests (p.c.), this
is a case of multiple causation in which two forms with
similar form and semantics influence the development of a
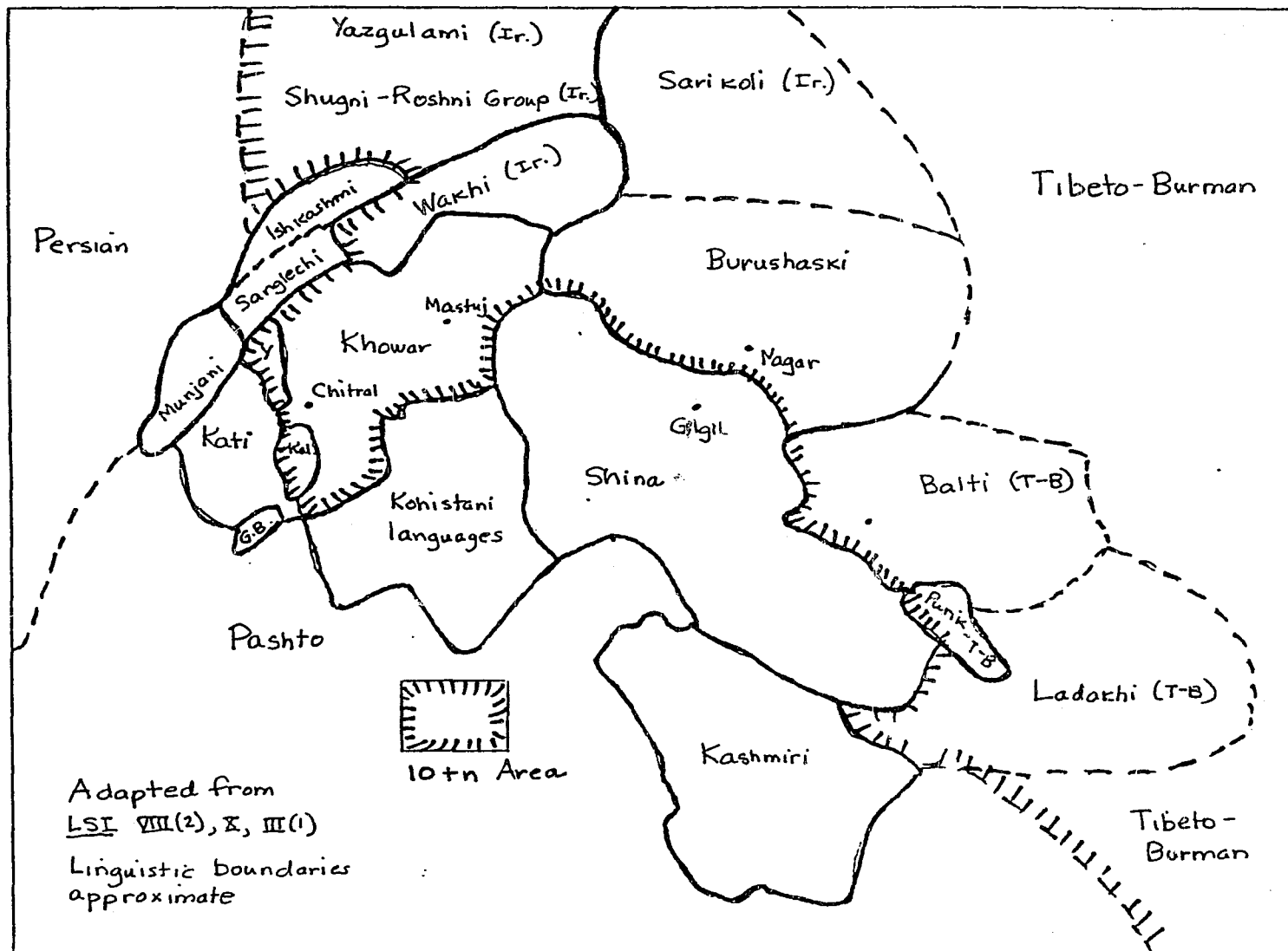single phenomenon.

[43]As noted in Chs. 5 and 6 above, taken together
Kalasha and languages like Marathi and Dakkhini Urdu afford
interesting complementary parallels and a laborabory for
the study of syntactic change. The one has left-branching

attributable to interaction with a Burushaski substratum, and to the most recent level can be assigned features linking Kalasha on the one hand to the specifically South Asian linguistic area, and on the other (via Khowar) to a small area of regional Iranian influence. As communication and cultural links shift from ties with Central Asia or Nuristan to relations with the lower Indus valley, we can expect to see an increasing approximation of Kalasha to the South Asian linguistic pattern.
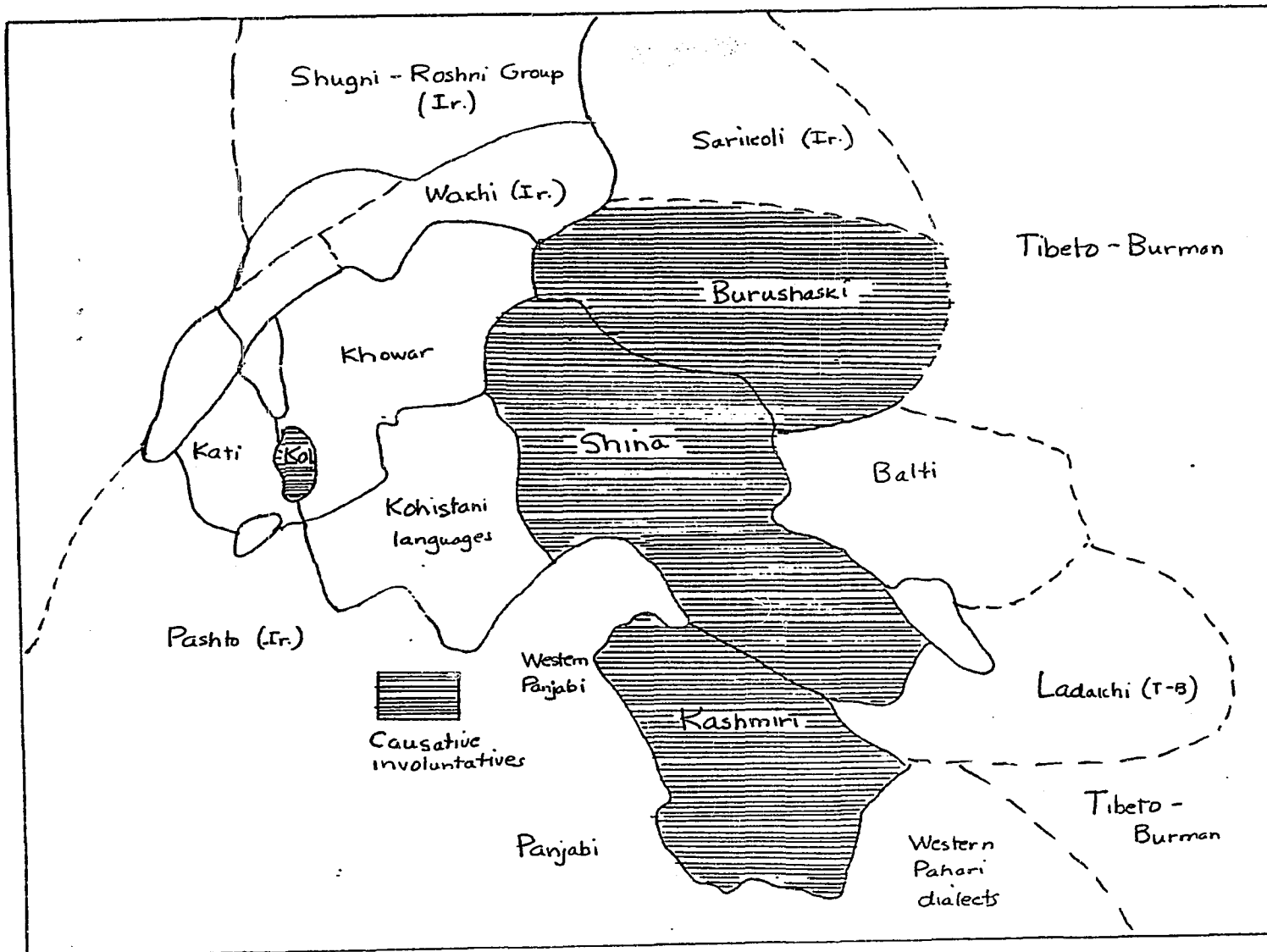
complementation and relativization strategies in the pro-
cess of accommodating (to) right-branching structures, and
the others show right-branching structures in transition to
left branching. In Kalasha the left-branching structures
are the legacy of its long-term membership in the Indo-
Turanian area, while in Marathi and Dakkhini Urdu they are
being re-acquired as a result of more recent interaction
with Dravidian.

APPENDIX

Yazgulami (Ir.)

Shugni-Roshni Group (Ir.)

Sari Koli (Ir.)

Tibeto-Burman

Persian

Ishkashmi

Wakhi (Ir.)

Sarglechi

Burushaski

Mastuj

Khowar

Munjani

Chitral

Nagar

Kati

Kal.

Gilgit

Balti (T-B)

G.B.

Kohistani languages

Shina

Pashto

Panik T-B

Ladakhi (T-B)

10+n Area

Adapted from
LSI VIII(2), X, III(1)

Kashmiri

Tibeto-Burman

Linguistic boundaries
approximate

Map 1. 10 + n Area

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Map 2.   Expression of agentive postposition

Map 3. Distribution of causative involuntatives

Within the map:

Shugni - Roshni Group (Ir.)

Sarikoli (Ir.)

Wakhi (Ir.)

Khowar

Burushaski

Tibeto - Burman

Kati

Kol

Shina

Balti

Kohistani languages

Pashto (Ir.)

Western Panjabi

Causative involuntatives

Ladakhi (T-B)

Kashmiri

Panjabi

Western Pahari dialects

Tibeto - Burman

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REFERENCES

REFERENCES

Akatsuka, Noriko. 1985. "Conditionals and the Epistemic
    Scale". Language 61.2:625-639.

Allchin, F. G. 1980. "Archaeological and Language His-
    torical Evidence for the Movement of Indo-Aryan
    Speaking Peoples into India and Pakistan". Jour-
    nal of the Cama (K.R.) Oriental Institute 48:
    68-108.

Allen, Cynthia L. 1984. "Another Look at the History of
    Impersonal Verbs in English". ms. version

Andronov, M. S. 1968. "Dravidian and Aryan: From the
    Typological Similarity to the Similarity of Forms". in
    Two Lectures on the Historicity of Language Families.
    Annamalainagar: Annamalai University, Dept. of Lin-
    guistics, Publication No. 15.

Avery, John. 1881. "On Relative Clauses in the Rigveda".
    Proceedings of the American Oriental Society. 11:64-6.

Bailey, Charles-James N. 1973. Variation and Linguistic
    Theory. Arlington, Virginia: Center for Applied Lin-
    guistics.

Bailey, T. Grahame. 1924. Grammar of the Shina Language.
    London: The Royal Asiatic Society.

Bashir, Elena. 1983. "Some Areal Characteristics of Kal-
    asha". paper presented at the 12th Annual Conference
    on South Asia held in Madison, Wisconsin, November
    1983.

_____. 1985. "Toward a Semantics of the Burusha-
    ki Verb". in Zide et al., (eds.).

_____. 1988-a. "Inferentiality in Kalasha and Khowar".
    in Proceedings of the 24th Regional Meeting (CLS 24).
    Chicago: Chicago Linguistic Society.

_____. 1988-b. "SAY Quotatives in Northwest Indo-
    Aryan, Burushaski, Wakhi, and Balti." Paper
    presented at the 10th Annual South Asian Languages
    Analysis Roundtable, Seattle, Washington, July 10-13,
    1988.

_____, Hook, Peter Edwin, and Deshpande, M. M. 1987.
    Select Papers from SALA-7: South Asian Languages
    Analysis Roundtable Conference. (held in Ann Arbor,

Michigan, May 17-19, 1985). Bloomington: Indiana University Linguistics Club.

Berger, Hermann. 1974. _Das Yasin Burushaski_. (Neu-indischen Stüdien, Band 3). Weisbaden: Otto Harrassowitz.

_____. ms. _Hunza Burushaski_. unpublished working copy.

Beskrovny, V. M. 1976. "A Study of Gypsy Numerals". _Indian Linguistics_. 37:215-9.

Bhat, D. N. S. 1979. "Vectors in Kannada". _International Journal of Dravidian Linguistics_. 8,2:300-9.

Biddulph, J. 1880. _Tribes of the Hindu Koosh_. Calcutta: Office of the Superintendent of Government Printing. Reprinted 1971 (ed. K. Gratzl) Graz: Akademische Druck u. Verlagsanstatt.

Bloch, Jules. 1965. _Indo-Aryan: from the Vedas to Modern Times_. (tr. Alfred Master). Paris: Librarié d'Amerique et d'orient, Adrien Maisonneuve.

Brockelmann, C. 1954. _Osttürkische Grammatik der Islamischen Litteratur-Sprachen Mittelasiens_. Leiden: E. J. Brill.

Buddruss, Georg. 1982. _Khowar-Texte in Arabischer Schrift_. Akademie der Wissenschaft und der Literatur, Abhandlungen der Geistes-und-Socialwissenschaftlichen Klasse, Jahrgang 1982, No. 1. Weisbaden: Franz Steiner Verlag.

_____. 1983. "Neue Schriftsprachen im Norden Pakistans. Eine Beobachtungen". _Schrift und Gedächtnis_ (Beiträge zür Archäologie der literarischen Kommunikation). München: Wilhelm Fink.

_____. 1987. "Ein Ordal der Waigal-Kafiren des Hindukusch". in _Cahiers Ferdinand de Saussure 41_. 1987. Cahier dédié à Georges Redard. Genève: Librarie Droz.

Bynon, Theodora. 1977. _Historical Linguistics_. Cambridge: Cambridge University Press.

Cardona, George. 1978. "Relations between Causatives and Passives in Indo-Iranian". _Linguistics in the Seventies: Directions and Prospects_ (ed. Braj B. Kachru), special issue of _Studies in the Linguistic Sciences_. 8.2, Fall 1978. Urbana: University of Illinois, Dept. of Linguistics.

_____. 1978-b. "A Note on Indo-Iranian dha: (IE *dhe:)"
Indian Linguistics 39:209-24.

Chafe, Wallace and Nichols, Johanna (eds.). 1986.
Evidentiality: the Linguistic Coding of Epistemology.
Norwood, New Jersey: Ablex.

Chatterji, Suniti Kumar. 1926. The Origin and Development
of the Bengali Language. Calcutta: Calcutta Univer-
sity Press.

Comrie, Bernard. 1976. Aspect. Cambridge: Cambridge
University Press.

_____. 1981. Language Universals and Linguistic
Typology. Chicago: University of Chicago Press.

_____, and Keenan, Edward L. 1979. "Noun Phrase Ac-
cessibility Revisited". Language. 55.3:649-663.

Darling, Elizabeth Gillian. 1979. Merit Feasting Among
the Kalash Kafirs of Northwestern Pakistan. Master's
thesis, University of British Columbia.

Dekeyser, Xavier. 1984. "Relativization in Early Mod-
ern English". in Fisiak, Jasek (ed.) 1984.

DeLancey, Scott. 1981. "An Interpretation of Split-
Ergativity and Related Patterns". Language 57:626-57.

_____. 1985-a. "Categories of Non-Volitional Actor in
Lhasa Tibetan" in Zide et al. 1985.

_____. 1985-b. "Lhasa Tibetan Evidentials and the Se-
mantics of Causation". Proceedings of the Eleventh
Annual Meeting of the Berkeley Linguistics Society.
Berkeley, California: Berkeley Linguistics Society.

_____. 1986. "Evidentiality and Volitionality in
Tibetan". in Chafe and Nichols (eds.).

Deshpande, Madhav M. 1981. "Pāṇini and the Vedic Evi-
dence: A Peep into the 'Past'". in Golden Jubilee
Volume, pp. 52-65. Poona: Vaidika Samśodhana
Mandala.

Downing, Bruce T. 1973. "Correlative Relative Clauses
in Universal Grammar". Minnesota Working Papers in
Linguistics and Philosophy of Language. 2:1-17.

Dryer, Mathew S. 1985. "Object-verb Order and Adjective-
Noun Order: Dispelling a Myth". paper presented at
the 1985 winter meeting of the Linguistic Society of
America.

Ebert, Karen. 1986. "Reported Speech in Some Languages of Nepal". in <u>Direct and Indirect Speech</u>. (ed. Florian Coulmas) Trends in Linguistics, Studies and Monographs 31. Berlin: Mouton de Gruyter.

Edelman, Dzhoi. 1980. "K substratnomu naslediju tsentral-noasiatskogo jazykogo sojuza". <u>Voprosy jazykoznanija</u>. 5:21-32.

_____. 1983. <u>The Dardic and Nuristani Languages</u>. Moscow: Nauka.

Eichner, Heiner. 1969. "Hetihitisch <u>ẹẹṡṡ/ụaṡṡia</u> (Gewander) tragen; anziehen; bekleiden". <u>Münchener Stüdien zür Sprachwissenschaft</u> 27:5-44.

Emeneau, Murray B. 1956. "India as a Linguistic Area". <u>Language</u> 32:3-16.

_____. 1966. "The Dialects of Old Indo-Aryan". in <u>Ancient Indo-European Dialects</u>. ed. H. Birnbaum and Jaan Puhvel. Berkeley: University of California Press.

_____. 1974. "The Indian Linguistic Area Revisited". <u>International Journal of Dravidian Linguistics</u> 3: 92-134.

_____. 1980. "India and Linguistic areas". in <u>Language and Linguistic Area: Essays by Murray B. Emeneau</u> (ed. Anwar Dil). Stanford: Stanford University Press.

Endresen, R. T. and Kristiansen, Knut. 1981. "Khowar Studies". <u>Acta Iranica</u> 21:210-43.

Fedson, Vijayarani Jotimuttu. 1981. <u>The Tamil Serial or Compound Verb</u>. Unpublished Ph.D. dissertation. Chicago: The University of Chicago.

Fisiak, Jacek. 1984. (ed.) <u>Historical Syntax</u>. Berlin, New York: Mouton.

Friedman, Victor A. 1978. "On the Semantic and Morphological Influence of Turkish on Balkan Slavic". <u>Papers from the Fourteenth Regional Meeting of the Chicago Linguistic Society</u>. Chicago: Chicago Linguistic Society.

Friedrich, Paul. 1974. "Aspect Theory and Homeric Aspect". <u>International Journal of American Linguistics</u> 40.4-2. Memoirs 28 and 29. Chicago: The University of Chicago Press.

Fussman, Gerard. 1972. _Atlas Linguistique des Parlers Dardes et Kafires_. Vol. I. Cartes, Vol. II. Commentaire. Paris: Ecole Française d'Extrême orient.

Gardezee, Nazeer M. 1986. "The Language Affinity of Karakoram Region". _Central Asia_. Vol. 9 (Winter 1986). Peshawar: Area Study Centre, University of Peshawar.

Givon, Talmy. 1980. "The Binding Hierarchy and the Typology of Complements". _Studies in Language_ 4.3:333-377.

_____. "Evidentiality and Epistemological Space". _Studies in Language_. 6.1:23-49.

Goldsmith, John and Woisetschlaeger, Erich. 1982. "The Logic of the Progressive Aspect". _Linguistic Inquiry_ 13.1:79-89.

Gonda, J. 1954. "The Original Character of the Indo-European relative pronoun io-". _Lingua_ 4:1-41.

Greenberg, Joseph. 1963. "Some Universals of Grmmar with Particular Reference to the Order of Meaningful Elements", in _Universals of Language_ 2nd edition, (ed.) Greenberg, Joseph A. Cambridge: The M.I.T. Press.

Grierson, Sir George Abraaham. 1901. "Note on the Languages of India". prepared for the census of India 1901.

_____. 1919. _Linguistic Survey of India, Vol. VII, Part 2_. Calcutta: Superintendent Government Printing, India.

_____. 1920. _Ishkashmi, Zebaki and Yazhgulami_. London: Royal Asiatic Society.

Grjunberg, A. L. and I. M. Steblin-Kamensky. 1976. _Jazyki vostochnogo gindukusha: vakhanskii iiazyk_. Moscow: Nauka.

Gumperz, John and R. Wilson. 1971. "Convergence and Creolization: A Case from the Indo-Aryan/Dravidian Border in India". in Hymes, Dell H. (ed.) _Pidginization and Creolization of Languages_. London: Cambridge University Press.

Haarmann, Harald. 1970. _Die indirekte Erlebnisform als grammatische Kategorie. Eine eurasische Isoglosse_. Wiesbaden: Otto Harrassowitz.

Hamp, Eric. 1969. "ues- in Indo-European". _Acta Linguis-_

tica Hafniensa 12:151-69.

_____. 1976. "Why Syntax Needs Phonology". in Papers
from the Parasession on Diachronic Syntax. (ed. Stee-
ver et al.). Chicago: Chicago Linguistic Society.

Hawkins, John A. 1983. Word Order Universals. New York:
Academic Press.

Heston, Wilma L. 1980. "Some Areal features: Indian or
Irano-Indian". International Journal of Dravidian
Linguistics. 9.1:141-157.

_____. 1983. "What Linguistic Area: An Iranianist's
View". paper presented at 1983 American Association
of Asian Studies annual meeting, held in San
Francisco.

Hock, Hans Henrich. 1981. "Sanskrit Causative Syntax:
a Diachronic Study". Studies in the Linguistic Sci-
ences. 2.2:9-33.

_____. "The Sanskrit Quotative: a Historical and Com-
parative Study". Studies in the Linguistic Sciences.
12.2:39-86.

Hoernle, A. F. Rudolf. 1880. A Comparative Grmmar of the
Gaudian (Indo-Aryan) Languages. reprinted 1975.
Amsterdam: Philo Press.

Hook, Peter Edwin. 1974. The Compound Verb in Hindi. The
Michigan Series in South and Southeast Asian Languages
and Literatures, No. 1. Ann Arbor: The University of
Michigan Center for South and Southeast Asian Studies.

_____. 1976. "The Hindi Compound Verb: What it is and
What it Does". in Readings in Hindi-Urdu Linguistics.
ed. Singh, K. S. Delhi: National Publishing House.

_____. 1977-a. "Some Uses for Probabilistic Conceptu-
Conceptualizations of Dialect Space", in Spoken and
Written Language in South and Southeast Asia. ed.
Herman Hendrik van Olphen. Austin: Department of
Oriental and African Languages and Literatures.

_____. 1977-b. "The Distribution of the Compound Verb
in the Languages of North India and the Question of
its Origin". International Journal of Dravidian Lin-
guistics. 6.2:336-351.

_____. 1978. "Perfecting a Test for the Perfective:
Aspectual Parallels in Russian, Lithuanian, Modern
Greek, Hindi and Pashto". University of Michigan Pa-
pers in Linguistics. 2:89-104.

_____. 1982. "South Asia as a Semantic Area: Forms, Meanings, and their Connections". in P.J. Mistry (ed.) <u>Studies in South Asian Languages and Linguistics</u>, Special Issue of <u>South Asian Review</u> 6.3.

_____. 1985. "Linguistic Areas: getting at the grain of History". in <u>Festschrift for Henry Hoenigswald</u>. ed. George Cardona and Norman H. Zide. Tubingen: Gunter Narr Verlag.

_____. 1986."Null Valents in the Expression of Impersonal Action in Kashmiri and Russian". <u>Papers from the General Session at the 22nd Regional Meeting</u>. Chicago: Chicago Linguistic Society.

_____. 1987. "A Note on Involuntary Apprehension in Shina (Skardu)". ms.

_____. and Koul, Omkar N. 1984. "Pronominal Suffixes and Split Ergativity in Kashmiri". in Koul and Hook (eds.) 1984, pp. 123-35.

_____. and Zia, Muhammad Amin. 1987. "Searching for the Goddess: A Study of Sensory and other Impersonal Causative Expressions in Shina (Gilgit)". ms.

Hopper, Paul J. (ed.) 1982. <u>Tense Aspect: Between Semantics and Pragmatics</u>. Amsterdam-Philadelphia: Benjamins.

Jakobson, Roman. 1957. "Shifters, Verbal Categories and the Russian Verb". in <u>Selected Writings</u>, Vol. 2:130-47. The Hague: Mouton.

Jettmar, K. 1975. <u>Die Religionen des Hindukush</u>. Stuttgart: W. Kohlhammer.

_____, and Edelberg, Lennart (eds.). 1974. <u>Cultures of the Hindu Kush</u>. (selected papers from the Hindu Kush Cultural Conference held at Moesgard 1970). Weisbaden: Franz Steiner Verlag.

Jones, Schuyler. 1966. <u>An Annotated Bibliography of Nuristan (Kafiristan) and the Kalash Kafirs of Chitral: Part I</u>. Historisk-filosofiske Meddelelser (udgivet of) Det Kongelige Danske Videnskabernes Selskab. 41.3 Copenhagen: Munksgaard.

_____. 1969. <u>An Annotated Bibliography of Nuristan (Kafiristan) and the Kalash Kafirs of Chitral: Part II</u>.

Kachru, Yamuna. 1979. "The Quotative in South Asian Lan-

guages". _South Asian Languages Analysis-1_.

_____. 1986. "The Syntax of Dakkhini: A Study in Language Variation and Language Change". in Krishnamurthi, Bh. (ed.) 1986.

Karamshoev, D. 1979. "Problemy Kategorii Roda v Pamirskix Jazykax". _Voprosy Jazykoznanija_ 5:92-102.

Kaul, Vijay K. 1985. _The Compound Verb in Kashmiri_. Unpublished Ph.D. dissertation. Kurukshetra University.

Keenan, Edward L. 1985. "Relative Clauses". in Shopen, Timothy (ed.), _Language Typology and Syntactic Description, II_. Cambridge: Cambridge University Press.

_____, and Comrie, Bernard. 1977. "Noun Phrase Accessibility and Universal Grammar". _Linguistic Inquiry_. 8.1:63-99.

_____, and Comrie, Bernard. 1979. "Data on the Accessibility Hierarchy". _Language_. 55.2:333-351.

Kemmer, Suzanne E. 1984. "From Comparative to Relativizer: The Case of Icelandic _Sem_". _Proceedings of the Tenth Annual Meeting of the Berkeley Linguistics Society_. Berkeley, California: Berkeley Linguistics Society.

Klaiman, M. H. 1976-a. _Volitionality and Subject in Bengali: A Study of Semantic Parameters in Grammatical Processes_. Bloomington: Indiana University Linguistics Club.

_____. 1976-b. "Topicalization and Relativization in Hindi". _Indian Linguistics_. 37:315-33.

Klimov, G. A. 1974. "On the Character of Languages of Active Typology". _Linguistics_ 131: 11-25.

_____. 1979. "On the Position of the Ergative Type in Typological Classification". in Plank, Frans (ed.) _Ergativity: A Theory of Grammatical Relations_. 1979. New York: Academic Press.

Koul, Omkar N. and Hook, Peter Edwin. 1984. _Aspects of Kashmiri Linguistics_. New Delhi: Bahri Publications.

Krishnamurti, Bh. (ed.) 1986. _South Asian Languages: Structure, Convergence and Diglossia_. Delhi: Motilal Banarsidass.

Kuiper, F. B. J. 1967. "The Genesis of a Linguistic

Area". Indo-Iranian Journal. 10:81-102.

Kurylowicz, Jerzy. 1919. "Le genre verbal en Indo-Iranien". Rocznik Orientalistyczny 6:201-9.

Lee, Ho Sang. 1985. "Consciously Known but Unassimilated Information: a Pragmatic Analysis of the Epistemic Modal -kun in Korean". Proceedings of the First Annual Meeting of the Pacific Linguistics Conference. Eugene, Oregon: Department of Linguistics, University of Oregon.

Leitner, G. W. 1880. Kafiristan: Section I, The Bash-geli Kafirs and their Language. Simla: Journal of the United Service Institute of India, No. 43.

Lindholm, James Milton. 1975. The Conceptual Basis of the Tamil Adverbial Participle. Ph. D. Dissertation, The University of Chicago.

Lord, Carol. 1976. "Evidence for Syntactic Reanalysis: From Verb to Complementizer in Kwa". in Papers from the Parasession on Diachronic Syntax. Chicago: Chicago Linguistic Society.

Lorimer, D. L. R. 1935-1938. The Burushaski Language. (3 vols.). Vol. I, Introduction and Grammar, Vol. 2, Texts and Translations, Vol. 3 (1938), Vocabularies and Index. Oslo: Instittutet for Sammenlignende Kulturforskning.

_____. 1962. Werchikwar-English Vocabulary. Instituttet for Sammenlignende Kulturforskning. Oslo: Norwegian Universities Press.

Loude, Jean Yves and Viviane Lièvre. 1980. Kalash: les derniers infidels des Hindu Kush. Paris: Berger-Levrault.

_____. 1984. Solstice Päien. Paris: .

Lyons, John. 1977. Semantics, Vols. I and II. Cambridge: Cambridge University Press.

Magier, David S. 1985. "Temporal Reference Points and the Semantics of Framing". paper presented at the 60th meeting of the L.S.A. at Seattle, Wahsington, Dec. 30, 1985.

Masica, Colin P. 1972. "Relative Clauses in South Asia". in Fermanteau et al. (eds.) 1972.

_____. 1974. "The Basic Order Typology as a Definer of an Indian Linguistic Area". International

Journal of Dravidian Linguistics. 3.1:154-80.

_____. 1976. Defining a Linguistic Area. Chicago: University of Chicago Press.

_____. 1976-b. "Another Typological Feature Common to South and Central Asian Languages: Identified Object Marking". South Asia 2: Proceedings of the 30th Inter-national Congress of Human Sciences in Asia and North Africa (1976). ed Graciela de la Lama. Mexico, 20 D.F.: El Colegio de Mexico.

_____. 1983. "Indo-Altaic Revisited: Areal Convergence or Typological Coincidence". ms.

Matisoff, James. 1988. "Cis-yangtzean China as part of the Southeast Asian Linguistic Area" (handout). paper presented at the 40th annual meeting of the Association for Asian Studies, at San Francisco, March 26, 1988.

Maxwell, Daniel N. 1979. "Strategies of Relativization and NP Accessibility". Language. 55.2:352-371.

McCawley, Noriko. 1976. "From OE/ME 'Impersonal' to 'Personal' Constructions: What is a Subjectless S?" in Papers from the Parasession on Diachronic Syntax. Chicago: Chicago Linguistic Society.

Meenakshi, K. 1983. Epic Syntax. New Delhi: Meharchand Lachmandas.

_____. 1986. "The Quotative in Indo-Aryan". in Krishnamurti, Bh. (ed.) 1986.

Menges, Karl H. 1964. "Altajisch und Dravidisch". Orbis 13:66-103.

_____. 1968. The Turkic Languages and Peoples: An Introduction to Turkic Studies. Wiesbaden: Otto Harrassowitz.

Morgenstierne, Georg. 1926. Report on a Linguistic Mission to Afghanistan. Oslo: Instittutet for Sammenlignende Kulturforskning, Serie CI-2.

_____. 1932. Report on a Linguistic Mission to Northwestern India. Oslo: Instituttet for Sammenlignende Kulturforskning.

_____. 1936. "Iranian Elements in Khowar". BSOAS 8:657-71, reprinted in Irano-Dardica. Wiesbaden: Dr. Ludwig Richert Verlag, 1973.

_____. 1938. *Indo-Iranian Frontier Languages, Vol. II, Iranian Pamir Languages*. Oslo: Instittutet for Sammenlignende Kulturforskning.

_____. 1944. *Indo-Iranian Frontier Languages, The Pashai Language. Vol. III, The Pashai Language*. Part 1, Grammar (1967), Part 2, Texts and Translations (1944), Part 3, Vocabulary (1956). Serie B: Skrifter XL. Part 1 Oslo: Universitetsforlatet, Part 2, Oslo: H. Achehoug & Co. (W. Nygaard), Part 3, Oslo: H. Aschehoug & Co. (W. Nygaard).

_____. 1945. "Notes on Shumashti". *NTS* 13:240-81.

_____. 1947. "Some Features of Khowar Morphology". *NTS* 14:5-28.

_____. 1973. *Indo-Iranian Frontier Languages, Vol. IV, The Kalasha Language*. Instittutet for Sammenlignende Kulturforskning, Serie B: Skrifter. Oslo, Bergen-Tronso: Universitetsforlatet.

_____. 1974. "Languages of Nuristan and Surrounding Regions". in Jettmar and Edelberg (eds.) 1974.

Morin, Yves-Charles and Etienne Tiffou. 1985. "Passives in Burushaski". to appear in *Passives and Voice*. Shibatani, M. (ed.). Amsterdam: John Benjamins.

Munnings, David. 1987. *Khowar Lexicography*, working copy no. 5.

Muyksen, Pieter. 1977. *Syntactic Developments in the Verb Phrase of Ecuadorean Quechua*. Lisse: Peter de Ridder Press.

Myhill, John. 1985. "Expressing the Future in English". handout from University of Pennsylvania colloquium.

Nadkarni, M. 1975. "Bilingualism and Syntactic Change in Konkani". *Language* 51:672-683.

Nedyalkov, V. P. and G. G. Silnitsky. 1973. "The Typology of Morphological Causatives" in *Trends in Soviet Theoretical Linguistics*. ed. F. Kiefer. Dordrecht: Reidel, pp. 1-32.

Nichols, Johanna. 1986. "The Bottom Line: Chinese Pidgin Russian". in Chafe and Nichols (eds.).

O'Brien, Captain D. J. T. 1895. *Grammar and Vocabulary of the Khowar Dialect (Chitrali)*. Lahore. Republished Delhi: Manager of Publications.

Parkes, Peter. 1983. Alliance and Elopement: Economy, Social Order and Sexual Antagonism among the Kalasha of Chitral. Doctoral thesis. Oxford University.

Permanteau, Paul M. et al. 1972. The Chicago Which Hunt: Papers from the Relative Clause Festival. Chicago: Chicago Linguistic Society.

Perry, John R. 1979. "Uzbek Influence on Tajik Syntax: the Converb Constructions". in The Elements: A Parasession on Linguistic Units and Levels including Papers from the Conference on non-Slavic Languages of the U.S.S.R. (ed. Clyne, P. R. et al.). Chicago: Chicago Linguistic Society.

Fray, Bruce R. 1970. Topics in Hindi-Urdu Grammar. Berkeley, California: Center for South and Southeast Asia Studies.

Ramanujan, A. K. and Masica, Colin. 1969. "Toward a Phonological Typology of the Indian Linguistic Area". in Current Trends in Linguistics, 5. pp. 543-77.

Rao, Malathi and Bashir, Elena. 1985. "The Semantics and Pragmatics of Telegu Causatives". Papers from the 21st Regional Meeting. Chicago: Chicago Linguistic Society.

Rau, Nalini. 1987. "SAY(Abs.) as a Quotative Marker: Evidence for convergence in Kannada and Marathi". in Bashir, E., Hook, P.E., and Deshpande, M.M. (eds.) 1987.

Read, A.F.C. 1934. Balti Grammar. James G. Forlung Fund, Vol. 15.

Romaine, Suzanne. 1980. "The Relative Clause Marker in Scots English: diffusion, complexity and style as dimensions of syntactic change". Language in Society 9:221-49.

_____. 1982. Socio-Historical Linguistics. Cambridge: Cambridge University Press.

_____. 1984. "Towards a Typology of Relative-clause Formation Strategies in Germanic". in Fisiak, J. (ed.) 1984.

Sadock, Jerrold. 1978. "A Conspiracy in Danish Relative Clause Formation". in Peranteau et al. (eds.) 1972.

Saksena, Baburam. 1937. Evolution of Awadhi (A Branch of Hindi). Allahabad: The Indian Press, Ltd.

Schachter, Paul. 1973. "Focus and Relativization". Language 49.1:19-46.

Schmidt, Ruth Laila. 1985. "Morphologicl Criteria for Distinguishing Categories of Transitivity in Shina". in Zide et al. (eds.) 1985.

Sebuktekin, Hikmet I. 1971. Turkish-English Contrastive Analysis. Janua Linguarum, Series Practica 84. The Hague: Mouton.

Shah, Wazir Ali and Morgenstierne, Georg. 1959. "Some Khowar Songs". Acta Orientalia 24:29-58.

Shapiro, Michael. ms. "Hindi lagna: a Study in Semantic Change". University of Washington.

Shaw, R. B. 1877. "A Grammar of the Language of Eastern Turkestan". Journal of the Royal Asiatic Society of Bengal 3:242-368.

Shopen, Timothy (ed.). 1985. Language Typology and Syntactic Description (3 vols.) Cambridge: Cambridge University Press.

Siiger, Halfdan. 1963. "Shamanism amongst the Kalash Kafirs of Chitral". Folk 5:295-303.

_____. 1967. "Shamanistic Ecstasy and Supernatural Beings: a Study Based on Field-work among the Kalash Kafirs of Chitral." From the Third Danish Expedition to Central Asia. Scripta Instituti Donneriani Aboensis (Stockholm) 1:69-81.

Singh, Udaya Narayana, Subbarao, K. V. and Bandyopadhyah, S. K. 1986. "Classification of Polar Verbs in Selected South Asian Languages" in Krishnamurti, Bh. (ed.) 1986.

Sjoberg, Andrée. 1963. Uzbek Structural Grammar. Uralic and Altaic Series, Vol. 18. Bloomington: Indiana University.

Sloan, Mohammad Ismail. 1981. Khowar English Dictionary. (privately published), New York.

Slobin, Dan I. and Aksu, Ayhana A. 1982. "Tense, Aspect, and Modality in the use of the Turkish Evidential". in Tense-aspect: Between Semantics and Pragmatics. ed. Hopper, Paul J. Amsterdam-Philadelphia: Benjamins.

Snoy, P. 1962. Die Kafiren: Formen der Wirtschaft und Geistigen Kultur. Thesis (privately published) Univ. Frankfurt am Main.

Southworth, Franklin D., "Linguistic Stratigraphy of North
    India". _International Journal of Dravidian
    Linguistics_ 3.2:201-223.

Srivastav, Veneeta. 1987. "The Semantics of Adjoined
    Clauses in Hindi". ms. Cornell University.

Strand, Richard F. 1973. "Notes on the Nuristani and
    Dardic Languages". _Journal of the American Orien-
    tal Society_ 93.3:297-305.

_____. 1985. 'Locality and Nominal Relationships in
    Kamviri" in Zide et al. (eds.) 1985.

Subbarao, K. V. 1979. "Secondary Verbs in Telugu".
    International Journal of Dravidian Linguistics 8.2:
    268-72.

_____, and Saxena, Anju. ms. "Synchronic Evidence
    for Diachronic Problem: The Case of the Verb 'Say'
    in Indo-Aryan." University of Delhi.

Tessitori, 1914-16. "Grammar of Old Western Rajasthani".
    Indian Antiquary 38-40.

Thurgood, Graham W. 1986. "The Nature and Origins of the
    Akha Evidentials System". in Chafe and Nichols (eds.)
    1986.

_____. ms. "Languages in Intimate Contact"
    The Making of a Linguistic Area". paper presented at
    the March 1988 meeting of the American Association of
    Asian Studies, held in San Francisco.

Tiffou, Etienne, and Pesot, J. 1983. _Contes du Yasin:
    Introduction au bourouchaski du Yasin avec grammaire
    et lexique analytique._ pre-publication ms.,
    University of Montreal.

Tiwari, Udai Narain. 1960. _The Origin and Development of
    Bhojpuri._ Calcutta: The Asiatic Society.

Trail, Ronald and Cooper, Greg. 1985. "Kalasha Phonemic
    Survey". unpublished ms.

_____. 1987. _A Kalasha-English, English-Kalasha Dic-
    tionary._ draft version.

Turner, R. L. 1966. _A Comparative Dictionary of the Indo-
    Aryan Languages._ London: Oxford University Press.

Tyler, Stephen A. 1968. "Dravidian and Uralian: the
    Lexical Evidence". _Language_ 44.4:798-812.

Wallace, William D. 1981. "Object Marking in the History of Nepali: a Case of Syntactic Diffusion". <u>Studies in the Linguistic Sciences</u> 11.2:107-128.

Windfuhr, Gernot L. 1982. "The Verbal Category of Inference in Persian". <u>Acta Iranica</u>, Deuxieme Serie, Hommages et Opera Minora. Monumentum Georg Morgenstierne. II. Leiden: E. J. Brill.

_____. 1985. "A Spatial Model for Tense, Aspect, and Mood". <u>Folia Linguistica</u> 19.3-4:415-461.

_____. 1987. "Convergence: Iranian Talyshi and Turkic Azari". in Bashir, E., Hook, P.E., and Deshpande, M.M. (eds.) 1987.

Wutt, Karl. 1976. "Über Zeichen und Ornamente der Kalash in Chitral". <u>Archiv für Völkerkünde</u> 30:137-173.

Zia, Muhammad Amin. 1986. <u>Sinaá gáaidaa aur gráaimar</u>. Gilgit: Zia Publications.

Zide, Arlene R. K., David Magier, and Eric Schiller (eds.). 1985. <u>Proceedings of the Conference on Participant Roles: South Asia and Adjacent Areas</u>, an ancillary meeting to the CLS regional meeting April 25, 1984. Bloomington: Indiana University Linguistics Club.